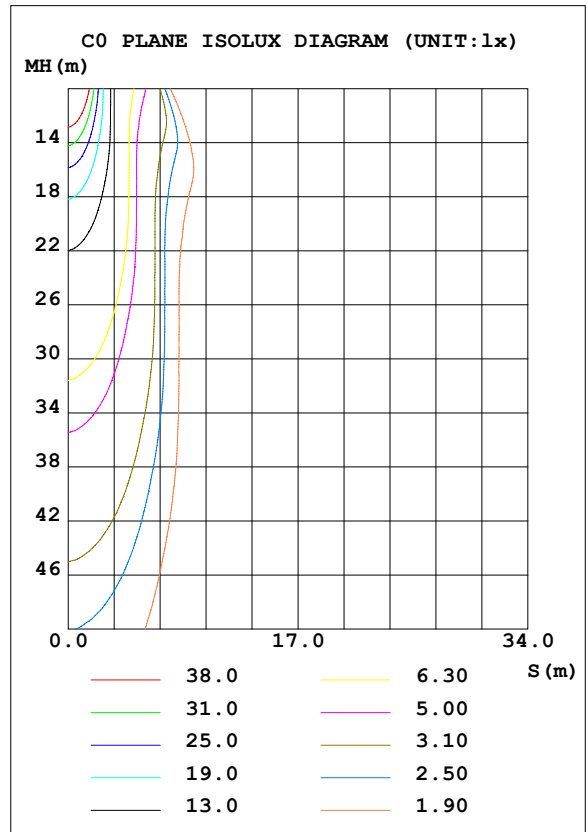
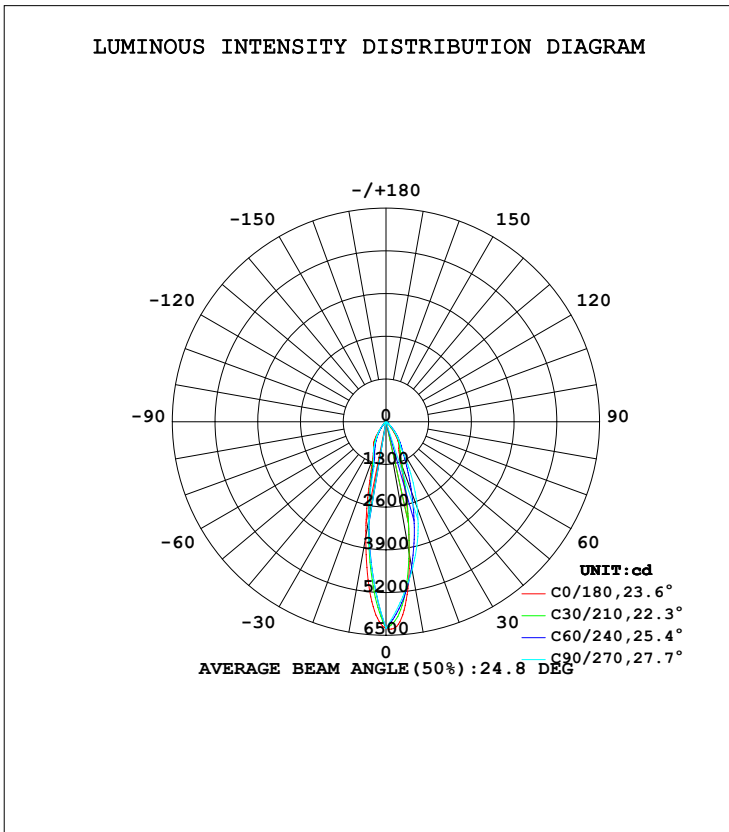


LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	Juvenis AC-30W-24D-3000K-90	Imax (cd)	6316	S/MH (C0/180)	0.38
NOMINAL POWER (W)	30	LOR (%)	100.0	S/MH (C90/270)	0.33
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	2040.1	η UP, DN (C0-180)	0.0, 40.7
NOMINAL FLUX (lm)	2040.07	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 59.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.00
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	1.00



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	5351	4714	4662	5037	5897	5567	5434	5197	0- 5	134.2	134.2	6.58,6.58
10	3558	3020	3034	3388	4094	4266	4579	3752	5- 10	312.0	446.2	21.9,21.9
15	1968	1741	1406	1934	2316	2827	3724	2439	10- 15	343.4	789.6	38.7,38.7
20	1179	1030	1135	1098	1291	1765	2787	1540	15- 20	297.6	1087	53.3,53.3
25	898.6	779.2	864.8	812.6	938.0	1173	1850	1088	20- 25	259.9	1347	66,66
30	758.5	565.3	594.1	585.9	780.4	873.7	912.5	836.1	25- 30	226.3	1573	77.1,77.1
35	496.2	333.3	416.7	356.3	536.1	658.9	675.5	634.1	30- 35	186.2	1760	86.3,86.3
40	215.1	124.0	239.3	143.3	257.4	430.8	438.4	408.8	35- 40	133.8	1893	92.8,92.8
45	91.13	67.70	61.84	69.54	90.75	229.0	201.4	214.3	40- 45	74.61	1968	96.5,96.5
50	36.07	34.67	42.93	36.20	60.85	103.1	138.5	90.35	45- 50	35.84	2004	98.2,98.2
55	11.22	8.480	24.03	9.327	16.38	37.74	75.56	26.84	50- 55	18.35	2022	99.1,99.1
60	7.566	6.378	5.123	6.782	8.265	18.83	12.64	13.70	55- 60	8.698	2031	99.6,99.6
65	5.749	4.617	3.512	4.824	6.105	9.052	9.834	7.870	60- 65	3.889	2035	99.7,99.7
70	4.098	3.001	1.901	3.131	4.560	5.309	7.023	5.348	65- 70	2.620	2037	99.9,99.9
75	2.432	1.433	0.2905	1.516	2.968	3.711	4.212	3.648	70- 75	1.775	2039	100,100
80	0.1157	0.1066	0	0.1344	0.3773	1.899	0	1.735	75- 80	0.8038	2040	100,100
85	0.0174	0	0	0	0.0603	0	0	0	80- 85	0.0838	2040	100,100
90	0.0174	0	0	0	0.0172	0	0	0	85- 90	0.0031	2040	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

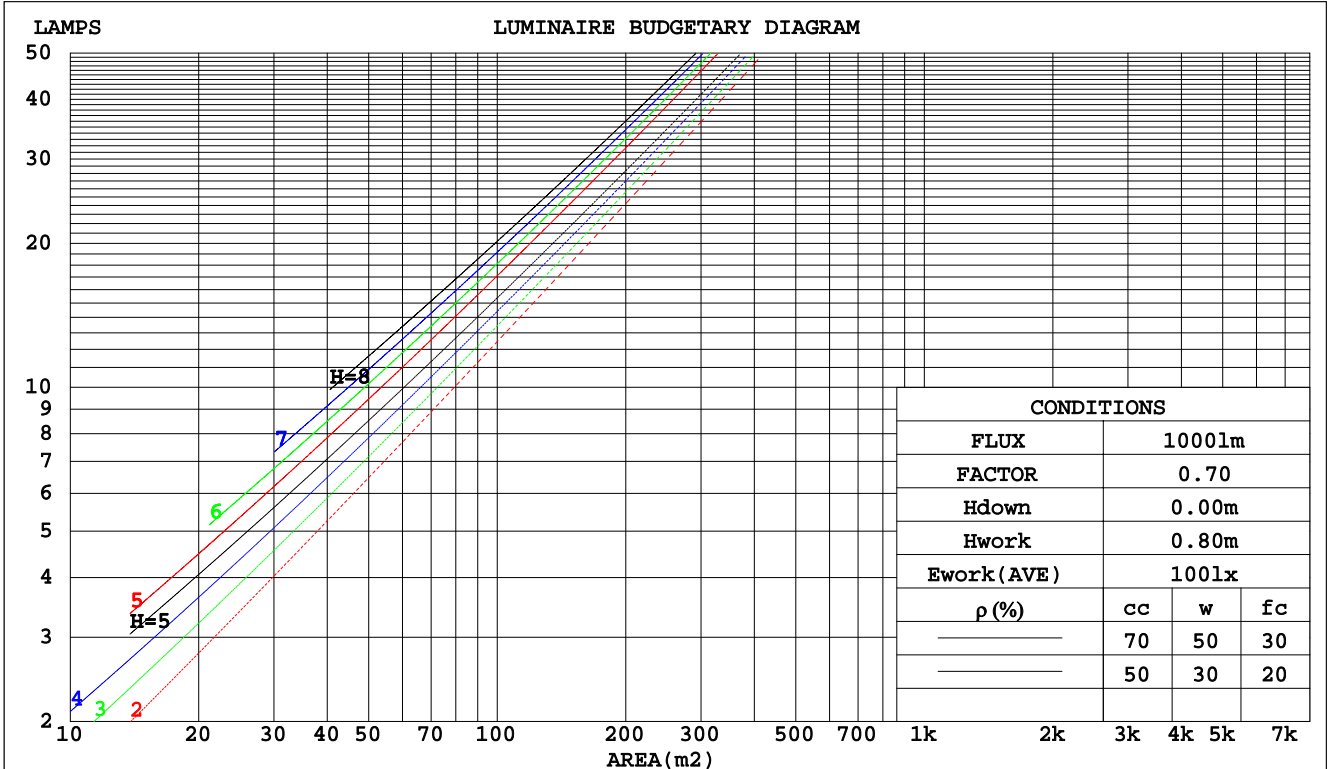
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio															
	Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.04	1.02	1.02	1.00	.99	.98	.97	.96	.95
2.0	1.05	1.01	.98	1.03	.90	.97	.90	.97	.95	.97	.95	.93	.94	.92	.91	.89
3.0	.98	.94	.90	.97	.93	.90	.94	.91	.88	.92	.89	.87	.90	.88	.85	.84
4.0	.93	.88	.84	.92	.87	.84	.90	.86	.83	.88	.84	.82	.86	.83	.81	.79
5.0	.88	.83	.79	.87	.82	.78	.85	.81	.78	.84	.80	.77	.82	.79	.76	.75
6.0	.83	.78	.74	.83	.78	.74	.81	.77	.73	.80	.76	.73	.79	.75	.73	.71
7.0	.79	.74	.70	.79	.74	.70	.78	.73	.70	.76	.72	.69	.75	.72	.69	.68
8.0	.76	.70	.67	.75	.70	.67	.74	.70	.66	.73	.69	.66	.72	.69	.66	.65
9.0	.72	.67	.64	.72	.67	.63	.71	.66	.63	.70	.66	.63	.69	.66	.63	.62
10.0	.69	.64	.61	.69	.64	.61	.68	.64	.60	.67	.63	.60	.67	.63	.60	.59



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.164	.093	.030	.157	.090	.029	.145	.083	.027	.133	.077	.025	.123	.071	.023	
2.0	.156	.086	.026	.150	.083	.026	.140	.078	.024	.130	.073	.023	.121	.069	.022	
3.0	.148	.079	.024	.143	.077	.023	.134	.073	.022	.126	.069	.021	.119	.066	.020	
4.0	.140	.073	.021	.136	.071	.021	.129	.068	.020	.122	.065	.020	.115	.063	.019	
5.0	.133	.068	.020	.130	.067	.019	.123	.064	.019	.117	.062	.018	.111	.060	.018	
6.0	.127	.064	.018	.124	.063	.018	.118	.061	.018	.113	.059	.017	.108	.057	.017	
7.0	.121	.060	.017	.118	.059	.017	.113	.057	.016	.108	.056	.016	.104	.054	.016	
8.0	.116	.056	.016	.113	.056	.016	.109	.054	.016	.104	.053	.015	.100	.052	.015	
9.0	.111	.053	.015	.108	.053	.015	.104	.052	.015	.101	.050	.014	.097	.049	.014	
10.0	.106	.051	.014	.104	.050	.014	.100	.049	.014	.097	.048	.014	.094	.047	.014	

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.170	.157	.146	.146	.135	.126	.100	.093	.087	.057	.054	.051	.018	.017	.016	
2.0	.154	.133	.114	.132	.114	.099	.090	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.141	.113	.092	.121	.098	.079	.083	.068	.056	.048	.040	.033	.015	.013	.011	
4.0	.130	.099	.075	.112	.085	.065	.077	.059	.046	.044	.035	.027	.014	.011	.009	
5.0	.121	.087	.062	.104	.075	.054	.071	.052	.038	.041	.031	.022	.013	.010	.007	
6.0	.113	.077	.052	.097	.067	.045	.067	.047	.032	.039	.028	.019	.013	.009	.006	
7.0	.106	.069	.044	.091	.060	.038	.063	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.100	.063	.038	.086	.055	.033	.060	.038	.023	.035	.023	.014	.011	.007	.005	
9.0	.095	.058	.033	.082	.050	.029	.057	.035	.020	.033	.021	.012	.011	.007	.004	
10.0	.090	.053	.029	.078	.046	.025	.054	.032	.018	.031	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DOBAC
 Test Date:2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity:65.0%
 Test Distance:6.960m [K=1.0000]
 Remarks:

Uncorrected UGR Table

NAME: Juvenis AC-30W-24D-3000K-90					TYPE:					WEIGHT:				
DIM.:					SPEC.:					SERIAL No.:				
MFR.: DOBAC					SUR.:					PROTECTION ANGLE:				
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3				
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3				
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2				
Room dimensions	Viewed crosswise					Viewed endwise								
x = 2H y = 2H	17.4	18.3	17.6	18.4	18.6	17.4	18.3	17.7	18.5	18.6				
3H	17.3	18.1	17.5	18.3	18.5	17.3	18.1	17.5	18.3	18.5				
4H	17.2	18.0	17.5	18.2	18.4	17.2	17.9	17.5	18.2	18.4				
6H	17.1	17.8	17.4	18.1	18.3	17.1	17.8	17.4	18.1	18.3				
8H	17.1	17.8	17.4	18.0	18.3	17.1	17.7	17.4	18.0	18.3				
12H	17.0	17.7	17.4	17.9	18.2	17.0	17.7	17.3	17.9	18.2				
4H 2H	17.2	17.9	17.5	18.1	18.4	17.2	18.0	17.5	18.2	18.4				
3H	17.0	17.7	17.4	18.0	18.2	17.0	17.7	17.4	18.0	18.2				
4H	17.0	17.6	17.3	17.8	18.2	17.0	17.5	17.3	17.8	18.1				
6H	16.9	17.4	17.2	17.7	18.1	16.9	17.4	17.2	17.7	18.0				
8H	16.8	17.3	17.2	17.6	18.0	16.8	17.3	17.2	17.6	18.0				
12H	16.8	17.2	17.2	17.6	18.0	16.8	17.2	17.2	17.6	17.9				
8H 4H	16.8	17.3	17.2	17.6	18.0	16.8	17.3	17.2	17.6	18.0				
6H	16.7	17.1	17.1	17.5	17.9	16.7	17.1	17.1	17.5	17.9				
8H	16.7	17.0	17.1	17.4	17.9	16.6	17.0	17.1	17.4	17.8				
12H	16.6	16.9	17.1	17.3	17.8	16.6	16.9	17.1	17.3	17.8				
12H 4H	16.8	17.2	17.2	17.6	18.0	16.8	17.2	17.2	17.6	18.0				
6H	16.7	17.0	17.1	17.4	17.9	16.6	17.0	17.1	17.4	17.8				
8H	16.6	16.9	17.1	17.3	17.8	16.6	16.9	17.1	17.3	17.8				
Variations with the observer position at spacings:														
S = 1.0H	+ 4.5 / -11.3					+ 3.2 / -10.5								
1.5H	+ 6.8 / -10.4					+ 5.7 / -11.0								
2.0H	+ 7.3 / - 6.0					+ 5.3 / - 7.3								

CIE Pub.117 Corrected 2040 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.5)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

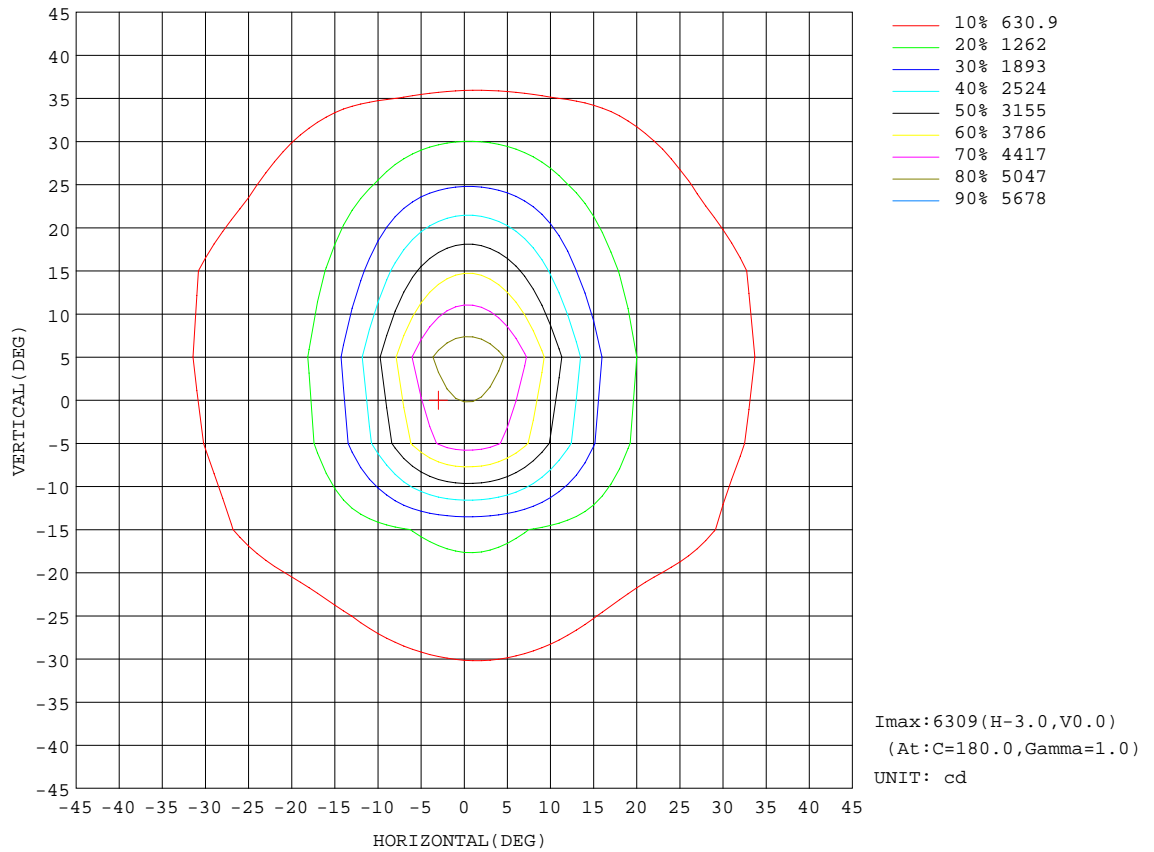
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5									
k = 0.60	87	81	77	86	80	77	86	80	77	73
0.80	95	89	85	94	88	85	93	88	84	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	95	102	97	94	100	96	93	89
1.50	106	101	98	105	100	97	102	99	96	92
2.00	109	104	101	107	103	101	105	101	99	94
2.50	110	106	104	109	105	103	106	103	101	95
3.00	112	108	106	110	107	105	107	104	102	96
4.00	114	111	109	112	109	107	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

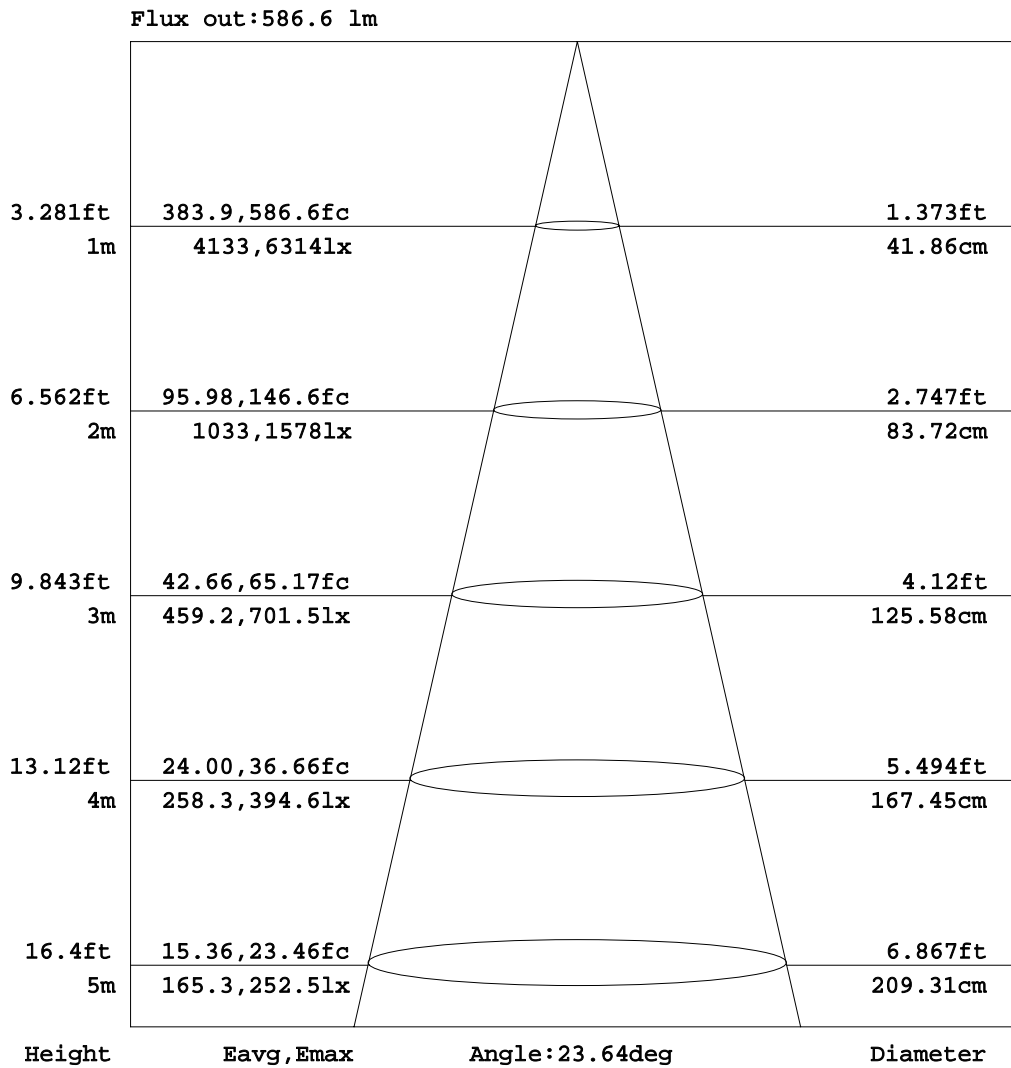


C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

AAI Figure

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:



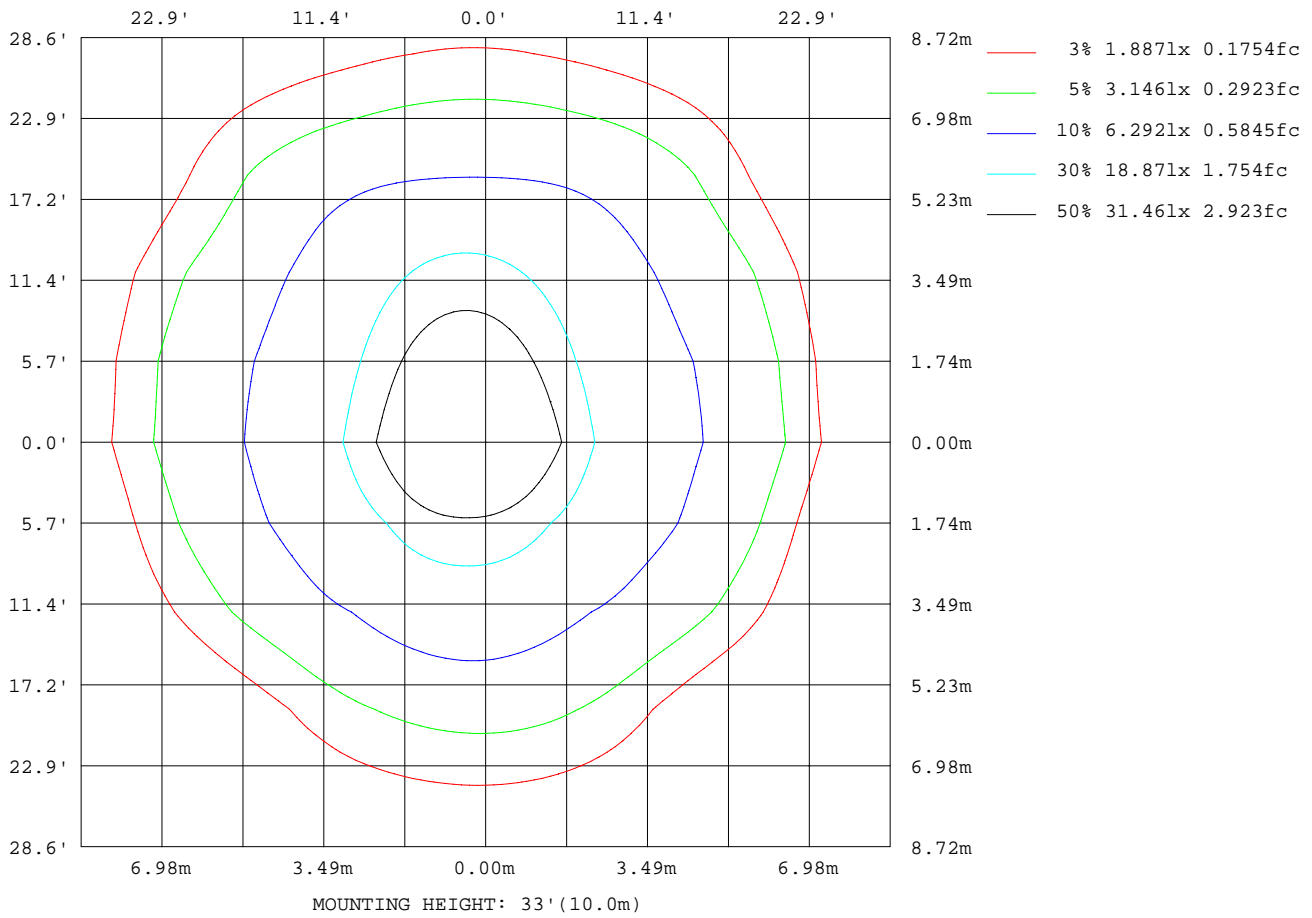
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

Average Luminance Table(CIBSE)

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	2040.07	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.0055	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	3556	3242	3332	3281	4110	2854	3799	5815	7284	7617	7729	7350	5467	3416	5329	4935	4987	4550	5193
60	2751	2597	2525	2470	2304	2373	2653	2973	2523	1863	2397	3440	3347	2638	2407	2722	2656	2848	3006
65	2473	2285	2201	2094	2017	1950	1840	1774	1739	1511	1619	1838	1912	2056	2106	2204	2330	2481	2627
70	2179	1977	1856	1721	1658	1508	1348	1233	1171	1011	1088	1289	1416	1585	1774	1884	2055	2231	2424
75	1708	1326	1073	1202	1128	857	579	372	258	204	226	412	638	917	1228	1435	1406	1856	2085
80	121	101	139	538	194	84	51	29	9	0	8	35	73	117	231	736	283	319	395
85	36	129	188	0	0	0	0	0	0	0	0	0	0	0	0	0	140	123	126

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum	specified	maximum	specified
		calculated	maximum	measured	maximum
Category 1	55 to 90	7729	200	---	500
Category 2	65 to 90	2627	200	---	500
Category 3	75 to 90	2085	200	---	500

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	2040.07	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.0055	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	3556	3242	3332	3281	4110	2854	3799	5815	7284	7617	7729	7350	5467	3416	5329	4935	4987	4550	5193
60	2751	2597	2525	2470	2304	2373	2653	2973	2523	1863	2397	3440	3347	2638	2407	2722	2656	2848	3006
65	2473	2285	2201	2094	2017	1950	1840	1774	1739	1511	1619	1838	1912	2056	2106	2204	2330	2481	2627
70	2179	1977	1856	1721	1658	1508	1348	1233	1171	1011	1088	1289	1416	1585	1774	1884	2055	2231	2424
75	1708	1326	1073	1202	1128	857	579	372	258	204	226	412	638	917	1228	1435	1406	1856	2085
80	121	101	139	538	194	84	51	29	9	0	8	35	73	117	231	736	283	319	395
85	36	129	188	0	0	0	0	0	0	0	0	0	0	0	0	0	140	123	126

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

range (deg)	Maximum measured	Average Luminance(cd/sq.m)			
		Maximum limit for screen type & software category used			
		Type I,II screen Some neg.s'ware	Type I,II screen Only pos.s'ware	Type III screen Some neg.s'ware	Type III screen Only pos.s'ware
55 to 90	7729	1000	1500	200	500
65 to 90	2627	1000	1500	200	500

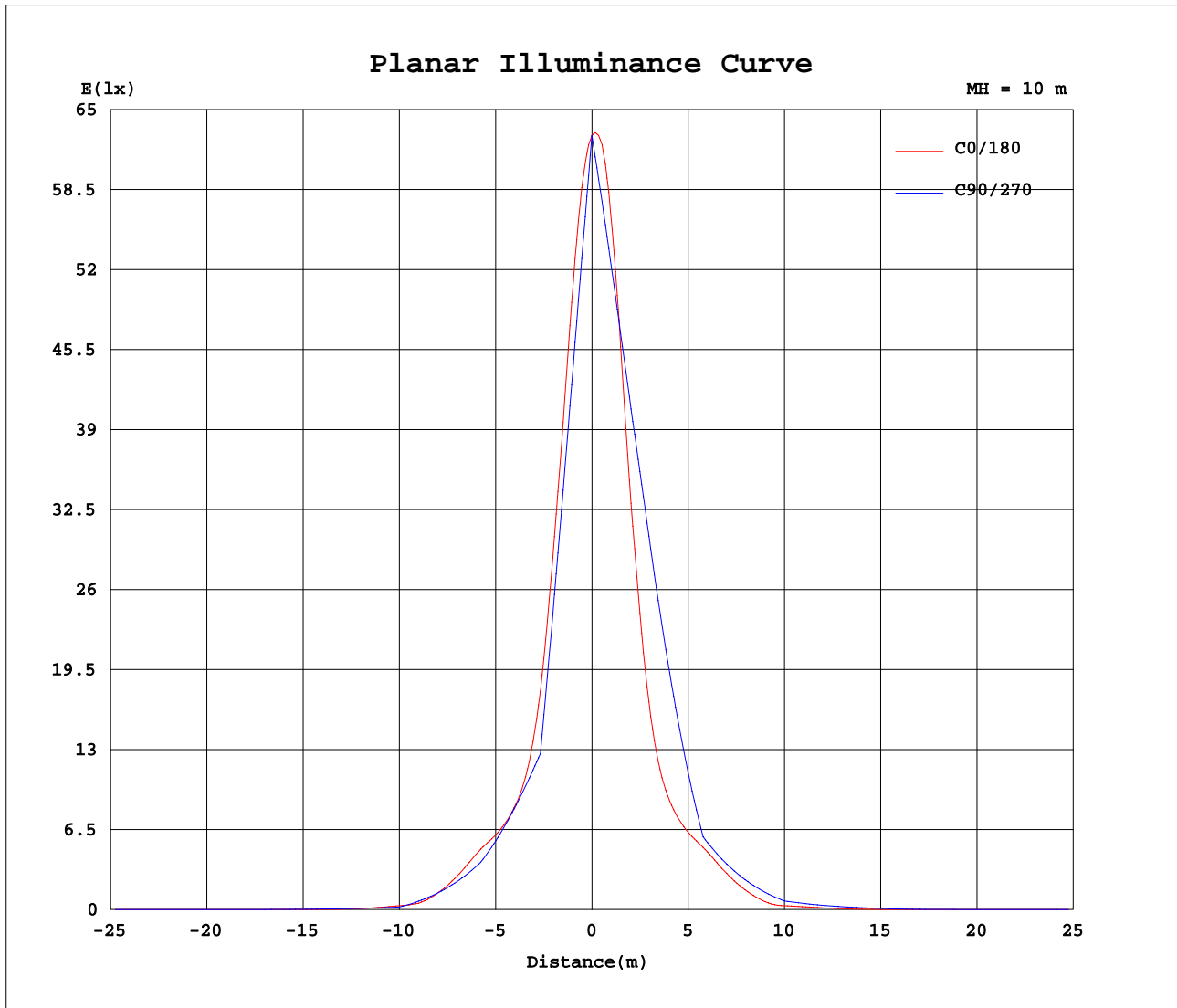
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

No match

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290
5	5351	5238	5136	5046	4966	4897	4838	4791	4749	4714	4690	4670	4651	4643	4636	4636	4642	4646	4662
10	3558	3427	3320	3233	3164	3110	3073	3047	3030	3020	3012	3008	3007	3002	3001	3003	3008	3020	3034
15	1968	1892	1841	1807	1785	1776	1770	1770	1760	1741	1714	1677	1632	1581	1527	1474	1433	1409	1406
20	1179	1145	1123	1107	1099	1094	1093	1086	1068	1030	1001	1008	1021	1040	1061	1085	1107	1124	1135
25	899	876	861	853	850	850	847	836	801	779	770	773	782	796	813	830	846	858	865
30	759	716	684	667	664	675	667	630	593	565	551	551	562	575	587	594	597	596	594
35	496	448	417	402	402	412	404	386	357	333	323	328	359	385	401	411	415	417	417
40	215	191	174	160	158	178	192	187	150	124	153	186	212	229	239	242	241	240	239
45	91.1	81.5	76.7	79.6	73.7	65.6	71.4	68.9	72.8	67.7	71.6	84.4	94.2	95.2	89.5	80.0	70.1	63.6	61.8
50	36.1	30.9	27.9	28.2	29.9	26.6	22.7	30.9	36.1	34.7	26.9	20.2	18.7	24.8	30.4	36.0	39.6	41.8	42.9
55	11.2	10.6	10.2	10.2	10.5	9.56	10.3	12.2	13.0	8.48	9.00	10.1	12.0	15.0	18.3	21.3	23.0	23.7	24.0
60	7.57	7.26	7.14	7.04	6.95	6.83	6.79	6.46	6.34	6.38	6.53	6.82	7.30	7.90	8.18	7.78	6.94	5.83	5.12
65	5.75	5.47	5.31	5.23	5.12	4.98	4.87	4.77	4.69	4.62	4.53	4.37	4.28	4.19	4.12	4.08	4.04	3.82	3.51
70	4.10	3.86	3.72	3.57	3.49	3.28	3.24	3.17	3.12	3.00	2.84	2.67	2.54	2.42	2.32	2.25	2.20	2.08	1.90
75	2.43	2.08	1.89	1.84	1.53	0.94	1.71	1.72	1.61	1.43	1.22	1.01	0.82	0.66	0.53	0.44	0.37	0.32	0.29
80	0.12	0.11	0.10	0.15	0.13	0.21	0.51	0.42	0.18	0.11	0.08	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.00
85	0.02	0.03	0.06	0.09	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290
5	4676	4703	4733	4771	4816	4863	4921	4978	5037	5106	5179	5254	5339	5432	5535	5647	5768	5897	5830
10	3055	3087	3128	3172	3218	3266	3303	3344	3388	3429	3472	3511	3562	3627	3709	3811	3938	4094	4018
15	1425	1467	1529	1607	1690	1773	1842	1895	1934	1966	1994	2014	2038	2063	2098	2147	2217	2316	2268
20	1137	1130	1119	1105	1090	1077	1066	1058	1098	1155	1181	1190	1194	1198	1206	1223	1250	1291	1276
25	863	857	847	835	824	812	805	806	813	831	862	874	879	882	886	896	913	938	933
30	590	589	588	585	580	573	569	571	586	613	649	688	699	692	696	712	741	780	777
35	413	410	405	398	385	365	340	342	356	380	407	433	452	454	454	465	492	536	531
40	239	240	242	242	236	223	202	175	143	158	199	224	223	206	200	209	227	257	252
45	65.6	73.9	85.4	97.3	105	107	99.3	84.5	69.5	74.0	81.6	96.3	87.3	79.0	88.8	87.7	88.1	90.7	91.7
50	43.2	42.6	41.1	38.5	33.7	28.2	27.9	30.7	36.2	43.2	46.1	40.8	39.5	45.9	51.4	51.0	53.4	60.9	60.4
55	24.2	24.4	24.3	23.2	20.7	17.2	13.5	10.8	9.33	16.8	19.1	15.6	12.0	15.7	15.4	14.4	15.1	16.4	16.9
60	5.20	6.59	8.34	9.46	9.84	9.20	8.11	7.25	6.78	6.62	6.79	7.48	7.32	7.30	7.65	7.83	7.94	8.27	8.43
65	3.31	3.76	4.16	4.27	4.36	4.44	4.56	4.78	4.82	4.89	5.00	5.12	5.29	5.42	5.62	5.77	5.93	6.11	6.20
70	1.76	2.05	2.31	2.42	2.54	2.66	2.81	2.98	3.13	3.34	3.44	3.54	3.68	3.87	4.02	4.20	4.42	4.56	4.70
75	0.23	0.32	0.44	0.59	0.74	0.91	1.10	1.30	1.52	1.75	1.92	2.04	2.10	2.00	2.53	2.64	2.83	2.97	3.13
80	0.00	0.01	0.02	0.03	0.05	0.07	0.09	0.11	0.13	0.22	0.48	0.70	0.76	0.27	0.59	0.30	0.39	0.38	0.58
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.07	0.08	0.06	0.04	0.06	0.04
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--3

UNIT: cd

C(DEG) γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290
5	5771	5720	5678	5644	5619	5602	5583	5567	5558	5547	5529	5518	5500	5484	5469	5448	5434	5409	5390
10	3972	3954	3961	3992	4043	4113	4185	4266	4341	4418	4494	4546	4587	4611	4616	4605	4579	4533	4465
15	2254	2266	2302	2362	2442	2551	2679	2827	2993	3165	3331	3475	3597	3681	3735	3749	3724	3652	3546
20	1277	1293	1325	1372	1439	1532	1642	1765	1920	2098	2277	2448	2599	2711	2778	2805	2787	2719	2618
25	936	945	963	988	1023	1066	1106	1173	1267	1369	1492	1616	1722	1802	1846	1863	1850	1809	1749
30	781	795	814	833	833	827	841	874	914	964	1008	1032	1031	1003	961	926	913	924	953
35	545	576	621	640	628	622	628	659	702	735	727	709	690	680	676	676	675	675	676
40	266	300	339	347	354	362	384	431	474	491	484	468	451	442	439	439	438	438	438
45	93.3	98.9	124	147	148	131	178	229	265	275	257	229	211	202	202	202	201	201	199
50	65.1	68.5	66.4	69.9	76.3	72.4	75.9	103	117	103	87.7	84.4	96.1	112	127	136	138	136	125
55	20.0	23.9	25.6	28.0	37.1	37.0	33.7	37.7	50.4	55.8	57.0	52.9	55.6	63.1	70.6	74.7	75.6	74.4	68.9
60	8.89	9.19	9.37	10.6	13.0	10.6	12.8	18.8	26.0	29.1	27.4	23.4	20.1	18.3	15.9	13.6	12.6	13.4	15.4
65	6.34	6.47	6.61	6.79	6.85	7.20	7.78	9.05	9.49	7.42	7.72	8.07	8.49	8.93	9.37	9.73	9.83	9.59	9.11
70	4.75	4.85	4.91	4.99	5.06	5.14	5.21	5.31	5.43	5.62	5.83	6.04	6.26	6.51	6.75	6.95	7.02	6.91	6.68
75	3.24	3.42	3.39	3.49	3.42	3.43	3.59	3.71	3.81	3.90	4.01	4.09	4.12	4.15	4.16	4.18	4.21	4.25	4.30
80	0.70	0.96	1.61	1.57	1.29	1.55	1.99	1.90	1.61	1.29	1.00	0.72	0.47	0.27	0.12	0.03	0.00	0.03	0.13
85	0.06	0.09	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-24D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290	6290				
5	5361	5331	5304	5273	5249	5222	5197	5180	5170	5164	5168	5183	5209	5245	5292				
10	4385	4293	4191	4085	3969	3857	3752	3654	3571	3504	3455	3431	3428	3447	3490				
15	3419	3269	3100	2924	2751	2588	2439	2307	2194	2097	2024	1968	1936	1922	1932				
20	2488	2330	2159	1983	1810	1661	1540	1440	1360	1295	1242	1206	1182	1169	1168				
25	1667	1567	1455	1337	1237	1152	1088	1041	1011	972	943	920	905	897	895				
30	984	998	988	959	919	875	836	809	798	808	808	783	763	751	750				
35	681	692	707	720	717	678	634	604	594	590	590	563	520	495	487				
40	440	448	462	474	476	454	409	364	336	316	304	288	249	221	209				
45	199	205	223	251	263	249	214	165	124	133	122	99.1	95.7	91.3	89.6				
50	109	90.4	82.6	83.6	93.1	105	90.4	69.0	66.3	64.1	56.2	50.7	48.0	42.0	36.6				
55	60.7	52.4	52.2	53.3	49.7	40.0	26.8	27.0	30.4	25.8	17.4	16.0	13.7	12.3	11.3				
60	17.5	19.2	22.7	25.3	25.0	20.2	13.7	10.2	9.26	9.99	8.91	8.35	8.06	7.82	7.57				
65	8.66	8.28	7.95	7.66	7.39	8.56	7.87	7.19	6.83	6.64	6.48	6.27	6.17	5.94	5.78				
70	6.47	6.28	6.09	5.90	5.71	5.51	5.35	5.25	5.17	5.04	4.84	4.72	4.55	4.39	4.23				
75	4.35	4.36	4.29	4.21	4.08	3.88	3.65	3.28	3.13	3.40	3.33	3.02	2.97	2.72	2.53				
80	0.29	0.50	0.77	1.07	1.38	1.64	1.74	1.07	0.85	1.15	1.35	0.51	0.58	0.16	0.13				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.05	0.02	0.02				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

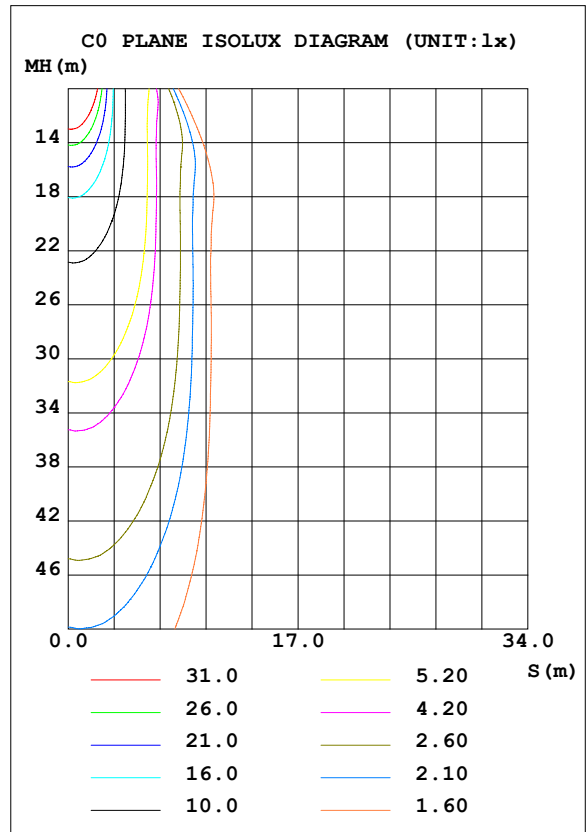
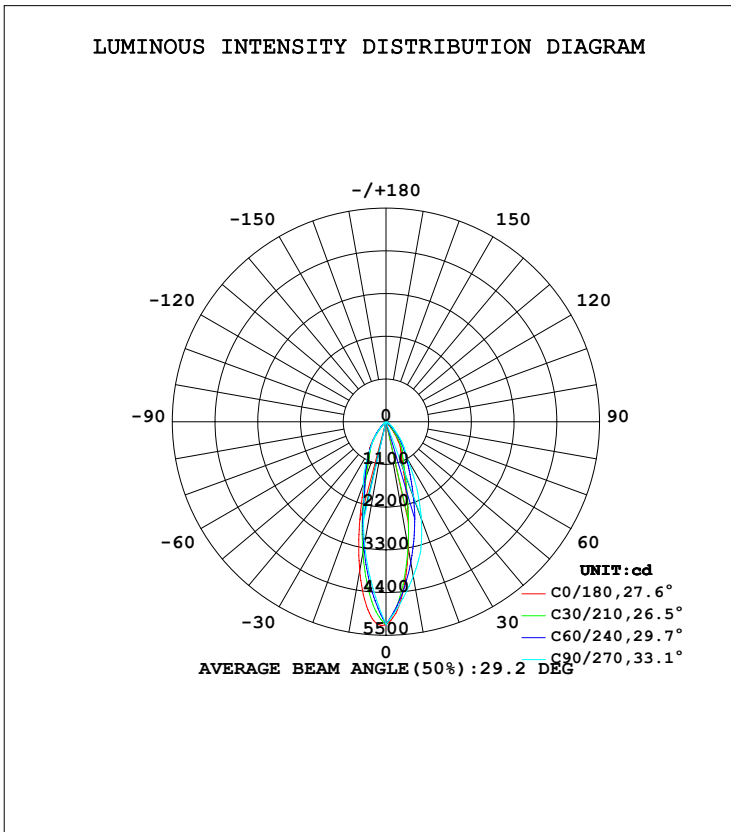
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	Juvenis AC-30W-30D-3000K-90	Imax (cd)	5248	S/MH (C0/180)	0.50
NOMINAL POWER (W)	30	LOR (%)	100.0	S/MH (C90/270)	0.43
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	2202.1	η UP, DN (C0-180)	0.0, 44.0
NOMINAL FLUX (lm)	2202.08	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 56.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	219.6	η down (%)	100.0	CIBSE SHR MAX	0.50



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	4946	4421	4201	4182	4568	4456	4630	4718	0- 5	114.0	114.0	5.18,5.18
10	3904	3336	3184	3002	3314	3445	4043	3863	5- 10	281.8	395.8	18,18
15	2606	2287	2167	1994	2085	2465	3455	2897	10- 15	347.5	743.3	33.8,33.8
20	1629	1489	1711	1308	1318	1709	2656	2043	15- 20	338.2	1081	49.1,49.1
25	1096	1070	1255	945.9	936.1	1199	1858	1415	20- 25	303.1	1385	62.9,62.9
30	853.8	774.8	799.7	685.3	726.9	870.7	1059	1018	25- 30	260.7	1645	74.7,74.7
35	606.5	529.5	557.4	441.9	439.2	628.6	814.4	765.2	30- 35	213.9	1859	84.4,84.4
40	297.0	295.6	315.1	203.6	157.0	395.7	569.7	538.3	35- 40	156.8	2016	91.5,91.5
45	77.05	148.3	72.81	91.93	58.49	201.6	324.9	294.7	40- 45	89.31	2105	95.6,95.6
50	46.19	63.55	53.13	45.46	39.77	85.56	228.0	128.6	45- 50	42.76	2148	97.5,97.5
55	29.37	29.95	33.44	26.33	22.65	39.95	131.0	45.04	50- 55	25.02	2173	98.7,98.7
60	13.04	18.03	13.76	15.47	8.809	24.61	34.06	29.03	55- 60	14.42	2188	99.3,99.3
65	5.385	8.631	10.10	7.533	4.612	11.69	24.11	14.43	60- 65	6.828	2194	99.6,99.6
70	3.879	3.858	6.435	3.471	3.454	5.012	14.15	6.227	65- 70	4.036	2198	99.8,99.8
75	2.819	2.549	2.774	1.842	2.235	3.604	4.197	4.329	70- 75	2.472	2201	99.9,99.9
80	0.3160	1.032	0	0.3705	0.1384	2.011	0	2.429	75- 80	1.098	2202	100,100
85	0.0289	0	0	0	0.0389	0	0	0	80- 85	0.1258	2202	100,100
90	0.0116	0	0	0	0.0151	0	0	0	85- 90	0.0027	2202	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

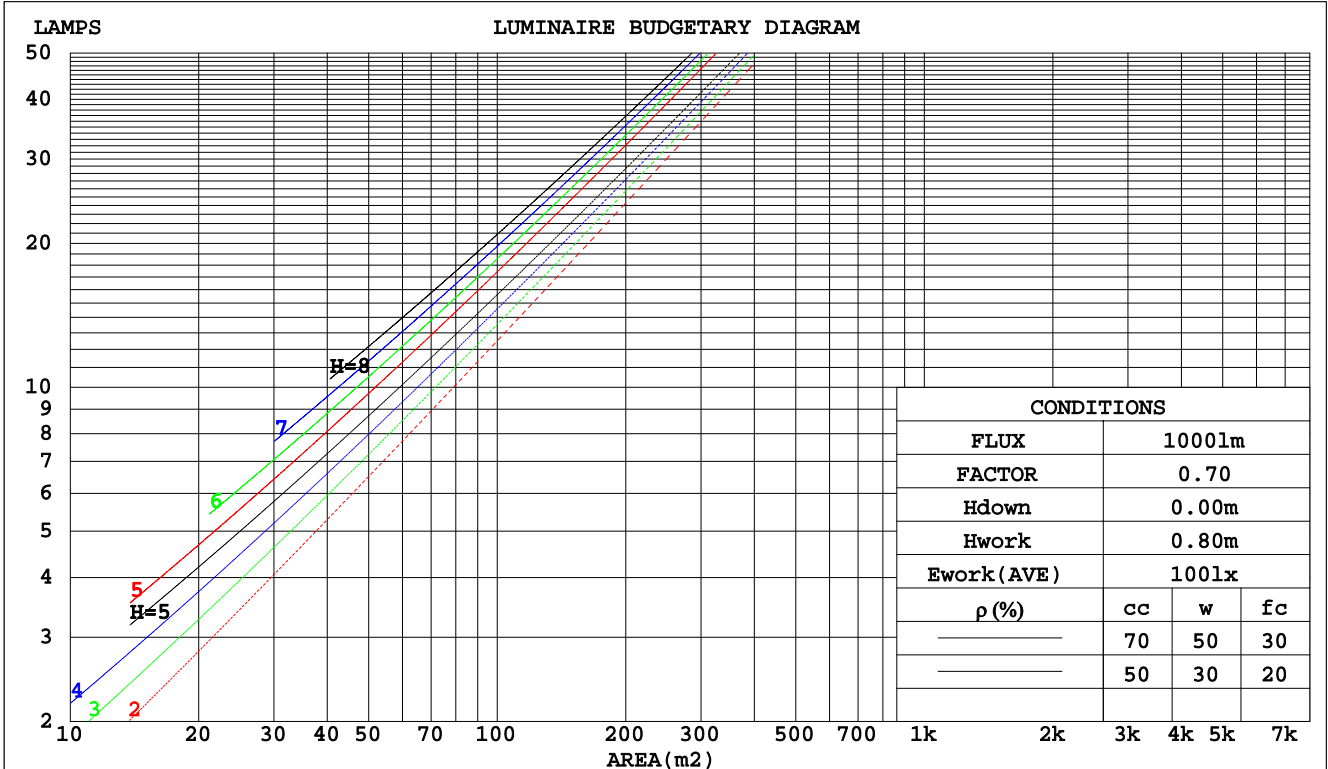
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc																0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.91	.90	.88
3.0	.97	.93	.89	.96	.92	.88	.93	.90	.87	.91	.88	.86	.89	.86	.84	.83
4.0	.92	.86	.82	.91	.86	.82	.88	.84	.81	.86	.83	.80	.85	.82	.79	.78
5.0	.86	.81	.77	.85	.80	.77	.84	.79	.76	.82	.78	.75	.81	.77	.75	.73
6.0	.82	.76	.72	.81	.76	.72	.79	.75	.71	.78	.74	.71	.77	.73	.70	.69
7.0	.77	.72	.68	.77	.71	.68	.76	.71	.67	.74	.70	.67	.73	.70	.67	.65
8.0	.74	.68	.64	.73	.68	.64	.72	.67	.64	.71	.67	.63	.70	.66	.63	.62
9.0	.70	.65	.61	.70	.64	.61	.69	.64	.61	.68	.63	.60	.67	.63	.60	.59
10.0	.67	.61	.58	.66	.61	.58	.66	.61	.58	.65	.61	.57	.64	.60	.57	.56



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

WEC AND CCEC

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.170	.097	.031	.163	.093	.030	.151	.086	.028	.139	.080	.026	.128	.074	.024	
2.0	.162	.089	.027	.157	.086	.027	.146	.081	.025	.136	.076	.024	.127	.072	.023	
3.0	.154	.082	.025	.149	.080	.024	.140	.076	.023	.132	.072	.022	.124	.069	.021	
4.0	.146	.076	.022	.142	.074	.022	.135	.071	.021	.127	.068	.021	.121	.066	.020	
5.0	.139	.071	.021	.136	.070	.020	.129	.067	.020	.123	.065	.019	.117	.062	.019	
6.0	.132	.066	.019	.129	.065	.019	.124	.063	.018	.118	.061	.018	.113	.059	.018	
7.0	.126	.062	.018	.124	.062	.018	.118	.060	.017	.114	.058	.017	.109	.057	.017	
8.0	.121	.059	.017	.118	.058	.016	.114	.057	.016	.109	.055	.016	.105	.054	.016	
9.0	.115	.056	.016	.113	.055	.015	.109	.054	.015	.105	.053	.015	.102	.052	.015	
10.0	.111	.053	.015	.109	.053	.015	.105	.051	.014	.102	.050	.014	.098	.049	.014	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.084	.068	.055	.048	.040	.033	.016	.013	.011	
4.0	.131	.099	.074	.113	.085	.064	.078	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.115	.078	.051	.099	.067	.044	.068	.047	.031	.039	.028	.019	.013	.009	.006	
7.0	.108	.070	.043	.093	.061	.038	.064	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.102	.064	.037	.088	.055	.032	.061	.039	.023	.035	.023	.014	.011	.007	.005	
9.0	.097	.058	.032	.083	.051	.028	.058	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.092	.054	.028	.080	.047	.025	.055	.033	.017	.032	.019	.010	.010	.006	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DOBAC
 Test Date:2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity:65.0%
 Test Distance:6.960m [K=1.0000]
 Remarks:

Uncorrected UGR Table

NAME: Juvenis AC-30W-30D-3000K					TYPE:					WEIGHT:					
DIM.:					SPEC.:					SERIAL No.:					
MFR.: DOBAC					SUR.:					PROTECTION ANGLE:					
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3					
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3					
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2					
Room dimensions	Viewed crosswise					Viewed endwise									
x = 2H y = 2H	19.2	20.1	19.5	20.3	20.5	20.1	21.0	20.3	21.1	21.3					
3H	19.1	19.9	19.3	20.1	20.3	19.9	20.7	20.2	20.9	21.1					
4H	19.0	19.8	19.3	20.0	20.2	19.9	20.6	20.1	20.8	21.1					
6H	18.9	19.7	19.2	19.9	20.1	19.8	20.5	20.1	20.7	21.0					
8H	18.9	19.6	19.2	19.8	20.1	19.7	20.4	20.0	20.7	20.9					
12H	18.8	19.5	19.2	19.8	20.1	19.7	20.3	20.0	20.6	20.9					
4H 2H	19.0	19.8	19.3	20.0	20.2	19.8	20.6	20.1	20.8	21.0					
3H	18.9	19.5	19.2	19.8	20.1	19.7	20.4	20.0	20.6	20.9					
4H	18.8	19.4	19.1	19.7	20.0	19.6	20.2	20.0	20.5	20.8					
6H	18.7	19.2	19.1	19.6	19.9	19.5	20.1	19.9	20.4	20.7					
8H	18.7	19.1	19.0	19.5	19.9	19.5	20.0	19.9	20.3	20.7					
12H	18.6	19.1	19.0	19.4	19.8	19.4	19.9	19.8	20.2	20.6					
8H 4H	18.7	19.2	19.0	19.5	19.9	19.5	20.0	19.9	20.3	20.7					
6H	18.6	19.0	19.0	19.4	19.8	19.4	19.8	19.8	20.2	20.6					
8H	18.5	18.9	18.9	19.3	19.7	19.3	19.7	19.8	20.1	20.5					
12H	18.4	18.8	18.9	19.2	19.7	19.3	19.6	19.7	20.0	20.5					
12H 4H	18.6	19.1	19.0	19.4	19.8	19.4	19.9	19.8	20.3	20.6					
6H	18.5	18.9	19.0	19.3	19.7	19.3	19.7	19.8	20.1	20.5					
8H	18.4	18.8	18.9	19.2	19.7	19.3	19.6	19.7	20.0	20.5					
Variations with the observer position at spacings:															
S = 1.0H	+ 3.7 / - 9.3					+ 2.5 / - 9.2									
1.5H	+ 6.0 / - 6.9					+ 4.8 / - 7.1									
2.0H	+ 4.0 / - 6.1					+ 3.0 / - 6.3									

CIE Pub.117 Corrected 2202 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.7)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

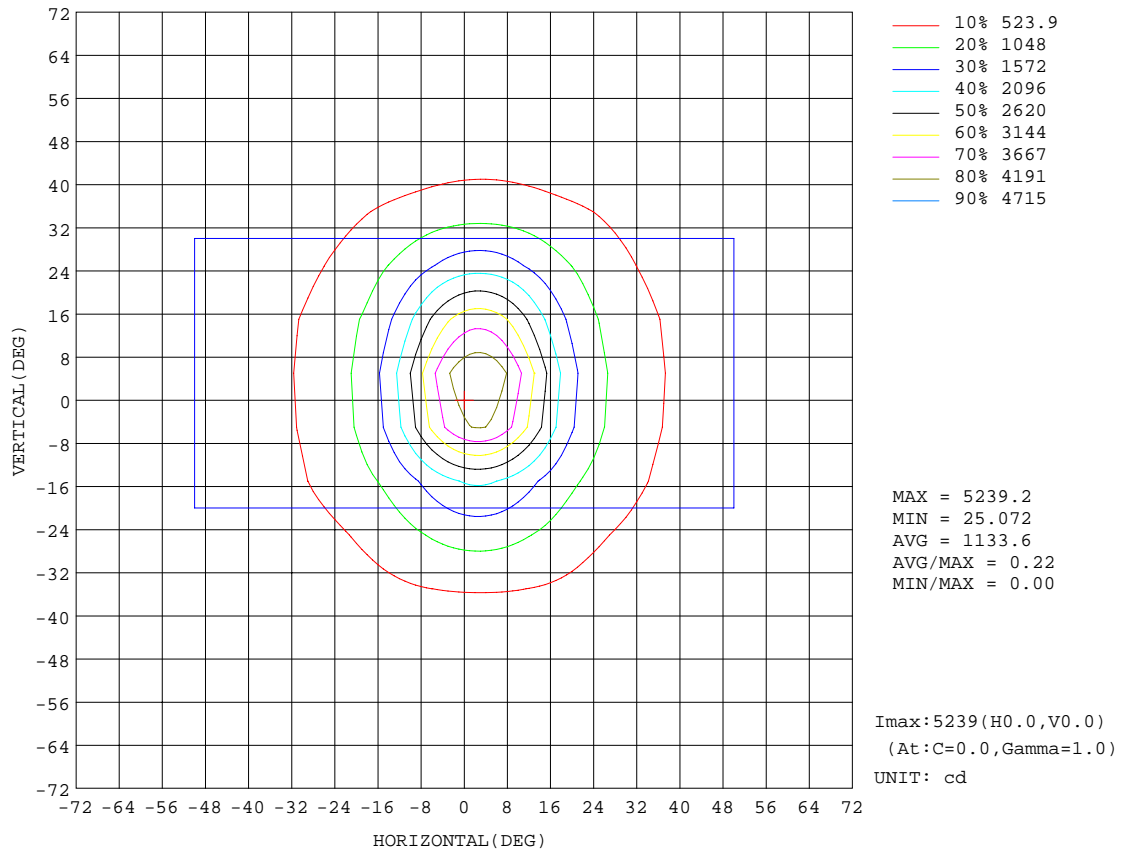
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	86	80	76	86	79	76	85	79	75	72
0.80	94	88	84	93	87	84	92	87	83	80
1.00	99	93	89	98	92	89	96	92	88	84
1.25	103	97	94	102	97	94	100	96	93	88
1.50	106	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	99	93
2.50	110	106	103	108	105	102	105	103	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	105	97
5.00	115	113	111	113	111	109	109	107	106	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

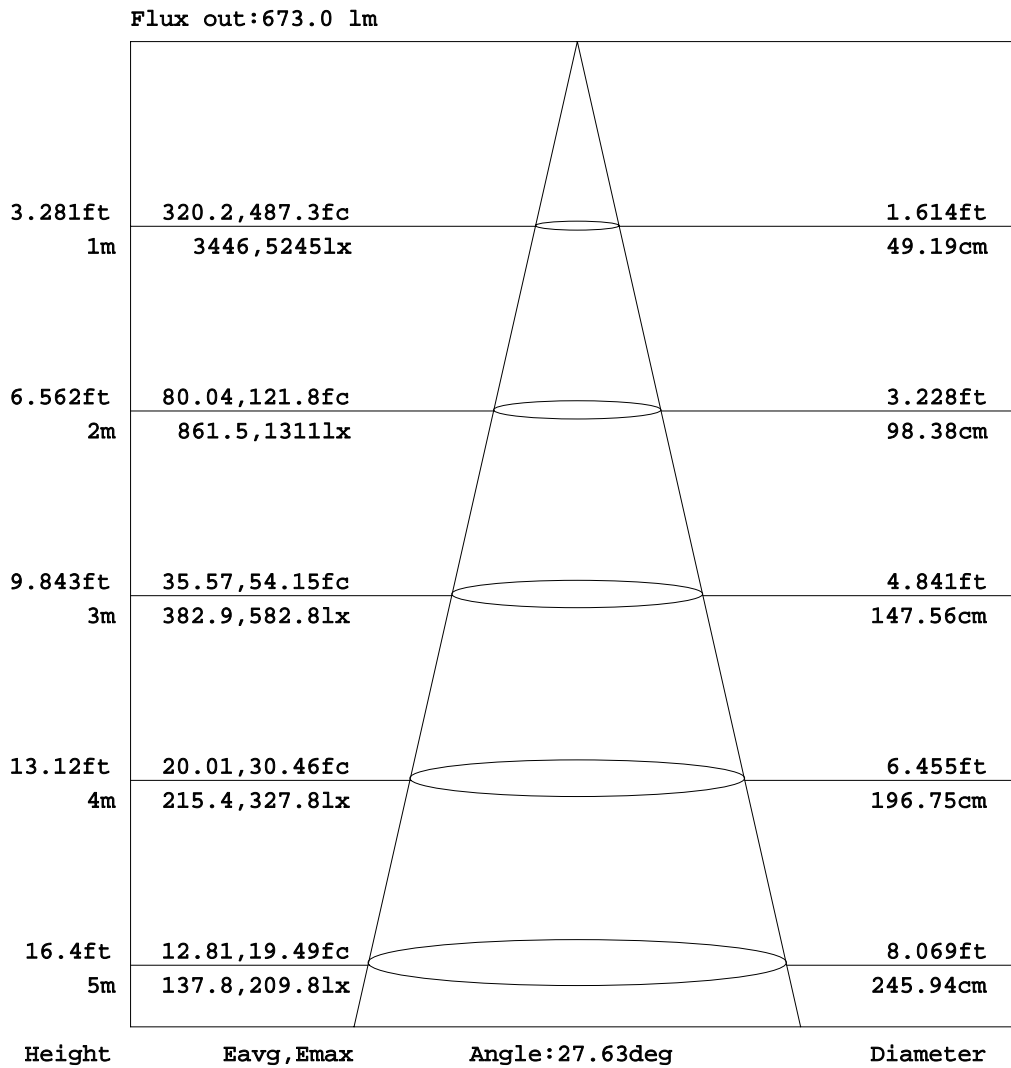


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

AAI Figure

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:



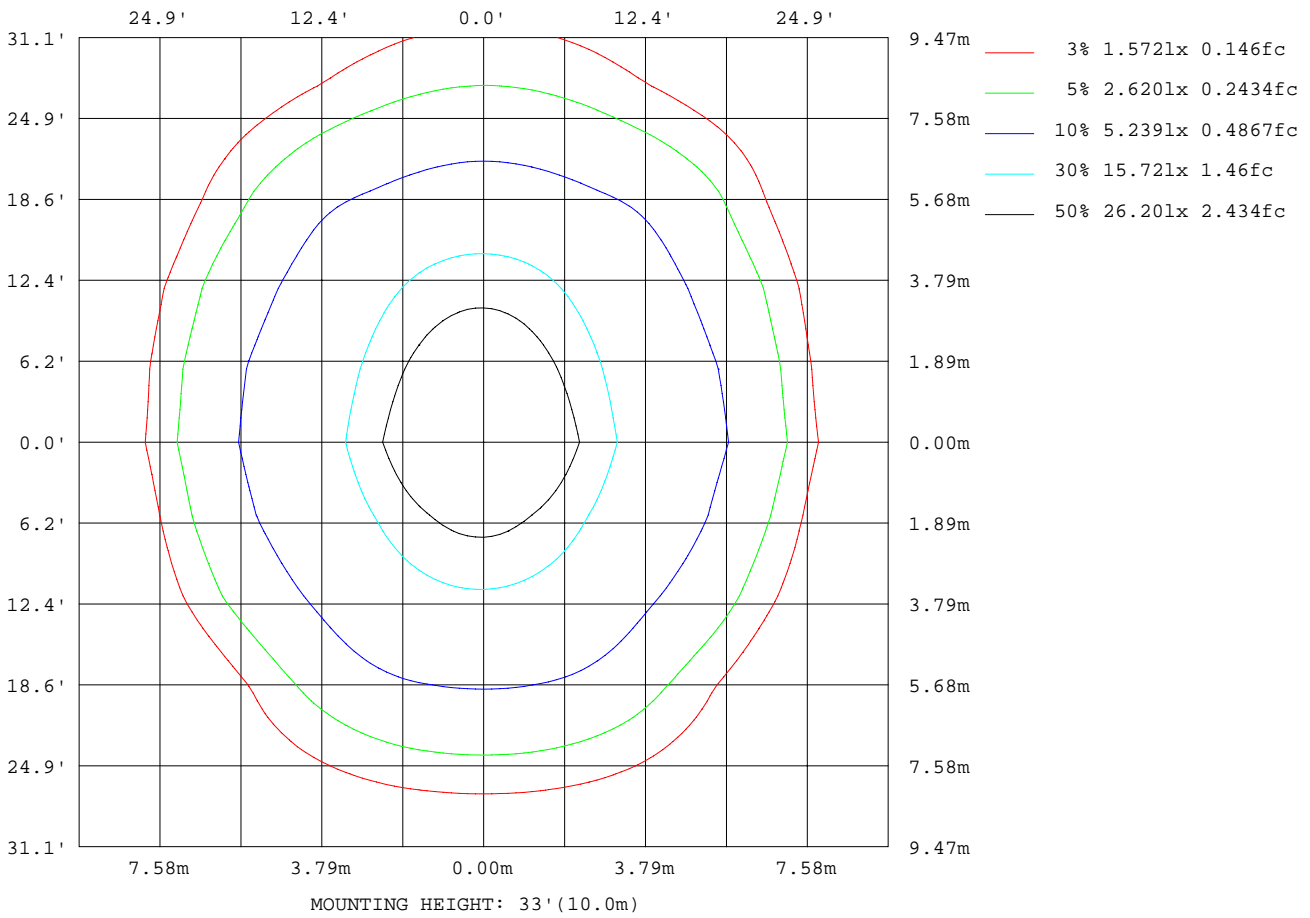
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	2202.08	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.0055	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	9309	8909	8853	9084	9332	9824	9691	10116	10657	10601	10137	9320	9134	8933	7875	7783	7262	7125	7180
60	4741	4476	4704	5162	6016	6631	5983	5553	5260	5002	5001	5040	5521	5949	4877	4151	3542	3293	3203
65	2317	2279	2507	2488	3688	3090	2761	3604	4216	4343	4006	3249	2443	2827	3056	2124	2094	1984	1984
70	2062	2039	2076	2143	2067	2098	2449	3019	3373	3421	3209	2737	2194	1913	1922	1907	1868	1832	1836
75	1980	1941	1939	1979	1571	1934	2132	2207	2069	1948	1984	2030	1896	1584	1391	1687	1411	1537	1570
80	331	365	1002	1040	561	1195	774	356	88	0	85	329	682	769	368	854	300	167	145
85	60	147	180	0	0	0	0	0	0	0	0	0	0	0	0	0	98	72	81

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum calculated	specified maximum	maximum measured	specified maximum
Category 1	55 to 90	10657	200	---	500
Category 2	65 to 90	4343	200	---	500
Category 3	75 to 90	2207	200	---	500

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	2202.08	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.0055	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	9309	8909	8853	9084	9332	9824	9691	10116	10657	10601	10137	9320	9134	8933	7875	7783	7262	7125	7180
60	4741	4476	4704	5162	6016	6631	5983	5553	5260	5002	5001	5040	5521	5949	4877	4151	3542	3293	3203
65	2317	2279	2507	2488	3688	3090	2761	3604	4216	4343	4006	3249	2443	2827	3056	2124	2094	1984	1984
70	2062	2039	2076	2143	2067	2098	2449	3019	3373	3421	3209	2737	2194	1913	1922	1907	1868	1832	1836
75	1980	1941	1939	1979	1571	1934	2132	2207	2069	1948	1984	2030	1896	1584	1391	1687	1411	1537	1570
80	331	365	1002	1040	561	1195	774	356	88	0	85	329	682	769	368	854	300	167	145
85	60	147	180	0	0	0	0	0	0	0	0	0	0	0	0	0	98	72	81

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

range (deg)	Maximum measured	Average Luminance(cd/sq.m)			
		Maximum limit for screen type & software category used			
		Type I,II screen Some neg.s'ware	Type I,II screen Only pos.s'ware	Type III screen Some neg.s'ware	Type III screen Only pos.s'ware
55 to 90	10657	1000	1500	200	500
65 to 90	4343	1000	1500	200	500

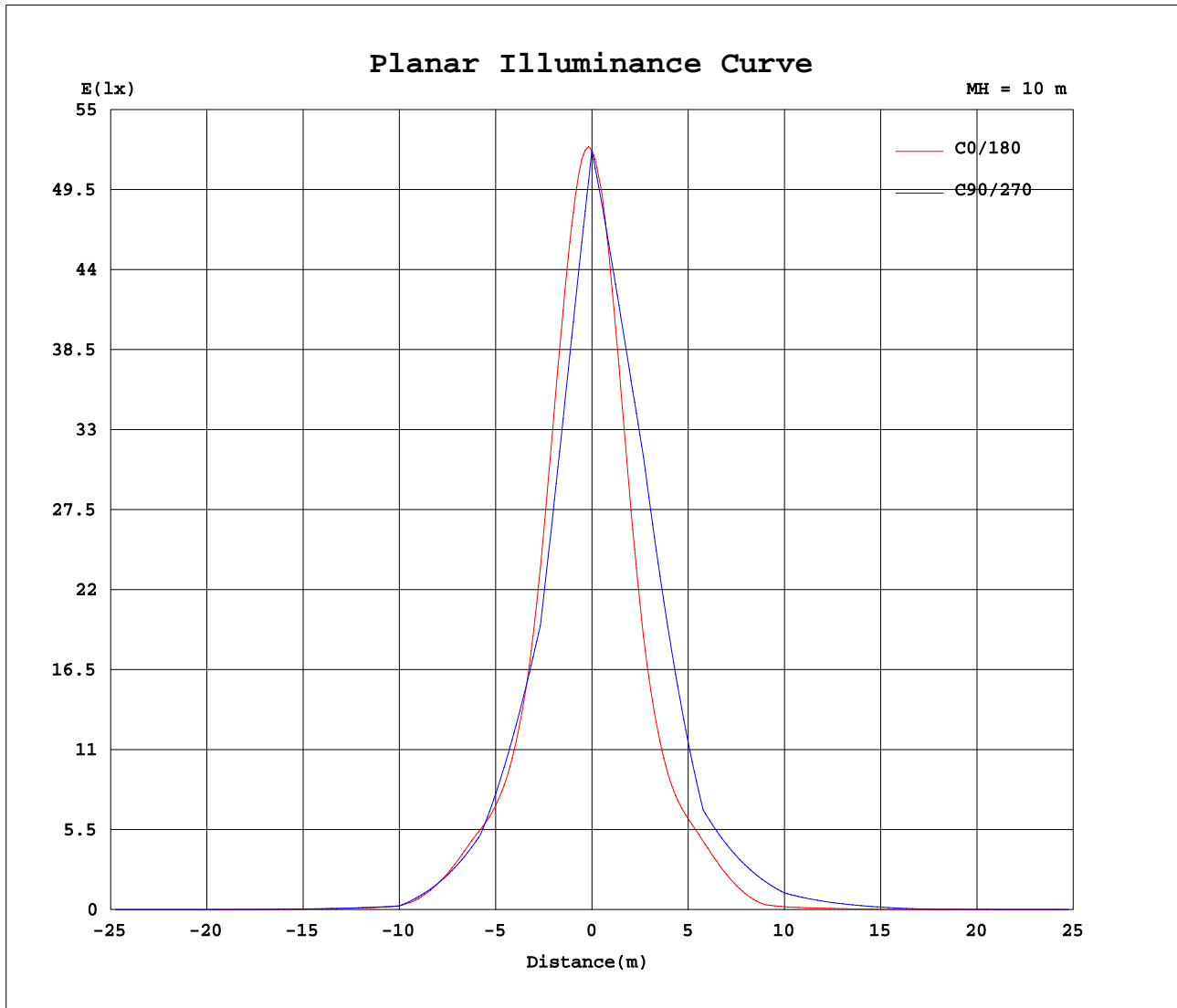
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

No match

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218
5	4946	4865	4789	4719	4656	4598	4547	4503	4460	4421	4388	4357	4325	4301	4275	4254	4236	4215	4201
10	3904	3786	3684	3599	3528	3470	3424	3389	3359	3336	3313	3297	3286	3272	3256	3239	3223	3205	3184
15	2606	2509	2436	2383	2346	2323	2308	2301	2295	2287	2278	2269	2260	2247	2236	2221	2201	2184	2167
20	1629	1570	1529	1503	1488	1482	1487	1492	1495	1489	1501	1545	1585	1629	1667	1698	1715	1720	1711
25	1096	1067	1049	1039	1036	1037	1037	1035	1046	1070	1102	1140	1176	1206	1233	1253	1264	1264	1255
30	854	822	802	796	803	817	806	778	768	775	797	823	844	857	854	844	826	809	800
35	606	567	546	539	549	553	544	537	529	529	546	570	585	589	585	578	571	562	557
40	297	267	256	259	274	279	273	272	276	296	333	356	368	365	356	343	330	320	315
45	77.0	75.8	77.8	73.2	81.6	102	106	78.2	107	148	176	185	178	161	137	112	91.6	78.1	72.8
50	46.2	44.5	44.4	44.0	43.7	46.0	44.7	45.9	50.3	63.5	71.8	57.5	45.4	46.9	49.6	51.8	53.0	53.5	53.1
55	29.4	27.8	28.1	27.6	27.9	28.8	28.7	28.5	29.4	29.9	31.0	31.2	30.6	30.4	31.9	33.1	33.6	33.8	33.4
60	13.0	12.0	12.3	12.5	12.9	14.5	14.2	13.7	16.5	18.0	18.2	17.6	16.5	15.5	15.3	14.9	14.5	14.0	13.8
65	5.39	5.22	5.30	5.35	5.83	6.14	5.78	7.25	8.57	8.63	7.18	5.66	6.42	7.43	8.38	9.21	9.80	10.1	10.1
70	3.88	3.82	3.84	3.87	3.90	3.91	4.03	4.21	3.89	3.86	3.95	4.19	4.61	5.19	5.68	6.08	6.34	6.45	6.43
75	2.82	2.74	2.76	2.82	2.76	2.88	2.82	2.46	2.24	2.55	2.75	2.89	3.04	3.15	3.14	3.06	2.94	2.83	2.77
80	0.32	0.34	0.35	0.74	0.96	1.29	0.99	0.72	0.54	1.03	1.14	0.96	0.74	0.53	0.34	0.19	0.08	0.02	0.00
85	0.03	0.05	0.07	0.09	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218
5	4185	4177	4165	4157	4155	4157	4167	4174	4182	4198	4220	4246	4281	4323	4373	4430	4495	4568	4527
10	3163	3139	3119	3098	3075	3056	3031	3013	3002	2997	2998	3003	3019	3048	3090	3147	3221	3314	3263
15	2149	2131	2113	2097	2077	2060	2040	2017	1994	1972	1953	1936	1930	1932	1946	1973	2018	2085	2051
20	1687	1650	1605	1552	1496	1438	1385	1334	1308	1293	1275	1261	1252	1247	1249	1260	1282	1318	1301
25	1239	1215	1185	1148	1104	1059	1015	975	946	932	934	926	917	909	904	906	917	936	931
30	800	806	809	802	784	758	728	701	685	684	698	717	716	697	686	686	700	727	718
35	555	555	554	548	537	518	488	460	442	435	436	441	441	426	405	398	410	439	431
40	315	320	325	329	328	318	295	256	204	185	192	200	189	165	149	143	144	157	156
45	75.7	88.0	106	126	143	153	149	126	91.9	66.9	62.7	72.8	64.6	60.3	57.6	55.9	56.5	58.5	58.3
50	51.7	50.6	48.4	46.0	43.3	43.2	50.8	53.6	45.5	42.0	39.7	40.4	39.3	38.5	39.1	38.6	38.4	39.8	39.7
55	32.6	32.0	30.8	29.4	28.6	28.8	28.9	28.2	26.3	24.8	24.5	24.6	24.2	22.9	22.5	22.5	21.7	22.6	22.8
60	13.7	13.8	13.8	13.9	14.3	15.2	16.0	16.4	15.5	13.4	10.6	11.4	11.3	9.74	9.37	9.06	8.50	8.81	9.13
65	9.84	9.31	8.49	7.55	6.55	5.68	5.15	6.57	7.53	7.10	5.84	4.94	5.19	4.87	4.67	4.61	4.56	4.61	4.71
70	6.31	6.04	5.62	5.15	4.59	4.13	3.80	3.60	3.47	3.61	3.73	3.59	3.52	3.51	3.46	3.45	3.46	3.45	3.54
75	2.78	2.82	2.87	2.89	2.82	2.70	2.54	2.25	1.84	1.98	2.19	2.40	2.36	2.01	2.34	2.19	2.22	2.23	2.32
80	0.02	0.08	0.18	0.31	0.47	0.65	0.80	0.73	0.37	0.35	0.56	0.82	0.93	0.29	0.40	0.16	0.14	0.14	0.15
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	0.05	0.03	0.02	0.04	0.01
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--3

UNIT: cd

C(DEG) \ γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218
5	4493	4467	4448	4437	4433	4436	4443	4456	4475	4494	4507	4525	4545	4568	4592	4609	4630	4643	4659
10	3231	3217	3220	3239	3274	3323	3379	3445	3516	3596	3682	3754	3830	3896	3951	4003	4043	4061	4069
15	2041	2050	2076	2120	2179	2261	2356	2465	2584	2712	2847	2980	3111	3218	3319	3395	3455	3469	3464
20	1300	1314	1341	1383	1443	1518	1607	1709	1819	1944	2068	2195	2322	2436	2527	2601	2656	2672	2664
25	935	946	967	995	1037	1085	1131	1199	1277	1356	1446	1539	1626	1705	1769	1820	1858	1873	1870
30	722	741	769	807	820	817	833	871	922	981	1025	1054	1069	1070	1063	1055	1059	1075	1103
35	441	468	510	538	553	576	597	629	676	724	742	748	753	765	783	800	814	820	819
40	169	201	240	259	277	305	345	396	436	465	484	497	507	520	539	556	570	576	574
45	60.9	66.3	70.0	89.2	103	92.1	145	202	236	247	245	250	261	278	298	313	325	332	331
50	41.4	43.1	44.0	47.3	48.2	52.8	59.7	85.6	95.6	79.0	70.8	95.5	133	169	198	217	228	230	223
55	24.9	26.1	27.8	30.6	32.3	33.9	37.5	39.9	41.6	42.8	48.4	57.5	80.0	100	115	125	131	133	130
60	10.4	11.4	13.0	15.3	16.8	18.9	22.5	24.6	25.6	26.4	28.7	31.5	36.6	38.6	37.1	34.8	34.1	35.8	39.8
65	4.91	5.17	5.82	6.55	7.14	9.67	11.5	11.7	11.0	11.6	14.7	17.7	19.8	21.5	22.7	23.6	24.1	24.2	24.0
70	3.64	3.79	3.99	4.14	4.47	4.98	4.63	5.01	5.94	7.64	9.50	11.2	12.2	13.0	13.5	13.9	14.2	14.3	14.3
75	2.46	2.73	2.78	2.99	2.98	3.09	3.36	3.60	3.98	4.56	5.01	5.18	5.04	4.74	4.44	4.24	4.20	4.32	4.62
80	0.21	0.65	0.94	1.32	1.08	1.24	2.09	2.01	1.70	1.36	1.03	0.73	0.48	0.27	0.12	0.03	0.00	0.03	0.13
85	0.03	0.05	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DOBAC
 Test Date:2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity:65.0%
 Test Distance:6.960m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-30D-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218	5218				
5	4670	4679	4690	4696	4707	4713	4718	4729	4741	4754	4772	4796	4825	4860	4900				
10	4066	4050	4024	3993	3949	3904	3863	3823	3790	3763	3748	3746	3761	3791	3839				
15	3433	3383	3304	3209	3108	3001	2897	2800	2716	2643	2586	2546	2527	2529	2555				
20	2635	2571	2489	2385	2271	2161	2043	1931	1832	1749	1680	1633	1604	1593	1600				
25	1850	1808	1742	1663	1577	1492	1415	1341	1275	1208	1157	1118	1093	1082	1083				
30	1134	1156	1160	1145	1115	1072	1018	969	929	910	893	869	850	841	843				
35	813	808	806	814	826	806	765	723	697	683	684	662	623	599	593				
40	568	561	555	559	563	560	538	486	441	408	382	363	323	295	286				
45	324	313	304	303	310	315	295	247	184	160	145	121	95.5	85.0	79.1				
50	205	173	133	92.1	94.8	126	129	103	70.0	59.6	56.1	52.4	49.1	47.3	46.0				
55	121	103	78.9	56.7	50.5	45.9	45.0	45.8	41.3	38.4	37.6	34.8	32.5	31.2	29.4				
60	43.7	44.4	39.7	34.0	31.3	29.6	29.0	27.5	24.8	22.3	20.9	19.0	16.3	14.8	13.1				
65	23.4	22.3	20.8	18.4	15.3	14.4	14.4	14.5	13.0	9.91	8.64	7.91	6.46	5.82	5.44				
70	14.1	13.8	13.0	11.8	9.99	7.97	6.23	5.31	5.99	5.38	4.68	4.43	4.22	4.04	3.90				
75	5.03	5.48	5.84	5.93	5.61	5.00	4.33	3.95	3.71	3.58	3.49	3.29	3.17	3.02	2.85				
80	0.29	0.51	0.80	1.14	1.54	1.98	2.43	2.73	2.49	1.99	1.68	1.93	1.24	1.01	0.51				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.08	0.10	0.05	0.03			
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

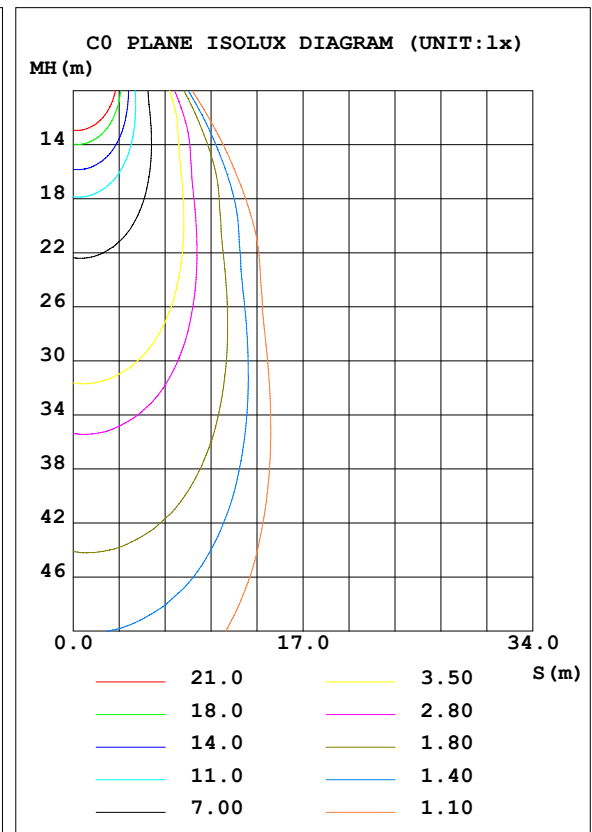
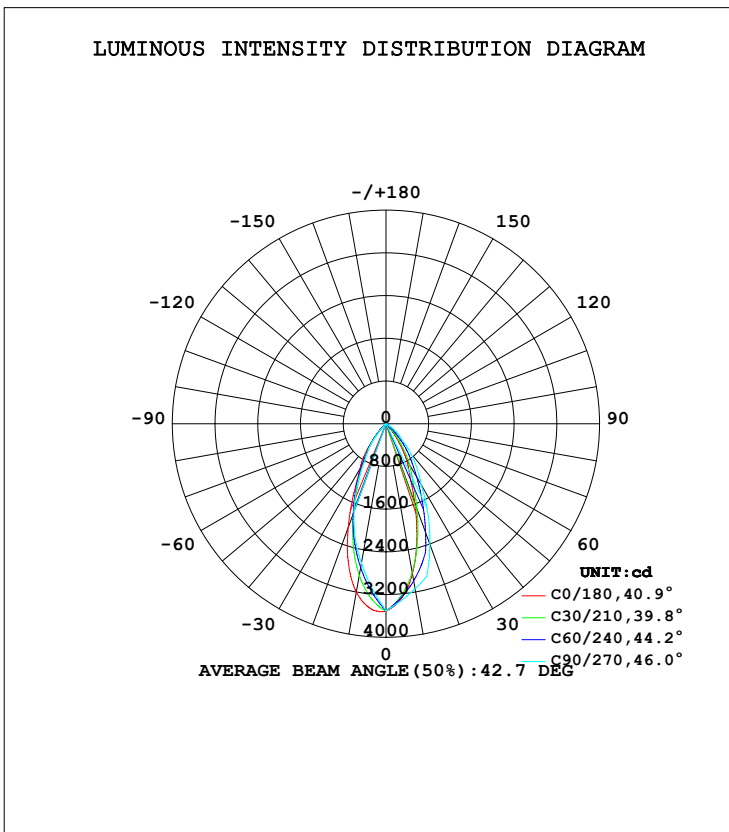
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 77.39 lm/W			
MODEL	Juvenis AC-30W-40D-3000K-90	I _{max} (cd)	3521	S/MH (C0/180)	0.71
NOMINAL POWER (W)	28	LOR (%)	100.0	S/MH (C90/270)	0.62
RATED VOLTAGE (V)	220	TOTAL FLUX (lm)	2190.2	η UP, DN (C0-180)	0.0, 43.0
NOMINAL FLUX (lm)	2190.2	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 57.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	0.70



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
5	3468	3203	3078	3079	3292	3248	3321	3375	0- 5	79.93	79.93	3.65,3.65
10	3205	2794	2653	2574	2855	2896	3139	3127	5- 10	218.6	298.5	13.6,13.6
15	2714	2308	2228	2017	2237	2455	2957	2778	10- 15	314.8	613.4	28,28
20	2071	1778	1753	1469	1571	1967	2409	2347	15- 20	355.7	969.1	44.2,44.2
25	1421	1282	1278	1016	1051	1414	1860	1758	20- 25	339.1	1308	59.7,59.7
30	976.1	868.1	803.5	681.4	759.4	983.1	1312	1254	25- 30	291.0	1599	73,73
35	678.8	543.1	551.6	388.0	427.5	669.2	1011	887.0	30- 35	232.0	1831	83.6,83.6
40	341.5	272.0	299.7	134.0	131.0	396.6	709.9	602.1	35- 40	165.3	1997	91.2,91.2
45	77.24	128.6	47.81	55.79	41.41	191.9	409.0	329.8	40- 45	93.11	2090	95.4,95.4
50	37.15	50.60	36.29	30.79	28.15	73.18	283.0	138.7	45- 50	43.31	2133	97.4,97.4
55	26.60	23.41	24.77	18.84	19.31	30.32	157.0	37.60	50- 55	24.59	2158	98.5,98.5
60	17.69	16.63	13.26	12.88	12.27	21.90	31.03	27.63	55- 60	14.47	2172	99.2,99.2
65	11.01	10.37	9.763	7.724	7.302	14.50	23.47	19.28	60- 65	7.769	2180	99.5,99.5
70	6.556	5.953	6.268	4.183	4.681	9.333	15.91	12.69	65- 70	5.286	2185	99.8,99.8
75	4.366	3.001	2.773	1.965	2.331	6.221	8.355	8.377	70- 75	3.387	2188	99.9,99.9
80	0.6072	0.4527	0	0.1231	0.1051	3.127	0	4.036	75- 80	1.540	2190	100,100
85	0.0425	0	0	0	0.0369	0	0	0	80- 85	0.1852	2190	100,100
90	0.0136	0	0	0	0.0197	0	0	0	85- 90	0.0034	2190	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd								UNIT:lm			

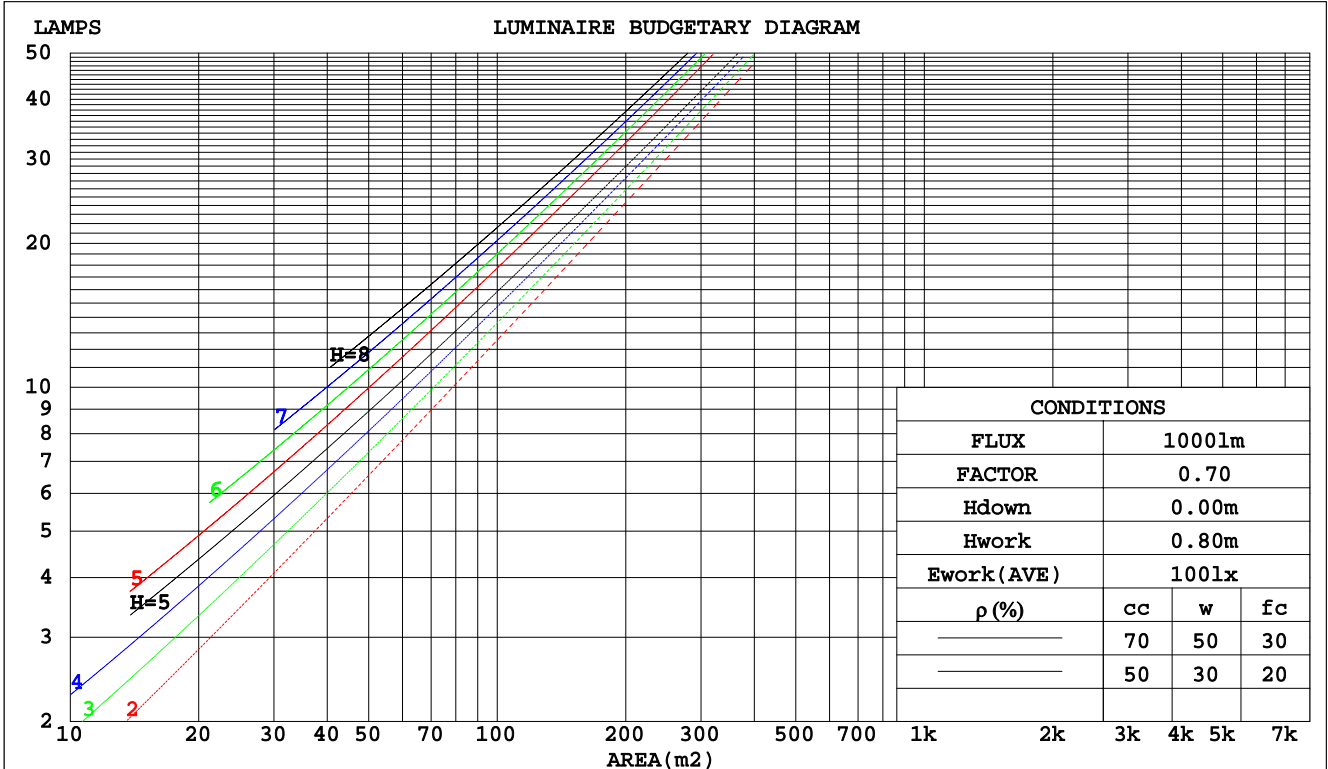
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc																0
RCR	RCR:Room Cavity Ratio Coefficients of Utilization(CU)															
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.11	1.08	1.06	1.09	1.07	1.05	1.05	1.03	1.01	1.01	.98	.98	.96	.95	.94	
2.0	1.03	.99	.96	1.02	.98	.95	.98	.95	.93	.95	.93	.91	.93	.91	.89	
3.0	.97	.92	.88	.95	.91	.87	.93	.89	.86	.90	.87	.84	.88	.85	.83	
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.80	.85	.82	.79	.83	.80	.78	
5.0	.85	.79	.75	.84	.79	.75	.82	.78	.74	.81	.77	.73	.79	.76	.73	
6.0	.80	.74	.70	.79	.74	.70	.78	.73	.69	.76	.72	.69	.75	.71	.68	
7.0	.76	.70	.66	.75	.69	.65	.74	.69	.65	.72	.68	.65	.71	.67	.64	
8.0	.71	.66	.62	.71	.65	.62	.70	.65	.61	.69	.64	.61	.68	.64	.61	
9.0	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.65	.61	.57	
10.0	.64	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.55	.62	.57	.54	



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

WEC AND CCEC

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.175	.100	.032	.168	.096	.031	.156	.089	.029	.144	.083	.027	.134	.077	.025	
2.0	.168	.092	.028	.162	.089	.028	.152	.084	.026	.142	.080	.025	.133	.075	.024	
3.0	.160	.085	.025	.155	.083	.025	.146	.079	.024	.137	.075	.023	.130	.072	.022	
4.0	.152	.079	.023	.148	.077	.023	.140	.074	.022	.133	.071	.021	.126	.068	.021	
5.0	.145	.074	.021	.141	.072	.021	.134	.070	.021	.128	.067	.020	.122	.065	.020	
6.0	.138	.069	.020	.135	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018	
7.0	.132	.065	.018	.129	.064	.018	.123	.062	.018	.119	.061	.018	.114	.059	.017	
8.0	.126	.061	.017	.123	.061	.017	.119	.059	.017	.114	.058	.017	.110	.056	.016	
9.0	.120	.058	.016	.118	.058	.016	.114	.056	.016	.110	.055	.016	.106	.054	.016	
10.0	.115	.055	.015	.113	.055	.015	.110	.054	.015	.106	.053	.015	.103	.052	.015	

ρcc	80%			70%			50%			30%			10%			0
ρw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.133	.113	.133	.114	.098	.091	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.143	.114	.090	.123	.098	.078	.084	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.078	.060	.045	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.107	.075	.052	.073	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.042	.095	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.090	.056	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.094	.054	.028	.081	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DOBAC
 Test Date:2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity:65.0%
 Test Distance:6.960m [K=1.0000]
 Remarks:

Uncorrected UGR Table

NAME: Juvenis AC-30W-40D-3000K-90					TYPE:					WEIGHT:				
DIM.:					SPEC.:					SERIAL No.:				
MFR.: DOBAC					SUR.:					PROTECTION ANGLE:				
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3				
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3				
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2				
Room dimensions	Viewed crosswise					Viewed endwise								
x = 2H y = 2H	19.7	20.6	19.9	20.8	20.9	19.7	20.7	20.0	20.8	21.0				
3H	19.6	20.4	19.8	20.6	20.8	19.6	20.5	19.9	20.7	20.9				
4H	19.5	20.3	19.8	20.5	20.7	19.5	20.3	19.8	20.6	20.8				
6H	19.4	20.2	19.7	20.4	20.7	19.4	20.2	19.7	20.4	20.7				
8H	19.4	20.1	19.7	20.3	20.6	19.4	20.1	19.7	20.4	20.6				
12H	19.3	20.0	19.6	20.3	20.6	19.4	20.1	19.7	20.3	20.6				
4H 2H	19.5	20.3	19.7	20.5	20.7	19.5	20.3	19.8	20.5	20.8				
3H	19.3	20.0	19.7	20.3	20.6	19.4	20.1	19.7	20.4	20.6				
4H	19.3	19.9	19.6	20.2	20.5	19.3	20.0	19.7	20.2	20.6				
6H	19.2	19.8	19.6	20.1	20.4	19.2	19.8	19.6	20.1	20.5				
8H	19.1	19.7	19.5	20.0	20.4	19.2	19.7	19.6	20.0	20.4				
12H	19.1	19.6	19.5	19.9	20.3	19.1	19.6	19.5	20.0	20.4				
8H 4H	19.1	19.7	19.5	20.0	20.4	19.2	19.7	19.6	20.0	20.4				
6H	19.1	19.5	19.5	19.9	20.3	19.1	19.5	19.5	19.9	20.3				
8H	19.0	19.4	19.5	19.8	20.2	19.0	19.4	19.5	19.8	20.3				
12H	18.9	19.3	19.4	19.7	20.2	19.0	19.3	19.4	19.7	20.2				
12H 4H	19.1	19.6	19.5	19.9	20.3	19.1	19.6	19.5	20.0	20.4				
6H	19.0	19.4	19.5	19.8	20.2	19.0	19.4	19.5	19.8	20.3				
8H	18.9	19.3	19.4	19.7	20.2	19.0	19.3	19.4	19.7	20.2				
Variations with the observer position at spacings:														
S = 1.0H	+ 3.9 / - 8.7					+ 2.5 / - 9.4								
1.5H	+ 6.5 / - 7.6					+ 5.1 / - 7.9								
2.0H	+ 4.2 / - 2.5					+ 1.9 / - 2.6								

CIE Pub.117 Corrected 2190 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.7)

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

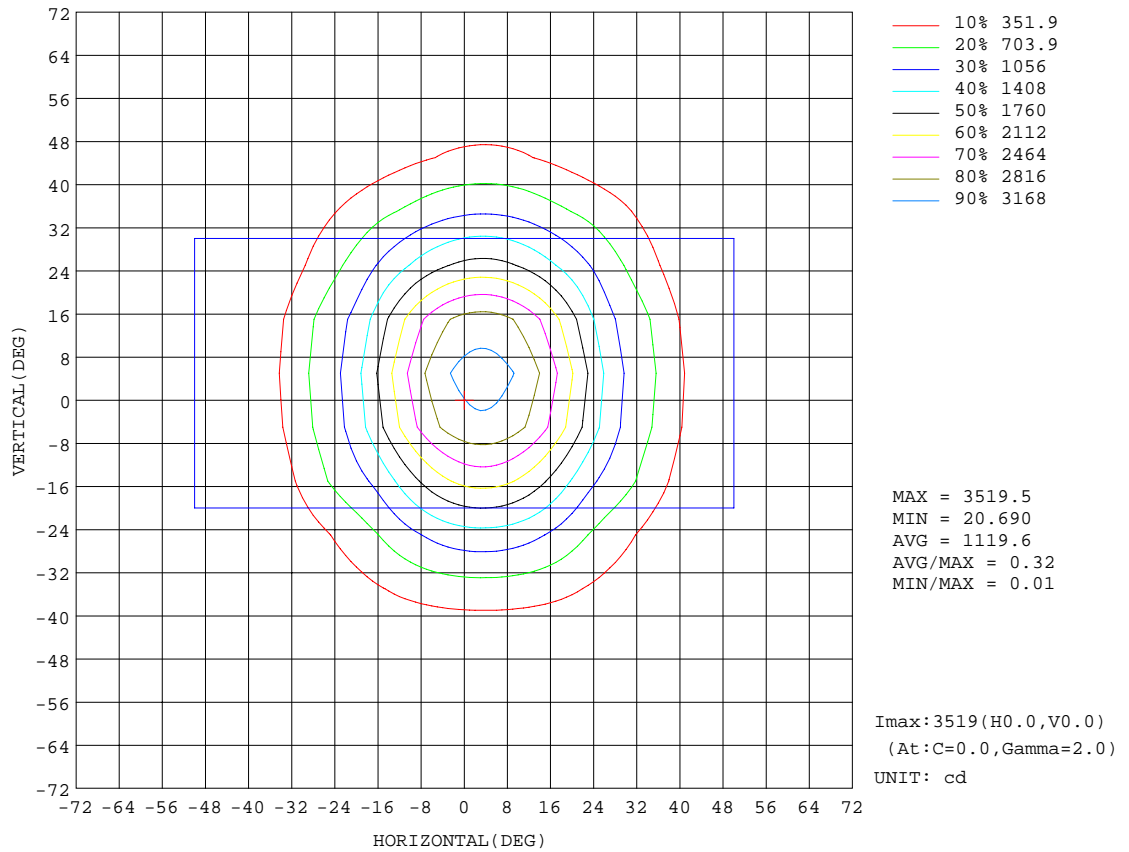
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	86	79	75	85	79	75	85	79	75	71
0.80	94	88	84	93	87	84	92	87	83	79
1.00	98	93	89	98	92	89	96	92	88	84
1.25	103	97	94	102	97	93	100	95	92	88
1.50	105	101	97	104	100	97	102	98	96	91
2.00	108	104	101	107	103	100	104	101	98	93
2.50	110	106	103	108	105	102	105	102	100	94
3.00	112	108	105	110	107	104	106	104	102	96
4.00	114	111	109	112	109	107	108	106	104	97
5.00	115	113	111	113	111	109	109	107	106	98
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

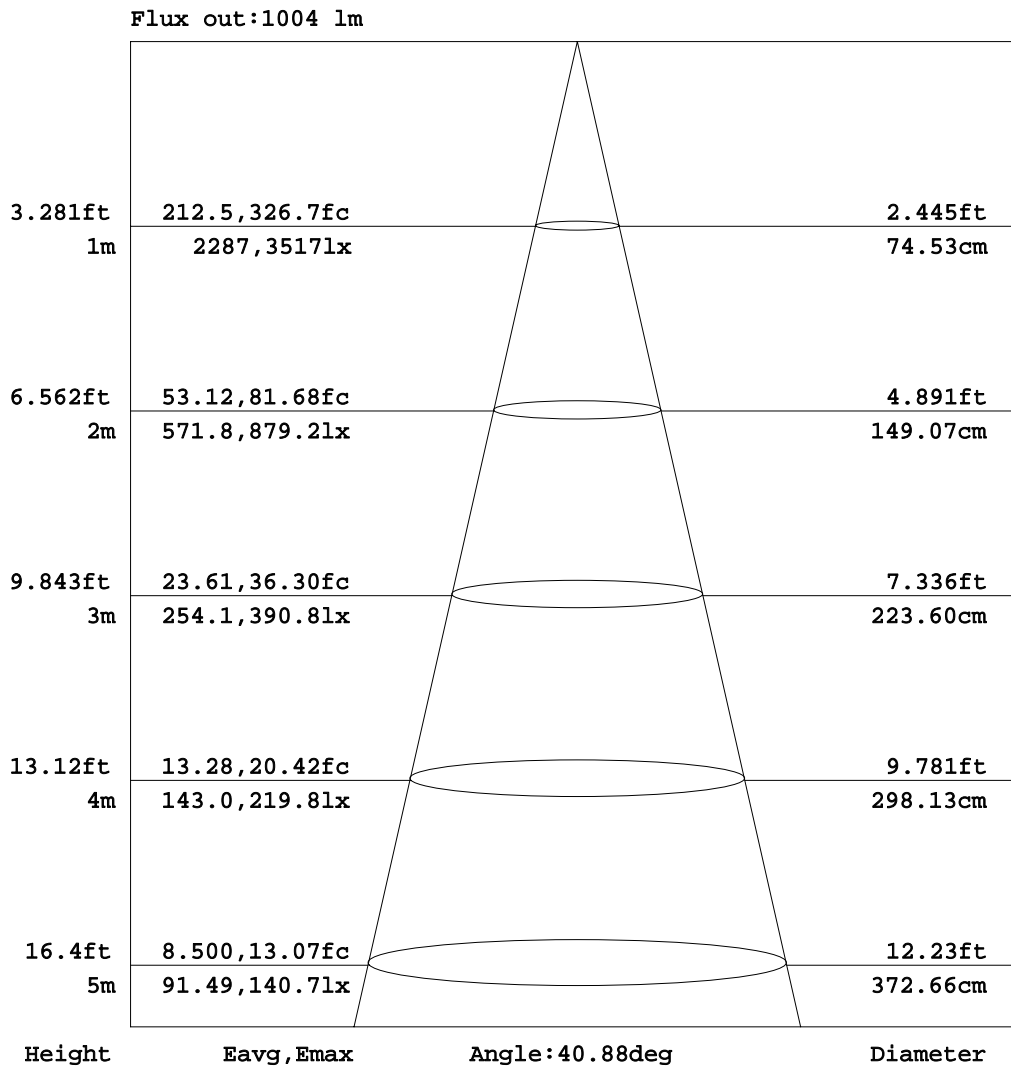


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

AAI Figure

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:



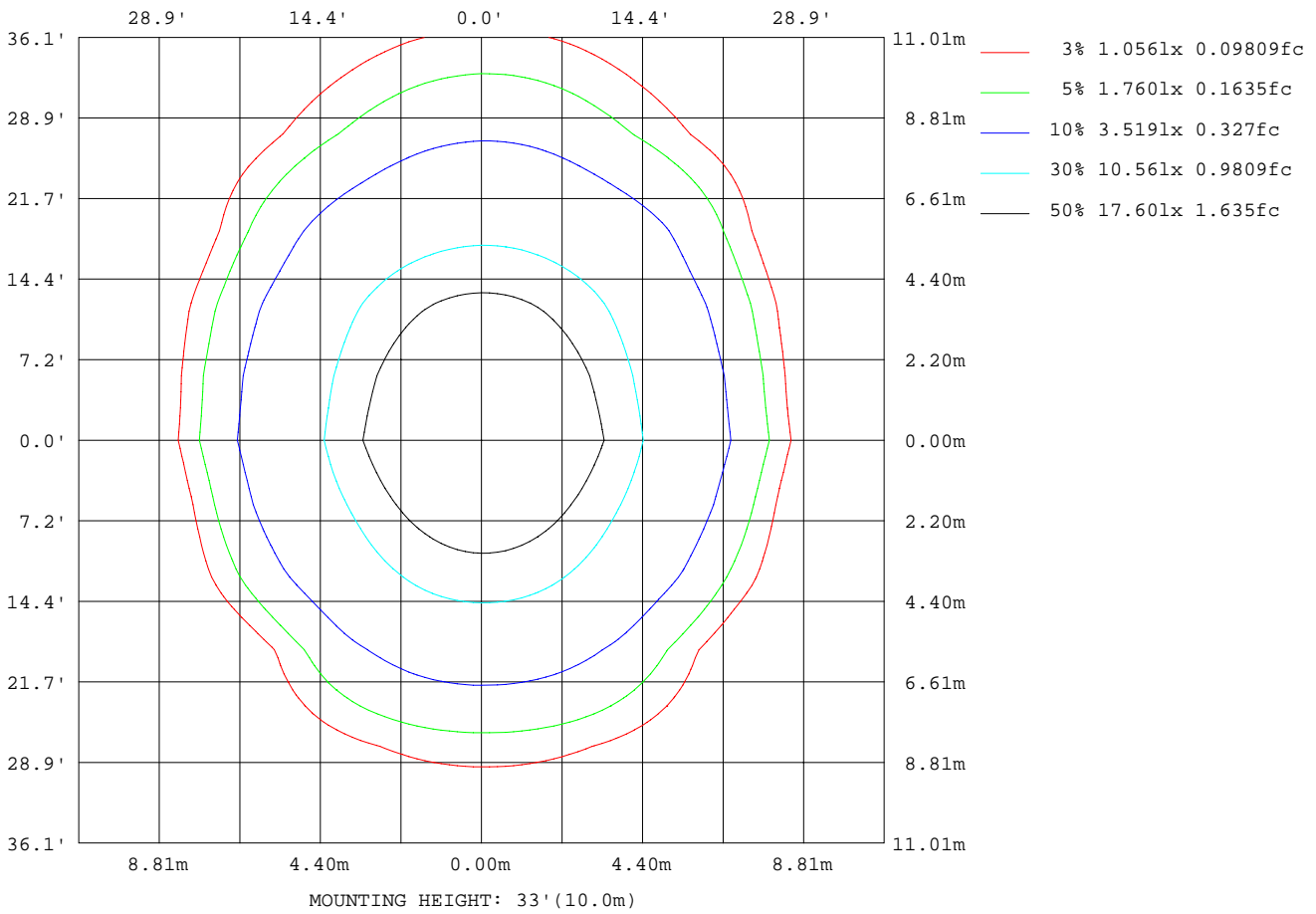
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

Average Luminance Table(CIBSE)

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	2190.2	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.0055	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	8431	7984	7806	7752	7707	7540	7536	7575	7990	7853	7280	6739	6519	6212	5953	5943	5811	5938	6121
60	6432	6112	6023	5956	5975	5997	5785	5497	5127	4821	4798	4760	4809	4762	4510	4371	4310	4317	4463
65	4736	4438	4477	4412	4587	4281	4172	4343	4313	4200	4022	3665	3239	3231	3369	3145	3092	3056	3141
70	3485	3320	3295	3546	3180	3289	3506	3563	3465	3332	3186	2911	2429	2281	2273	2442	2431	2410	2488
75	3067	2892	2717	2835	2221	2222	2517	2358	2119	1948	1878	1747	1173	1272	1565	1580	1430	1431	1638
80	636	604	1155	1458	522	678	759	365	91	0	80	255	171	133	217	736	131	91	110
85	89	165	189	0	0	0	0	0	0	0	0	0	0	0	0	0	92	66	77

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

CIBSE Category	Gamma (deg)	Average Luminance		Patch Luminance	
		maximum calculated	specified maximum	maximum measured	specified maximum
Category 1	55 to 90	8431	200	---	500
Category 2	65 to 90	4736	200	---	500
Category 3	75 to 90	3067	200	---	500

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Parameter description for average Luminance	Symbol	Value	Unit
Luminance in Azimuth Plane	Bc	refer Table 2	cd/sq.m.
Intensity at angle Gamma in given azimuth plane	I	from data	cd/klm
Number of lamps	N	1	
Output of each lamp(initial lumens as specified)	F	2190.2	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.0055	sq.m.
Angle to the downward vertical from light centre	Gamma	from data	deg

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

G deg	C plane(deg)																		
	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
55	8431	7984	7806	7752	7707	7540	7536	7575	7990	7853	7280	6739	6519	6212	5953	5943	5811	5938	6121
60	6432	6112	6023	5956	5975	5997	5785	5497	5127	4821	4798	4760	4809	4762	4510	4371	4310	4317	4463
65	4736	4438	4477	4412	4587	4281	4172	4343	4313	4200	4022	3665	3239	3231	3369	3145	3092	3056	3141
70	3485	3320	3295	3546	3180	3289	3506	3563	3465	3332	3186	2911	2429	2281	2273	2442	2431	2410	2488
75	3067	2892	2717	2835	2221	2222	2517	2358	2119	1948	1878	1747	1173	1272	1565	1580	1430	1431	1638
80	636	604	1155	1458	522	678	759	365	91	0	80	255	171	133	217	736	131	91	110
85	89	165	189	0	0	0	0	0	0	0	0	0	0	0	0	0	92	66	77

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

range (deg)	Maximum measured	Average Luminance(cd/sq.m)			
		Maximum limit for screen type & software category used			
		Type I,II screen Some neg.s'ware	Type I,II screen Only pos.s'ware	Type III screen Some neg.s'ware	Type III screen Only pos.s'ware
55 to 90	8431	1000	1500	200	500
65 to 90	4736	1000	1500	200	500

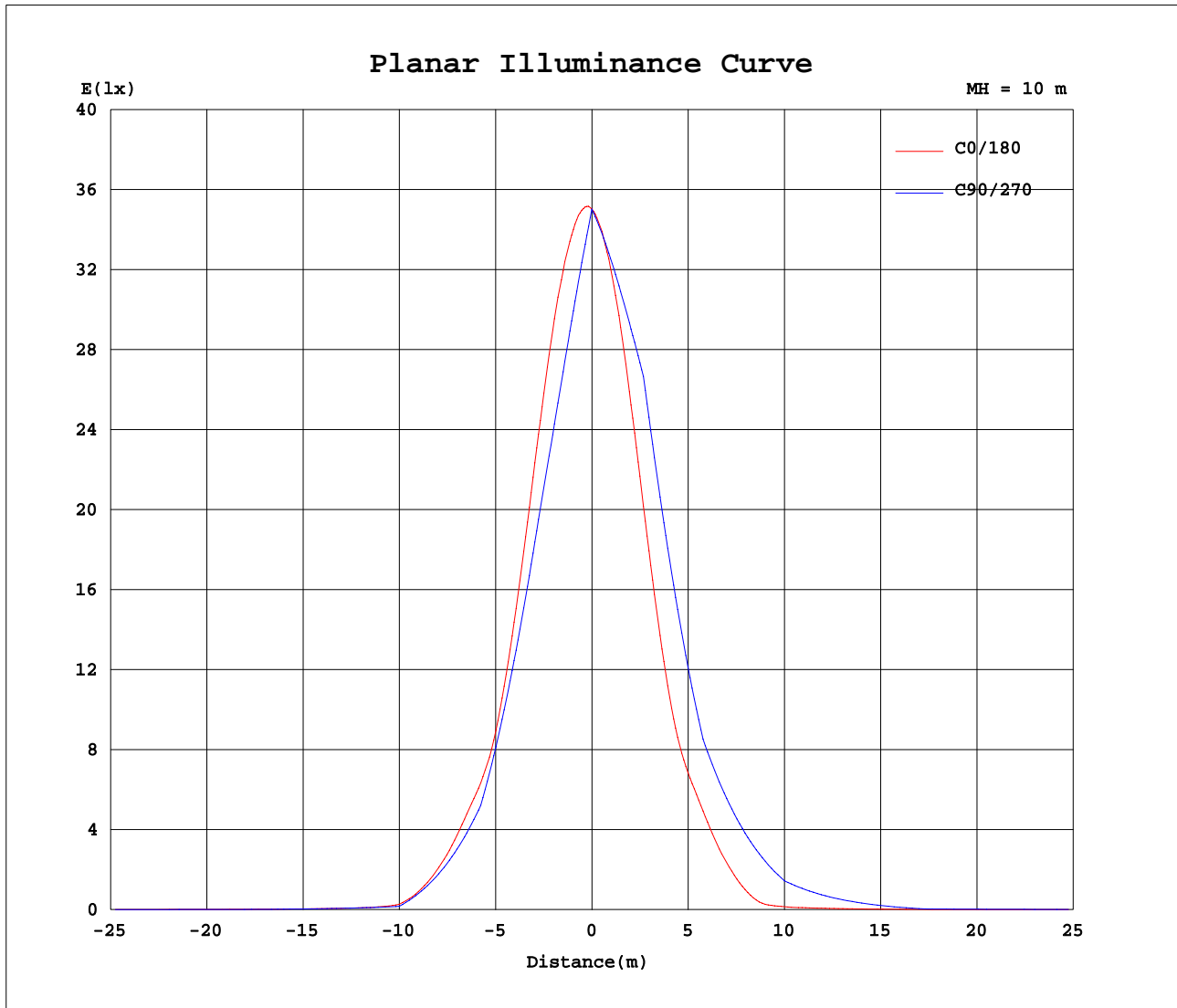
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

No match

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DOBAC
 Test Date: 2017-11-01

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
 Humidity: 65.0%
 Test Distance: 6.960m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--1

UNIT: cd

C(DEG) γ (DEG)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90
0	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503
5	3468	3431	3396	3363	3332	3302	3275	3251	3226	3203	3183	3164	3147	3133	3119	3107	3096	3085	3078
10	3205	3137	3074	3016	2965	2920	2882	2850	2820	2794	2771	2752	2737	2722	2707	2693	2679	2666	2653
15	2714	2626	2552	2490	2440	2398	2365	2340	2321	2308	2297	2290	2285	2280	2275	2268	2257	2243	2228
20	2071	1983	1914	1862	1823	1797	1782	1774	1773	1778	1786	1794	1800	1801	1799	1793	1783	1768	1753
25	1421	1360	1318	1288	1268	1254	1245	1243	1261	1282	1302	1319	1328	1332	1327	1319	1307	1291	1278
30	976	935	909	898	896	902	884	860	857	868	888	903	906	898	880	857	835	813	804
35	679	631	602	590	595	596	577	560	545	543	550	555	571	578	578	573	566	557	552
40	342	303	284	282	294	294	280	270	260	272	313	339	350	350	341	329	316	305	300
45	77.2	74.8	75.9	66.8	80.3	101	99.9	64.4	87.9	129	158	169	162	143	117	90.7	68.6	53.6	47.8
50	37.2	35.7	35.2	35.0	36.2	36.8	34.0	35.8	40.5	50.6	58.1	44.3	32.0	32.6	33.5	35.4	36.5	36.8	36.3
55	26.6	25.4	25.2	24.7	24.6	24.7	24.5	24.2	24.3	23.4	23.8	23.9	23.8	23.8	23.9	24.8	25.2	25.2	24.8
60	17.7	16.9	16.8	16.5	16.6	16.5	16.4	16.1	16.4	16.6	16.5	16.3	15.9	15.5	15.1	14.7	14.1	13.6	13.3
65	11.0	10.4	10.3	10.4	10.4	10.3	10.3	10.6	10.7	10.4	9.95	9.46	9.70	9.85	10.1	10.1	10.0	9.92	9.76
70	6.56	6.31	6.25	6.36	6.20	6.46	6.67	6.42	5.98	5.95	6.19	6.38	6.60	6.62	6.70	6.63	6.52	6.40	6.27
75	4.37	4.21	4.12	4.27	3.87	4.16	4.04	3.48	3.16	3.00	3.16	3.47	3.58	3.49	3.36	3.18	3.02	2.88	2.77
80	0.61	0.69	0.58	1.03	1.10	1.61	1.39	0.89	0.50	0.45	0.65	0.82	0.73	0.54	0.35	0.20	0.09	0.02	0.00
85	0.04	0.06	0.08	0.11	0.09	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--2

UNIT: cd

C(DEG) γ (DEG)	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
0	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503
5	3070	3065	3061	3058	3058	3061	3067	3072	3079	3090	3104	3122	3143	3167	3194	3224	3257	3292	3277
10	2638	2623	2611	2598	2587	2582	2574	2572	2574	2581	2593	2608	2631	2660	2696	2741	2794	2855	2831
15	2205	2182	2156	2130	2103	2077	2053	2033	2017	2006	2001	2002	2014	2035	2066	2109	2166	2237	2210
20	1731	1708	1681	1650	1616	1580	1542	1503	1469	1443	1424	1414	1416	1426	1444	1472	1513	1571	1548
25	1261	1244	1223	1198	1168	1134	1094	1052	1016	998	1004	1003	998	993	992	1000	1019	1051	1043
30	797	796	793	787	775	753	722	694	681	684	700	720	716	699	692	699	721	759	748
35	544	535	524	508	490	458	417	397	388	390	397	403	402	387	372	372	391	427	419
40	297	296	296	295	287	269	235	188	134	133	158	167	150	122	113	112	118	131	129
45	51.1	62.8	79.9	100	116	120	109	82.9	55.8	45.1	40.8	50.8	44.2	41.7	38.8	39.2	39.8	41.4	41.4
50	35.0	33.1	30.9	29.8	29.0	28.5	33.4	33.9	30.8	28.0	27.3	27.1	27.0	26.8	27.0	27.1	27.2	28.1	28.2
55	24.0	23.0	22.0	21.3	21.0	20.6	20.2	19.6	18.8	18.8	18.8	18.7	18.6	18.3	18.4	18.7	18.5	19.3	19.4
60	13.2	13.2	13.2	13.1	13.3	13.2	13.3	13.1	12.9	12.4	11.9	12.0	12.0	11.9	11.7	11.9	11.8	12.3	12.4
65	9.58	9.35	8.96	8.52	8.15	7.53	7.26	7.51	7.72	7.83	7.71	7.31	7.23	7.19	7.08	7.10	7.10	7.30	7.53
70	6.14	5.99	5.76	5.48	5.09	4.57	4.36	4.29	4.18	4.28	4.62	4.59	4.30	4.57	4.48	4.53	4.61	4.68	4.83
75	2.71	2.67	2.63	2.49	2.09	1.67	1.69	1.81	1.96	2.23	2.47	2.25	1.63	2.04	2.18	2.04	2.06	2.33	2.44
80	0.02	0.08	0.16	0.24	0.25	0.16	0.14	0.13	0.12	0.21	0.56	0.70	0.23	0.12	0.13	0.09	0.10	0.11	0.12
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.05	0.03	0.02	0.04	0.02
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--3

UNIT: cd

C (DEG) \ γ (DEG)	190	195	200	205	210	215	220	225	230	235	240	245	250	255	260	265	270	275	280
0	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503
5	3265	3256	3248	3243	3240	3240	3243	3248	3256	3263	3269	3277	3286	3295	3305	3312	3321	3328	3337
10	2815	2807	2807	2815	2828	2848	2870	2896	2924	2956	2990	3017	3048	3076	3101	3122	3139	3153	3160
15	2197	2199	2215	2242	2280	2331	2390	2455	2525	2595	2664	2730	2793	2846	2894	2931	2957	2973	2977
20	1545	1559	1590	1636	1699	1779	1868	1967	2049	2114	2171	2223	2270	2313	2349	2382	2409	2429	2443
25	1049	1067	1098	1140	1200	1278	1341	1414	1489	1552	1613	1669	1718	1759	1799	1832	1860	1880	1892
30	754	775	811	856	884	896	927	983	1049	1109	1152	1182	1209	1234	1261	1285	1312	1330	1344
35	430	461	506	540	564	594	627	669	726	775	806	830	861	903	945	983	1011	1023	1021
40	144	176	217	242	266	296	341	397	450	493	526	555	583	619	656	687	710	721	719
45	43.4	48.8	53.5	66.5	85.4	78.4	132	192	233	251	268	289	315	345	374	394	409	418	421
50	29.0	30.2	31.1	33.5	34.6	40.1	48.1	73.2	85.0	72.7	72.2	118	168	212	246	270	283	287	281
55	20.3	21.1	22.1	23.6	25.1	26.7	29.5	30.3	32.4	37.9	45.7	67.7	97.0	121	138	150	157	160	159
60	13.1	13.8	14.9	16.0	17.4	18.9	20.4	21.9	23.4	25.1	29.0	33.9	39.6	40.2	36.4	32.4	31.0	33.5	39.5
65	7.95	8.53	9.26	10.2	11.3	12.5	13.5	14.5	15.4	16.4	17.9	19.2	20.3	21.4	22.2	23.0	23.5	23.7	23.6
70	5.04	5.40	5.81	6.52	7.15	7.72	8.20	9.33	10.5	11.5	12.5	13.2	14.0	14.6	15.1	15.6	15.9	16.1	16.1
75	2.78	3.56	3.70	4.34	4.34	4.67	5.33	6.22	6.82	7.11	7.34	7.51	7.80	7.91	8.03	8.22	8.36	8.50	8.66
80	0.17	0.60	0.83	1.71	1.57	2.08	2.85	3.13	2.65	2.11	1.63	1.21	0.84	0.50	0.23	0.06	0.00	0.06	0.25
85	0.03	0.04	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DOBAC
Test Date: 2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity: 65.0%
Test Distance: 6.960m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

NAME: Juvenis AC-30W-40D-3000K-90	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

Table--4

UNIT: cd

C(DEG) γ (DEG)	285	290	295	300	305	310	315	320	325	330	335	340	345	350	355				
0	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503	3503				
5	3343	3348	3354	3358	3364	3369	3375	3382	3390	3396	3404	3414	3426	3438	3452				
10	3163	3163	3160	3154	3143	3134	3127	3120	3116	3111	3113	3120	3133	3152	3176				
15	2970	2953	2925	2893	2855	2817	2778	2741	2707	2679	2657	2645	2643	2654	2677				
20	2450	2449	2442	2431	2416	2398	2347	2268	2193	2132	2080	2042	2021	2018	2034				
25	1894	1889	1877	1858	1832	1796	1758	1708	1655	1565	1492	1437	1403	1389	1394				
30	1350	1350	1346	1338	1324	1296	1254	1197	1135	1087	1044	1003	980	966	964				
35	1004	977	950	933	926	924	887	833	790	769	763	737	694	669	664				
40	705	682	660	644	639	629	602	546	497	458	428	408	368	337	328				
45	416	399	381	367	360	351	330	281	213	182	159	136	102	87.1	79.3				
50	264	231	186	133	108	135	139	112	72.1	54.0	48.5	44.9	40.9	38.2	37.1				
55	152	135	109	75.0	51.7	43.7	37.6	42.0	37.3	33.0	31.7	29.8	28.4	27.7	26.5				
60	46.7	51.2	48.7	39.5	33.8	29.6	27.6	26.3	24.9	23.5	22.2	21.0	19.5	18.8	17.9				
65	23.4	23.1	22.4	21.8	20.6	19.9	19.3	18.3	17.2	15.9	14.7	13.7	12.7	11.7	11.1				
70	16.1	15.9	15.6	15.2	14.6	13.7	12.7	11.5	10.9	10.2	9.34	8.44	7.76	7.12	6.69				
75	8.80	8.88	8.98	9.06	8.91	8.73	8.38	7.87	7.12	6.29	5.88	5.47	5.06	4.75	4.49				
80	0.56	0.96	1.45	2.01	2.57	3.25	4.04	4.64	4.49	3.79	3.14	3.28	2.74	2.15	1.04				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.19	0.22	0.10	0.05				
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DOBAC
Test Date:2017-11-01

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V1.0.260
Humidity:65.0%
Test Distance:6.960m [K=1.0000]
Remarks: