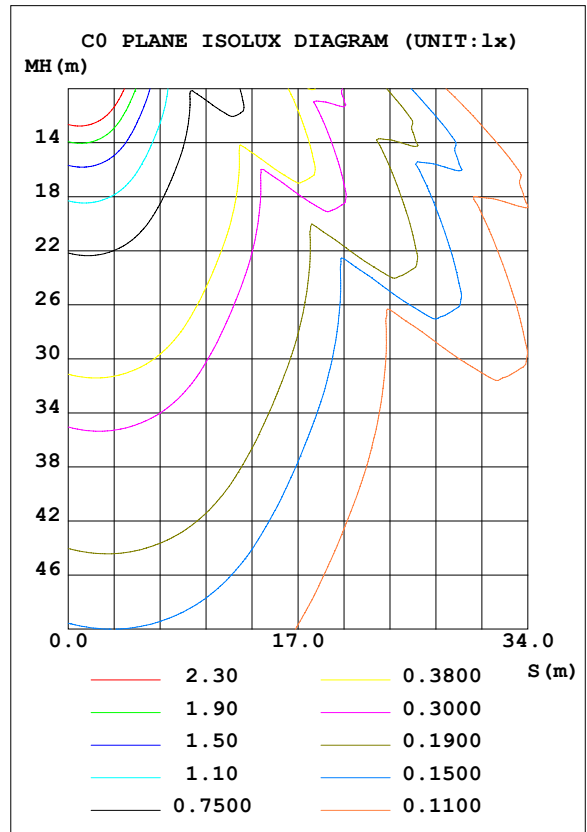
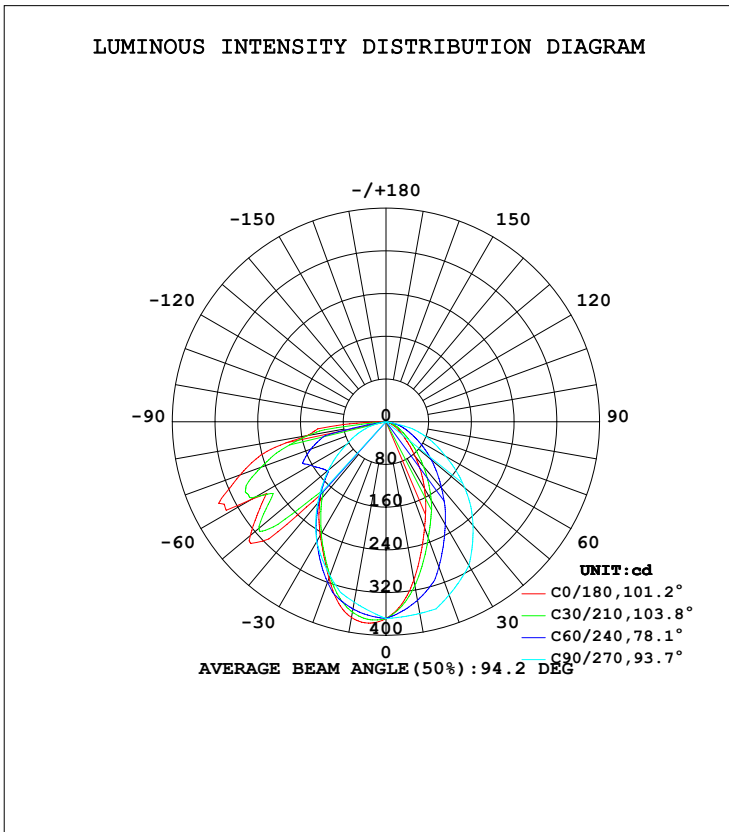


**LUMINAIRE PHOTOMETRIC TEST REPORT**

NAME: Frater Narro-16W-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL	Frater Narro-16W-3000K	Imax (cd)	378.5	S/MH (C0/180)	1.03
NOMINAL POWER (W)	16	LOR (%)	100.0	S/MH (C90/270)	1.07
RATED VOLTAGE (V)	228	TOTAL FLUX (lm)	852.29	η UP, DN (C0-180)	0.0, 48.0
NOMINAL FLUX (lm)	852.293	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 52.0
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	227.5	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: 2017-11-07

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	378.5	368.0	355.8	343.0	342.6	350.4	366.5	375.8	0- 5	8.687	8.687	1.02,1.02
10	372.3	359.2	343.1	310.7	300.8	324.5	364.6	375.3	5- 10	25.13	33.82	3.97,3.97
15	348.9	341.5	330.4	273.7	253.5	292.6	362.7	366.8	10- 15	39.35	73.17	8.59,8.59
20	312.0	315.9	306.8	236.5	211.3	259.4	345.4	350.2	15- 20	50.37	123.5	14.5,14.5
25	275.8	280.5	283.1	199.5	176.3	221.5	328.1	319.0	20- 25	57.63	181.2	21.3,21.3
30	246.3	246.4	259.5	164.7	144.5	188.3	310.7	285.4	25- 30	61.92	243.1	28.5,28.5
35	219.1	216.6	229.2	135.7	114.1	159.5	282.1	255.1	30- 35	63.52	306.6	36,36
40	192.4	189.7	199.0	110.0	85.42	133.1	253.4	227.3	35- 40	62.26	368.9	43.3,43.3
45	310.3	176.5	168.7	90.09	61.67	106.4	224.8	196.2	40- 45	61.05	429.9	50.4,50.4
50	331.4	233.7	140.8	66.62	44.05	82.88	192.6	168.7	45- 50	65.63	495.6	58.1,58.1
55	290.6	265.3	112.8	49.75	31.21	62.95	160.5	152.7	50- 55	65.30	560.9	65.8,65.8
60	289.5	246.3	84.84	36.05	22.10	46.52	128.4	234.0	55- 60	61.89	622.7	73.1,73.1
65	339.9	234.5	65.14	24.56	15.37	33.14	102.8	232.7	60- 65	62.74	685.5	80.4,80.4
70	290.2	214.0	45.44	15.53	9.973	22.75	77.16	206.0	65- 70	59.72	745.2	87.4,87.4
75	242.9	163.8	25.74	8.436	5.555	14.56	51.57	190.3	70- 75	51.95	797.2	93.5,93.5
80	150.4	91.33	0	2.404	2.011	6.659	0	143.8	75- 80	37.80	835.0	98,98
85	104.9	0	0	0	0.7482	0	0	0	80- 85	15.02	850.0	99.7,99.7
90	1.046	0	0	0	0.5945	0	0	0	85- 90	2.316	852.3	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			

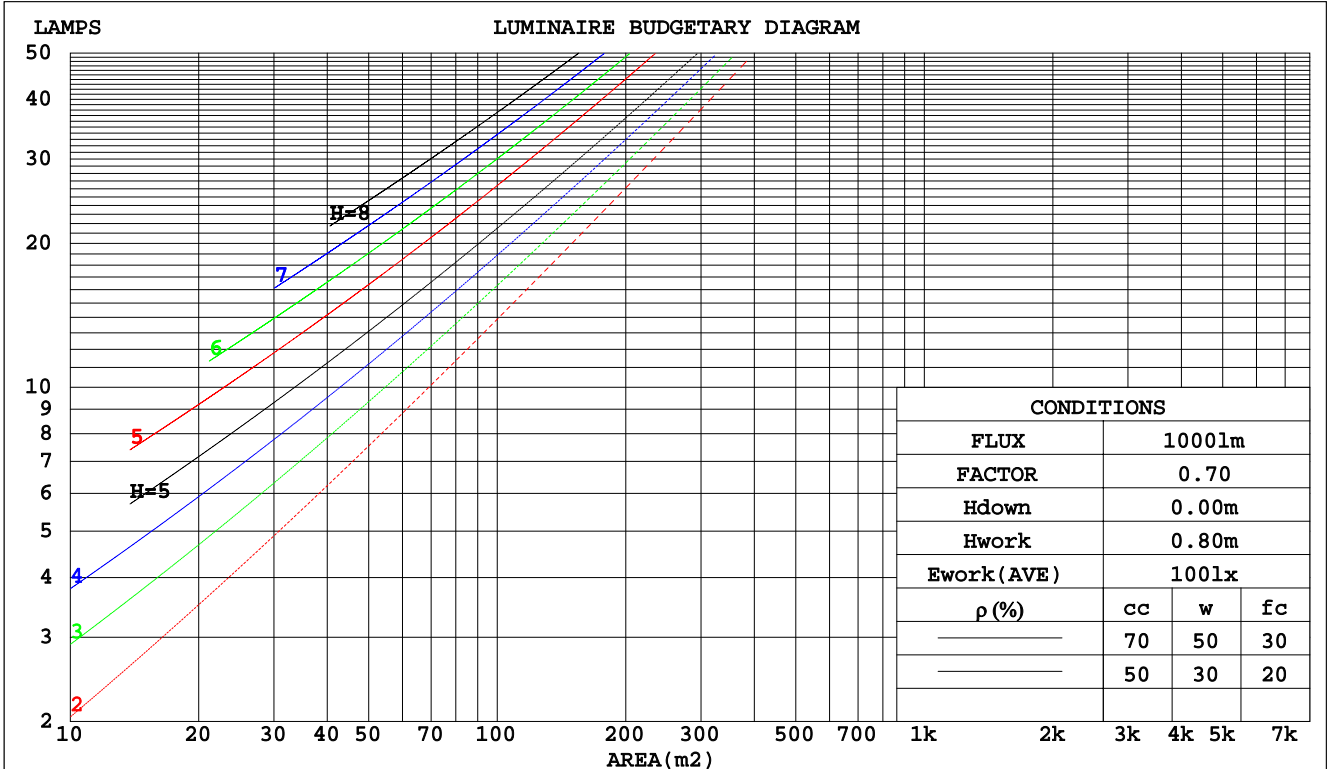
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DOBAC  
Test Date:2017-11-07

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: Frater Narro-16W-3000K	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	.00
1.0	1.03	.98	.94	1.01	.96	.93	.96	.93	.90	.92	.89	.87	.89	.86	.84	.82
2.0	.89	.82	.76	.87	.80	.75	.83	.78	.73	.80	.75	.71	.77	.73	.70	.67
3.0	.78	.69	.62	.76	.68	.62	.73	.66	.61	.70	.64	.60	.68	.63	.58	.56
4.0	.69	.60	.53	.67	.59	.52	.65	.57	.52	.62	.56	.51	.60	.55	.50	.48
5.0	.61	.52	.45	.60	.52	.45	.58	.51	.45	.56	.49	.44	.54	.48	.44	.41
6.0	.55	.46	.40	.55	.46	.40	.53	.45	.39	.51	.44	.39	.49	.43	.39	.36
7.0	.50	.42	.35	.50	.41	.35	.48	.40	.35	.47	.40	.35	.45	.39	.34	.32
8.0	.46	.38	.32	.46	.37	.32	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29
9.0	.43	.34	.29	.42	.34	.29	.41	.34	.29	.40	.33	.28	.39	.33	.28	.26
10.0	.39	.32	.26	.39	.31	.26	.38	.31	.26	.37	.31	.26	.36	.30	.26	.24



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DOBAC  
 Test Date: 2017-11-07

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: Frater Narro-16W-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.330	.188	.059	.323	.184	.058	.309	.177	.057	.297	.171	.055	.286	.166	.053	
2.0	.307	.168	.052	.301	.166	.051	.289	.161	.050	.278	.156	.049	.268	.152	.048	
3.0	.281	.149	.045	.275	.147	.044	.265	.143	.044	.255	.140	.043	.246	.136	.042	
4.0	.257	.133	.039	.252	.132	.039	.242	.129	.038	.234	.125	.038	.226	.123	.037	
5.0	.235	.120	.035	.231	.119	.035	.223	.116	.034	.215	.113	.034	.208	.111	.033	
6.0	.217	.109	.031	.213	.108	.031	.206	.105	.031	.199	.103	.030	.192	.101	.030	
7.0	.201	.099	.028	.197	.098	.028	.191	.096	.028	.185	.095	.028	.179	.093	.027	
8.0	.187	.091	.026	.184	.090	.026	.178	.089	.025	.172	.087	.025	.167	.086	.025	
9.0	.174	.084	.024	.172	.084	.023	.167	.082	.023	.162	.081	.023	.157	.080	.023	
10.0	.164	.078	.022	.161	.078	.022	.157	.077	.022	.152	.076	.021	.148	.074	.021	

ρ <sub>cc</sub>	80%			70%			50%			30%			10%			0
ρ <sub>w</sub>	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ <sub>fc</sub>	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	.182	.156	.133	.155	.134	.114	.106	.092	.079	.061	.053	.046	.020	.017	.015	
2.0	.174	.132	.096	.149	.113	.083	.102	.079	.058	.059	.046	.034	.019	.015	.011	
3.0	.167	.114	.073	.143	.099	.063	.098	.069	.044	.057	.040	.026	.018	.013	.009	
4.0	.159	.101	.057	.136	.087	.050	.094	.061	.035	.054	.036	.021	.017	.012	.007	
5.0	.151	.091	.046	.130	.079	.040	.089	.055	.029	.052	.032	.017	.017	.011	.006	
6.0	.143	.082	.039	.123	.071	.034	.085	.050	.024	.049	.029	.014	.016	.010	.005	
7.0	.136	.075	.033	.117	.065	.029	.081	.046	.020	.047	.027	.012	.015	.009	.004	
8.0	.129	.070	.029	.111	.060	.025	.077	.042	.018	.045	.025	.011	.015	.008	.003	
9.0	.123	.065	.025	.106	.056	.022	.073	.039	.016	.043	.023	.009	.014	.008	.003	
10.0	.117	.060	.022	.101	.052	.020	.070	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DOBAC  
 Test Date:2017-11-07

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: Frater Narro-16W-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	31.0	32.5	31.2	32.7	32.9	25.4	26.9	25.7	27.1	27.3				
3H	34.1	35.6	34.4	35.8	36.1	26.5	28.0	26.8	28.2	28.5				
4H	35.5	36.9	35.8	37.1	37.4	27.0	28.4	27.3	28.6	28.9				
6H	36.5	37.8	36.8	38.0	38.3	27.0	28.3	27.3	28.6	28.8				
8H	36.8	38.1	37.1	38.3	38.6	26.9	28.2	27.3	28.5	28.8				
12H	37.0	38.2	37.3	38.5	38.8	26.9	28.1	27.2	28.4	28.7				
4H 2H	31.6	33.0	31.9	33.2	33.5	28.2	29.6	28.5	29.8	30.1				
3H	35.0	36.2	35.3	36.5	36.8	29.9	31.1	30.2	31.4	31.7				
4H	36.5	37.6	36.9	37.9	38.3	30.6	31.7	31.0	32.0	32.3				
6H	37.6	38.6	38.0	39.0	39.3	30.6	31.6	31.0	32.0	32.4				
8H	38.0	38.9	38.4	39.3	39.7	30.6	31.5	31.0	31.9	32.3				
12H	38.2	39.0	38.6	39.4	39.8	30.5	31.4	31.0	31.8	32.2				
8H 4H	36.7	37.7	37.2	38.0	38.4	32.3	33.2	32.7	33.6	33.9				
6H	38.1	38.9	38.6	39.3	39.8	32.4	33.2	32.9	33.6	34.1				
8H	38.7	39.4	39.1	39.8	40.3	32.4	33.1	32.9	33.5	34.0				
12H	39.0	39.6	39.5	40.1	40.5	32.4	33.0	32.9	33.4	33.9				
12H 4H	36.7	37.6	37.1	38.0	38.4	32.6	33.4	33.0	33.8	34.2				
6H	38.1	38.8	38.6	39.2	39.7	32.8	33.5	33.3	33.9	34.4				
8H	38.7	39.3	39.2	39.7	40.2	32.8	33.4	33.2	33.8	34.3				
Variations with the observer position at spacings:														
S = 1.0H	+ 0.1 / - 0.1					+ 0.2 / - 0.1								
1.5H	+ 0.1 / - 0.1					+ 0.1 / - 0.3								
2.0H	+ 0.4 / - 0.2					+ 0.7 / - 0.6								

CIE Pub.117 Corrected 852.3 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.6)

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: DOBAC  
Test Date: 2017-11-07

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: Frater Narro-16W-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

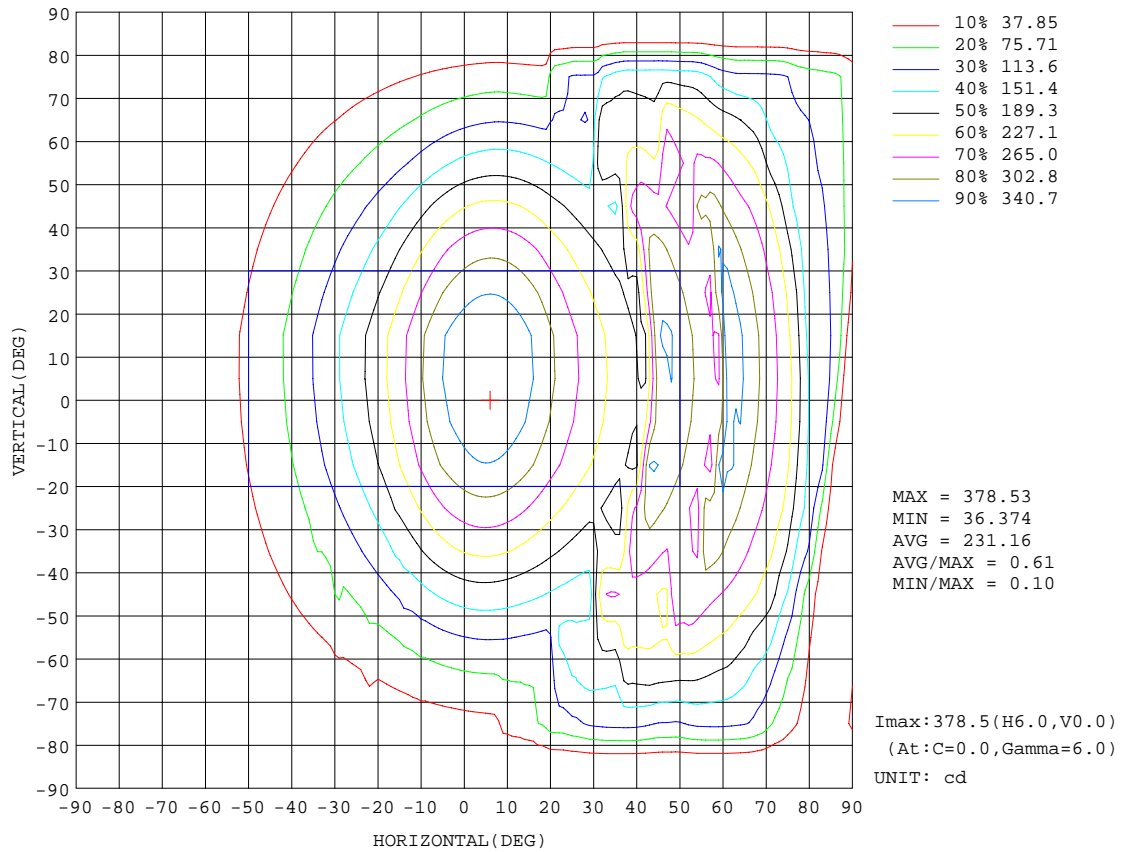
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	57	46	39	57	46	39	56	45	39	32
0.80	67	55	48	66	55	47	64	54	47	40
1.00	75	63	56	73	62	55	71	64	55	47
1.25	81	70	63	80	70	63	77	68	62	54
1.50	86	76	69	85	75	68	82	73	67	59
2.00	93	84	77	91	83	77	88	81	75	67
2.50	98	89	83	95	88	82	92	85	80	72
3.00	101	94	88	99	92	87	95	89	85	76
4.00	105	99	94	103	98	93	99	94	90	81
5.00	108	103	99	106	101	97	101	97	94	85
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNM = 1.25			

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DOBAC  
Test Date:2017-11-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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: Frater Narro-16W-3000K	TYPE:	WEIGHT:
DIM.:	SPEC.:	SERIAL No.:
MFR.: DOBAC	SUR.:	PROTECTION ANGLE:

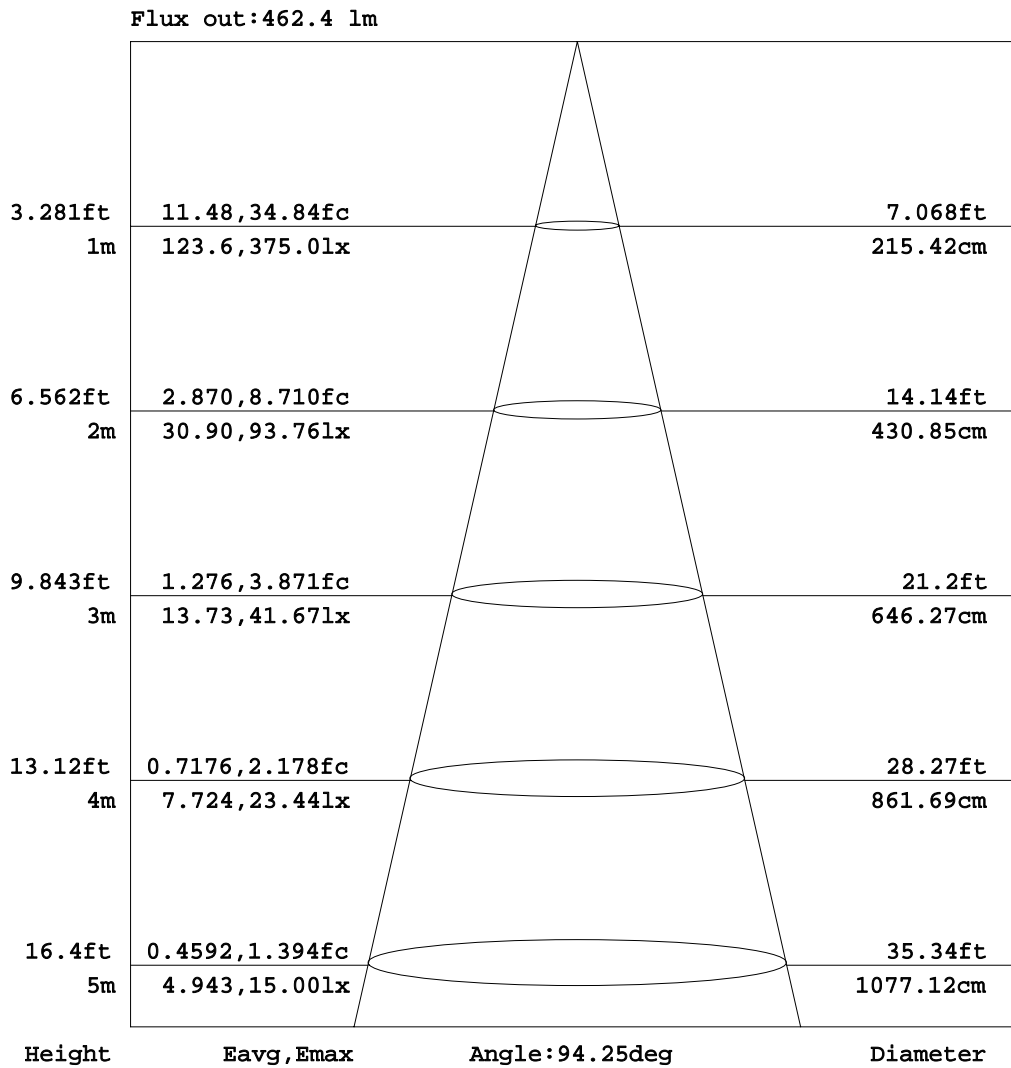


C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DOBAC  
 Test Date: 2017-11-07

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: Frater Narro-16W-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.

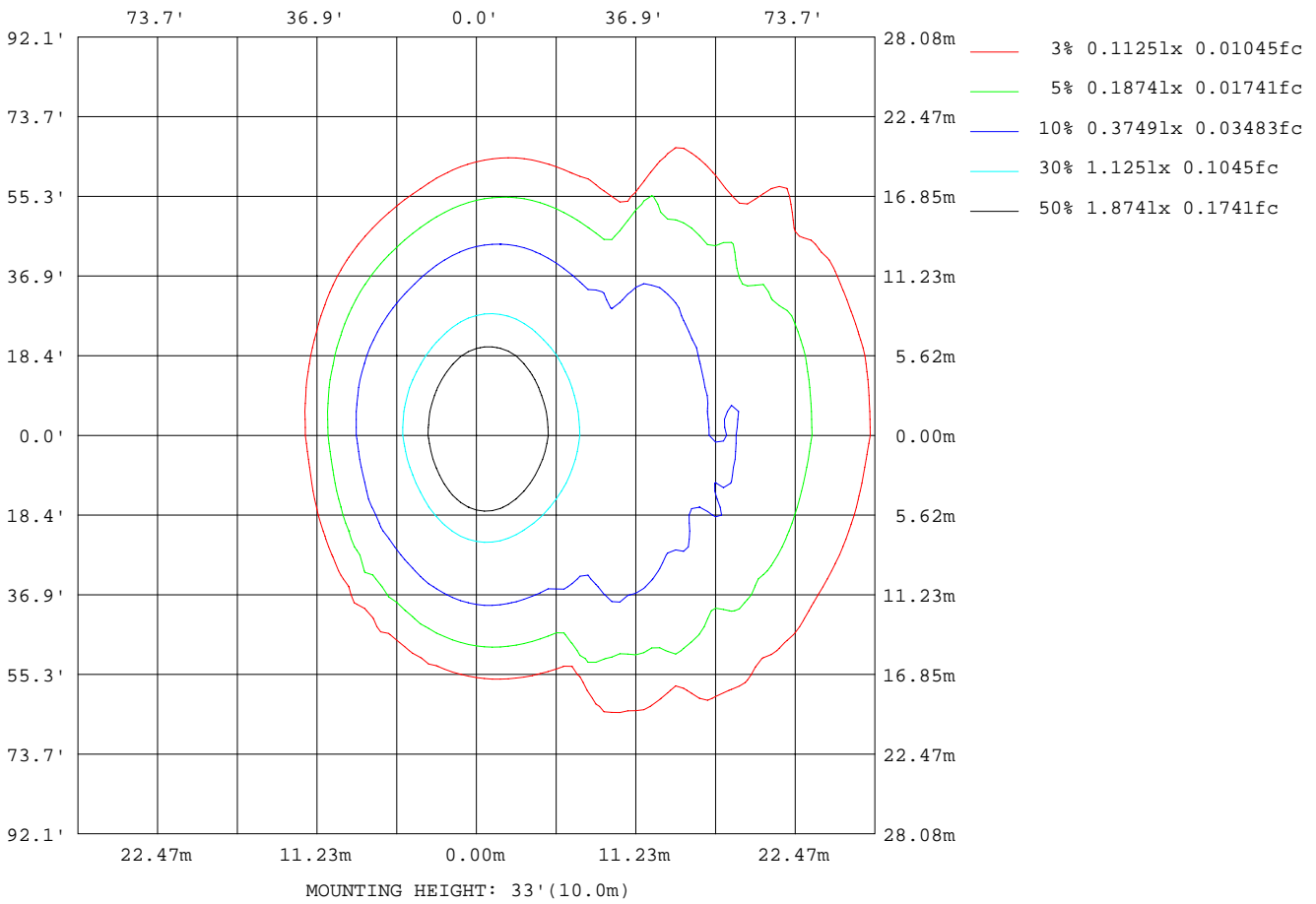
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DOBAC  
Test Date:2017-11-07

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: Frater Narro-16W-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: 2017-11-07

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: Frater Narro-16W-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	852.293	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.006	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	84443814497967378123754346818243944339923426132776288752377919371159261311810993	9577	8946	9069															
60	9651610439589009938077999772298544933050230074282802465620125163501331010844	8985	7865	7304	7368														
65	13405126738213601420292414747136680232410299202568921871171911346310736	8741	7344	6390	5990	6060													
70	1413983363227329210471117409422272932404643063622142185181418610977	8541	6719	5704	5144	4804	4860												
75	15643846910360443024910789997968208456338322461657312991	9857	7563	6021	4940	4098	3632	3420	3577										
80	14434129251392654149808129709793459211016	1443	0	559	1540	2200	2360	2304	2785	1943	1384	1930							
85	20062283097156592	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1861	1496	1431	

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	200622	200	---	500
Category 2	65 to 90	200622	200	---	500
Category 3	75 to 90	200622	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:2017-11-07

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: Frater Narro-16W-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	852.293	lm
Multiplying factor	K	1	
Luminous area in horizontal plane used in calculations	A	0.006	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	84443814497967378123754346818243944339923426132776288752377919371159261311810993	9577	8946	9069															
60	9651610439589009938077999772298544933050230074282802465620125163501331010844	8985	7865	7304	7368														
65	13405126738213601420292414747136680232410299202568921871171911346310736	8741	7344	6390	5990	6060													
70	141398336322732921047117409422272932404643063622142185181418610977	8541	6719	5704	5144	4804	4860												
75	15643846910360443024910789997968208456338322461657312991	9857	7563	6021	4940	4098	3632	3420	3577										
80	14434129251392654149808129709793459211016	1443	0	559	1540	2200	2360	2304	2785	1943	1384	1930							
85	20062283097156592	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1861	1496	1431

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	200622	1000	1500	200	500
65 to 90	200622	1000	1500	200	500

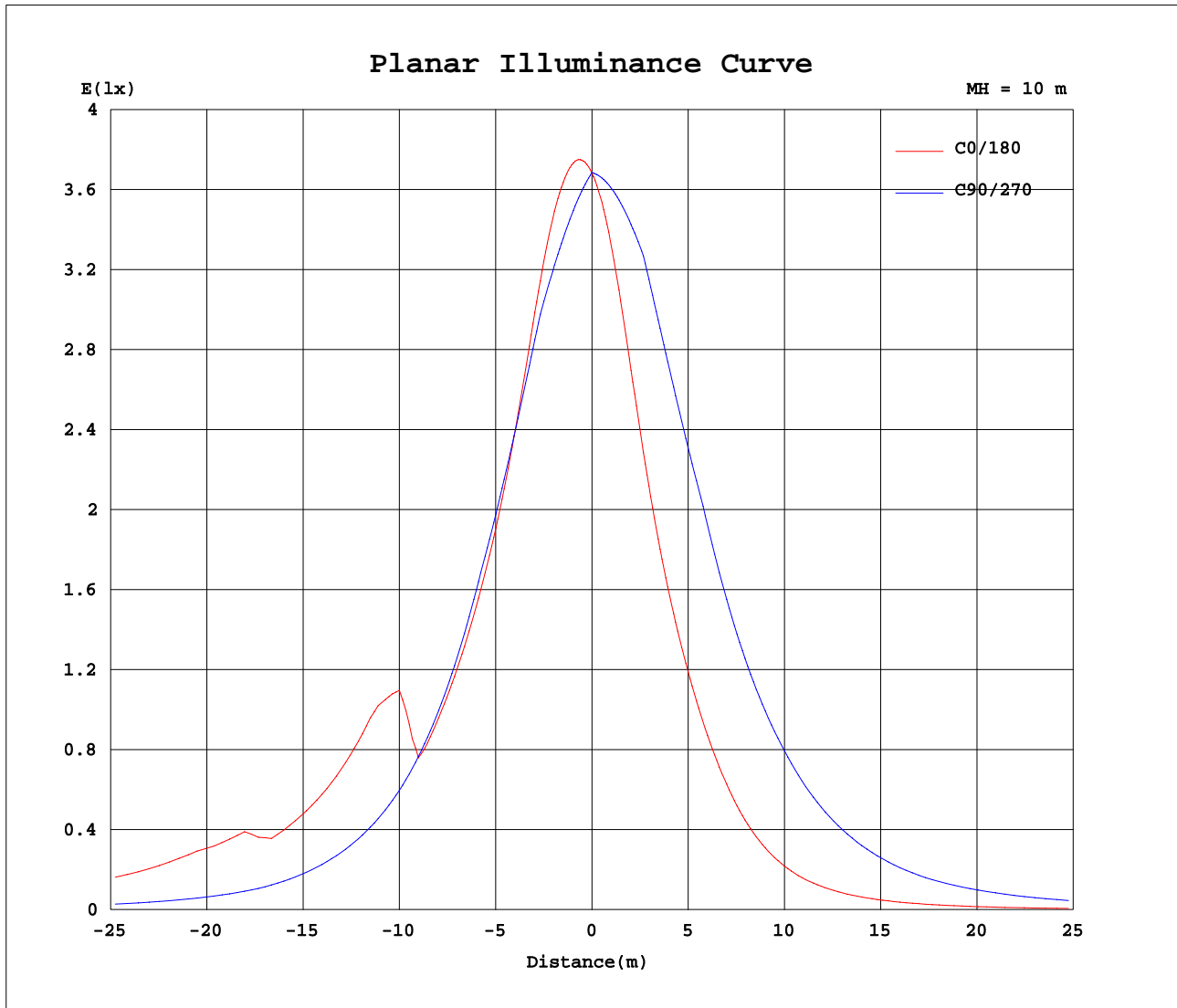
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

No match

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:DOBAC  
Test Date:2017-11-07

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: 2017-11-07

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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: Frater Narro-16W-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	368	368	368	368	368	368	368	368	368	368	368	368	368	368	368				
5	371	372	373	374	375	375	376	376	377	377	377	378	378	378	378				
10	372	373	375	375	375	375	375	375	374	374	373	373	372	372	372				
15	372	373	373	373	371	369	367	364	361	358	355	353	351	349	349				
20	358	360	360	359	357	355	350	343	337	331	325	320	316	314	312				
25	342	342	340	337	332	326	319	313	306	298	291	285	280	278	276				
30	325	323	319	312	304	295	285	277	271	266	261	255	250	248	246				
35	297	296	291	284	276	265	255	247	240	235	232	228	223	220	219				
40	268	265	258	250	241	233	227	220	213	208	204	202	198	194	192				
45	238	234	226	217	209	202	196	192	189	183	180	203	241	292	310				
50	206	201	195	188	180	174	169	172	201	249	323	337	339	336	332				
55	173	169	164	158	152	170	153	255	287	310	311	304	299	296	291				
60	141	139	134	130	151	196	234	277	275	270	266	269	261	271	291				
65	112	110	117	112	218	224	233	235	272	242	303	321	349	342	341				
70	83.7	83.6	114	114	204	212	206	270	273	278	293	292	295	295	293				
75	55.5	66.7	113	117	175	192	190	238	237	238	245	244	248	246	241				
80	3.63	9.43	23.2	35.7	70.7	106	144	180	184	171	176	183	166	157	151				
85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.6	106	123	120	120				
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:2017-11-07

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: