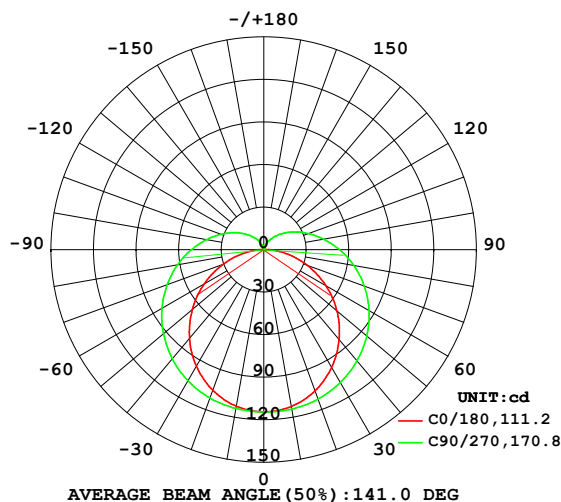


LUMINAIRE PHOTOMETRIC TEST REPORT

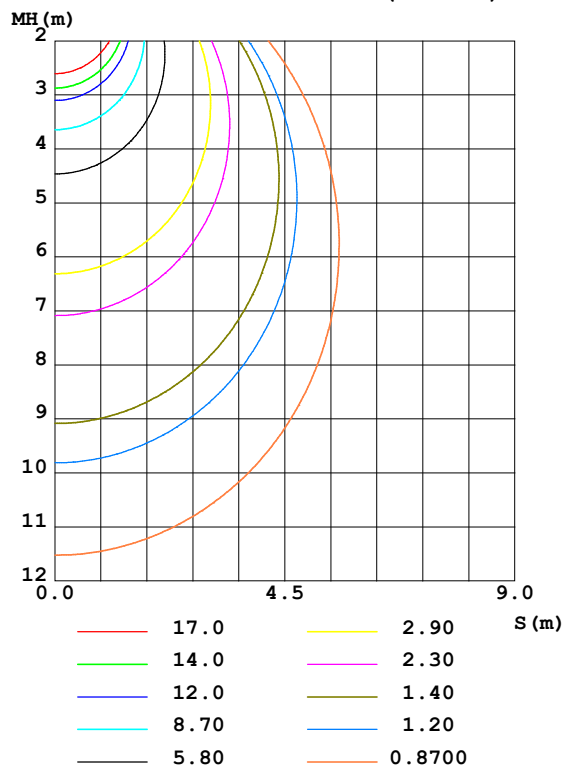
Test:U:230.4V I:0.0395A P:5W PF:0.5522 Freq:50.00Hz Lamp Flux:525x1 lm		
SGSO SKU: 0028920142	TYPE:	WEIGHT:
SPEC.:0.3m T5 Cabinet,5W,525lm,105lm/W,3CCT Switch,3000/3500/4000K,Linkable	DIM.: $\varnothing 322 \times 21.5 \text{mm}$	SERIAL No.:
MFR.: TOSPO	SUR.:0.011	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 105 lm/W			
MODEL	3000K	I _{max} (cd)	114.4	S/MH (C0/180)	1.24
NOMINAL POWER(W)	5	LOR(%)	100.0	S/MH (C90/270)	1.40
RATED VOLTAGE(V)	230	TOTAL FLUX (lm)	525	η UP,DN (C0-180)	8.9,41.8
NOMINAL FLUX(lm)	525	CIE CLASS	SEMI-D.	η UP,DN (C180-360)	8.4,40.9
LAMPS INSIDE	1	η up (%)	17.3	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)		η down (%)	82.7	CIBSE SHR MAX	1.55

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Testing Room
Test Date:2023-03-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:25%
Test Distance:11.350m [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
10	112.3	113.2	114.1	113.1	112.1	112.9	113.7	113.0	0- 10	10.86	10.86	2.04,2.04
20	106.0	109.3	112.1	109.0	105.5	108.5	111.4	108.8	10- 20	31.45	42.30	7.94,7.94
30	95.84	102.6	108.1	102.2	95.06	101.3	106.9	101.8	20- 30	48.72	91.02	17.1,17.1
40	82.67	93.64	102.3	92.97	81.52	91.79	100.4	92.53	30- 40	60.92	151.9	28.5,28.5
50	67.41	82.95	94.87	82.11	65.85	80.63	92.33	81.56	40- 50	67.07	219.0	41.1,41.1
60	50.51	71.26	85.79	70.30	48.64	68.62	82.87	69.73	50- 60	67.06	286.1	53.7,53.7
70	32.81	59.26	75.48	58.23	30.64	56.49	72.53	57.66	60- 70	61.57	347.6	65.3,65.3
80	15.74	47.75	64.50	46.75	13.41	45.00	61.72	46.21	70- 80	52.12	399.8	75,75
90	3.492	37.40	53.47	36.43	2.052	34.83	51.10	35.98	80- 90	41.04	440.8	82.7,82.7
100	0.3904	28.62	43.04	27.75	0.4755	26.41	41.11	27.46	90-100	31.08	471.9	88.6,88.6
110	0.4203	21.36	33.57	20.62	0.4987	19.59	32.03	20.52	100-110	22.95	494.8	92.9,92.9
120	0.5435	15.69	25.25	15.02	0.5591	14.22	24.16	15.01	110-120	16.19	511.0	95.9,95.9
130	0.5817	11.20	18.09	10.62	0.6122	10.01	17.35	10.64	120-130	10.66	521.7	97.9,97.9
140	0.6343	7.268	12.22	6.532	0.6785	6.369	11.69	7.165	130-140	6.298	528.0	99.1,99.1
150	0.6887	4.249	7.332	3.083	0.7360	2.637	7.173	3.746	140-150	3.159	531.1	99.7,99.7
160	0.7115	1.997	3.161	1.532	0.7784	1.294	2.646	1.552	150-160	1.200	532.3	99.9,99.9
170	0.7518	1.074	1.002	0.9497	0.8312	0.9749	0.9627	0.8141	160-170	0.3438	532.7	100,100
180	0.8085	0.8301	0.8490	0.8348	0.8236	0.7997	0.8184	0.8194	170-180	0.0810	532.8	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 185.1 lm

%lum = 34.7%

%lamp = 34.7%

Conical surface Flux(120deg): 286.06 lm

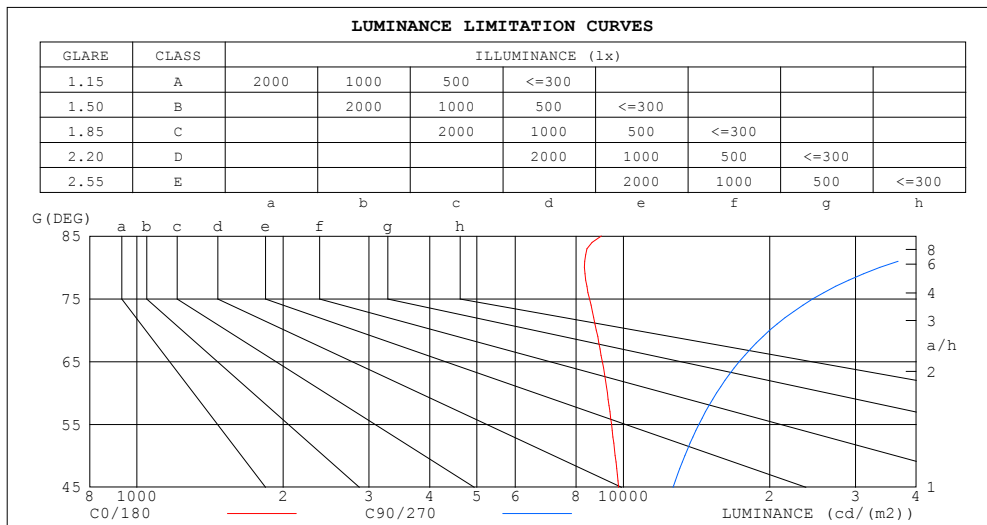
%lum = 53.7%

%lamp = 53.7%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Testing Room
 Test Date:2023-03-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
 Humidity:25%
 Test Distance:11.350m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	9008	61284
80	8321	33672
75	8523	24535
70	8803	20006
65	9057	17323
60	9271	15555
55	9458	14304
50	9625	13379
45	9778	12660

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Testing Room
 Test Date: 2023-03-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-3000H_V1 SYSTEM V2.0.361
 Humidity: 25%
 Test Distance: 11.350m [K=1.0000]
 Remarks:

WEC AND CCEC

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						Wall Exitance Coefficients(WEC)										
0.0																	
1.0	.389	.221	.070	.377	.215	.068	.353	.203	.065	.332	.191	.061	.312	.181	.058		
2.0	.336	.184	.057	.325	.179	.055	.304	.169	.052	.284	.160	.050	.266	.151	.047		
3.0	.298	.159	.048	.288	.154	.046	.269	.146	.044	.251	.138	.042	.235	.130	.040		
4.0	.268	.139	.041	.259	.136	.040	.242	.128	.038	.226	.121	.037	.211	.114	.035		
5.0	.244	.124	.036	.235	.121	.035	.220	.114	.034	.205	.108	.032	.191	.102	.031		
6.0	.223	.112	.032	.216	.109	.031	.201	.103	.030	.188	.098	.029	.175	.092	.027		
7.0	.206	.102	.029	.199	.099	.028	.186	.094	.027	.173	.089	.026	.162	.084	.025		
8.0	.191	.093	.026	.184	.091	.026	.172	.086	.025	.161	.082	.024	.150	.077	.022		
9.0	.178	.086	.024	.172	.084	.024	.161	.080	.023	.150	.075	.022	.141	.071	.021		
10.0	.166	.080	.022	.161	.078	.022	.151	.074	.021	.141	.070	.020	.132	.066	.019		

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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.322	.322	.322	.275	.275	.275	.188	.188	.188	.108	.108	.108	.034	.034	.034	
1.0	.318	.288	.261	.272	.247	.224	.186	.170	.155	.107	.098	.090	.034	.032	.029	
2.0	.312	.265	.226	.267	.228	.195	.183	.158	.136	.105	.092	.080	.034	.030	.026	
3.0	.304	.249	.204	.261	.215	.177	.179	.149	.124	.103	.087	.073	.033	.028	.024	
4.0	.296	.236	.190	.254	.204	.165	.175	.142	.116	.101	.083	.069	.033	.027	.023	
5.0	.289	.226	.180	.248	.196	.157	.171	.137	.111	.099	.080	.066	.032	.026	.022	
6.0	.281	.218	.173	.242	.189	.151	.167	.132	.107	.097	.078	.064	.031	.025	.021	
7.0	.274	.212	.168	.236	.184	.147	.163	.129	.104	.095	.076	.062	.031	.025	.020	
8.0	.267	.206	.164	.230	.179	.143	.159	.126	.102	.093	.074	.061	.030	.024	.020	
9.0	.261	.201	.161	.225	.175	.141	.156	.123	.100	.091	.073	.060	.029	.024	.020	
10.0	.255	.197	.159	.220	.171	.139	.153	.121	.098	.089	.071	.059	.029	.023	.019	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Testing Room
Test Date:2023-03-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:25%
Test Distance:11.350m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

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	21.6	23.0	22.1	23.5	24.1	23.7	25.1	24.2	25.6	26.2
3H	23.3	24.6	23.8	25.1	25.7	26.4	27.7	27.0	28.2	28.8
4H	24.0	25.2	24.5	25.8	26.4	27.9	29.1	28.5	29.7	30.3
6H	24.6	25.7	25.2	26.3	26.9	29.5	30.7	30.1	31.3	31.9
8H	24.8	25.9	25.4	26.5	27.2	30.4	31.6	31.0	32.1	32.8
12H	25.0	26.1	25.6	26.7	27.3	31.5	32.6	32.1	33.1	33.8
4H 2H	22.8	24.0	23.3	24.6	25.2	24.3	25.5	24.8	26.1	26.7
3H	24.7	25.8	25.3	26.4	27.0	27.2	28.3	27.8	28.9	29.6
4H	25.6	26.6	26.2	27.2	27.9	28.9	29.9	29.5	30.5	31.2
6H	26.4	27.3	27.0	27.9	28.7	30.8	31.7	31.4	32.3	33.0
8H	26.7	27.6	27.4	28.2	29.0	31.8	32.6	32.5	33.3	34.0
12H	27.0	27.8	27.7	28.4	29.2	33.0	33.8	33.7	34.4	35.2
8H 4H	26.7	27.5	27.3	28.2	28.9	29.3	30.1	29.9	30.8	31.5
6H	27.9	28.6	28.5	29.2	30.0	31.5	32.2	32.1	32.8	33.6
8H	28.4	29.0	29.1	29.7	30.5	32.7	33.3	33.4	34.0	34.8
12H	28.9	29.4	29.6	30.2	31.0	34.2	34.7	34.9	35.4	36.2
12H 4H	27.0	27.8	27.7	28.5	29.2	29.3	30.1	30.0	30.8	31.5
6H	28.4	29.0	29.1	29.7	30.6	31.6	32.2	32.3	32.9	33.7
8H	29.1	29.7	29.9	30.4	31.2	33.0	33.5	33.7	34.2	35.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.2 / - 0.4					+ 0.2 / - 0.4				

CIE Pub.117, 532.8 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -2.2)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Testing Room
Test Date:2023-03-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:25%
Test Distance:11.350m [K=1.0000]
Remarks:

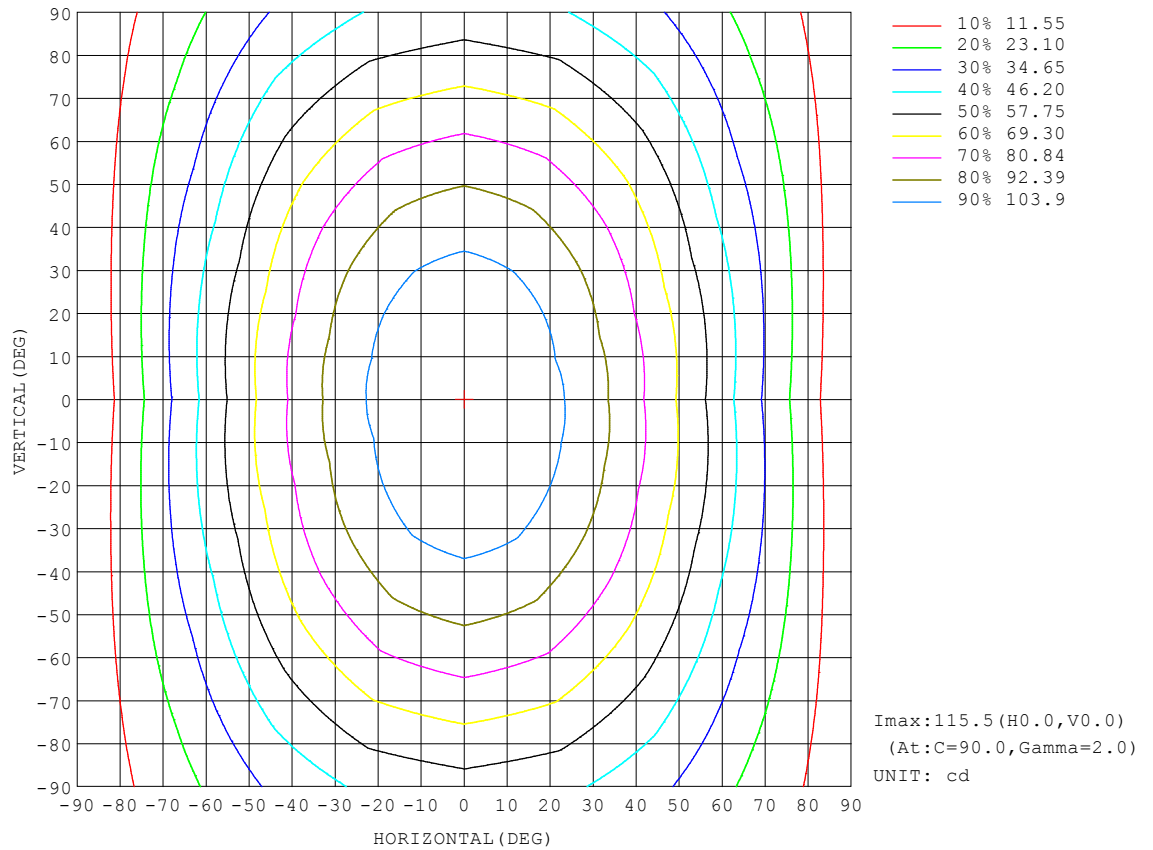
UTILIZATION FACTORS TABLE

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	48	35	28	47	35	28	45	34	27	21
0.80	57	44	36	55	43	35	53	42	35	27
1.00	65	52	43	63	51	43	59	51	41	33
1.25	71	59	50	69	57	49	65	55	48	38
1.50	77	64	56	74	63	55	69	60	53	42
2.00	84	73	64	81	71	63	75	67	60	49
2.50	88	78	70	85	76	68	79	71	65	53
3.00	92	83	75	89	80	73	82	75	69	56
4.00	97	89	82	93	86	80	86	80	75	61
5.00	100	93	87	96	90	84	88	83	79	64
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004										
Suspended										
SHR NOM = 1.25										

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Testing Room
 Test Date: 2023-03-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-3000H_V1 SYSTEM V2.0.361
 Humidity: 25%
 Test Distance: 11.350m [K=1.0000]
 Remarks:

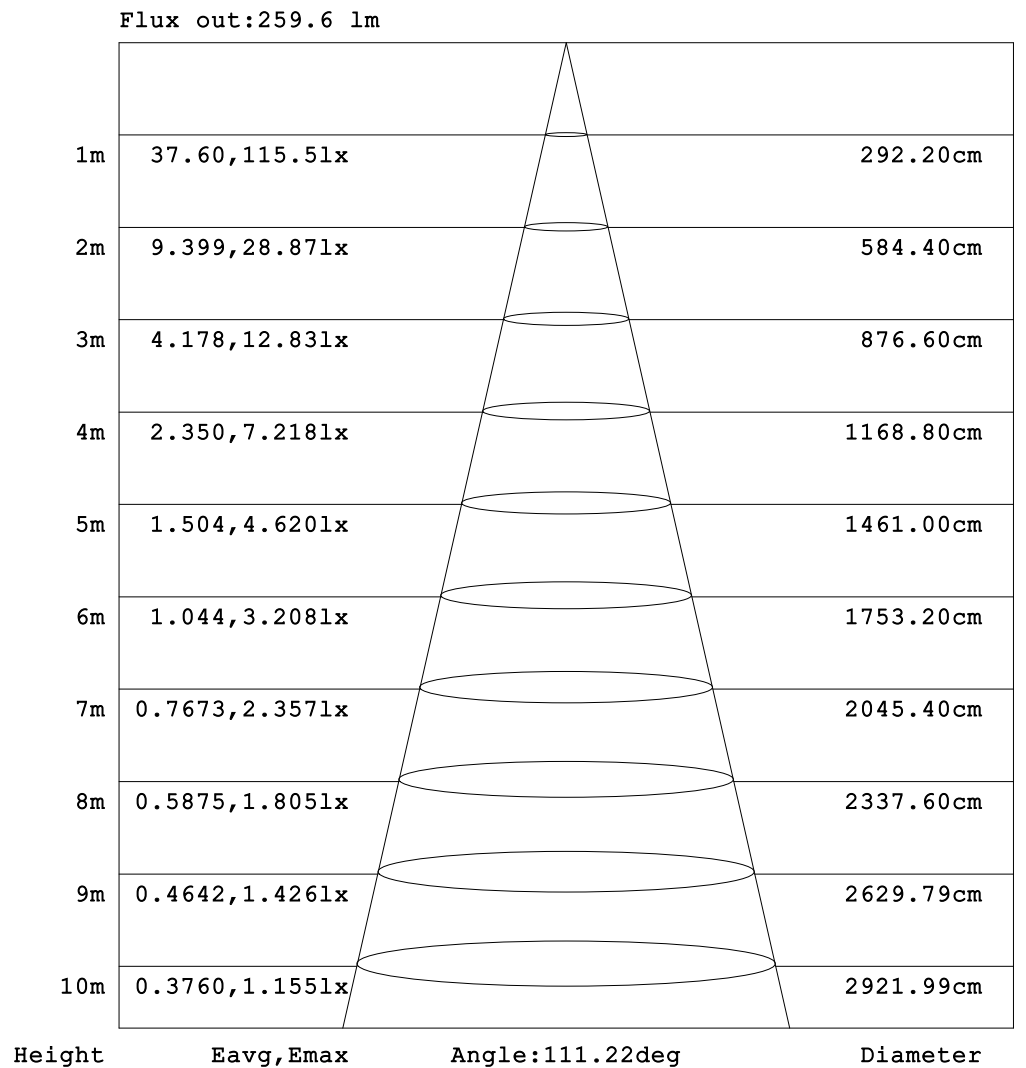
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Testing Room
Test Date:2023-03-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:25%
Test Distance:11.350m [K=1.0000]
Remarks:

AAI Figure

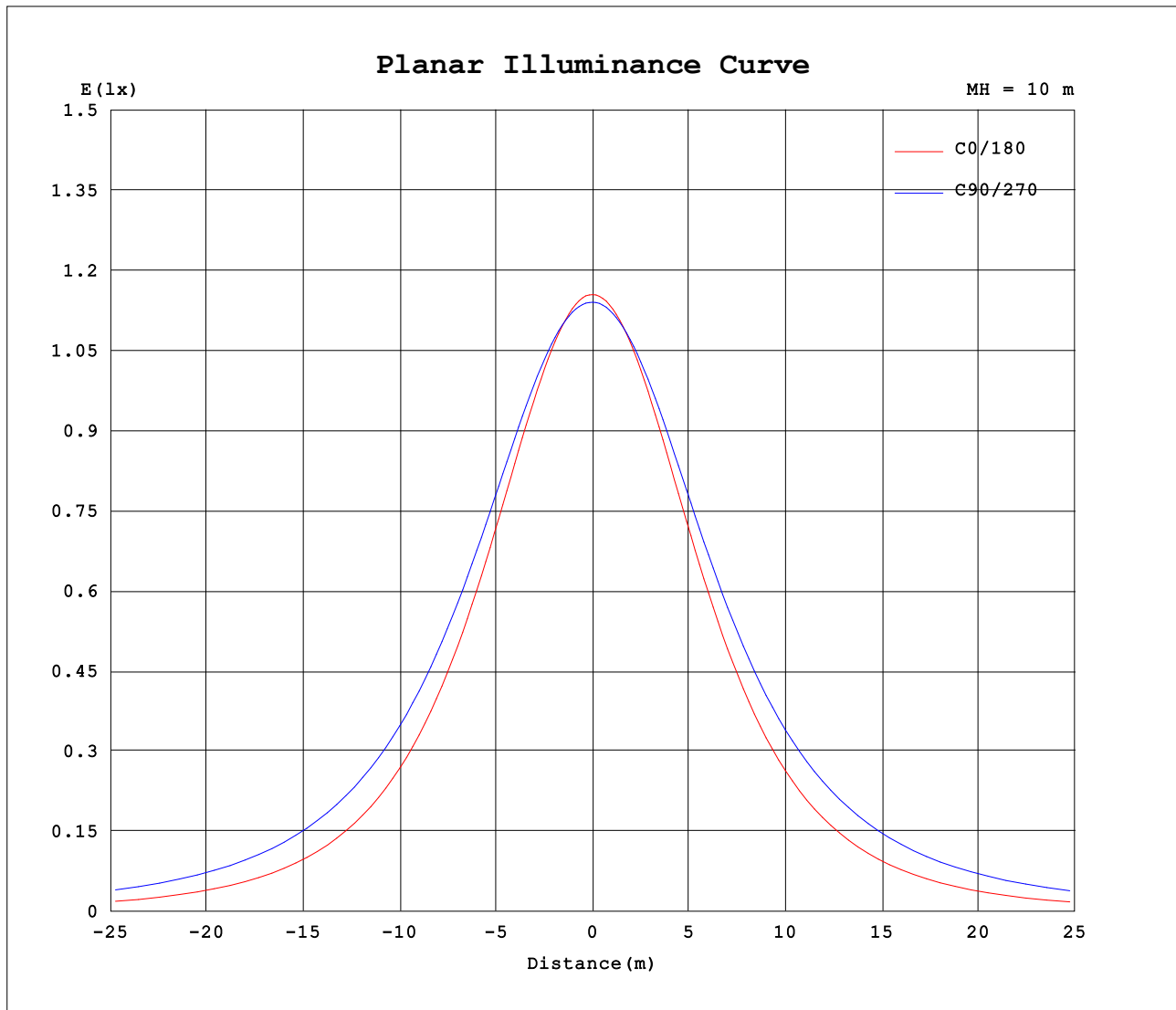


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Testing Room
Test Date:2023-03-02

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361
Humidity:25%
Test Distance:11.350m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Testing Room
 Test Date: 2023-03-02

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-3000H_V1 SYSTEM V2.0.361
 Humidity: 25%
 Test Distance: 11.350m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114			
5	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114			
10	112	113	113	114	114	114	113	112	112	112	113	113	114	114	113	112			
15	110	110	112	113	113	113	111	110	109	110	111	112	113	112	111	110			
20	106	107	109	111	112	111	109	107	105	106	109	110	111	111	109	107			
25	101	103	106	109	110	109	106	102	101	102	105	108	109	108	106	103			
30	95.8	98.3	103	107	108	107	102	97.5	95.1	96.8	101	105	107	105	102	97.7			
35	89.6	92.8	98.4	104	105	103	97.8	91.8	88.7	91.0	96.8	102	104	102	97.4	92.1			
40	82.7	86.7	93.6	100.0	102	99.7	93.0	85.6	81.5	84.7	91.8	97.9	100	98.2	92.5	85.9			
45	75.3	80.1	88.5	96.0	98.8	95.7	87.7	78.8	73.9	77.9	86.4	93.6	96.5	93.9	87.2	79.2			
50	67.4	73.2	82.9	91.6	94.9	91.3	82.1	71.8	65.9	70.7	80.6	88.9	92.3	89.3	81.6	72.2			
55	59.1	65.9	77.2	86.9	90.5	86.6	76.3	64.4	57.4	63.2	74.7	84.0	87.8	84.4	75.7	64.9			
60	50.5	58.5	71.3	81.9	85.8	81.6	70.3	56.8	48.6	55.7	68.6	78.8	82.9	79.2	69.7	57.5			
65	41.7	51.1	65.2	76.7	80.8	76.4	64.3	49.3	39.7	48.1	62.5	73.5	77.8	73.9	63.7	50.0			
70	32.8	43.7	59.3	71.3	75.5	71.0	58.2	41.9	30.6	40.7	56.5	68.0	72.5	68.5	57.7	42.7			
75	24.0	36.7	53.4	65.8	70.1	65.5	52.4	34.9	21.8	33.7	50.6	62.6	67.1	63.1	51.8	35.7			
80	15.7	30.2	47.7	60.3	64.5	59.9	46.7	28.4	13.4	27.3	45.0	57.2	61.7	57.7	46.2	29.3			
85	8.55	24.5	42.4	54.8	58.9	54.5	41.4	22.8	6.46	21.8	39.7	51.9	56.4	52.4	40.9	23.7			
90	3.49	19.7	37.4	49.5	53.5	49.2	36.4	18.2	2.05	17.2	34.8	46.7	51.1	47.3	36.0	19.0			
95	0.41	16.0	32.8	44.4	48.2	44.0	31.9	14.6	0.65	13.6	30.4	41.8	46.0	42.3	31.5	15.2			
100	0.39	13.1	28.6	39.5	43.0	39.2	27.7	11.8	0.48	11.0	26.4	37.2	41.1	37.7	27.5	12.4			
105	0.40	10.9	24.8	34.9	38.2	34.5	24.0	9.76	0.48	9.05	22.8	32.8	36.4	33.3	23.8	10.3			
110	0.42	9.23	21.4	30.6	33.6	30.2	20.6	8.16	0.50	7.58	19.6	28.7	32.0	29.2	20.5	8.73			
115	0.51	7.90	18.4	26.7	29.3	26.3	17.7	6.92	0.53	6.43	16.7	24.9	27.9	25.3	17.6	7.44			
120	0.54	6.48	15.7	23.0	25.3	22.7	15.0	5.53	0.56	5.50	14.2	21.3	24.2	21.7	15.0	6.30			
125	0.58	5.59	13.3	19.6	21.5	19.3	12.7	4.85	0.58	4.30	12.0	18.2	20.6	18.5	12.7	5.21			
130	0.58	4.71	11.2	16.5	18.1	16.2	10.6	4.03	0.61	3.13	10.0	15.2	17.3	15.6	10.6	3.75			
135	0.59	3.43	8.79	13.7	15.0	13.4	8.25	2.81	0.64	2.38	7.97	12.6	14.4	12.9	8.82	2.94			
140	0.63	2.69	7.27	11.0	12.2	10.7	6.53	2.18	0.68	1.75	6.37	9.96	11.7	10.5	7.17	2.03			
145	0.68	1.87	5.95	8.38	9.20	8.20	4.86	1.65	0.71	1.39	3.95	7.71	9.31	8.38	4.96	1.51			
150	0.69	1.46	4.25	6.71	7.33	6.11	3.08	1.24	0.74	0.77	2.64	5.44	7.17	6.05	3.75	1.19			
155	0.70	1.21	2.87	4.74	5.49	3.93	2.06	1.05	0.76	0.75	1.77	3.07	3.72	4.18	2.37	0.77			
160	0.71	1.04	2.00	2.90	3.16	2.12	1.53	0.95	0.78	0.75	1.29	1.79	2.65	2.46	1.55	0.77			
165	0.73	0.89	1.34	1.70	1.98	1.28	1.10	0.86	0.82	0.75	1.10	1.28	1.19	1.50	0.80	0.77			
170	0.75	0.85	1.07	1.11	1.00	0.93	0.95	0.85	0.83	0.75	0.97	0.82	0.96	0.84	0.81	0.77			
175	0.79	0.83	0.84	0.83	0.89	0.85	0.84	0.83	0.83	0.76	0.85	0.82	0.86	0.82	0.82	0.77			
180	0.81	0.83	0.83	0.83	0.85	0.83	0.83	0.83	0.82	0.80	0.80	0.82	0.82	0.82	0.82	0.77			

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:Testing Room

Test Date:2023-03-02

γ Range: 0 - 180DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-3000H_V1 SYSTEM V2.0.361

Humidity:25%

Test Distance:11.350m [K=1.0000]

Remarks: