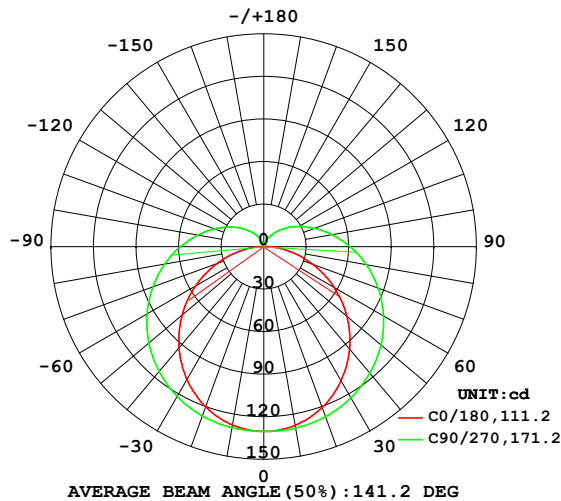


LUMINAIRE PHOTOMETRIC TEST REPORT

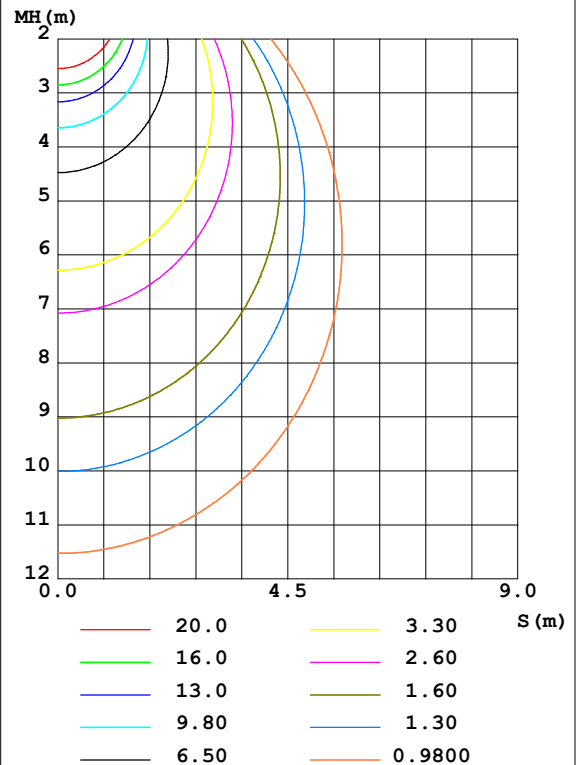
Test:U:230.4V I:0.0386A P:5W PF:0.5485 Freq:50.00Hz Lamp Flux:525x1 lm		
SGSO SKU: 0028920142	TYPE:	WEIGHT:
SPEC.:0.3m T5 Cabinet,5W,525lm,105lm/W,3CCT Switch,3000/3500/4000K,Linkable	DIM.: $\phi 322 \times 21.5\text{mm}$	SERIAL No.:
MFR.: TOSPO	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 105 lm/W			
MODEL	0.3m-5w-3500K	I _{max} (cd)	130.3	S/MH (C0/180)	1.24
NOMINAL POWER (W)	5	LOR (%)	100.0	S/MH (C90/270)	1.41
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	525	η UP, DN (C0-180)	8.8, 41.7
NOMINAL FLUX (lm)	525	CIE CLASS	SEMI-D.	η UP, DN (C180-360)	8.5, 41.0
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	127.9	128.9	129.9	128.8	127.7	128.6	129.6	128.8	0- 10	12.37	12.37	2.03,2.03
20	120.7	124.3	127.6	124.0	120.1	123.7	127.0	124.1	10- 20	35.82	48.19	7.92,7.92
30	109.1	116.8	123.0	116.2	108.3	115.6	122.1	116.2	20- 30	55.52	103.7	17.1,17.1
40	94.15	106.5	116.4	105.8	93.00	104.8	114.8	105.7	30- 40	69.44	173.1	28.5,28.5
50	76.58	94.21	107.9	93.49	75.22	92.21	105.7	93.27	40- 50	76.49	249.6	41,41
60	57.25	80.86	97.55	80.07	55.71	78.57	95.04	79.78	50- 60	76.51	326.1	53.6,53.6
70	36.97	67.17	85.83	66.37	35.21	64.77	83.23	66.03	60- 70	70.29	396.4	65.2,65.2
80	17.40	54.07	73.33	53.30	15.60	51.69	70.93	52.96	70- 80	59.55	456.0	75,75
90	3.566	42.28	60.81	41.60	2.556	40.09	58.77	41.30	80- 90	46.93	502.9	82.7,82.7
100	0.4505	32.32	48.95	31.70	0.5174	30.36	47.33	31.43	90-100	35.58	538.5	88.5,88.5
110	0.5630	24.14	38.18	23.59	0.5654	22.62	36.92	23.55	100-110	26.28	564.8	92.9,92.9
120	0.6006	17.66	28.72	17.19	0.6337	16.44	27.78	17.23	110-120	18.54	583.3	95.9,95.9
130	0.6794	12.56	20.63	12.15	0.7024	11.58	20.01	12.22	120-130	12.21	595.5	97.9,97.9
140	0.7176	8.133	13.89	7.495	0.7712	7.409	13.52	8.230	130-140	7.214	602.7	99.1,99.1
150	0.8017	4.685	8.315	3.516	0.8248	3.095	8.324	4.329	140-150	3.622	606.4	99.7,99.7
160	0.8280	2.236	3.356	1.739	0.8857	1.531	2.998	1.812	150-160	1.376	607.7	99.9,99.9
170	0.8553	1.213	1.137	1.075	0.9271	1.066	1.138	1.012	160-170	0.3934	608.1	100,100
180	0.9239	0.9383	0.9535	0.9451	0.9239	0.9002	0.9230	0.9223	170-180	0.0921	608.2	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 210.95 lm

%lum = 34.7%

%lamp = 34.7%

Conical surface Flux(120deg): 326.14 lm

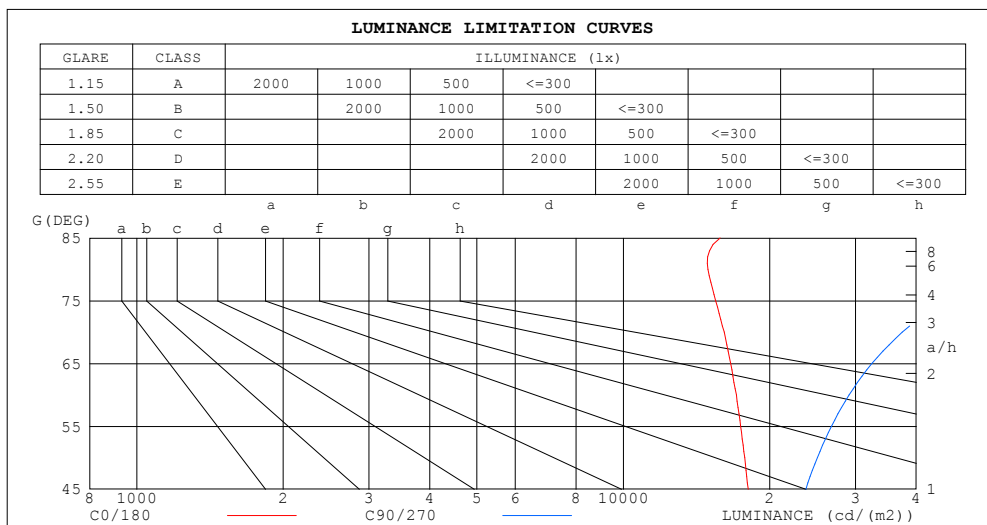
%lum = 53.6%

%lamp = 53.6%

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	15816	114798
80	14938	63024
75	15481	45925
70	16117	37453
65	16630	32428
60	17072	29117
55	17429	26778
50	17764	25051
45	18060	23720

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	.390	.222	.070	.377	.215	.068	.354	.203	.065	.332	.192	.061	.312	.181	.058		
2.0	.336	.184	.057	.325	.179	.055	.304	.169	.053	.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	.079	.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	.276	.276	.276	.188	.188	.188	.108	.108	.108	.035	.035	.035	
1.0	.319	.288	.261	.273	.248	.225	.187	.170	.155	.107	.099	.090	.034	.032	.029	
2.0	.312	.266	.226	.267	.229	.196	.183	.158	.137	.106	.092	.080	.034	.030	.026	
3.0	.305	.249	.205	.261	.215	.178	.179	.149	.125	.104	.087	.073	.033	.028	.024	
4.0	.297	.237	.191	.255	.204	.166	.175	.142	.117	.101	.083	.069	.033	.027	.023	
5.0	.289	.227	.181	.248	.196	.157	.171	.137	.111	.099	.080	.066	.032	.026	.022	
6.0	.282	.219	.174	.242	.190	.151	.167	.133	.107	.097	.078	.064	.031	.026	.021	
7.0	.274	.212	.169	.236	.184	.147	.163	.129	.104	.095	.076	.062	.031	.025	.021	
8.0	.268	.207	.165	.230	.179	.144	.159	.126	.102	.093	.074	.061	.030	.024	.020	
9.0	.261	.202	.162	.225	.175	.141	.156	.123	.100	.091	.073	.060	.029	.024	.020	
10.0	.256	.198	.159	.220	.172	.139	.153	.121	.099	.089	.071	.059	.029	.023	.020	

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	23.2	24.6	23.7	25.1	25.7	25.4	26.8	25.9	27.3	27.9
3H	24.9	26.2	25.4	26.7	27.3	28.1	29.4	28.7	29.9	30.5
4H	25.6	26.8	26.1	27.4	28.0	29.6	30.8	30.2	31.4	32.0
6H	26.2	27.3	26.7	27.9	28.5	31.2	32.4	31.8	33.0	33.6
8H	26.4	27.5	27.0	28.1	28.7	32.1	33.3	32.7	33.8	34.5
12H	26.5	27.6	27.1	28.2	28.9	33.2	34.3	33.8	34.8	35.5
4H 2H	24.4	25.7	25.0	26.2	26.8	26.0	27.2	26.5	27.8	28.4
3H	26.3	27.4	26.9	28.0	28.7	28.9	30.0	29.5	30.6	31.3
4H	27.2	28.2	27.8	28.8	29.5	30.6	31.6	31.2	32.2	32.9
6H	28.0	28.9	28.6	29.5	30.2	32.5	33.4	33.1	34.0	34.7
8H	28.3	29.1	29.0	29.8	30.5	33.5	34.3	34.2	35.0	35.7
12H	28.6	29.3	29.2	30.0	30.8	34.7	35.5	35.4	36.1	36.9
8H 4H	28.3	29.1	29.0	29.8	30.5	31.0	31.8	31.6	32.5	33.2
6H	29.5	30.2	30.1	30.8	31.6	33.2	33.9	33.8	34.5	35.3
8H	30.0	30.6	30.7	31.3	32.1	34.4	35.0	35.1	35.7	36.5
12H	30.5	31.0	31.2	31.7	32.6	35.9	36.4	36.6	37.1	37.9
12H 4H	28.6	29.4	29.3	30.1	30.8	31.0	31.8	31.7	32.4	33.2
6H	30.0	30.7	30.7	31.4	32.2	33.3	33.9	34.0	34.6	35.4
8H	30.7	31.3	31.5	32.0	32.8	34.6	35.2	35.4	35.9	36.7
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, 608.2 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.7)

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:

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) $k(RI) \times RCR = 5$									
$k = 0.60$	48	35	28	47	35	28	45	34	27	21
0.80	57	44	36	55	43	35	53	42	34	27
1.00	65	51	43	63	50	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		

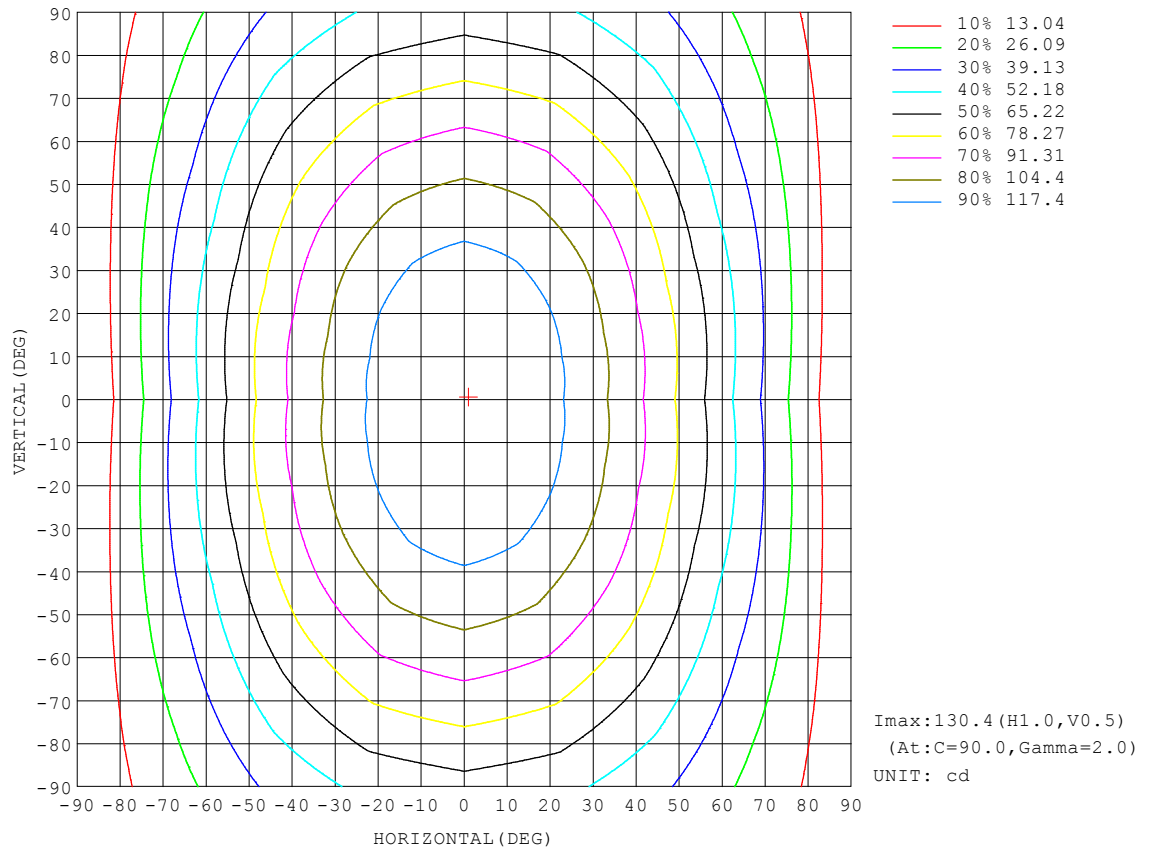
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Testing Room
Test Date:2023-03-02

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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:

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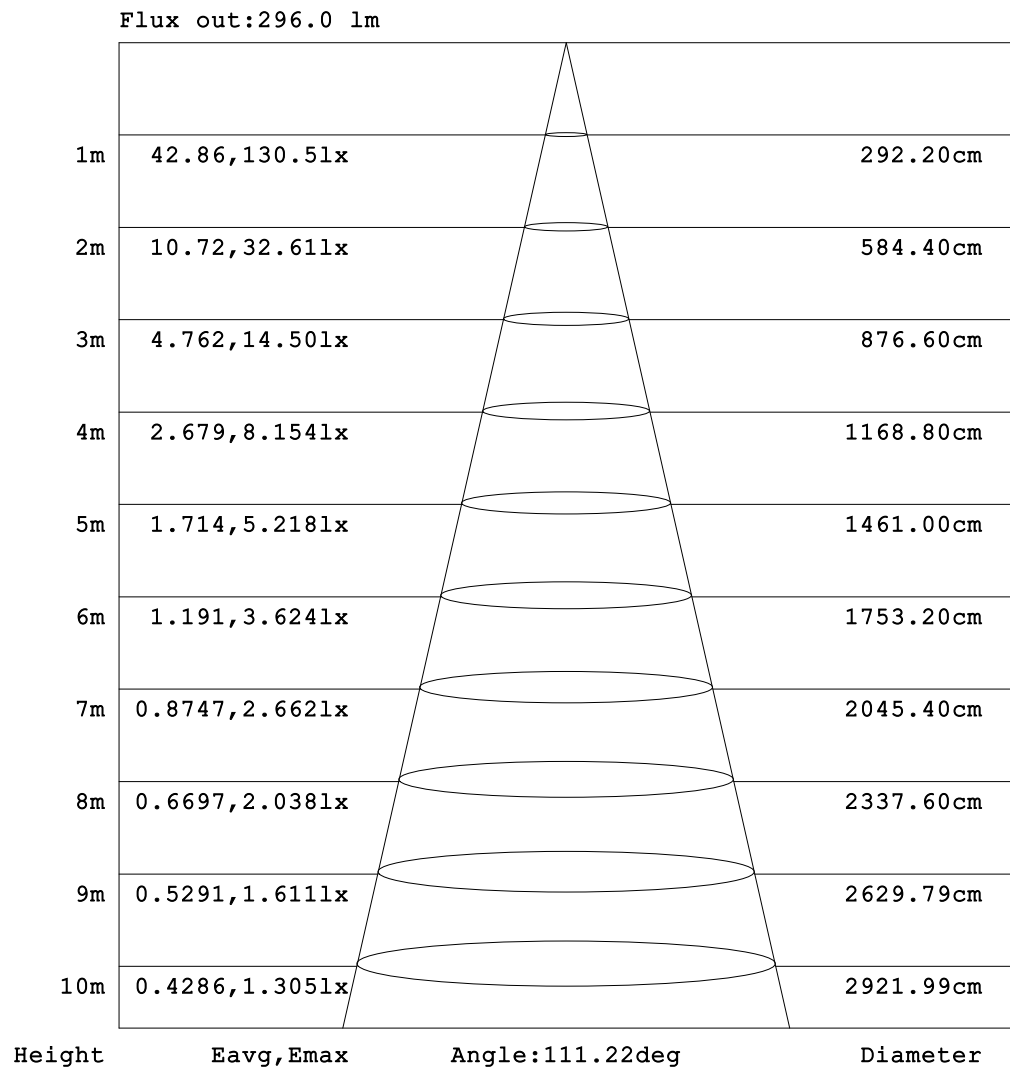
ISOCANDELA DIAGRAM



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

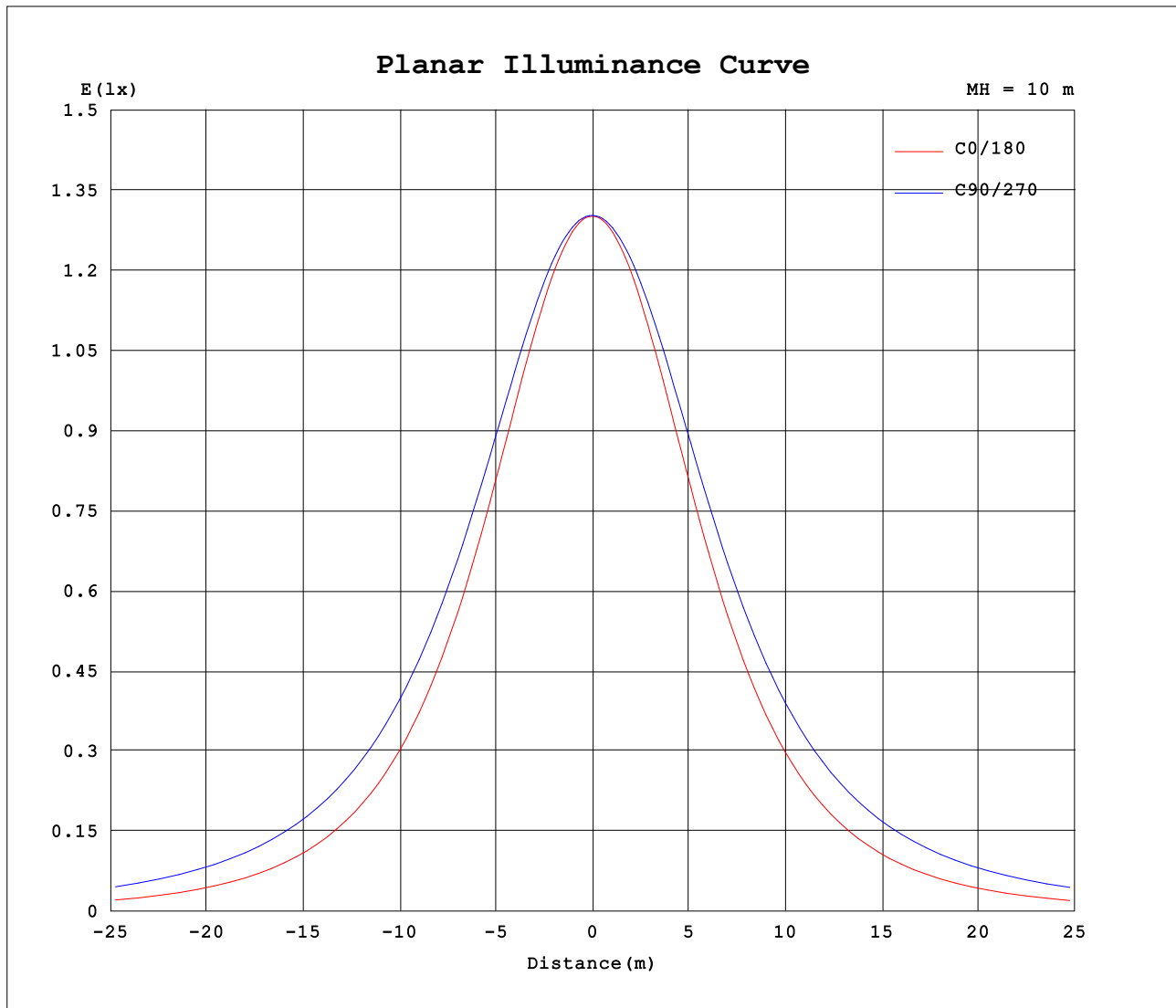


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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

γ (DEG) \ C (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	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130			
5	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130			
10	128	128	129	130	130	130	129	128	128	128	129	129	130	129	129	128			
15	125	126	127	128	129	128	127	125	124	125	127	128	129	128	127	125			
20	121	122	124	127	128	127	124	121	120	121	124	126	127	126	124	122			
25	115	117	121	124	126	124	121	117	115	116	120	123	125	124	120	117			
30	109	112	117	121	123	121	116	111	108	110	116	120	122	120	116	111			
35	102	105	112	118	120	118	111	105	101	104	111	116	119	117	111	105			
40	94.1	98.6	106	114	116	113	106	97.5	93.0	96.7	105	112	115	112	106	97.9			
45	85.7	90.9	101	109	112	109	99.8	89.8	84.4	89.0	98.7	107	110	107	99.7	90.4			
50	76.6	83.0	94.2	104	108	104	93.5	81.7	75.2	80.9	92.2	102	106	102	93.3	82.4			
55	67.0	74.6	87.6	98.8	103	98.5	86.9	73.4	65.6	72.4	85.5	96.1	101	96.7	86.6	74.0			
60	57.3	66.2	80.9	93.2	97.5	92.9	80.1	64.8	55.7	63.8	78.6	90.3	95.0	90.8	79.8	65.5			
65	47.1	57.7	74.0	87.2	91.8	86.9	73.2	56.3	45.5	55.2	71.6	84.2	89.2	84.8	72.9	57.0			
70	37.0	49.3	67.2	81.0	85.8	80.7	66.4	47.9	35.2	46.8	64.8	78.0	83.2	78.6	66.0	48.7			
75	26.9	41.3	60.5	74.8	79.6	74.5	59.7	39.9	25.1	38.8	58.1	71.8	77.1	72.4	59.4	40.7			
80	17.4	33.9	54.1	68.5	73.3	68.2	53.3	32.6	15.6	31.5	51.7	65.6	70.9	66.3	53.0	33.3			
85	9.25	27.4	48.0	62.3	67.0	62.0	47.2	26.2	7.68	25.1	45.7	59.6	64.8	60.2	46.9	26.9			
90	3.57	22.0	42.3	56.3	60.8	56.0	41.6	20.9	2.56	19.9	40.1	53.7	58.8	54.3	41.3	21.6			
95	0.49	17.8	37.1	50.4	54.8	50.1	36.4	16.9	0.75	15.8	35.0	48.1	53.0	48.7	36.1	17.3			
100	0.45	14.5	32.3	44.9	49.0	44.6	31.7	13.7	0.52	12.8	30.4	42.8	47.3	43.3	31.4	14.1			
105	0.46	12.0	28.0	39.6	43.4	39.4	27.5	11.3	0.53	10.5	26.3	37.8	42.0	38.3	27.3	11.7			
110	0.56	10.2	24.1	34.7	38.2	34.5	23.6	9.48	0.57	8.85	22.6	33.1	36.9	33.6	23.5	9.87			
115	0.59	8.67	20.7	30.2	33.3	29.9	20.2	8.04	0.60	7.52	19.3	28.7	32.2	29.2	20.2	8.40			
120	0.60	7.06	17.7	26.0	28.7	25.7	17.2	6.47	0.63	6.44	16.4	24.7	27.8	25.1	17.2	7.11			
125	0.61	6.11	15.0	22.2	24.5	22.0	14.5	5.66	0.66	5.08	13.9	20.9	23.7	21.3	14.6	5.92			
130	0.68	5.12	12.6	18.6	20.6	18.4	12.1	4.68	0.70	3.69	11.6	17.6	20.0	17.9	12.2	4.24			
135	0.70	3.73	9.81	15.5	17.0	15.3	9.41	3.28	0.73	2.78	9.29	14.6	16.6	14.9	10.1	3.35			
140	0.72	2.96	8.13	12.4	13.9	12.1	7.49	2.53	0.77	2.06	7.41	11.7	13.5	12.1	8.23	2.32			
145	0.76	2.05	6.65	9.47	10.4	9.32	5.58	1.90	0.80	1.63	4.63	8.92	10.8	9.67	5.73	1.72			
150	0.80	1.62	4.68	7.57	8.31	6.97	3.52	1.43	0.82	0.90	3.09	6.31	8.32	7.03	4.33	1.34			
155	0.82	1.36	3.19	5.27	6.18	4.45	2.37	1.20	0.86	0.89	2.08	3.57	4.60	4.82	2.72	0.88			
160	0.83	1.18	2.24	3.26	3.36	2.43	1.74	1.07	0.89	0.88	1.53	2.08	3.00	2.83	1.81	0.88			
165	0.85	1.01	1.51	1.90	2.24	1.45	1.26	0.96	0.92	0.87	1.19	1.48	1.42	1.79	1.18	0.88			
170	0.86	0.96	1.21	1.27	1.14	1.05	1.07	0.95	0.93	0.86	1.07	0.93	1.14	0.95	1.01	0.88			
175	0.89	0.94	0.95	0.95	1.02	0.96	0.95	0.95	0.93	0.86	0.95	0.93	0.98	0.93	0.95	0.88			
180	0.92	0.93	0.94	0.94	0.95	0.95	0.95	0.94	0.92	0.90	0.90	0.92	0.92	0.92	0.92	0.88			

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: