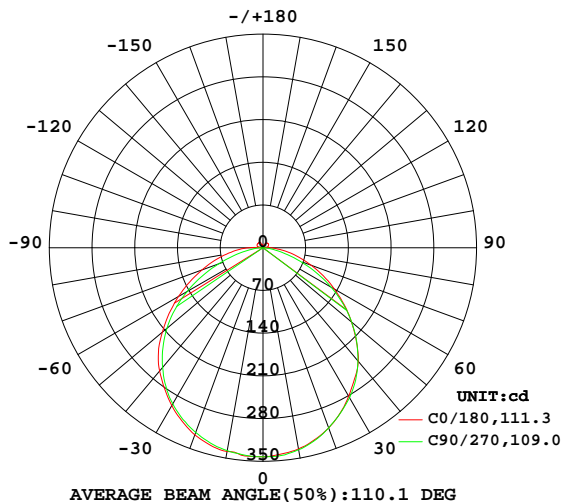


LUMINAIRE PHOTOMETRIC TEST REPORT

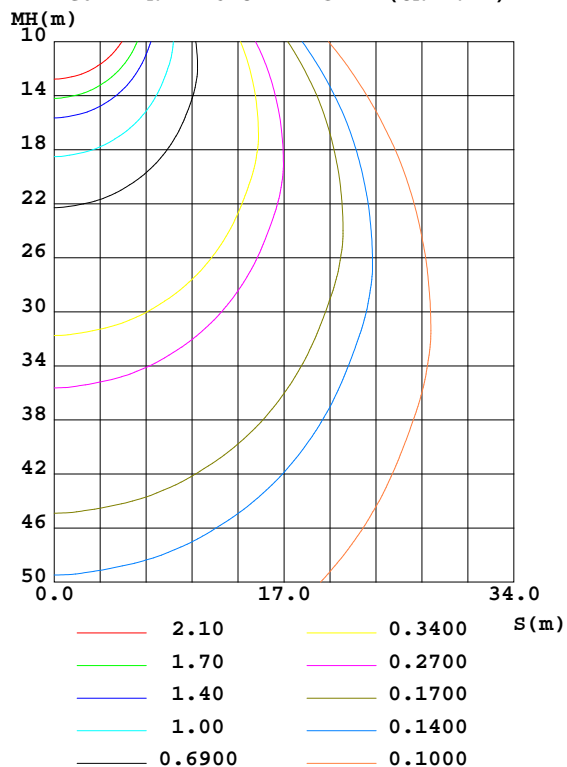
Test:U:24.004V I:0.3772A P:9.0556W PF:1.0000 Freq:0Hz Lamp Flux:995.837x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.:	SUR.:	Shielding Angle:N/A

DATA OF LAMP		PHOTOMETRIC DATA Eff: 109.97 lm/W			
MODEL	空心8.5w/m 830	Imax(cd)	342.5	S/MH(C0/180)	1.29
NOMINAL POWER(W)	8.5	LOR(%)	100.0	S/MH(C90/270)	1.28
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	995.84	η UP,DN(C0-180)	1.6,47.1
NOMINAL FLUX(lm)	995.837	CIE CLASS	DIRECT	η UP,DN(C180-360)	1.2,50.1
LAMPS INSIDE	1	η up(%)	2.8	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	η down(%)	97.2	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:Zero huang
Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:60%
Test Distance:26.000m [K=1.5110]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	334.7	334.7	336.2	337.9	339.0	339.8	337.7	336.9	0- 10	32.44	32.44	3.26,3.26
20	314.3	315.1	314.3	321.2	326.4	325.9	322.2	320.7	10- 20	93.21	125.6	12.6,12.6
30	280.9	282.9	283.8	291.7	298.8	301.0	295.7	291.9	20- 30	141.5	267.2	26.8,26.8
40	243.1	238.8	242.1	251.3	263.5	264.6	256.0	249.7	30- 40	170.3	437.5	43.9,43.9
50	189.4	185.0	189.9	201.3	215.4	216.2	205.5	194.5	40- 50	175.0	612.6	61.5,61.5
60	134.8	126.7	128.8	145.5	159.9	159.2	143.8	137.3	50- 60	153.6	766.2	76.9,76.9
70	84.10	74.52	64.89	88.32	106.6	99.83	77.29	83.10	60- 70	112.5	878.7	88.2,88.2
80	42.33	33.13	17.66	43.63	60.95	49.85	25.96	33.89	70- 80	64.56	943.2	94.7,94.7
90	13.26	10.73	0.8940	15.80	23.24	15.35	2.567	0	80- 90	24.79	968.0	97.2,97.2
100	2.489	5.600	0	5.544	2.240	3.093	0	0	90-100	3.375	971.4	97.5,97.5
110	9.443	7.203	0	6.992	10.39	8.260	0	0	100-110	4.621	976.0	98,98
120	10.82	7.379	0	7.590	11.07	8.433	0	0	110-120	5.219	981.2	98.5,98.5
130	10.91	7.379	0	8.102	11.07	8.433	0	0	120-130	4.901	986.1	99,99
140	10.39	7.119	0.1773	8.102	10.99	8.433	0	0	130-140	4.092	990.2	99.4,99.4
150	8.250	2.191	0.2660	0.5970	10.82	8.433	0	0	140-150	3.157	993.4	99.8,99.8
160	0.5137	2.108	0.3547	4.776	0.5151	8.433	0	0	150-160	1.524	994.9	99.9,99.9
170	0.6867	0.7028	0.5320	2.990	3.429	8.433	0	0	160-170	0.7352	995.7	100,100
180	0.6867	0.7028	0.7980	0.7701	0.6009	8.433	0	0	170-180	0.1808	995.8	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 526.18 lm

%lum = 52.8%

%lamp = 52.8%

Conical surface Flux(120deg): 766.15 lm

%lum = 76.9%

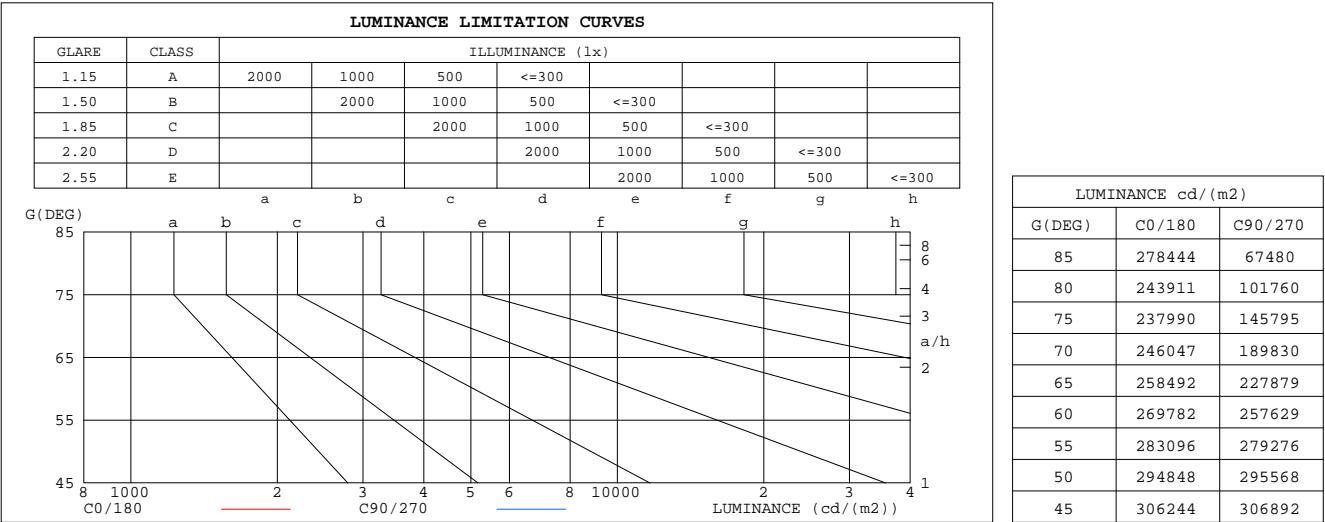
%lamp = 76.9%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.9DEG
 Operators:Zero huang
 Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 γ Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60%
 Test Distance:26.000m [K=1.5110]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.004V I:0.3772A P:9.0556W PF:1.0000 Freq:0Hz Lamp Flux:995.837x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.:	SUR.:	Shielding Angle:N/A



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:Zero huang
Test Date:2024-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:60%
Test Distance:26.000m [K=1.5110]
Remarks:

WEC AND CCEC

Test:U:24.004V I:0.3772A P:9.0556W PF:1.0000 Freq:0Hz Lamp Flux:995.837x1 lm								
NAME:			TYPE:LED			WEIGHT:N/A		
SPEC.:N/A			DIM.:			SERIAL No.:N/A		
MFR.:			SUR.:			Shielding Angle:N/A		

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	.311	.177	.056	.304	.173	.055	.289	.166	.053	.275	.159	.051	.262	.152	.049	
2.0	.290	.159	.049	.283	.156	.048	.270	.150	.047	.258	.145	.045	.247	.140	.044	
3.0	.268	.143	.043	.262	.140	.042	.250	.135	.041	.239	.131	.040	.229	.127	.039	
4.0	.247	.128	.038	.242	.126	.037	.231	.123	.037	.221	.119	.036	.212	.115	.035	
5.0	.228	.116	.034	.223	.115	.033	.214	.111	.033	.205	.108	.032	.197	.105	.032	
6.0	.212	.106	.030	.207	.105	.030	.199	.102	.030	.191	.099	.029	.184	.097	.029	
7.0	.197	.098	.028	.193	.096	.027	.186	.094	.027	.179	.092	.027	.172	.089	.026	
8.0	.184	.090	.025	.181	.089	.025	.174	.087	.025	.168	.085	.024	.162	.083	.024	
9.0	.173	.084	.023	.170	.083	.023	.163	.081	.023	.158	.079	.023	.152	.077	.022	
10.0	.162	.078	.022	.160	.077	.021	.154	.075	.021	.149	.074	.021	.144	.072	.021	

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	.212	.212	.212	.181	.181	.181	.124	.124	.124	.071	.071	.071	.023	.023	.023	
1.0	.202	.178	.156	.173	.152	.134	.118	.105	.093	.068	.061	.054	.022	.020	.017	
2.0	.194	.154	.120	.166	.132	.104	.114	.091	.072	.066	.053	.042	.021	.017	.014	
3.0	.186	.136	.096	.159	.117	.083	.109	.082	.059	.063	.048	.035	.020	.015	.011	
4.0	.178	.123	.080	.153	.106	.070	.105	.074	.049	.061	.043	.029	.020	.014	.010	
5.0	.171	.112	.069	.147	.097	.060	.101	.068	.043	.059	.040	.025	.019	.013	.008	
6.0	.164	.104	.061	.141	.090	.053	.097	.063	.038	.056	.037	.022	.018	.012	.007	
7.0	.157	.097	.055	.135	.084	.048	.093	.059	.034	.054	.035	.020	.017	.011	.007	
8.0	.150	.091	.051	.129	.079	.044	.090	.056	.031	.052	.033	.019	.017	.011	.006	
9.0	.144	.087	.047	.124	.075	.041	.086	.053	.029	.050	.031	.018	.016	.010	.006	
10.0	.139	.082	.045	.120	.071	.039	.083	.050	.028	.048	.030	.017	.016	.010	.005	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.9DEG
 Operators:Zero huang
 Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60%
 Test Distance:26.000m [K=1.5110]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.004V I:0.3772A P:9.0556W PF:1.0000 Freq:0Hz Lamp Flux:995.837x1 lm											
NAME:					TYPE:LED			WEIGHT:N/A			
SPEC.:N/A					DIM.:			SERIAL No.:N/A			
MFR.:					SUR.:			Shielding Angle:N/A			
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		31.9	33.4	32.3	33.7	33.9	31.8	33.3	32.1	33.6	33.8
	3H	33.4	34.8	33.7	35.0	35.3	32.9	34.3	33.3	34.6	34.9
	4H	34.0	35.3	34.4	35.6	35.9	33.2	34.5	33.6	34.8	35.2
	6H	34.6	35.8	34.9	36.1	36.4	33.4	34.6	33.8	34.9	35.3
	8H	34.8	36.0	35.2	36.3	36.7	33.4	34.6	33.8	34.9	35.3
	12H	35.0	36.1	35.4	36.5	36.8	33.4	34.5	33.8	34.9	35.2
4H	2H	32.4	33.7	32.8	34.0	34.3	32.3	33.6	32.7	33.9	34.2
	3H	34.1	35.2	34.5	35.5	35.9	33.6	34.7	34.0	35.1	35.5
	4H	34.8	35.8	35.2	36.2	36.6	34.1	35.1	34.5	35.5	35.9
	6H	35.5	36.4	36.0	36.8	37.3	34.3	35.2	34.8	35.6	36.1
	8H	35.8	36.7	36.3	37.1	37.6	34.4	35.2	34.8	35.6	36.1
	12H	36.1	36.9	36.6	37.3	37.8	34.4	35.2	34.9	35.6	36.1
8H	4H	35.0	35.9	35.5	36.3	36.7	34.3	35.2	34.8	35.6	36.0
	6H	35.9	36.6	36.4	37.1	37.5	34.7	35.4	35.2	35.9	36.4
	8H	36.3	37.0	36.8	37.4	37.9	34.9	35.5	35.4	36.0	36.5
	12H	36.7	37.3	37.3	37.8	38.3	35.0	35.5	35.5	36.0	36.5
12H	4H	35.0	35.8	35.5	36.2	36.7	34.3	35.1	34.8	35.6	36.0
	6H	35.9	36.6	36.4	37.0	37.5	34.8	35.5	35.3	35.9	36.4
	8H	36.4	37.0	36.9	37.5	38.0	35.0	35.6	35.5	36.1	36.6
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.2					+ 0.2 / - 0.3					
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.4					
2.0H	+ 0.2 / - 0.2					+ 0.4 / - 0.3					

CIE Pub.117, 995.8 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -0.0$)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:Zero huang
Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:60%
Test Distance:26.000m [K=1.5110]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.004V I:0.3772A P:9.0556W PF:1.0000 Freq:0Hz Lamp Flux:995.837x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.:	SUR.:	Shielding Angle:N/A

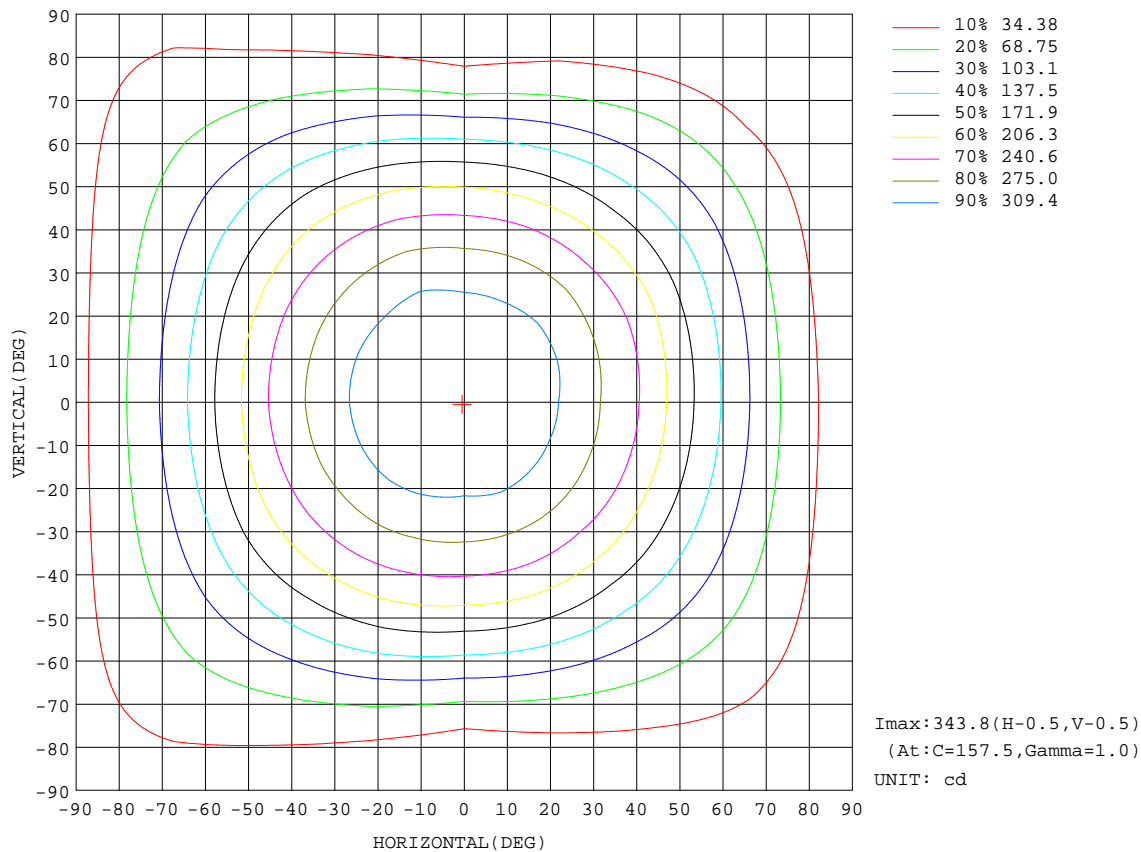
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	57	45	38	56	45	38	55	45	38	32
0.80	67	55	48	66	55	48	64	54	47	40
1.00	75	64	57	74	64	57	72	65	56	49
1.25	82	72	65	81	71	64	78	69	63	56
1.50	87	77	70	86	76	70	82	74	69	61
2.00	94	86	79	92	84	78	88	82	76	68
2.50	98	90	84	96	89	83	92	86	81	72
3.00	101	94	89	99	93	88	94	89	85	76
4.00	105	100	95	103	98	93	98	94	90	80
5.00	108	103	99	105	101	97	100	97	93	83
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.9DEG
 Operators:Zero huang
 Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60%
 Test Distance:26.000m [K=1.5110]
 Remarks:

ISOCANDELA DIAGRAM

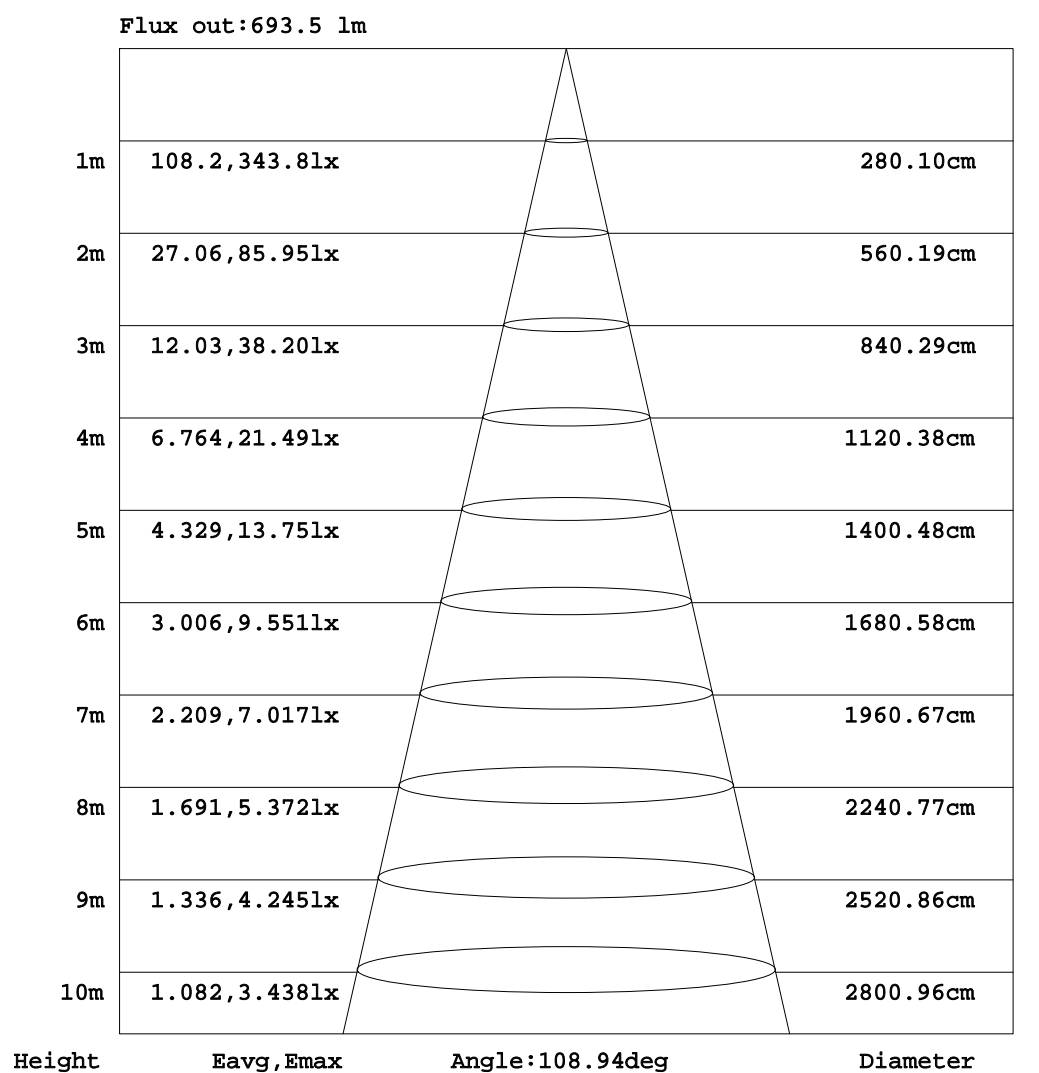
Test:U:24.004V I:0.3772A P:9.0556W PF:1.0000 Freq:0Hz Lamp Flux:995.837x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.:	SUR.:	Shielding Angle:N/A



C Range: 0 - 360DEG	γ Range: 0 - 180DEG
C Interval: 22.5DEG	γ Interval: 1.0DEG
Test Speed: HIGH	Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Temperature: 24.9DEG	Humidity: 60%
Operators: Zero huang	Test Distance: 26.000m [K=1.5110]
Test Date: 2024-01-03	Remarks:

AAI Figure

Test:U:24.004V I:0.3772A P:9.0556W PF:1.0000 Freq:0Hz Lamp Flux:995.837x1 lm		
NAME:	TYPE:LED	WEIGHT:N/A
SPEC.:N/A	DIM.:	SERIAL No.:N/A
MFR.:	SUR.:	Shielding Angle:N/A

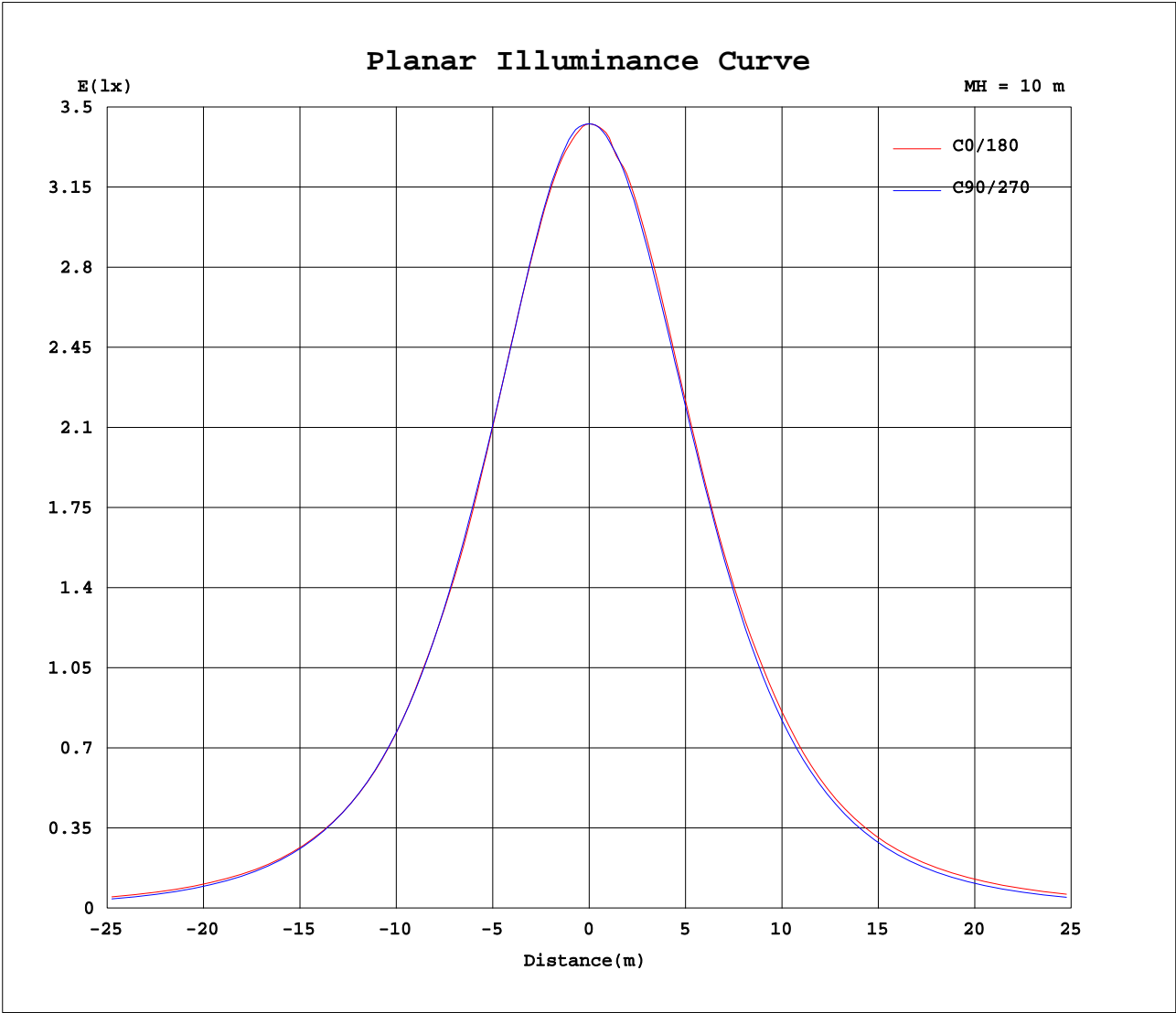


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:24.9DEG
 Operators:Zero huang
 Test Date:2024-01-03

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:60%
 Test Distance:26.000m [K=1.5110]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:Zero huang
Test Date:2024-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:60%
Test Distance:26.000m [K=1.5110]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.004V I:0.3772A P:9.0556W PF:1.0000 Freq:0Hz Lamp Flux:995.837x1 lm																	
NAME:									TYPE:LED						WEIGHT:N/A		
SPEC.:N/A									DIM.:						SERIAL No.:N/A		
MFR.:									SUR.:						Shielding Angle:N/A		

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	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343	343			
5	339	340	340	340	342	341	342	342	343	342	342	342	341	341	341	341	341			
10	335	333	335	335	336	337	338	339	339	340	340	340	338	338	337	336				
15	326	325	326	327	327	329	331	333	335	334	335	334	332	331	330	329				
20	314	313	315	317	314	319	321	323	326	326	326	326	322	322	321	318				
25	299	299	301	302	299	305	308	311	314	314	315	316	311	310	308	304				
30	281	281	283	284	284	288	292	295	299	299	301	302	296	296	292	286				
35	262	260	262	263	265	269	271	277	281	282	284	284	277	277	273	266				
40	243	240	239	241	242	248	251	257	264	264	265	263	256	255	250	247				
45	216	214	213	216	217	225	228	235	242	243	242	239	232	229	222	223				
50	189	186	185	189	190	198	201	209	215	216	216	213	205	201	194	196				
55	162	158	156	159	160	170	174	183	188	188	189	184	176	172	166	167				
60	135	130	127	128	129	140	146	155	160	160	159	153	144	142	137	139				
65	109	105	99.9	98.1	96.3	109	116	126	133	133	128	122	110	111	109	112				
70	84.1	80.2	74.5	69.8	64.9	79.3	88.3	99.9	107	105	99.8	91.0	77.3	82.7	83.1	84.8				
75	61.6	58.2	51.8	45.2	37.7	53.6	64.4	76.2	82.9	81.4	73.2	63.0	48.3	55.5	58.5	57.9				
80	42.3	40.2	33.1	26.7	17.7	31.9	43.6	55.1	60.9	58.5	49.8	39.6	26.0	34.3	33.9	31.1				
85	24.3	22.2	18.3	13.7	5.88	17.2	26.6	36.4	42.5	39.7	31.4	22.6	11.7	18.7	9.29	4.23				
90	13.3	12.6	10.7	7.56	0.89	8.67	15.8	21.5	23.2	19.6	15.3	10.6	2.57	3.83	0.00	0.00				
95	3.59	3.28	0.20	0.00	0.00	0.00	0.09	0.57	3.78	1.37	0.00	0.37	0.00	0.00	0.00	0.00				
100	2.49	3.27	5.60	1.95	0.00	1.98	5.54	4.32	2.24	3.22	3.09	2.85	0.00	0.00	0.00	0.00				
105	8.84	8.30	6.58	2.76	0.00	2.77	6.56	7.97	9.62	9.17	7.47	4.45	0.00	0.00	0.00	0.00				
110	9.44	9.08	7.20	2.84	0.00	3.12	6.99	8.83	10.4	10.1	8.26	4.35	0.00	0.00	0.00	0.00				
115	9.95	9.69	7.38	2.84	0.00	3.03	7.33	9.43	10.9	10.8	8.43	4.35	0.00	0.00	0.00	0.00				
120	10.8	9.95	7.38	2.84	0.00	3.29	7.59	9.94	11.1	11.1	8.43	4.35	0.00	0.00	0.00	0.00				
125	11.1	9.95	7.38	2.84	0.00	3.38	7.76	10.2	11.1	10.8	8.43	4.35	0.00	0.00	0.00	0.00				
130	10.9	9.95	7.38	2.84	0.00	2.88	8.10	10.5	11.1	10.6	8.43	4.35	0.00	0.00	0.00	0.00				
135	10.7	9.95	7.38	0.82	0.18	1.13	8.10	10.5	11.1	10.6	8.43	4.35	0.00	0.00	0.00	0.00				
140	10.4	9.69	7.12	0.44	0.18	3.03	8.10	10.5	11.0	10.6	8.43	4.35	0.00	0.00	0.00	0.00				
145	9.70	8.91	6.33	1.42	0.27	3.03	8.19	10.5	11.0	10.3	8.43	4.35	0.00	0.00	0.00	0.00				
150	8.25	7.54	2.19	0.98	0.27	3.03	0.60	10.5	10.8	9.41	8.43	4.35	0.00	0.00	0.00	0.00				
155	6.52	5.11	0.53	0.62	0.35	3.03	4.85	4.48	9.87	8.53	8.43	4.35	0.00	0.00	0.00	0.00				
160	0.51	0.61	2.11	0.62	0.35	2.68	4.78	3.30	0.52	7.65	8.43	4.35	0.00	0.00	0.00	0.00				
165	2.41	2.00	0.70	0.62	0.35	2.17	4.02	6.09	5.44	6.77	8.43	4.35	0.00	0.00	0.00	0.00				
170	0.69	0.61	0.70	0.62	0.53	1.82	2.99	4.04	3.43	5.89	8.43	4.35	0.00	0.00	0.00	0.00				
175	0.69	0.61	0.70	0.62	0.88	0.95	1.88	2.32	1.63	5.01	8.43	4.35	0.00	0.00	0.00	0.00				
180	0.69	0.61	0.70	0.62	0.80	0.87	0.77	0.60	0.60	4.13	8.43	4.35	0.00	0.00	0.00	0.00				

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:24.9DEG
Operators:Zero huang
Test Date:2024-01-03

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:60%
Test Distance:26.000m [K=1.5110]
Remarks: