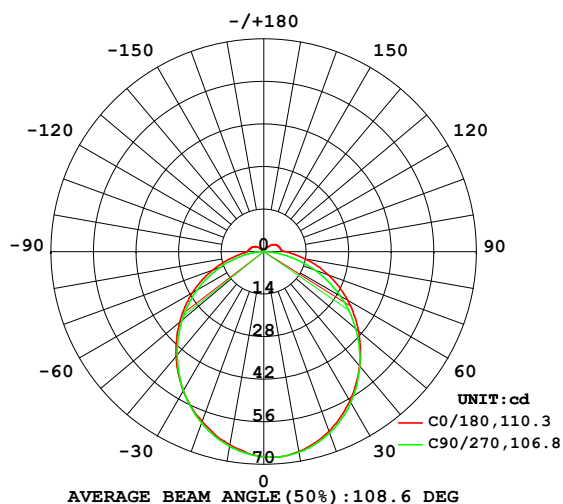


LUMINAIRE PHOTOMETRIC TEST REPORT

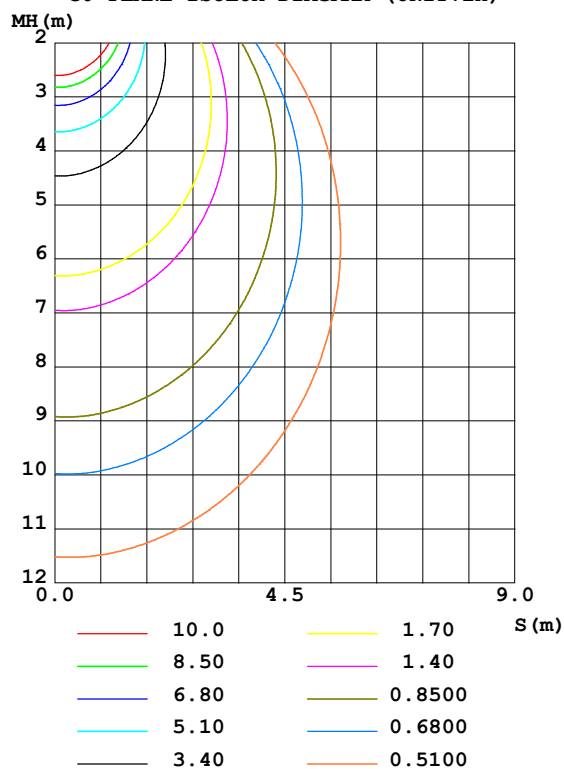
Test:U:24.002V I:0.1770A P:4.2484W PF:1.0000 Freq:50.00Hz Lamp Flux:202.001x1 lm		
NAME: PICCOLO 2200K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Acolyte	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 47.55 lm/W			
MODEL	PIC3.022MSV	I _{max} (cd)	69.14	S/MH	1.22
NOMINAL POWER(W)	4.17635	LOR(%)	100.0		
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	202.00	<input type="checkbox"/> UP,DN(C0-180)	2.9,49.1
NOMINAL FLUX(lm)	202.001	CIE CLASS	DIRECT	<input type="checkbox"/> UP,DN(C180-360)	2.5,45.6
LAMPS INSIDE	1	<input type="checkbox"/> up(%)	5.3	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	<input type="checkbox"/> down(%)	94.7	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: 25.3DEG
 Operators: HRP
 Test Date: 2022-11-21

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 6.020m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

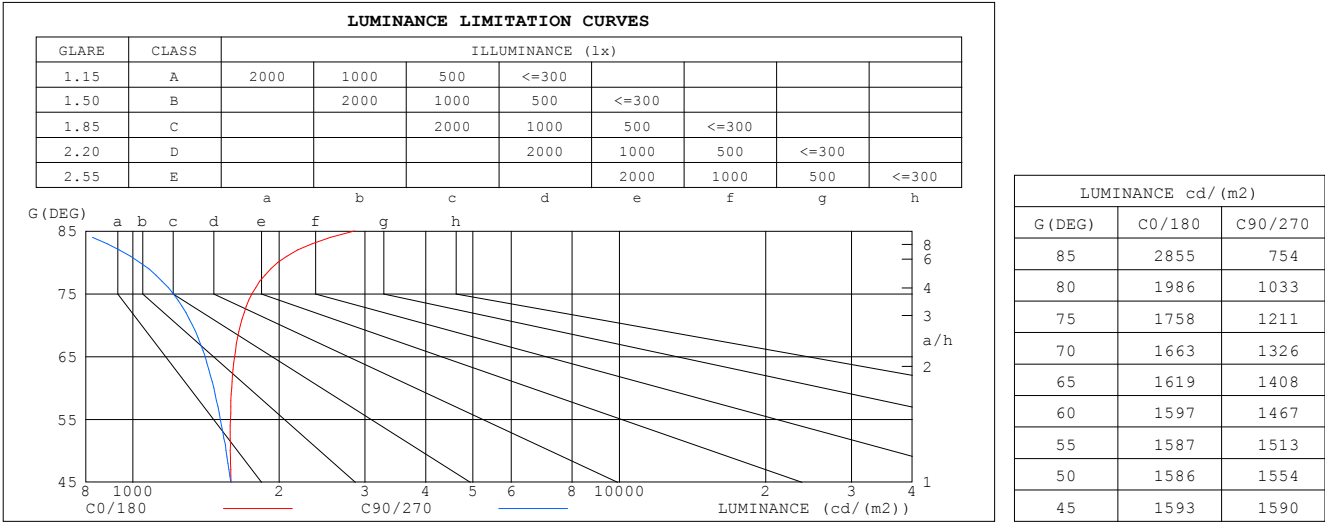
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	66.79	67.28	66.99	66.05	64.57	64.86	65.07	65.88	0- 10	6.389	6.389	3.16,3.16
20	62.85	63.87	63.49	61.69	59.48	59.55	60.00	61.40	10- 20	18.12	24.51	12.1,12.1
30	56.69	57.95	57.33	55.03	52.94	52.24	52.88	54.84	20- 30	27.00	51.51	25.5,25.5
40	49.11	50.06	49.14	46.91	44.91	43.88	44.37	46.99	30- 40	32.03	83.54	41.4,41.4
50	40.71	40.20	39.51	37.83	36.19	34.42	35.09	38.36	40- 50	32.86	116.4	57.6,57.6
60	31.88	30.91	29.02	28.14	27.15	24.99	25.40	29.33	50- 60	29.80	146.2	72.4,72.4
70	22.71	21.43	17.94	18.10	17.98	16.02	15.48	20.05	60- 70	23.42	169.6	84,84
80	13.77	12.03	7.098	8.819	9.884	7.763	6.051	11.08	70- 80	14.87	184.5	91.3,91.3
90	7.118	4.883	0.1031	3.955	5.626	3.576	0.0925	4.524	80- 90	6.760	191.2	94.7,94.7
100	5.634	3.889	0.0761	3.383	4.850	3.042	0.0701	2.957	90-100	3.626	194.9	96.5,96.5
110	5.190	3.419	0.0761	2.797	4.240	2.433	0.0720	3.101	100-110	2.978	197.8	97.9,97.9
120	4.655	2.704	0.0904	1.492	3.377	1.270	0.0822	2.237	110-120	2.209	200.1	99,99
130	3.566	1.300	0.0925	0.1291	1.566	0.1097	0.0946	0.8895	120-130	1.303	201.4	99.7,99.7
140	1.719	0.1035	0.0946	0.1312	0.1245	0.1180	0.1048	0.1127	130-140	0.4418	201.8	99.9,99.9
150	0.1701	0.1035	0.0966	0.1271	0.1245	0.1366	0.1174	0.1127	140-150	0.0987	201.9	99.9,99.9
160	0.1681	0.1035	0.0966	0.1271	0.1286	0.1449	0.1316	0.1230	150-160	0.0578	202.0	100,100
170	0.1598	0.1221	0.1172	0.1271	0.1286	0.1325	0.1316	0.1250	160-170	0.0364	202.0	100,100
180	0.1473	0.1283	0.1234	0.1271	0.1286	0.1325	0.1316	0.1250	170-180	0.0125	202.0	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HRP
 Test Date:2022-11-21

□ Range: 0 - 180DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:6.020m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:24.002V I:0.1770A P:4.2484W PF:1.0000 Freq:50.00Hz Lamp Flux:202.001x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HRP
Test Date:2022-11-21

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:24.002V I:0.1770A P:4.2484W PF:1.0000 Freq:50.00Hz Lamp Flux:202.001x1 lm									
				TYPE:LED			WEIGHT:		
				DIM.:			SERIAL No.:		
				SUR.:			Shielding Angle:		

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.326	.185	.059	.317	.181	.057	.301	.173	.055	.286	.165	.053	.272	.158	.051	
2.0	.299	.164	.050	.291	.160	.049	.277	.154	.048	.263	.148	.046	.251	.142	.045	
3.0	.274	.146	.044	.267	.143	.043	.254	.138	.042	.242	.132	.041	.231	.128	.040	
4.0	.251	.130	.038	.245	.128	.038	.233	.124	.037	.222	.119	.036	.212	.115	.035	
5.0	.231	.118	.034	.226	.116	.034	.215	.112	.033	.205	.108	.032	.196	.105	.032	
6.0	.214	.107	.031	.209	.105	.030	.199	.102	.030	.191	.099	.029	.182	.096	.029	
7.0	.199	.098	.028	.194	.097	.028	.186	.094	.027	.178	.091	.027	.170	.088	.026	
8.0	.185	.090	.025	.181	.089	.025	.173	.087	.025	.166	.084	.024	.159	.082	.024	
9.0	.173	.084	.023	.170	.083	.023	.163	.080	.023	.156	.078	.022	.150	.076	.022	
10.0	.163	.078	.022	.160	.077	.021	.153	.075	.021	.147	.073	.021	.141	.071	.020	

<input type="checkbox"/> cc	80%			70%			50%			30%			10%			0
<input type="checkbox"/> w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
<input type="checkbox"/> fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.231	.231	.231	.197	.197	.197	.135	.135	.135	.077	.077	.077	.025	.025	.025	
1.0	.222	.197	.174	.190	.169	.150	.130	.116	.104	.075	.067	.060	.024	.022	.019	
2.0	.214	.173	.138	.184	.149	.120	.126	.103	.083	.073	.060	.049	.023	.019	.016	
3.0	.207	.156	.115	.177	.134	.100	.122	.093	.070	.070	.055	.041	.023	.018	.014	
4.0	.199	.143	.100	.171	.123	.087	.117	.086	.061	.068	.050	.036	.022	.016	.012	
5.0	.191	.132	.089	.164	.115	.077	.113	.080	.055	.066	.047	.032	.021	.015	.011	
6.0	.184	.124	.081	.158	.107	.071	.109	.075	.050	.063	.044	.030	.020	.014	.010	
7.0	.177	.117	.075	.153	.102	.066	.105	.071	.046	.061	.042	.028	.020	.014	.009	
8.0	.171	.112	.071	.147	.097	.062	.102	.068	.044	.059	.040	.026	.019	.013	.009	
9.0	.165	.107	.067	.142	.093	.059	.098	.065	.042	.057	.038	.025	.019	.013	.008	
10.0	.159	.102	.065	.137	.089	.056	.095	.063	.040	.055	.037	.024	.018	.012	.008	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HRP
 Test Date:2022-11-21

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:6.020m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:24.002V I:0.1770A P:4.2484W PF:1.0000 Freq:50.00Hz Lamp Flux:202.001x1 lm										
					TYPE:LED			WEIGHT:		
					DIM.:			SERIAL No.:		
					SUR.:			Shielding 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	14.4	15.8	14.7	16.1	16.4	14.2	15.6	14.5	15.9	16.2
3H	16.3	17.6	16.6	17.9	18.3	15.6	17.0	16.0	17.3	17.7
4H	17.2	18.4	17.6	18.8	19.2	16.2	17.5	16.6	17.8	18.2
6H	18.0	19.2	18.4	19.6	20.0	16.6	17.8	17.0	18.2	18.6
8H	18.5	19.6	18.9	20.0	20.4	16.7	17.9	17.1	18.3	18.7
12H	18.9	20.0	19.3	20.4	20.8	16.8	17.9	17.2	18.3	18.7
4H 2H	15.0	16.3	15.4	16.6	17.0	14.9	16.1	15.2	16.5	16.8
3H	17.1	18.2	17.5	18.6	19.0	16.5	17.6	16.9	18.0	18.4
4H	18.2	19.2	18.6	19.6	20.0	17.2	18.3	17.7	18.7	19.1
6H	19.2	20.1	19.7	20.6	21.0	17.7	18.7	18.2	19.1	19.6
8H	19.7	20.6	20.2	21.0	21.5	17.9	18.8	18.4	19.2	19.7
12H	20.3	21.1	20.8	21.5	22.1	18.0	18.8	18.5	19.3	19.8
8H 4H	18.5	19.3	19.0	19.8	20.3	17.7	18.5	18.2	19.0	19.5
6H	19.8	20.5	20.3	21.0	21.5	18.4	19.1	18.9	19.6	20.2
8H	20.4	21.1	21.0	21.6	22.2	18.7	19.3	19.2	19.9	20.4
12H	21.2	21.7	21.7	22.3	22.9	18.9	19.5	19.5	20.0	20.6
12H 4H	18.5	19.3	19.0	19.8	20.3	17.8	18.6	18.3	19.0	19.6
6H	19.8	20.5	20.4	21.0	21.6	18.6	19.2	19.1	19.7	20.3
8H	20.6	21.1	21.2	21.7	22.3	19.0	19.5	19.5	20.1	20.6
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.2					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.1 / - 0.3					+ 0.2 / - 0.4				

CIE Pub.117, 202.0 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -5.6$)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HRP
 Test Date:2022-11-21

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:6.020m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:24.002V I:0.1770A P:4.2484W PF:1.0000 Freq:50.00Hz Lamp Flux:202.001x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:

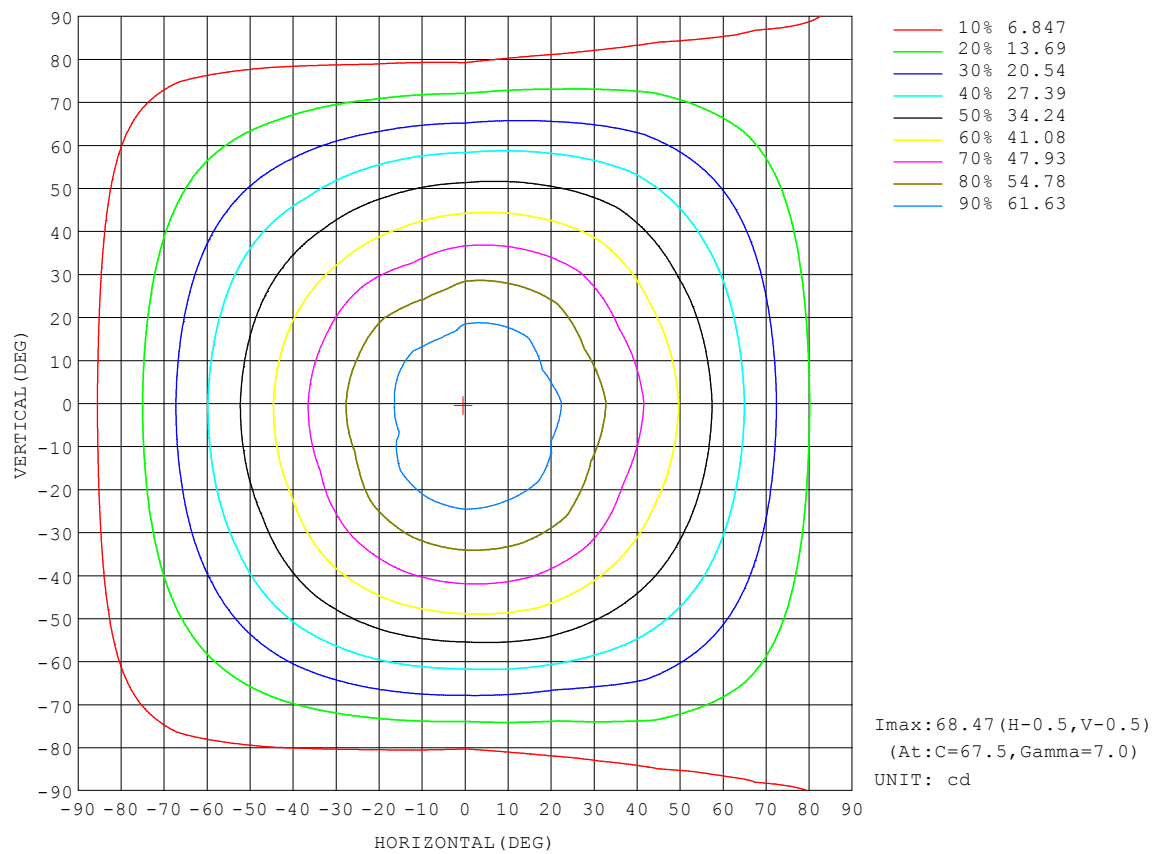
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	44	37	55	43	37	53	43	36	30
0.80	65	53	46	64	53	46	62	52	45	38
1.00	73	62	54	72	61	54	69	62	53	46
1.25	80	69	62	79	68	61	76	67	60	53
1.50	85	75	68	83	74	67	80	72	66	57
2.00	92	83	76	90	82	75	86	79	73	64
2.50	96	88	81	94	86	80	89	83	78	68
3.00	100	92	86	97	90	85	92	87	82	72
4.00	104	98	92	101	95	91	96	91	87	77
5.00	106	101	96	103	99	94	98	94	91	80
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: 25.3DEG
 Operators: HRP
 Test Date: 2022-11-21

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 6.020m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:24.002V I:0.1770A P:4.2484W PF:1.0000 Freq:50.00Hz Lamp Flux:202.001x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:

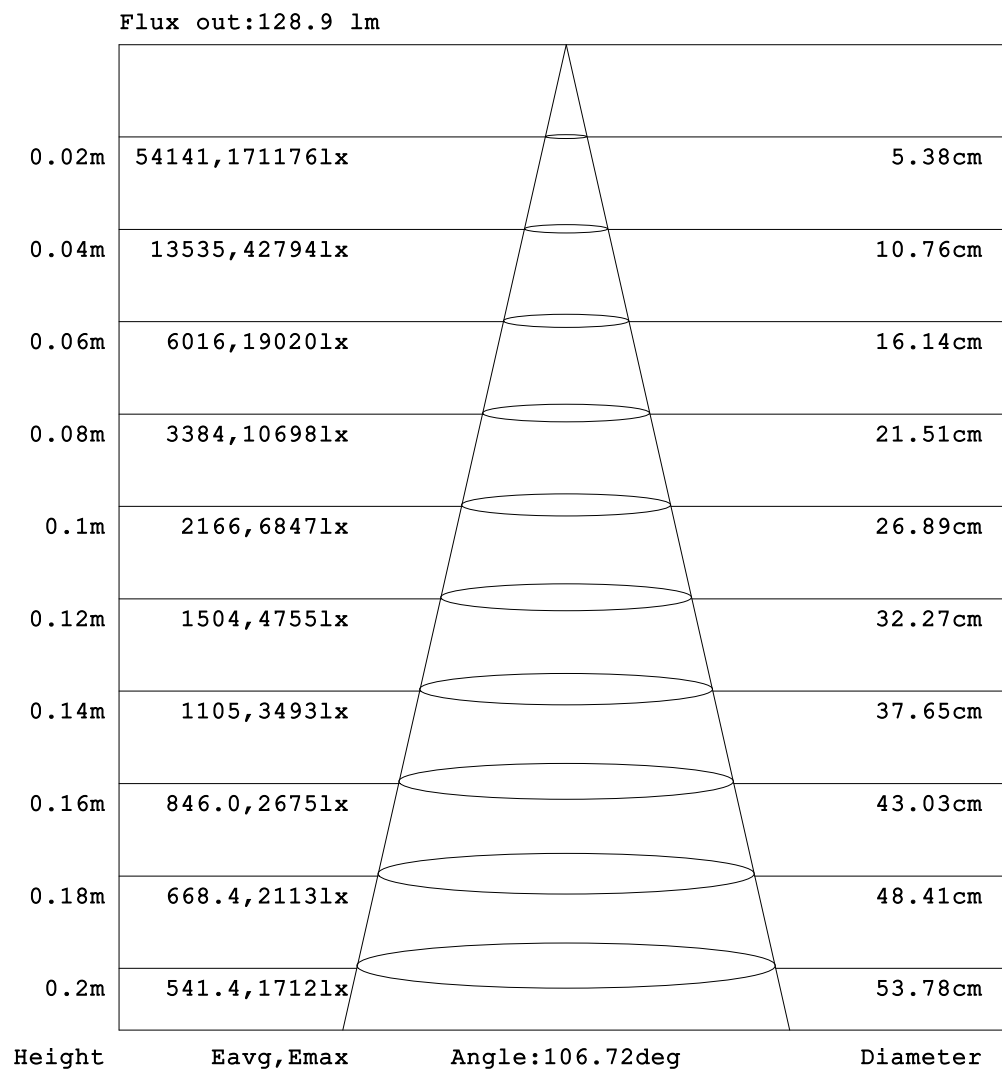


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HRP
Test Date:2022-11-21

□ Range: 0 - 180DEG
□ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks:

AAI Figure

Test:U:24.002V I:0.1770A P:4.2484W PF:1.0000 Freq:50.00Hz Lamp Flux:202.001x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:

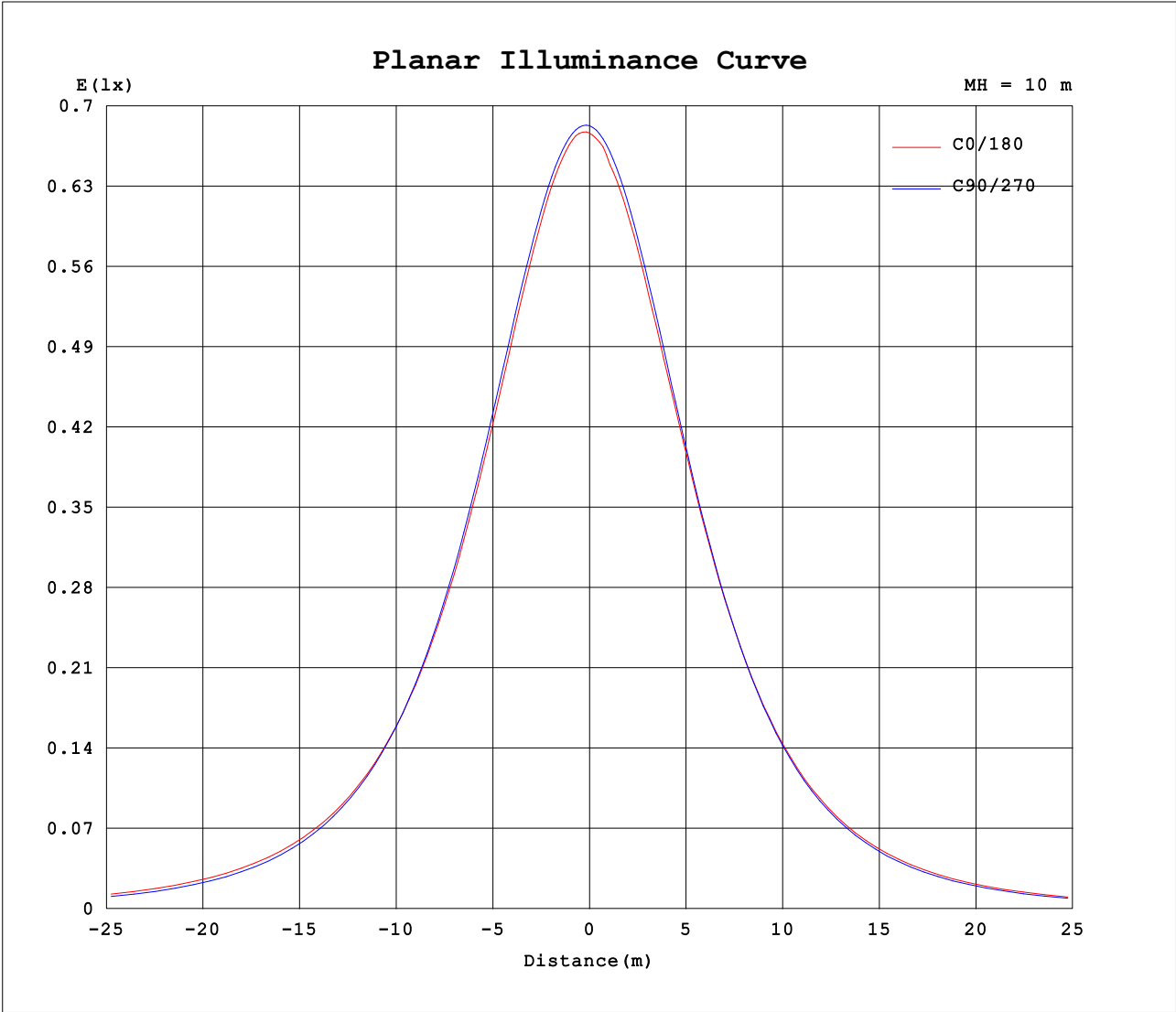


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: HRP
 Test Date: 2022-11-21

☐ Range: 0 - 180DEG
☐ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 6.020m [K=1.0000]
 Remarks:

Planar Illuminance Curve



LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.002V I:0.1770A P:4.2484W PF:1.0000 Freq:50.00Hz Lamp Flux:202.001x1 lm																		
										TYPE:LED					WEIGHT:			
										DIM.:					SERIAL No.:			
										SUR.:					Shielding Angle:			

Table--1

UNIT: cd

C (DEG) □ (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	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5	67.5			
5	67.7	67.7	67.8	69.1	67.6	67.4	67.2	66.9	66.4	67.1	66.6	67.9	66.7	66.8	67.1	67.4			
10	66.8	67.0	67.3	68.8	67.0	66.6	66.1	66.0	64.6	65.7	64.9	66.2	65.1	65.4	65.9	66.3			
15	65.1	64.7	66.0	67.5	65.6	65.0	64.2	64.0	62.3	63.3	62.5	63.9	62.8	63.3	63.9	64.8			
20	62.9	63.4	63.9	65.5	63.5	62.8	61.7	60.8	59.5	60.3	59.5	60.2	60.0	60.6	61.4	62.3			
25	60.0	60.7	61.2	62.5	60.7	59.9	58.6	57.8	56.5	56.8	56.1	56.4	56.7	57.4	58.3	59.3			
30	56.7	57.2	58.0	59.3	57.3	56.5	55.0	53.8	52.9	53.0	52.2	52.9	52.9	53.7	54.8	55.9			
35	53.0	52.6	54.3	55.7	53.5	52.6	51.1	50.1	49.1	49.0	48.2	48.4	48.8	49.8	51.1	52.0			
40	49.1	49.3	50.1	51.2	49.1	48.3	46.9	45.8	44.9	44.7	43.9	44.4	44.4	45.5	47.0	48.1			
45	45.0	45.2	45.3	46.6	44.5	43.7	42.5	41.5	40.6	40.4	38.5	40.0	39.8	41.1	42.7	44.1			
50	40.7	40.7	40.2	41.6	39.5	38.9	37.8	37.2	36.2	35.8	34.4	35.5	35.1	36.5	38.4	39.9			
55	36.4	36.2	35.6	36.6	34.3	33.9	33.1	32.5	31.7	31.3	29.6	30.7	30.3	31.9	33.9	35.2			
60	31.9	31.9	30.9	31.1	29.0	28.7	28.1	27.8	27.1	26.6	25.0	25.8	25.4	27.2	29.3	30.7			
65	27.3	27.1	26.1	24.9	23.5	23.5	23.1	23.0	22.6	22.0	20.7	20.9	20.5	22.4	24.7	26.4			
70	22.7	22.4	21.4	19.1	17.9	18.1	18.1	18.3	18.0	17.4	16.0	15.9	15.5	17.5	20.1	21.8			
75	18.2	18.0	16.8	14.0	12.4	12.8	13.2	13.7	13.7	13.1	11.7	11.1	10.6	12.8	15.4	17.3			
80	13.8	13.6	12.0	8.46	7.10	7.85	8.82	9.75	9.88	9.21	7.76	6.67	6.05	8.32	11.1	13.0			
85	9.93	9.53	7.83	5.10	2.60	3.84	5.55	6.82	7.08	6.45	4.94	3.21	2.22	4.45	7.22	9.17			
90	7.12	6.59	4.88	1.91	0.10	1.91	3.96	5.31	5.63	5.09	3.58	1.69	0.09	2.02	4.52	6.35			
95	5.95	5.42	4.04	1.88	0.08	1.72	3.64	4.92	5.18	4.70	3.28	1.50	0.08	1.65	3.66	5.29			
100	5.63	5.16	3.89	1.71	0.08	1.53	3.38	4.58	4.85	4.39	3.04	1.24	0.07	1.52	2.96	4.67			
105	5.43	4.94	3.66	1.51	0.08	1.17	3.15	4.25	4.53	4.12	2.84	0.90	0.07	1.27	3.33	4.37			
110	5.19	4.65	3.42	1.18	0.08	0.25	2.80	3.95	4.24	3.83	2.43	0.18	0.07	0.95	3.10	4.01			
115	4.90	4.39	3.10	0.62	0.08	0.10	2.39	3.55	3.84	3.37	2.04	0.09	0.07	0.54	2.79	3.87			
120	4.65	4.12	2.70	0.09	0.09	0.10	1.49	3.11	3.38	2.94	1.27	0.09	0.08	0.08	2.24	3.91			
125	4.13	3.58	2.18	0.10	0.09	0.11	0.23	2.42	2.85	2.25	0.23	0.09	0.09	0.08	1.69	3.40			
130	3.57	2.95	1.30	0.10	0.09	0.11	0.13	0.84	1.57	0.75	0.11	0.09	0.09	0.09	0.89	2.60			
135	2.74	2.17	0.13	0.11	0.09	0.11	0.13	0.13	0.24	0.15	0.11	0.11	0.10	0.09	0.13	1.69			
140	1.72	0.95	0.10	0.11	0.09	0.11	0.13	0.13	0.12	0.14	0.12	0.13	0.10	0.09	0.11	0.69			
145	0.18	0.13	0.10	0.11	0.10	0.11	0.13	0.13	0.12	0.13	0.12	0.13	0.11	0.09	0.11	0.12			
150	0.17	0.13	0.10	0.11	0.10	0.12	0.13	0.13	0.12	0.13	0.14	0.13	0.12	0.09	0.11	0.11			
155	0.17	0.13	0.10	0.11	0.10	0.12	0.13	0.13	0.13	0.13	0.14	0.13	0.13	0.12	0.12	0.11			
160	0.17	0.13	0.10	0.12	0.10	0.13	0.13	0.13	0.13	0.13	0.14	0.13	0.13	0.12	0.12	0.11			
165	0.17	0.13	0.11	0.13	0.10	0.13	0.13	0.13	0.13	0.13	0.14	0.13	0.13	0.12	0.13	0.11			
170	0.16	0.13	0.12	0.13	0.12	0.13	0.13	0.13	0.13	0.14	0.13	0.13	0.13	0.12	0.13	0.12			
175	0.15	0.13	0.12	0.13	0.12	0.13	0.13	0.13	0.13	0.14	0.13	0.13	0.13	0.12	0.13	0.12			
180	0.15	0.13	0.13	0.13	0.12	0.13	0.13	0.13	0.13	0.14	0.13	0.13	0.13	0.12	0.13	0.13			

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HRP
Test Date:2022-11-21

□ Range: 0 - 180DEG
□ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:6.020m [K=1.0000]
Remarks: