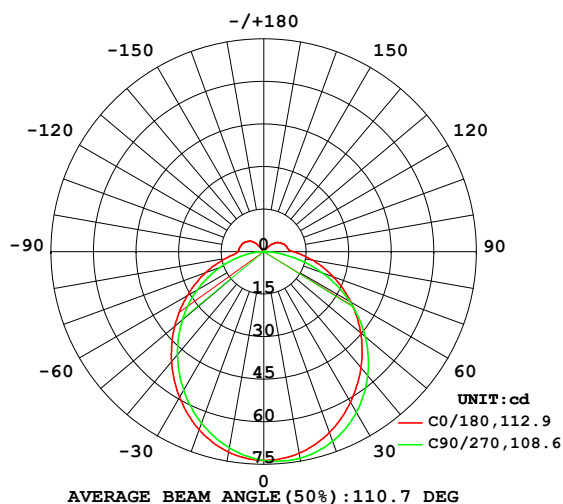


LUMINAIRE PHOTOMETRIC TEST REPORT

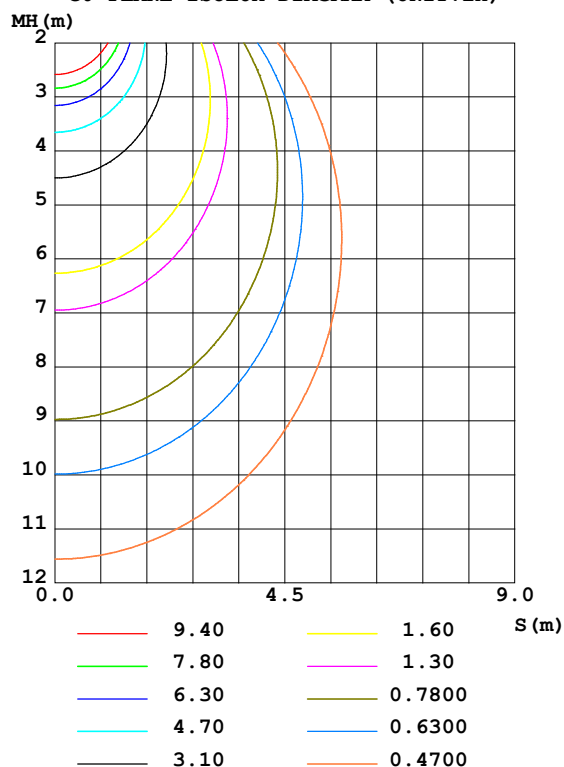
Test:U:24.002V I:0.2082A P:4.9972W PF:1.0000 Freq:50.00Hz Lamp Flux:234.616x1 lm		
NAME: PICCOLO 2400K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Acolyte	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 46.95 lm/W			
MODEL	PIC3.024MSV	I _{max} (cd)	74.19	S/MH	1.24
NOMINAL POWER(W)	4.45717	LOR(%)	100.0		
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	234.62	<input type="checkbox"/> UP,DN(C0-180)	4.0,48.7
NOMINAL FLUX(lm)	234.616	CIE CLASS	DIRECT	<input type="checkbox"/> UP,DN(C180-360)	3.6,43.7
LAMPS INSIDE	1	<input type="checkbox"/> up(%)	7.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	24	<input type="checkbox"/> down(%)	92.5	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:

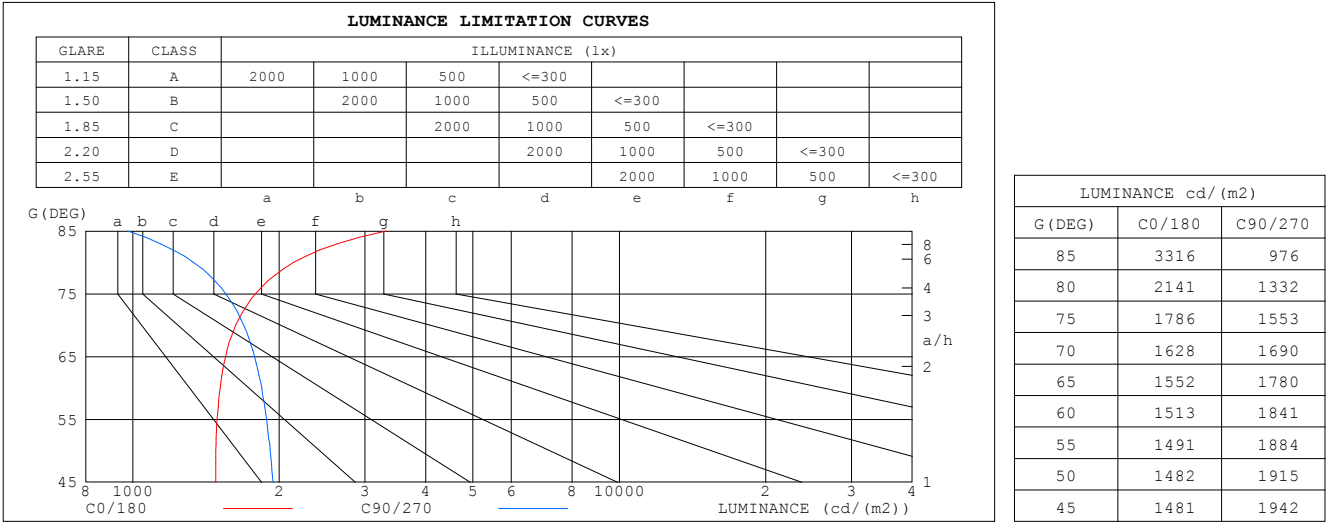
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	72.14	72.83	73.94	72.89	71.78	71.91	70.22	71.07	0- 10	6.950	6.950	2.96,2.96
20	67.85	69.91	71.15	69.01	66.77	67.71	64.32	65.98	10- 20	19.80	26.75	11.4,11.4
30	61.23	64.97	65.35	62.38	59.36	60.77	56.45	58.86	20- 30	29.76	56.51	24.1,24.1
40	53.33	58.27	57.00	53.66	50.60	51.40	47.38	50.48	30- 40	35.62	92.14	39.3,39.3
50	44.65	49.76	46.70	43.61	41.05	40.92	37.51	41.48	40- 50	36.95	129.1	55,55
60	35.46	40.01	34.92	32.64	31.25	30.12	27.19	32.10	50- 60	33.88	163.0	69.5,69.5
70	26.10	28.66	21.93	21.38	21.91	19.44	16.56	22.48	60- 70	27.02	190.0	81,81
80	17.43	16.90	8.772	11.48	13.45	10.42	6.447	13.40	70- 80	17.82	207.8	88.6,88.6
90	10.43	7.461	0.1352	6.847	9.168	6.140	0.1159	6.604	80- 90	9.129	216.9	92.5,92.5
100	8.433	6.689	0.0867	6.383	8.654	5.730	0.0690	4.318	90-100	5.774	222.7	94.9,94.9
110	7.713	5.322	0.0867	5.743	8.084	5.276	0.0789	4.020	100-110	4.897	227.6	97,97
120	6.514	3.737	0.0966	4.721	7.096	4.364	0.0887	2.024	110-120	3.627	231.2	98.6,98.6
130	4.394	0.5576	0.1163	1.569	5.727	1.541	0.1025	0.4696	120-130	2.304	233.5	99.5,99.5
140	0.7495	0.1105	0.1163	0.1789	2.180	0.1466	0.1144	0.1239	130-140	0.8415	234.4	99.9,99.9
150	0.1364	0.1169	0.1202	0.1690	0.1632	0.1466	0.1301	0.1278	140-150	0.1073	234.5	99.9,99.9
160	0.1389	0.1296	0.1281	0.1690	0.1681	0.1466	0.1478	0.1435	150-160	0.0651	234.6	100,100
170	0.1438	0.1296	0.1439	0.1690	0.1681	0.1466	0.1538	0.1533	160-170	0.0415	234.6	100,100
180	0.1559	0.1339	0.1518	0.1671	0.1681	0.1488	0.1538	0.1533	170-180	0.0144	234.6	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:0.2082A P:4.9972W PF:1.0000 Freq:50.00Hz Lamp Flux:234.616x1 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:0.2082A P:4.9972W PF:1.0000 Freq:50.00Hz Lamp Flux:234.616x1 lm											
				TYPE:LED				WEIGHT:			
				DIM.:				SERIAL No.:			
				SUR.:				Shielding Angle:			

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.334	.190	.060	.324	.185	.059	.307	.176	.056	.291	.168	.054	.276	.160	.051	
2.0	.304	.166	.051	.295	.163	.050	.279	.155	.048	.265	.149	.047	.252	.142	.045	
3.0	.277	.147	.044	.269	.144	.043	.255	.138	.042	.242	.133	.041	.230	.127	.039	
4.0	.253	.132	.039	.246	.129	.038	.234	.124	.037	.222	.119	.036	.211	.115	.035	
5.0	.233	.119	.034	.227	.116	.034	.215	.112	.033	.205	.108	.032	.195	.104	.031	
6.0	.215	.108	.031	.209	.106	.030	.199	.102	.030	.190	.098	.029	.181	.095	.028	
7.0	.199	.099	.028	.195	.097	.028	.185	.094	.027	.176	.090	.026	.168	.087	.026	
8.0	.186	.091	.026	.181	.089	.025	.173	.086	.025	.165	.084	.024	.157	.081	.024	
9.0	.174	.084	.023	.170	.083	.023	.162	.080	.023	.155	.078	.022	.148	.075	.022	
10.0	.163	.078	.022	.160	.077	.021	.152	.075	.021	.146	.072	.021	.139	.070	.020	

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Ceiling Cavity Exitance Coefficients (CCEC)									
0.0	.248	.248	.248	.212	.212	.212	.145	.145	.145	.083	.083	.083	.027	.027	.027	
1.0	.240	.214	.190	.205	.183	.164	.140	.126	.113	.081	.073	.066	.026	.024	.021	
2.0	.232	.190	.155	.199	.164	.134	.136	.113	.093	.079	.066	.055	.025	.021	.018	
3.0	.224	.173	.132	.192	.149	.114	.132	.104	.080	.076	.061	.047	.025	.020	.015	
4.0	.217	.160	.117	.186	.138	.101	.128	.096	.071	.074	.056	.042	.024	.018	.014	
5.0	.209	.150	.106	.180	.130	.092	.124	.090	.065	.072	.053	.039	.023	.017	.013	
6.0	.202	.141	.098	.174	.123	.085	.120	.086	.060	.069	.050	.036	.022	.016	.012	
7.0	.195	.135	.092	.168	.117	.081	.116	.082	.057	.067	.048	.034	.022	.016	.011	
8.0	.188	.129	.088	.162	.112	.077	.112	.079	.055	.065	.046	.032	.021	.015	.011	
9.0	.182	.124	.085	.157	.108	.074	.109	.076	.053	.063	.045	.031	.021	.015	.010	
10.0	.177	.120	.082	.152	.104	.072	.106	.073	.051	.062	.043	.030	.020	.014	.010	

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:0.2082A P:4.9972W PF:1.0000 Freq:50.00Hz Lamp Flux:234.616x1 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	14.0	15.5	14.4	15.8	16.2	15.1	16.5	15.4	16.8	17.2
3H	15.9	17.2	16.3	17.6	18.0	16.6	17.9	17.0	18.3	18.7
4H	16.8	18.1	17.2	18.4	18.9	17.2	18.5	17.6	18.9	19.3
6H	17.8	18.9	18.2	19.3	19.8	17.6	18.8	18.1	19.2	19.7
8H	18.2	19.4	18.7	19.8	20.3	17.8	18.9	18.2	19.3	19.8
12H	18.8	19.9	19.3	20.3	20.8	17.8	18.9	18.3	19.4	19.8
4H 2H	15.0	16.3	15.4	16.7	17.1	15.7	17.0	16.2	17.4	17.8
3H	17.0	18.1	17.5	18.6	19.0	17.5	18.6	18.0	19.0	19.5
4H	18.1	19.1	18.6	19.6	20.1	18.3	19.3	18.7	19.7	20.2
6H	19.2	20.1	19.7	20.6	21.1	18.8	19.7	19.3	20.2	20.7
8H	19.8	20.6	20.3	21.1	21.6	19.0	19.9	19.5	20.4	20.9
12H	20.4	21.2	20.9	21.7	22.3	19.1	19.9	19.7	20.4	21.0
8H 4H	18.6	19.4	19.1	19.9	20.5	18.7	19.6	19.2	20.1	20.6
6H	19.9	20.7	20.5	21.2	21.8	19.5	20.2	20.1	20.8	21.4
8H	20.7	21.3	21.3	21.9	22.5	19.8	20.5	20.4	21.0	21.6
12H	21.5	22.1	22.1	22.6	23.3	20.1	20.6	20.7	21.2	21.8
12H 4H	18.6	19.4	19.2	19.9	20.5	18.8	19.6	19.3	20.1	20.7
6H	20.1	20.7	20.7	21.3	21.9	19.7	20.4	20.3	20.9	21.5
8H	20.9	21.5	21.5	22.1	22.7	20.1	20.7	20.7	21.2	21.9
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	+ 0.2 / - 0.5					+ 0.2 / - 0.3				

CIE Pub.117, 234.6 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = -5.0$)

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:0.2082A P:4.9972W PF:1.0000 Freq:50.00Hz Lamp Flux:234.616x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:

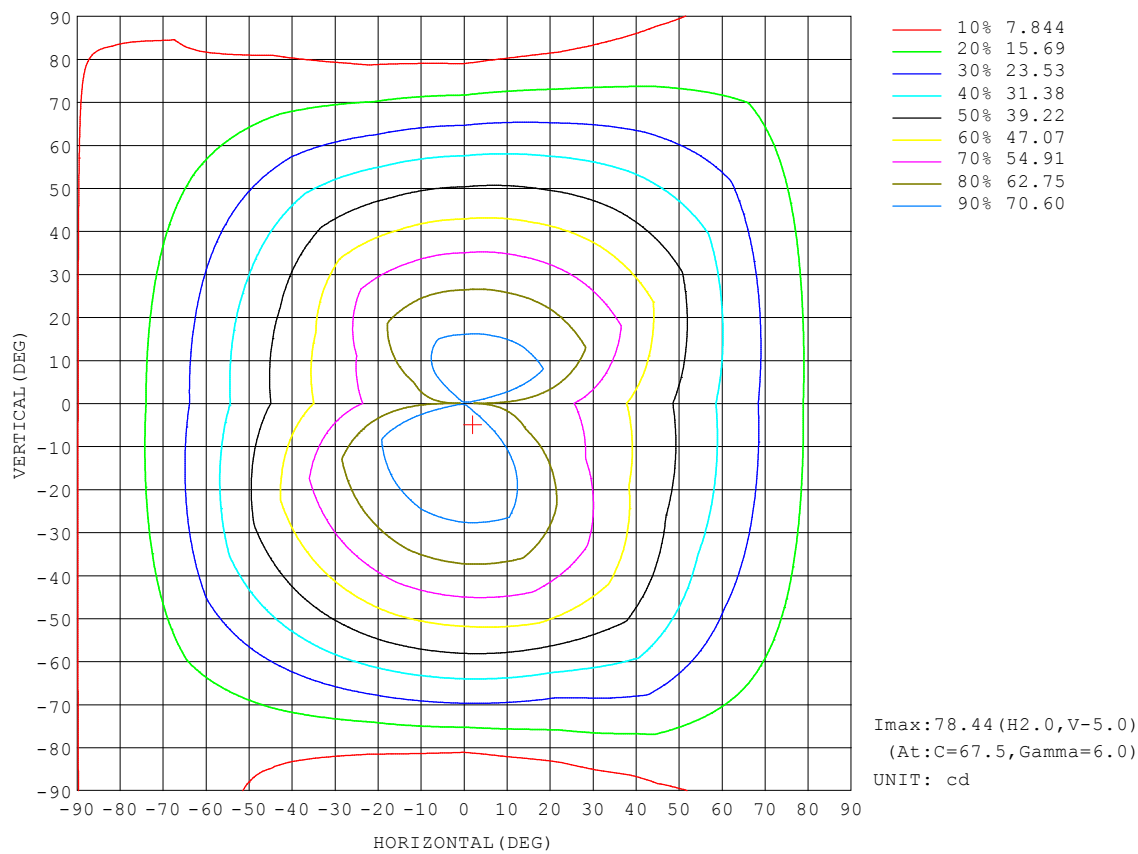
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	54	42	35	53	42	35	52	41	35	28
0.80	64	52	44	63	51	44	60	50	43	36
1.00	72	60	53	70	59	52	68	60	51	44
1.25	79	68	60	77	67	59	74	65	58	50
1.50	84	73	66	82	72	65	78	70	63	55
2.00	91	81	74	89	80	73	84	77	71	62
2.50	95	86	80	92	85	78	88	81	76	66
3.00	98	91	84	96	89	83	91	85	80	70
4.00	103	96	91	100	94	89	94	89	85	74
5.00	105	100	95	102	97	93	96	92	89	77
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

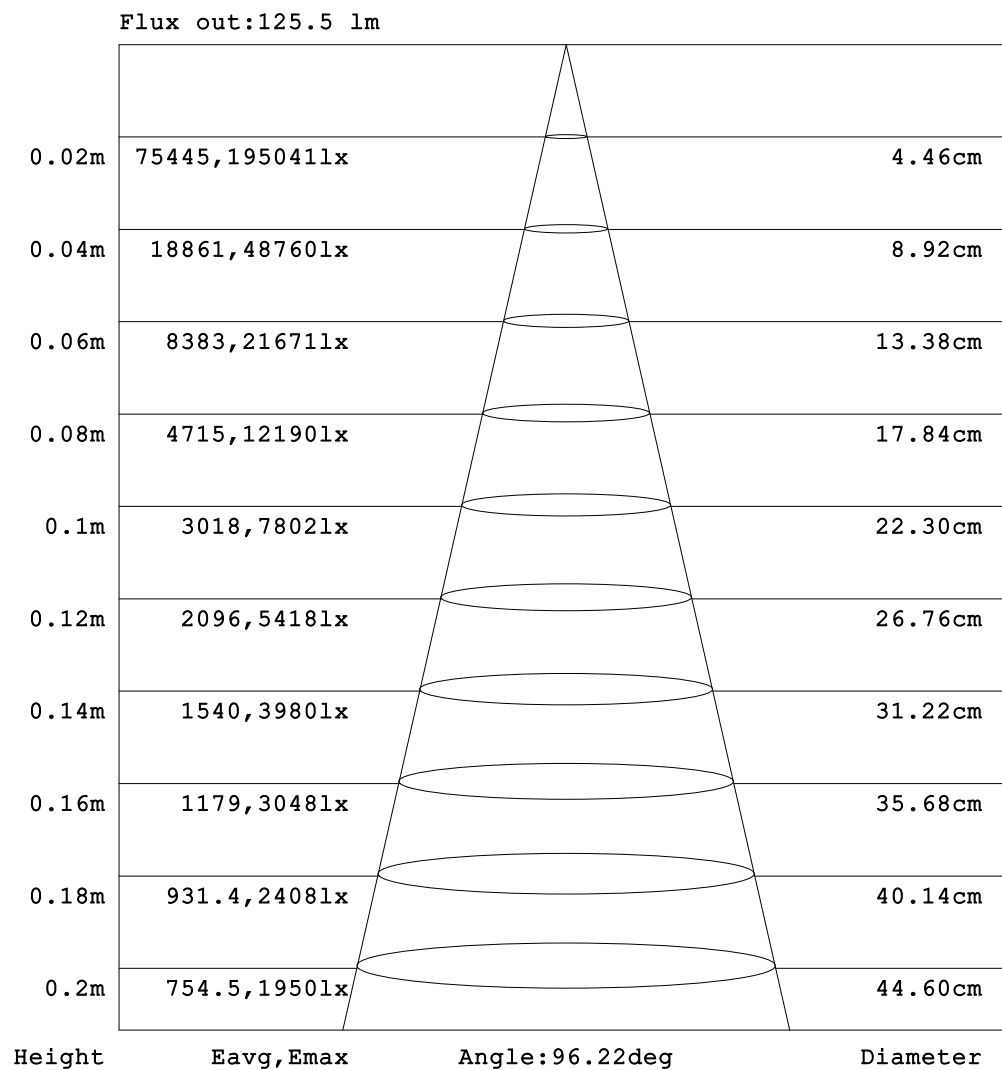
Test:U:24.002V I:0.2082A P:4.9972W PF:1.0000 Freq:50.00Hz Lamp Flux:234.616x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:



C Range: 0 - 360DEG	<input type="checkbox"/> Range: 0 - 180DEG
C Interval: 22.5DEG	<input type="checkbox"/> Interval: 1.0DEG
Test Speed: HIGH	Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Temperature:25.3DEG	Humidity:65.0%
Operators:HRP	Test Distance:6.020m [K=1.0000]
Test Date:2022-11-21	Remarks:

AAI Figure

Test:U:24.002V I:0.2082A P:4.9972W PF:1.0000 Freq:50.00Hz Lamp Flux:234.616x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:

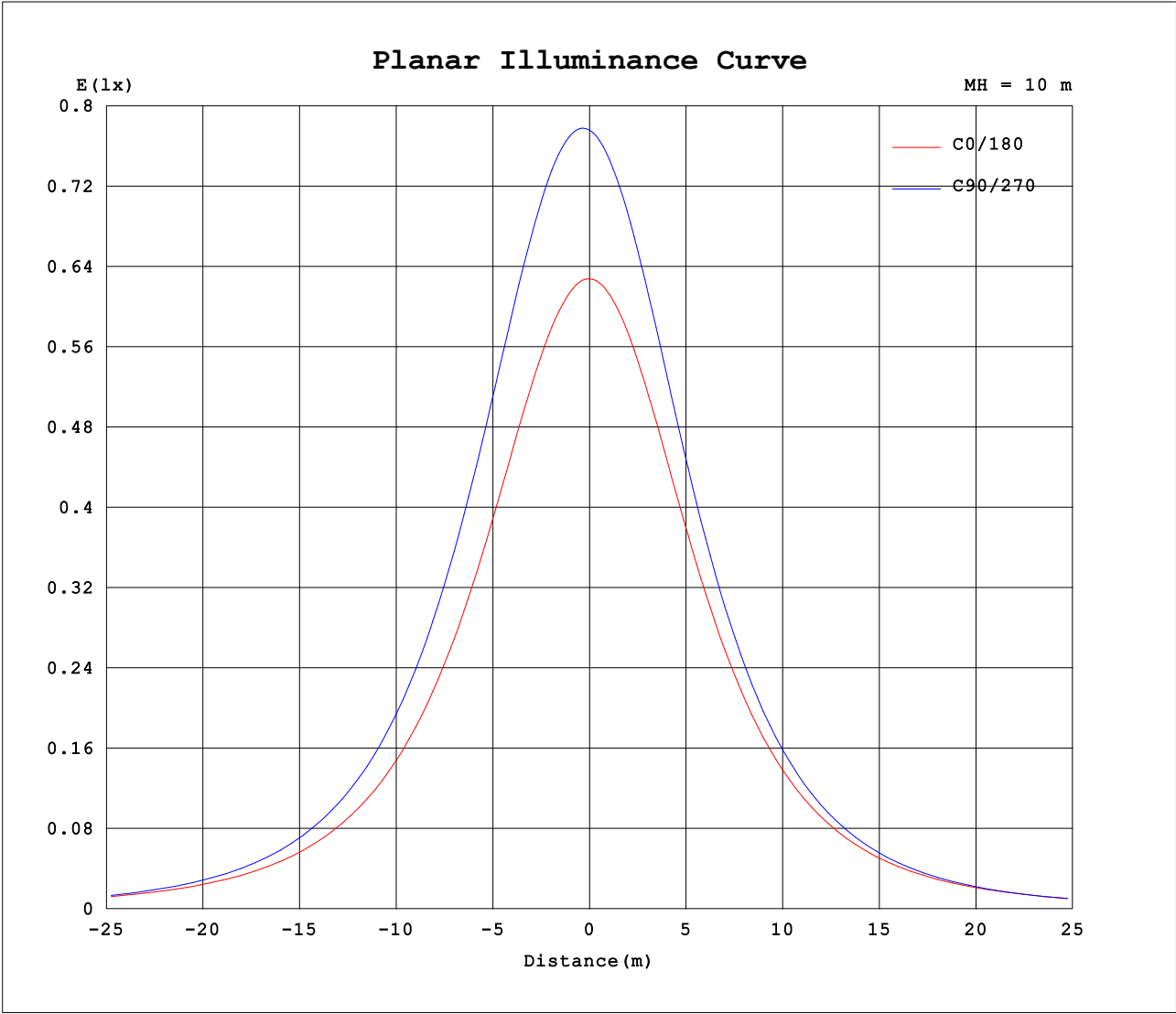


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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:0.2082A P:4.9972W PF:1.0000 Freq:50.00Hz Lamp Flux:234.616x1 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	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6	73.6			
5	73.2	73.3	73.5	74.2	74.1	74.0	73.7	73.3	73.1	73.0	73.1	72.2	72.3	72.4	72.7	73.0			
10	72.1	72.4	72.8	74.0	73.9	73.6	72.9	72.1	71.8	71.6	71.9	70.1	70.2	70.5	71.1	71.7			
15	70.4	70.8	71.6	73.0	72.9	72.4	71.3	70.2	69.6	69.5	70.1	67.4	67.5	68.0	68.8	69.7			
20	67.9	68.5	69.9	71.2	71.2	70.4	69.0	67.5	66.8	66.7	67.7	64.1	64.3	64.9	66.0	67.1			
25	64.8	65.7	67.7	68.8	68.6	67.7	66.0	64.2	63.3	63.4	64.6	60.4	60.6	61.3	62.6	63.9			
30	61.2	62.3	65.0	65.7	65.3	64.4	62.4	60.4	59.4	59.5	60.8	56.2	56.5	57.4	58.9	60.3			
35	57.4	58.7	61.8	62.0	61.5	60.4	58.2	56.2	55.1	55.4	56.3	51.7	52.0	53.1	54.8	56.4			
40	53.3	54.7	58.3	57.7	57.0	55.9	53.7	51.7	50.6	50.9	51.4	47.0	47.4	48.6	50.5	52.3			
45	49.1	50.5	54.2	53.0	52.1	50.9	48.8	46.9	45.9	46.3	46.2	42.1	42.5	44.0	46.0	48.0			
50	44.7	46.2	49.8	47.9	46.7	45.6	43.6	41.9	41.1	41.4	40.9	37.1	37.5	39.1	41.5	43.6			
55	40.1	41.5	45.1	42.4	41.0	39.8	38.2	36.8	36.1	36.4	35.6	32.0	32.4	34.2	36.8	39.1			
60	35.5	36.8	40.0	35.1	34.9	33.8	32.6	31.7	31.3	31.3	30.1	26.8	27.2	29.2	32.1	34.5			
65	30.7	31.9	34.5	28.8	28.5	27.7	27.0	26.6	26.5	26.3	24.7	21.5	21.9	24.2	27.3	29.8			
70	26.1	27.1	28.7	22.2	21.9	21.3	21.4	21.7	21.9	21.5	19.4	16.4	16.6	19.1	22.5	25.1			
75	21.7	22.4	22.7	16.7	15.2	15.1	16.2	17.1	17.5	16.9	14.7	11.4	11.3	14.1	17.7	20.7			
80	17.4	17.8	16.9	10.9	8.77	9.50	11.5	12.7	13.4	12.7	10.4	7.02	6.45	9.37	13.4	16.5			
85	13.5	13.6	11.1	6.73	3.23	5.21	7.93	9.81	10.47	9.70	7.28	3.85	2.34	5.43	9.59	12.6			
90	10.43	10.23	7.46	2.95	0.14	3.42	6.85	8.87	9.17	8.58	6.14	2.69	0.12	2.93	6.60	9.43			
95	8.89	8.56	6.62	3.10	0.09	3.23	6.61	8.60	8.88	8.32	5.94	2.57	0.07	1.87	4.99	7.78			
100	8.43	8.09	6.69	2.73	0.09	3.02	6.38	8.34	8.65	8.06	5.73	2.44	0.07	1.91	4.32	6.82			
105	8.15	7.77	6.31	1.87	0.09	2.78	6.15	8.06	8.38	7.79	5.54	2.22	0.07	1.50	4.75	6.08			
110	7.71	7.27	5.32	1.11	0.09	2.15	5.74	7.73	8.08	7.48	5.28	1.68	0.08	0.81	4.02	5.59			
115	7.02	6.40	4.65	0.21	0.09	0.75	5.29	7.25	7.66	7.06	4.86	0.49	0.08	0.17	3.19	5.12			
120	6.51	5.64	3.74	0.10	0.10	0.15	4.72	6.61	7.10	6.44	4.36	0.12	0.09	0.09	2.02	5.08			
125	5.68	4.79	2.34	0.10	0.11	0.15	3.41	6.02	6.45	5.87	3.33	0.12	0.09	0.09	1.42	3.78			
130	4.39	3.77	0.56	0.11	0.12	0.15	1.57	4.96	5.73	4.81	1.54	0.12	0.10	0.09	0.47	2.58			
135	3.14	1.83	0.11	0.11	0.12	0.15	0.19	3.22	4.41	3.32	0.15	0.12	0.11	0.10	0.12	1.24			
140	0.75	0.24	0.11	0.12	0.12	0.15	0.18	0.66	2.18	0.69	0.15	0.12	0.11	0.11	0.12	0.19			
145	0.14	0.13	0.11	0.13	0.12	0.15	0.17	0.17	0.16	0.17	0.15	0.12	0.13	0.12	0.13	0.13			
150	0.14	0.14	0.12	0.13	0.12	0.15	0.17	0.16	0.16	0.17	0.15	0.12	0.13	0.12	0.13	0.12			
155	0.14	0.14	0.13	0.13	0.12	0.15	0.17	0.16	0.17	0.16	0.15	0.13	0.13	0.12	0.13	0.12			
160	0.14	0.15	0.13	0.13	0.13	0.15	0.17	0.16	0.17	0.16	0.15	0.13	0.15	0.13	0.14	0.12			
165	0.14	0.15	0.13	0.14	0.13	0.15	0.17	0.16	0.17	0.16	0.15	0.13	0.15	0.14	0.16	0.12			
170	0.14	0.15	0.13	0.14	0.14	0.15	0.17	0.16	0.17	0.16	0.15	0.14	0.15	0.15	0.15	0.13			
175	0.14	0.15	0.13	0.15	0.15	0.15	0.17	0.16	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15			
180	0.16	0.15	0.13	0.15	0.15	0.15	0.17	0.16	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15			

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: