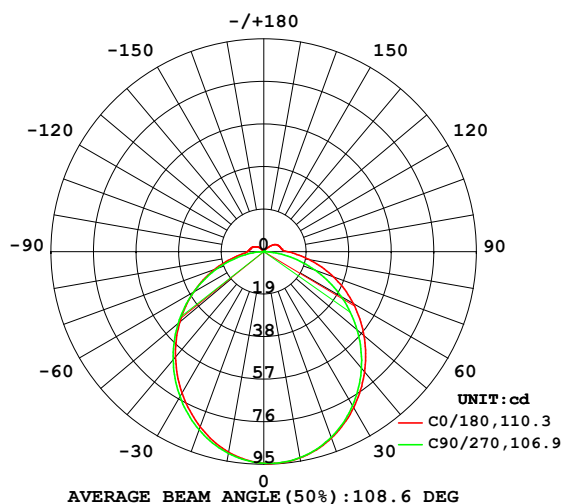


# LUMINAIRE PHOTOMETRIC TEST REPORT

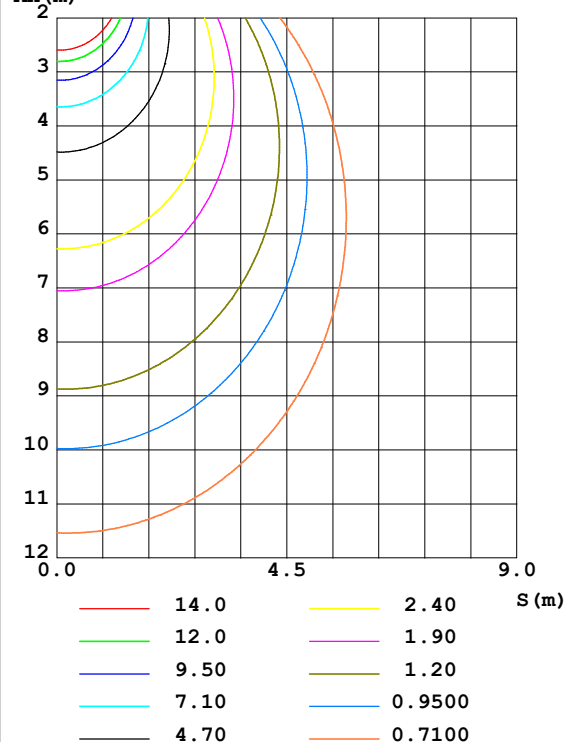
Test:U:24.002V I:0.1940A P:4.6564W PF:1.0000 Freq:50.00Hz Lamp Flux:282.133x1 lm		
NAME: PICCOLO 3500K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Acolyte	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 60.59 lm/W			
MODEL	PIC3.035MSV	Imax(cd)	94.81	S/MH	1.22
NOMINAL POWER(W)	4.54838	LOR(%)	100.0		
RATED VOLTAGE(V)	24	TOTAL FLUX(lm)	282.13	<input type="checkbox"/> UP,DN(C0-180)	2.8,49.0
NOMINAL FLUX(lm)	282.133	CIE CLASS	DIRECT	<input type="checkbox"/> UP,DN(C180-360)	2.5,45.7
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:

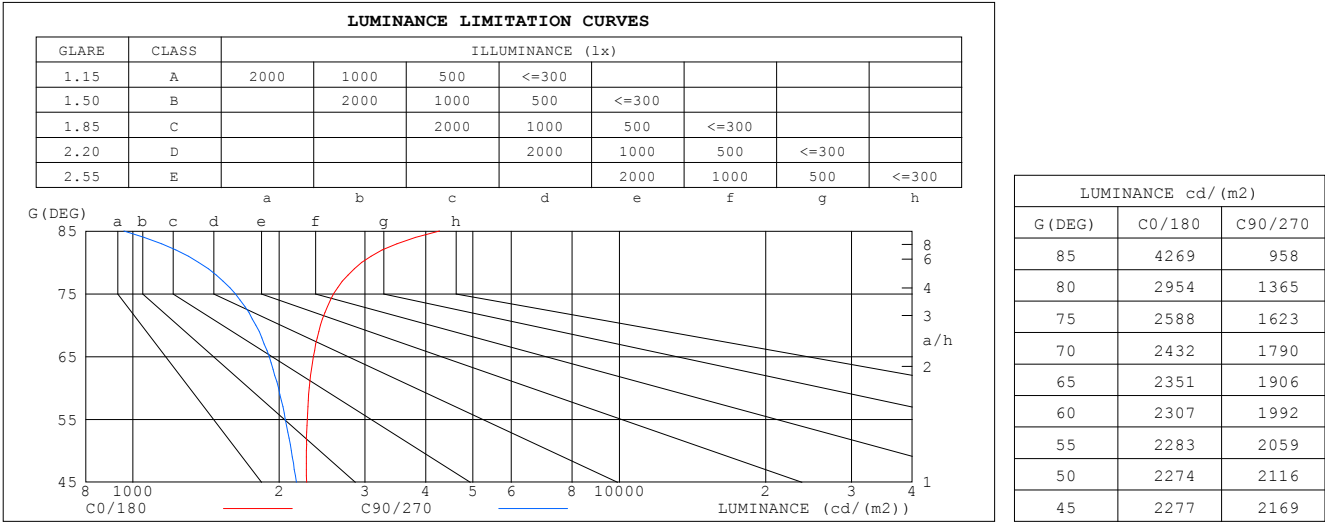
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	93.56	94.02	93.36	91.92	90.87	90.64	91.44	92.65	0- 10	8.915	8.915	3.16,3.16
20	88.54	89.42	88.17	85.30	83.22	83.02	84.64	86.91	10- 20	25.28	34.20	12.1,12.1
30	80.35	81.39	79.40	75.61	72.98	72.74	74.83	78.09	20- 30	37.71	71.91	25.5,25.5
40	70.04	70.88	67.83	63.94	61.38	60.93	62.99	67.38	30- 40	44.74	116.7	41.3,41.3
50	58.48	58.80	54.44	51.08	49.02	48.27	49.90	55.42	40- 50	45.97	162.6	57.6,57.6
60	46.14	45.62	39.86	37.50	36.25	35.21	36.16	42.72	50- 60	41.72	204.3	72.4,72.4
70	33.27	31.68	24.50	23.53	23.46	21.97	21.99	29.49	60- 70	32.82	237.2	84.1,84.1
80	20.52	17.71	9.486	10.88	12.31	10.14	8.474	16.55	70- 80	20.75	257.9	91.4,91.4
90	10.64	7.259	0.1192	5.181	7.438	4.722	0.0830	6.794	80- 90	9.401	267.3	94.7,94.7
100	8.062	5.501	0.0894	4.449	6.413	4.055	0.0728	4.263	90-100	5.020	272.3	96.5,96.5
110	7.401	5.034	0.0915	3.616	5.663	3.349	0.0915	4.493	100-110	4.108	276.4	98,98
120	6.356	3.429	0.0977	2.673	4.544	2.399	0.1081	2.911	110-120	3.064	279.5	99.1,99.1
130	4.124	0.1342	0.1248	0.6100	3.299	0.5831	0.1269	0.1391	120-130	1.842	281.3	99.7,99.7
140	0.1528	0.1289	0.1269	0.1745	0.7364	0.1726	0.1373	0.1454	130-140	0.5567	281.9	99.9,99.9
150	0.1476	0.1289	0.1310	0.1745	0.1684	0.1726	0.1539	0.1476	140-150	0.1024	282.0	100,100
160	0.1435	0.1331	0.1476	0.1745	0.1663	0.1726	0.1768	0.1641	150-160	0.0734	282.1	100,100
170	0.1559	0.1622	0.1581	0.1828	0.1663	0.1726	0.1851	0.1807	160-170	0.0473	282.1	100,100
180	0.1601	0.1622	0.1789	0.1911	0.1663	0.1726	0.1830	0.1953	170-180	0.0165	282.1	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:0.1940A P:4.6564W PF:1.0000 Freq:50.00Hz Lamp Flux:282.133x1 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:0.1940A P:4.6564W PF:1.0000 Freq:50.00Hz Lamp Flux:282.133x1 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	.133	.041	.231	.128	.040		
4.0	.251	.130	.038	.245	.128	.038	.233	.124	.037	.223	.119	.036	.213	.115	.035		
5.0	.231	.118	.034	.226	.116	.034	.215	.112	.033	.206	.108	.032	.197	.105	.032		
6.0	.214	.107	.031	.209	.106	.030	.200	.102	.030	.191	.099	.029	.183	.096	.029		
7.0	.199	.098	.028	.194	.097	.028	.186	.094	.027	.178	.091	.027	.170	.089	.026		
8.0	.185	.091	.025	.181	.089	.025	.174	.087	.025	.166	.084	.024	.160	.082	.024		
9.0	.173	.084	.023	.170	.083	.023	.163	.081	.023	.156	.078	.022	.150	.076	.022		
10.0	.163	.078	.022	.160	.077	.022	.153	.075	.021	.147	.073	.021	.142	.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	.134	.134	.134	.077	.077	.077	.025	.025	.025	
1.0	.222	.196	.173	.190	.169	.149	.130	.116	.103	.075	.067	.060	.024	.022	.019	
2.0	.214	.173	.138	.183	.149	.119	.126	.103	.083	.072	.060	.049	.023	.019	.016	
3.0	.206	.155	.115	.177	.134	.099	.121	.093	.070	.070	.054	.041	.023	.018	.013	
4.0	.198	.142	.099	.170	.123	.086	.117	.086	.061	.068	.050	.036	.022	.016	.012	
5.0	.191	.132	.088	.164	.114	.077	.113	.080	.054	.065	.047	.032	.021	.015	.011	
6.0	.184	.124	.080	.158	.107	.070	.109	.075	.050	.063	.044	.029	.020	.014	.010	
7.0	.177	.117	.075	.152	.101	.065	.105	.071	.046	.061	.042	.027	.020	.014	.009	
8.0	.170	.111	.070	.147	.096	.061	.101	.068	.043	.059	.040	.026	.019	.013	.009	
9.0	.164	.106	.067	.141	.092	.058	.098	.065	.041	.057	.038	.025	.018	.013	.008	
10.0	.158	.102	.064	.137	.088	.056	.095	.062	.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:0.1940A P:4.6564W PF:1.0000 Freq:50.00Hz Lamp Flux:282.133x1 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	15.9	17.3	16.2	17.6	17.9	15.4	16.8	15.7	17.1	17.4
3H	17.8	19.1	18.1	19.4	19.8	16.9	18.2	17.2	18.6	18.9
4H	18.7	20.0	19.1	20.3	20.7	17.4	18.7	17.8	19.1	19.4
6H	19.6	20.8	20.0	21.2	21.5	17.8	19.0	18.2	19.4	19.8
8H	20.0	21.2	20.4	21.6	22.0	17.9	19.1	18.3	19.5	19.9
12H	20.5	21.6	20.9	22.0	22.4	18.0	19.1	18.4	19.5	19.9
4H 2H	16.5	17.8	16.9	18.1	18.5	16.1	17.4	16.5	17.8	18.1
3H	18.6	19.8	19.1	20.1	20.6	17.9	19.0	18.3	19.4	19.8
4H	19.7	20.7	20.2	21.2	21.6	18.6	19.6	19.0	20.0	20.5
6H	20.8	21.7	21.3	22.1	22.6	19.1	20.0	19.6	20.5	20.9
8H	21.3	22.2	21.8	22.6	23.1	19.3	20.1	19.8	20.6	21.1
12H	21.9	22.7	22.4	23.1	23.7	19.4	20.1	19.9	20.6	21.1
8H 4H	20.1	20.9	20.5	21.4	21.9	19.1	19.9	19.6	20.4	20.9
6H	21.4	22.1	21.9	22.6	23.1	19.8	20.5	20.3	21.0	21.6
8H	22.0	22.7	22.6	23.2	23.8	20.1	20.7	20.6	21.3	21.8
12H	22.8	23.4	23.4	23.9	24.5	20.3	20.8	20.9	21.4	22.0
12H 4H	20.1	20.9	20.6	21.3	21.8	19.2	19.9	19.7	20.4	20.9
6H	21.4	22.1	22.0	22.6	23.2	20.0	20.7	20.6	21.2	21.7
8H	22.2	22.8	22.8	23.3	23.9	20.4	20.9	21.0	21.5	22.1
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 / - 0.4					+ 0.1 / - 0.4				

CIE Pub.117, 282.1 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = -4.4$ )

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:0.1940A P:4.6564W PF:1.0000 Freq:50.00Hz Lamp Flux:282.133x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:

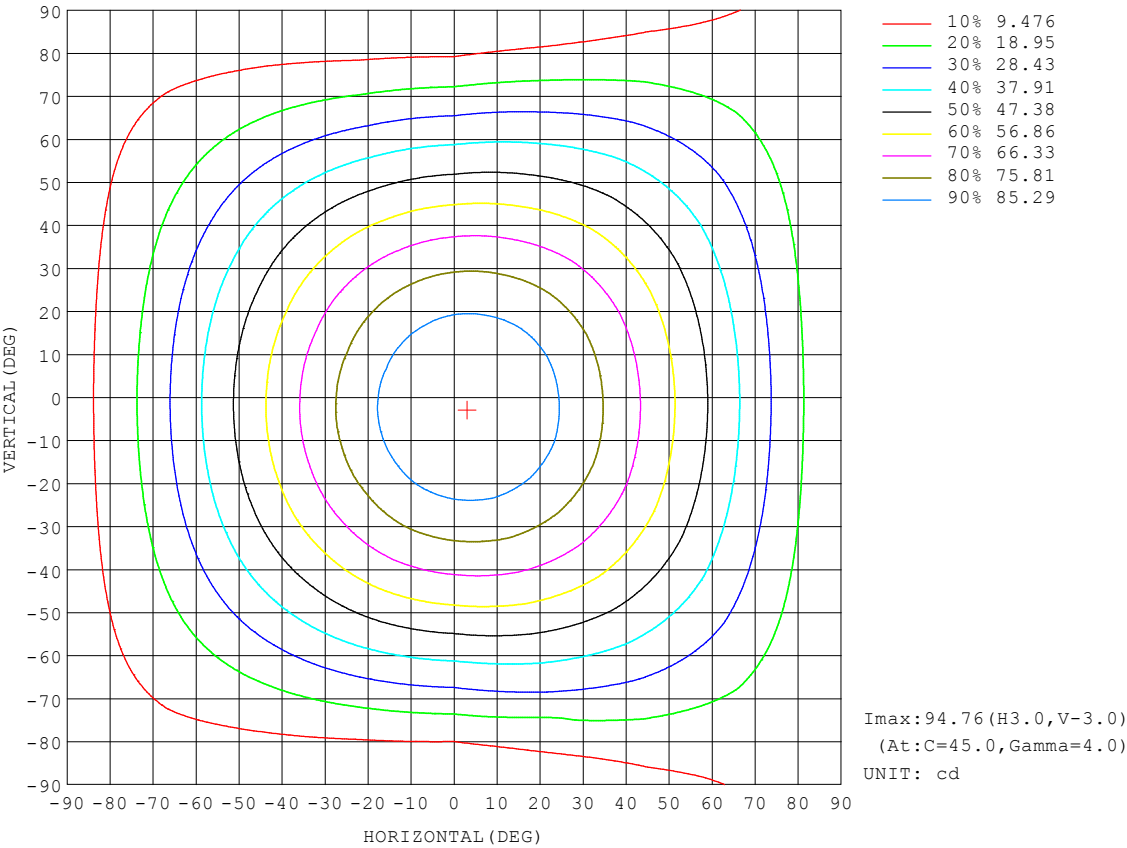
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	55	44	37	55	43	37	53	43	36	30
0.80	65	53	46	64	53	46	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	65
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	95	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:0.1940A P:4.6564W PF:1.0000 Freq:50.00Hz Lamp Flux:282.133x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:

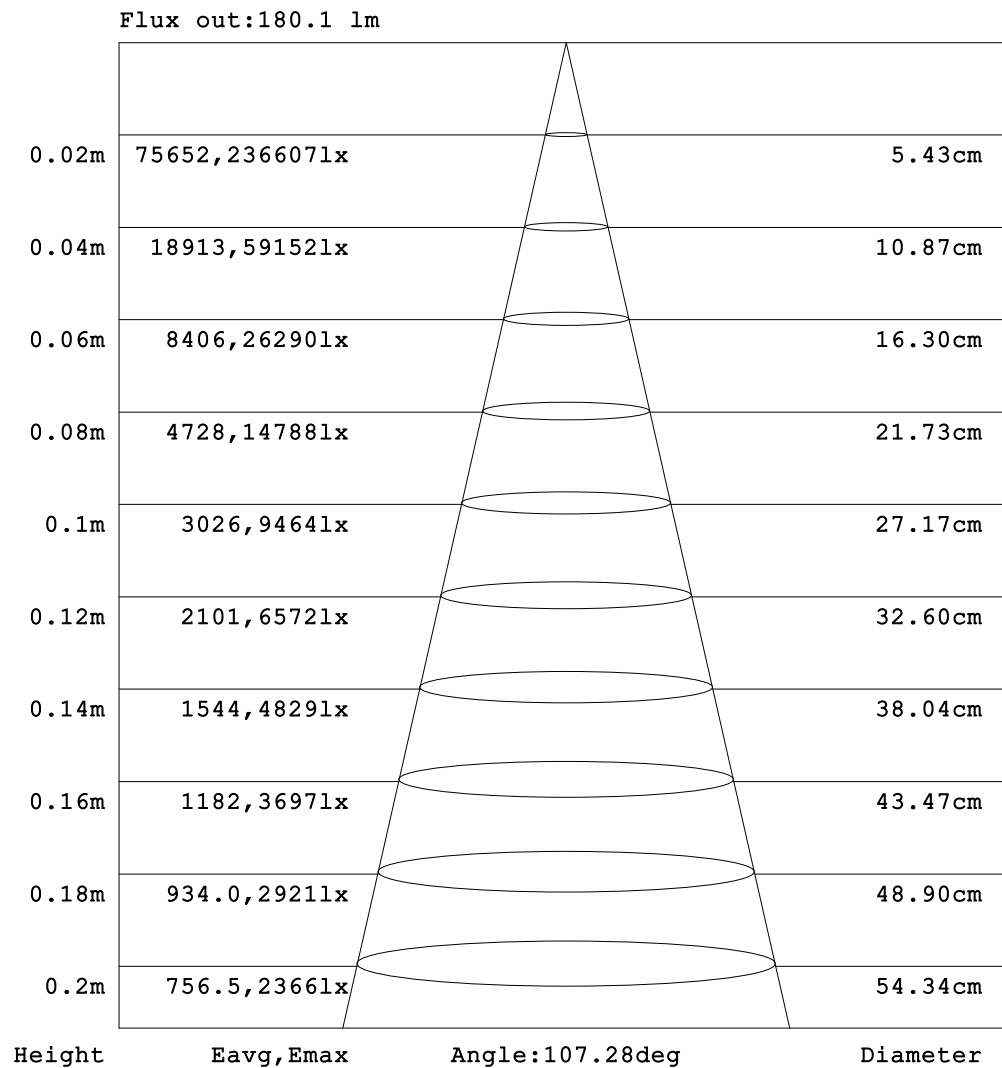


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:HRP  
Test Date:2022-11-21

☐ 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:0.1940A P:4.6564W PF:1.0000 Freq:50.00Hz Lamp Flux:282.133x1 lm		
	TYPE:LED	WEIGHT:
	DIM.:	SERIAL No.:
	SUR.:	Shielding Angle:



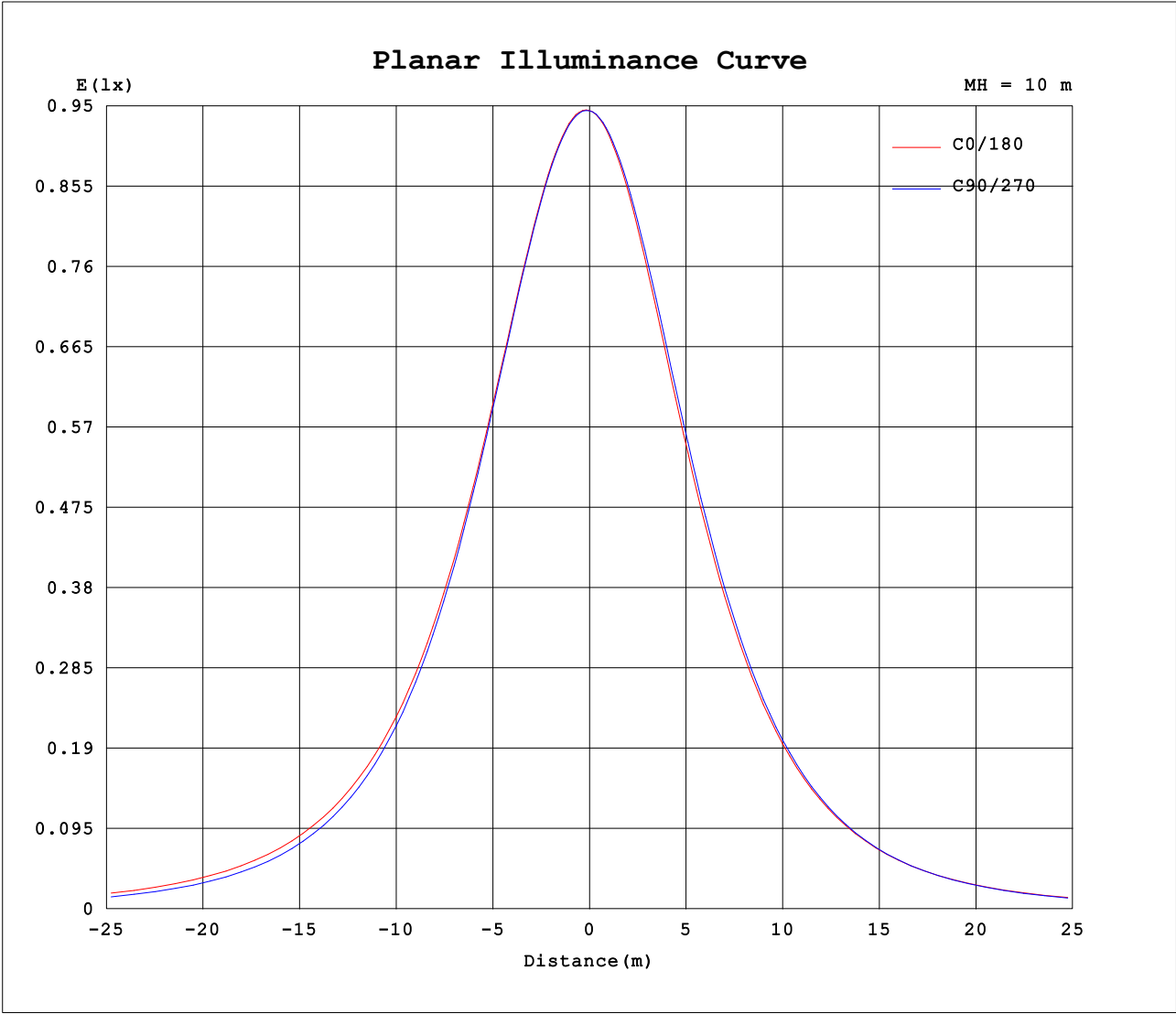
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

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



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:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:24.002V I:0.1940A P:4.6564W PF:1.0000 Freq:50.00Hz Lamp Flux:282.133x1 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	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5	94.5			
5	94.6	94.8	94.8	94.7	94.5	94.1	93.7	93.4	93.3	93.1	93.1	93.2	93.5	93.7	94.1	94.4			
10	93.6	94.0	94.0	93.9	93.4	92.7	91.9	91.3	90.9	90.5	90.6	90.9	91.4	92.0	92.7	93.2			
15	91.5	92.1	92.2	92.0	91.3	90.3	89.1	88.1	87.5	87.0	87.2	87.7	88.5	89.3	90.2	91.0			
20	88.5	89.3	89.4	89.1	88.2	87.0	85.3	84.0	83.2	82.7	83.0	83.7	84.6	85.7	86.9	87.8			
25	84.8	85.6	85.8	85.4	84.2	82.7	80.8	79.2	78.3	77.8	78.1	78.9	80.1	81.3	82.8	83.9			
30	80.4	81.3	81.4	80.8	79.4	77.8	75.6	74.0	73.0	72.4	72.7	73.6	74.8	76.3	78.1	79.4			
35	75.4	76.4	76.4	75.6	73.9	72.3	70.0	68.3	67.3	66.6	67.0	67.8	69.1	70.8	72.9	74.4			
40	70.0	71.1	70.9	69.8	67.8	66.2	63.9	62.3	61.4	60.6	60.9	61.7	63.0	64.9	67.4	69.0			
45	64.4	65.3	65.0	63.6	61.4	59.8	57.7	56.2	55.3	54.5	54.7	55.3	56.6	58.8	61.5	63.3			
50	58.5	59.3	58.8	57.1	54.4	53.0	51.1	49.8	49.0	48.2	48.3	48.7	49.9	52.4	55.4	57.4			
55	52.4	53.1	52.3	50.2	47.3	46.0	44.3	43.3	42.7	41.8	41.8	42.0	43.1	45.9	49.2	51.2			
60	46.1	46.7	45.6	43.2	39.9	38.7	37.5	36.7	36.2	35.4	35.2	35.2	36.2	39.2	42.7	45.0			
65	39.8	40.2	38.7	35.9	32.2	31.3	30.5	30.1	29.8	29.0	28.6	28.3	29.1	32.4	36.2	38.6			
70	33.3	33.5	31.7	28.5	24.5	23.9	23.5	23.6	23.5	22.6	22.0	21.4	22.0	25.6	29.5	32.1			
75	26.8	26.8	24.6	19.7	16.8	16.6	16.8	17.4	17.5	16.7	15.7	14.7	15.0	18.8	22.9	25.7			
80	20.5	20.3	17.7	13.5	9.49	9.86	10.9	11.9	12.3	11.4	10.1	8.60	8.47	12.2	16.6	19.4			
85	14.9	14.4	11.5	7.29	3.34	4.55	6.66	8.27	8.80	7.94	6.25	3.94	2.95	6.59	10.9	13.8			
90	10.6	10.1	7.26	2.84	0.12	2.49	5.18	6.95	7.44	6.62	4.72	2.17	0.08	3.01	6.79	9.58			
95	8.56	7.92	5.74	2.62	0.09	2.25	4.77	6.41	6.86	6.11	4.32	1.93	0.07	2.46	5.35	7.62			
100	8.06	7.46	5.50	2.35	0.09	1.97	4.45	5.98	6.41	5.70	4.05	1.63	0.07	2.13	4.26	6.55			
105	7.74	7.17	5.27	2.12	0.09	1.65	4.14	5.63	6.03	5.37	3.74	1.29	0.08	1.76	4.80	5.64			
110	7.40	6.84	5.03	1.07	0.09	1.14	3.62	5.25	5.66	5.01	3.35	0.87	0.09	0.82	4.49	5.53			
115	6.97	6.47	4.46	0.11	0.09	0.32	3.17	4.70	5.17	4.52	2.85	0.26	0.10	0.11	3.97	6.00			
120	6.36	5.70	3.43	0.11	0.10	0.15	2.67	4.09	4.54	3.90	2.40	0.13	0.11	0.10	2.91	5.33			
125	5.59	4.88	1.97	0.12	0.11	0.15	1.69	3.58	3.97	3.37	1.57	0.13	0.12	0.10	1.55	4.50			
130	4.12	3.28	0.13	0.13	0.12	0.15	0.61	2.77	3.30	2.57	0.58	0.13	0.13	0.11	0.14	2.97			
135	2.47	1.18	0.13	0.13	0.13	0.15	0.19	1.32	2.09	1.19	0.16	0.13	0.13	0.12	0.14	1.21			
140	0.15	0.15	0.13	0.14	0.13	0.15	0.17	0.29	0.74	0.34	0.17	0.14	0.14	0.12	0.15	0.15			
145	0.15	0.15	0.13	0.15	0.13	0.15	0.17	0.19	0.17	0.18	0.17	0.15	0.14	0.12	0.15	0.15			
150	0.15	0.15	0.13	0.15	0.13	0.16	0.17	0.19	0.17	0.18	0.17	0.16	0.15	0.13	0.15	0.15			
155	0.14	0.15	0.13	0.15	0.13	0.16	0.17	0.19	0.17	0.18	0.17	0.16	0.16	0.15	0.16	0.15			
160	0.14	0.15	0.13	0.16	0.15	0.17	0.17	0.19	0.17	0.18	0.17	0.16	0.18	0.16	0.16	0.16			
165	0.15	0.16	0.15	0.16	0.16	0.17	0.17	0.19	0.17	0.18	0.17	0.16	0.18	0.16	0.18	0.16			
170	0.16	0.16	0.16	0.17	0.16	0.18	0.18	0.19	0.17	0.18	0.17	0.17	0.19	0.17	0.18	0.16			
175	0.16	0.16	0.16	0.17	0.16	0.18	0.18	0.19	0.17	0.18	0.17	0.17	0.19	0.17	0.19	0.17			
180	0.16	0.16	0.16	0.17	0.18	0.19	0.19	0.20	0.17	0.17	0.17	0.17	0.18	0.19	0.20	0.20			

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: