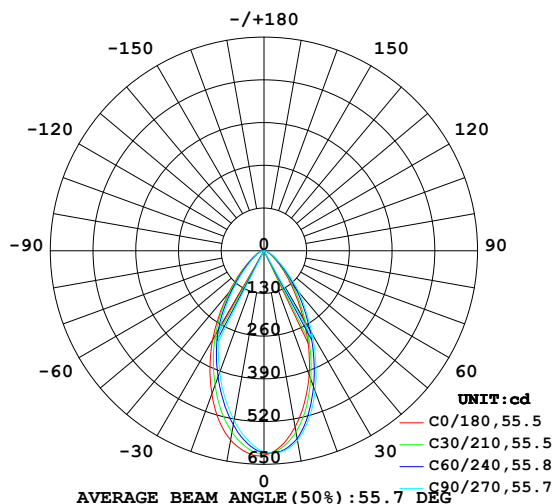


LUMINAIRE PHOTOMETRIC TEST REPORT

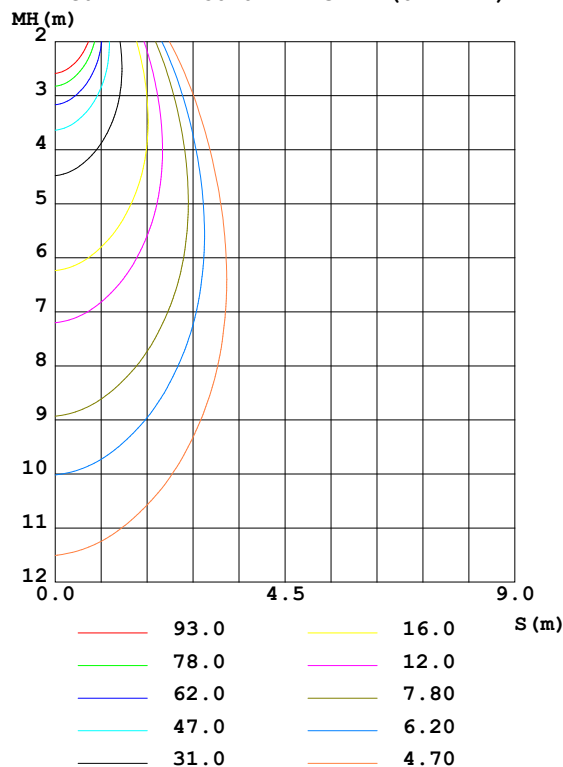
Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm					
NAME: PDOS-7W		TYPE:2700K		WEIGHT:	
SPEC.:		DIM.:		SERIAL No.:	
MFR.: MINDHAND		SUR.:		Shielding Angle:	

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 89.65 lm/W
MODEL		I _{max} (cd)	624.6	S/MH (C0/180)	0.89	
NOMINAL POWER (W)	7	LOR (%)	100.0	S/MH (C90/270)	0.78	
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	634.05	η UP,DN (C0-180)	0.0,51.9	
NOMINAL FLUX (lm)	634.046	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,48.1	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75	
TEST VOLTAGE (V)	230.5	η down (%)	100.0	CIBSE SHR MAX	0.90	

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [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	544.4	572.7	586.2	588.6	584.9	547.0	524.3	518.8	0- 10	55.70	55.70	8.78, 8.78
20	402.0	431.2	454.3	467.3	463.4	418.2	393.7	381.6	10- 20	138.3	194.0	30.6, 30.6
30	241.2	276.7	293.7	306.0	313.1	280.7	264.5	244.0	20- 30	160.3	354.3	55.9, 55.9
40	120.3	144.5	166.4	170.5	166.5	149.8	134.5	117.9	30- 40	129.1	483.4	76.2, 76.2
50	53.80	65.43	74.86	78.13	75.16	67.17	58.44	50.56	40- 50	77.16	560.5	88.4, 88.4
60	24.88	30.43	35.13	36.28	34.02	30.94	27.98	25.52	50- 60	40.11	600.6	94.7, 94.7
70	11.80	12.58	14.44	15.67	16.74	16.07	14.44	12.46	60- 70	21.24	621.9	98.1, 98.1
80	3.464	3.954	4.872	6.097	7.005	6.752	5.836	4.016	70- 80	9.991	631.9	99.7, 99.7
90	0	0	0	0.0941	0.4949	0.3869	0.0244	0	80- 90	2.174	634.0	100, 100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 528.05 lm

%lum = 83.3%

%lamp = 83.3%

Conical surface Flux(120deg): 600.64 lm

%lum = 94.7%

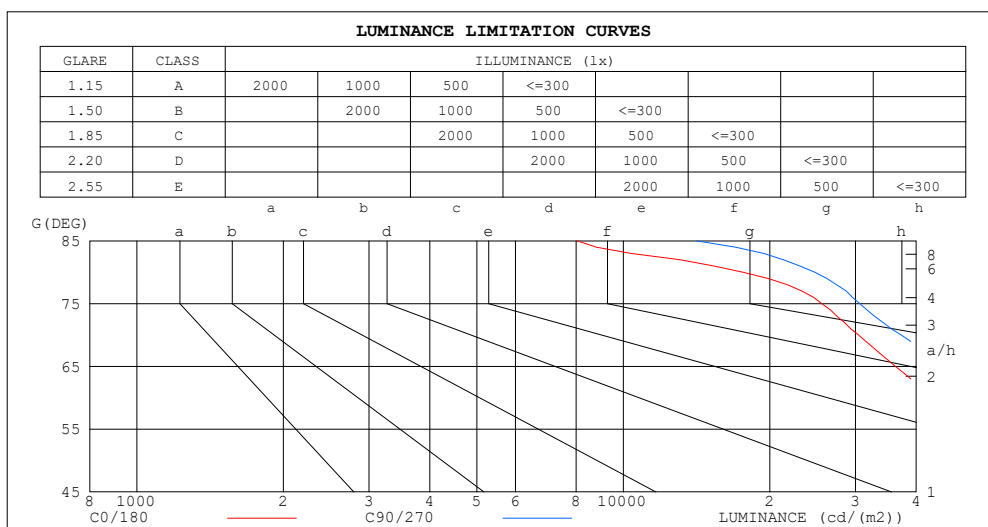
%lamp = 94.7%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Bob
 Test Date:2021-10-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
 Humidity:65.0%
 Test Distance:7.030m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm		
NAME: PDOS-7W	TYPE:2700K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: MINDHAND	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	8032	14136
80	17599	24752
75	25577	30603
70	30438	37245
65	36244	47628
60	43896	61980
55	54254	75879
50	73842	102742
45	103191	140949

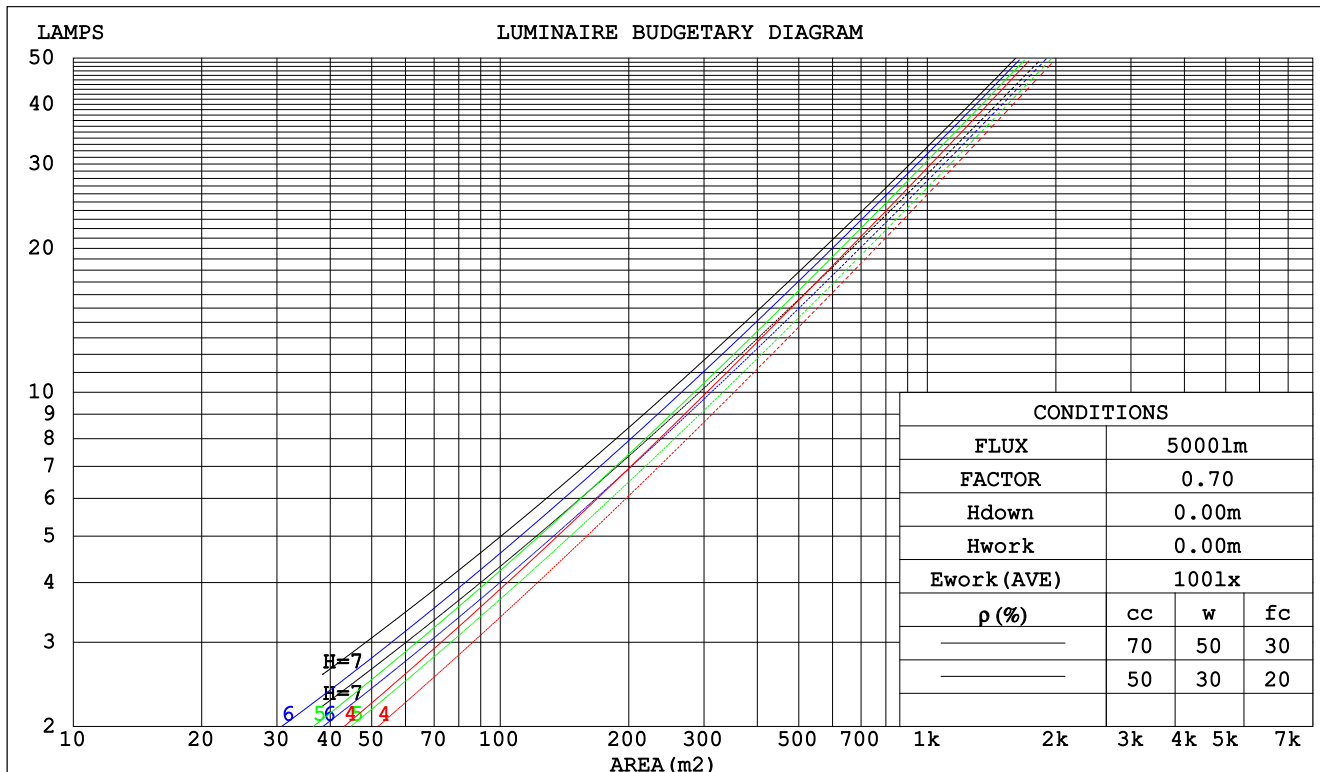
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm		
NAME: PDOS-7W	TYPE:2700K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: MINDHAND	SUR.:	Shielding Angle:

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															



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm					
NAME: PDOS-7W			TYPE:2700K		WEIGHT:
SPEC.:			DIM.:		SERIAL No.:
MFR.: MINDHAND			SUR.:		Shielding Angle:

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	.213	.121	.038	.206	.118	.037	.193	.111	.035	.182	.105	.034	.171	.099	.032		
2.0	.205	.112	.034	.199	.109	.034	.188	.104	.032	.178	.100	.031	.169	.095	.030		
3.0	.194	.103	.031	.189	.101	.030	.179	.097	.030	.171	.094	.029	.163	.090	.028		
4.0	.183	.095	.028	.179	.094	.028	.171	.090	.027	.163	.088	.026	.156	.085	.026		
5.0	.173	.088	.026	.169	.087	.025	.162	.084	.025	.155	.082	.024	.149	.080	.024		
6.0	.164	.082	.023	.160	.081	.023	.154	.079	.023	.148	.077	.023	.142	.075	.022		
7.0	.155	.077	.022	.152	.076	.022	.146	.074	.021	.141	.072	.021	.136	.071	.021		
8.0	.147	.072	.020	.144	.071	.020	.139	.070	.020	.135	.068	.020	.130	.067	.019		
9.0	.140	.068	.019	.138	.067	.019	.133	.066	.019	.129	.064	.018	.125	.063	.018		
10.0	.133	.064	.018	.131	.063	.018	.127	.062	.018	.123	.061	.017	.119	.060	.017		

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	.190	.190	.190	.163	.163	.163	.111	.111	.111	.064	.064	.064	.020	.020	.020	
1.0	.174	.157	.142	.149	.135	.122	.102	.093	.085	.058	.054	.049	.019	.017	.016	
2.0	.161	.132	.109	.138	.114	.094	.094	.079	.065	.054	.046	.038	.017	.015	.013	
3.0	.150	.114	.085	.128	.098	.074	.088	.068	.052	.051	.040	.030	.016	.013	.010	
4.0	.141	.100	.068	.121	.086	.059	.083	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.133	.088	.056	.114	.076	.048	.078	.053	.034	.045	.031	.020	.015	.010	.007	
6.0	.125	.079	.046	.108	.069	.040	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.119	.072	.039	.102	.062	.034	.071	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.113	.066	.034	.097	.057	.029	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.108	.061	.029	.093	.053	.025	.064	.037	.018	.037	.022	.011	.012	.007	.004	
10.0	.103	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.010	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm											
NAME: PDOS-7W					TYPE:2700K			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.: MINDHAND					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		26.7	27.8	26.9	28.0	28.2	28.0	29.1	28.2	29.3	29.5
	3H	27.0	28.0	27.3	28.2	28.4	28.3	29.3	28.5	29.5	29.7
	4H	27.1	28.1	27.4	28.3	28.5	28.4	29.3	28.6	29.6	29.8
	6H	27.1	28.0	27.4	28.3	28.5	28.4	29.3	28.7	29.6	29.8
	8H	27.1	28.0	27.4	28.2	28.5	28.4	29.3	28.7	29.5	29.8
	12H	27.0	27.9	27.4	28.2	28.5	28.4	29.2	28.7	29.5	29.8
4H	2H	26.8	27.8	27.1	28.0	28.3	28.0	29.0	28.3	29.2	29.4
	3H	27.2	28.1	27.6	28.4	28.7	28.4	29.2	28.7	29.5	29.8
	4H	27.4	28.2	27.8	28.5	28.8	28.5	29.3	28.9	29.6	29.9
	6H	27.5	28.2	27.9	28.5	28.9	28.6	29.3	29.0	29.7	30.0
	8H	27.5	28.1	27.9	28.5	28.8	28.7	29.3	29.1	29.6	30.0
	12H	27.5	28.0	27.9	28.4	28.8	28.6	29.2	29.0	29.6	30.0
8H	4H	27.4	28.1	27.8	28.4	28.8	28.5	29.1	28.9	29.5	29.9
	6H	27.6	28.1	28.0	28.5	28.9	28.7	29.2	29.1	29.6	30.0
	8H	27.6	28.0	28.0	28.4	28.9	28.7	29.1	29.1	29.6	30.0
	12H	27.5	27.9	28.0	28.4	28.8	28.7	29.1	29.2	29.5	30.0
12H	4H	27.4	28.0	27.8	28.3	28.7	28.5	29.0	28.9	29.4	29.8
	6H	27.5	28.0	28.0	28.4	28.9	28.6	29.1	29.1	29.5	29.9
	8H	27.6	27.9	28.0	28.4	28.9	28.7	29.1	29.1	29.5	30.0
Variations with the observer position at spacings:											
S = 1.0H	+ 1.1 / - 1.6					+ 1.1 / - 1.5					
1.5H	+ 1.3 / - 1.3					+ 1.7 / - 1.3					
2.0H	+ 2.2 / - 1.6					+ 2.5 / - 1.8					

CIE Pub.117, 634.0 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -1.6)
Area: 0.00113354 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm		
NAME: PDOS-7W	TYPE:2700K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: MINDHAND	SUR.:	Shielding Angle:

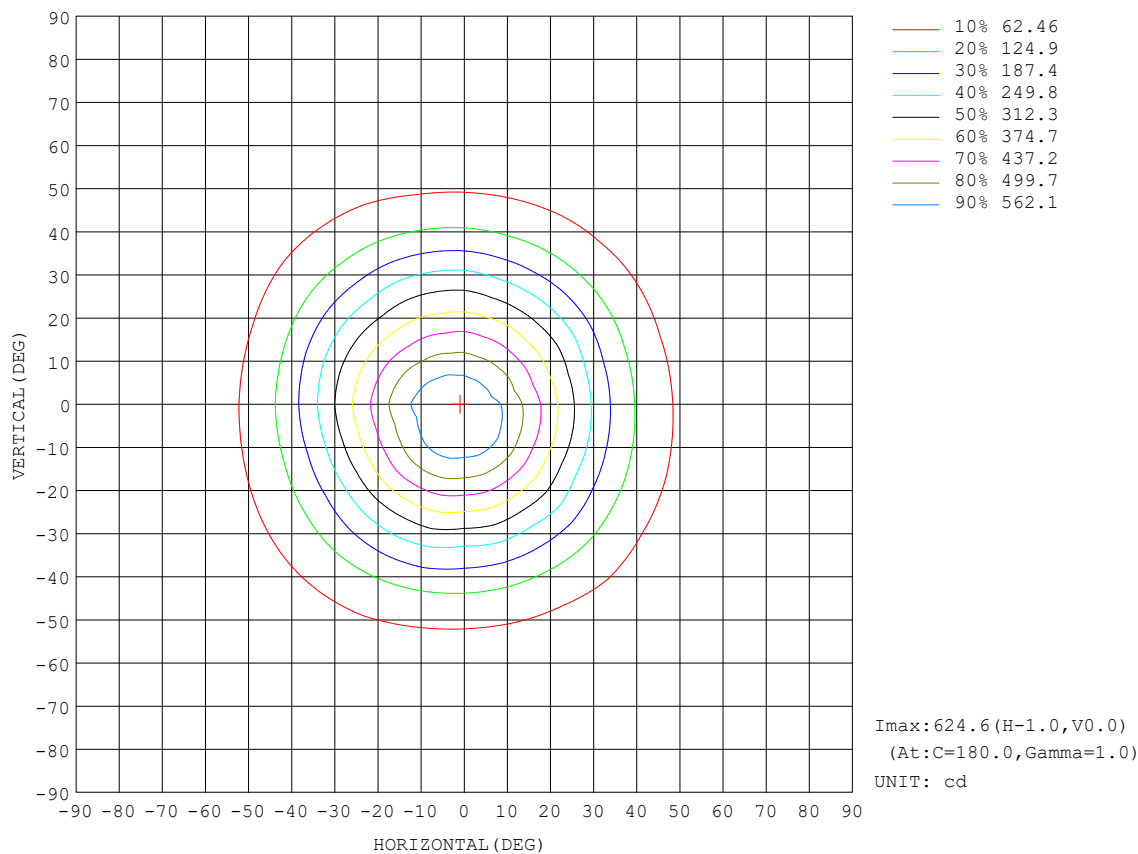
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	68	63	76	68	63	75	68	63	59
0.80	85	77	73	85	77	72	83	76	72	67
1.00	92	84	79	91	84	79	89	84	79	74
1.25	97	90	85	96	89	85	93	88	84	79
1.50	100	94	90	99	93	89	97	92	88	83
2.00	104	99	95	103	98	94	100	96	93	87
2.50	107	102	98	105	101	97	102	98	95	89
3.00	109	105	101	107	103	100	103	100	98	91
4.00	112	108	105	109	106	104	106	103	101	93
5.00	113	110	107	111	108	106	107	105	103	95
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm		
NAME: PDOS-7W	TYPE:2700K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: MINDHAND	SUR.:	Shielding Angle:

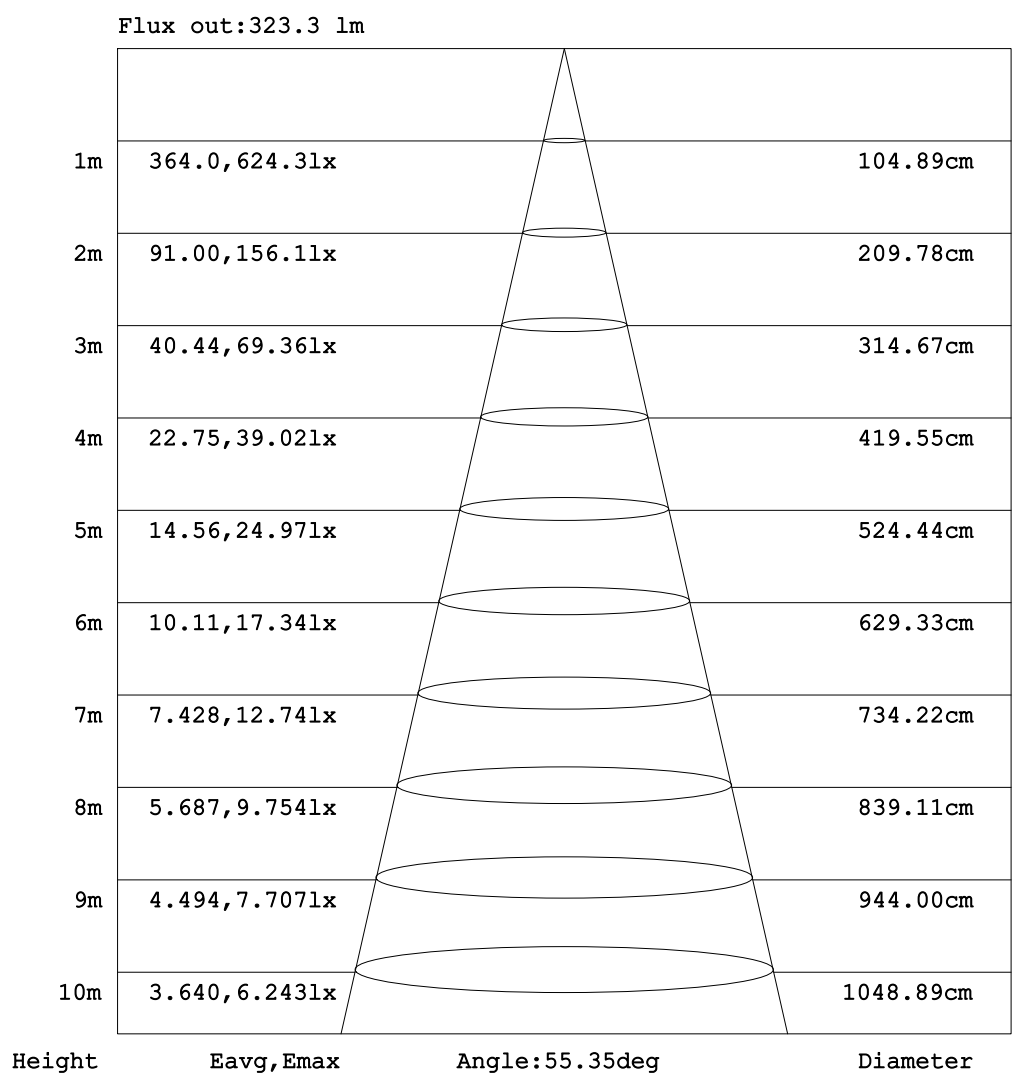


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

AAI Figure

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm		
NAME: PDOS-7W	TYPE:2700K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: MINDHAND	SUR.:	Shielding Angle:



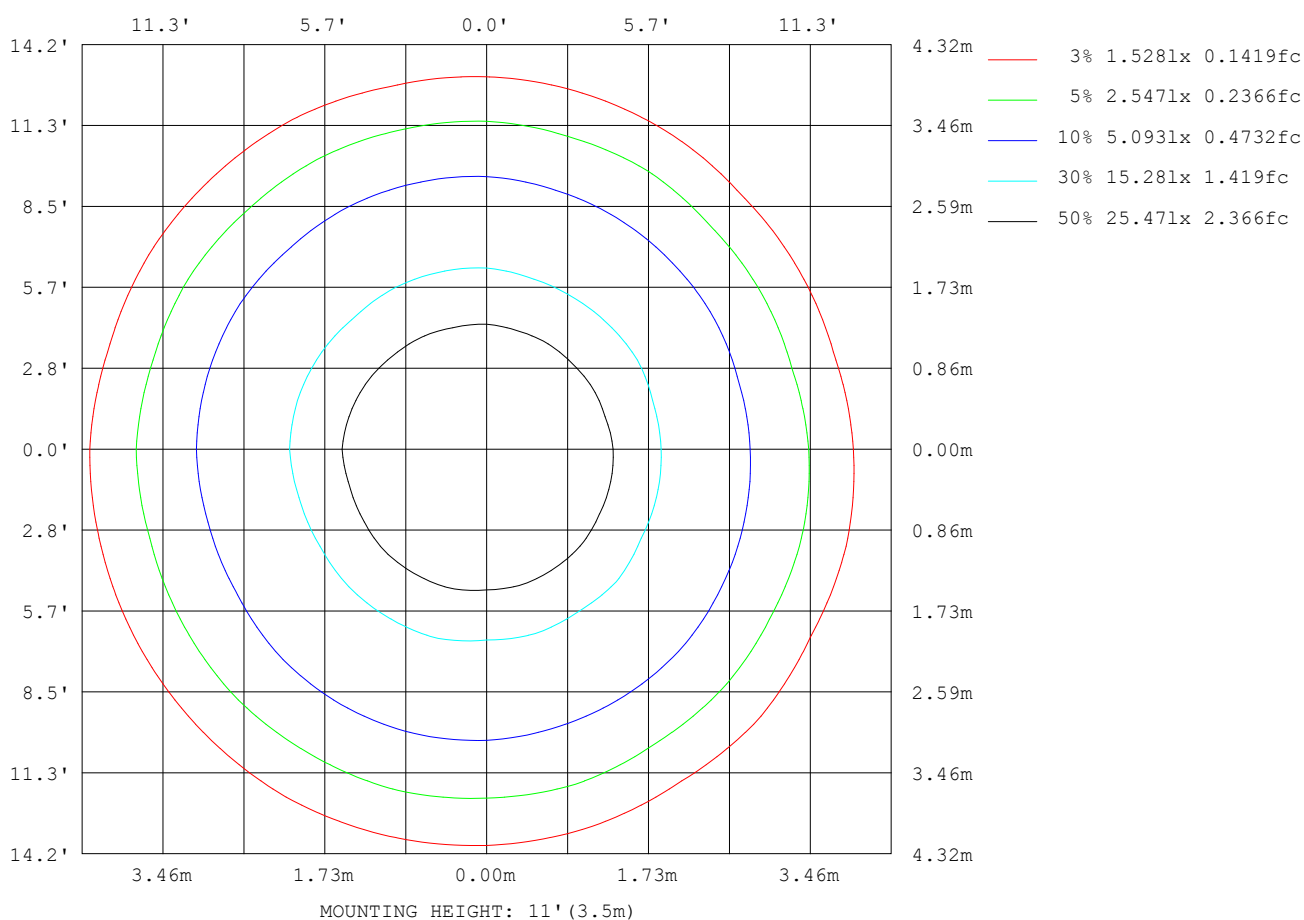
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm		
NAME: PDOS-7W	TYPE:2700K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: MINDHAND	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:230.45V I:0.0329A P:7.0723W PF:0.9337 Freq:50.00Hz Lamp Flux:634.046x1 lm		
NAME: PDOS-7W	TYPE:2700K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: MINDHAND	SUR.:	Shielding Angle:

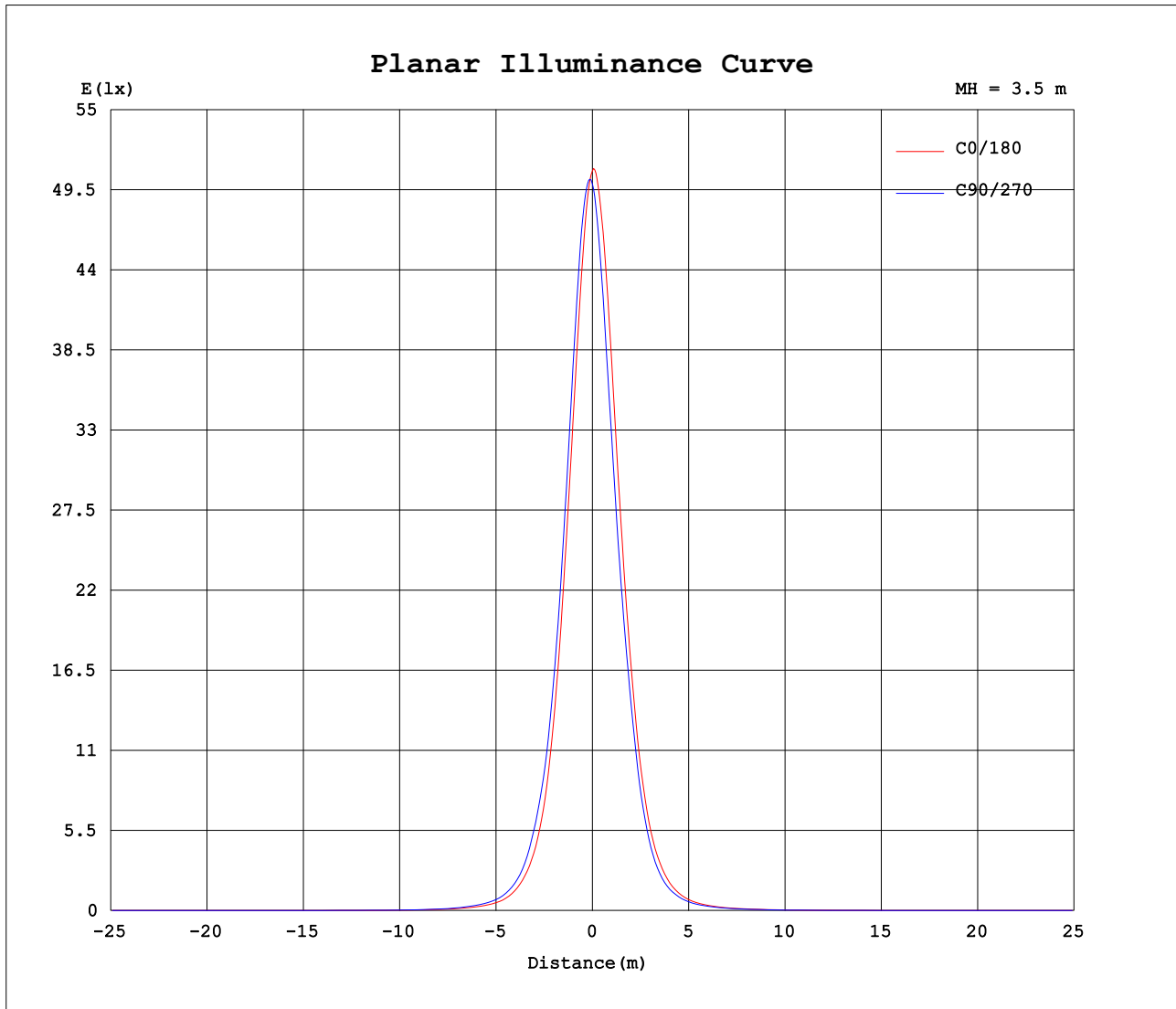
AvgL	cd/m2
L_0~180 (65) av	43070
L_0~180 (75) av	31916
L_0~180 (85) av	18272
L_90~270 (65) av	44849
L_90~270 (75) av	32275
L_90~270 (85) av	14925
L_45 (65) av	43947
L_45 (75) av	31784
L_45 (85) av	16544

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Bob
Test Date:2021-10-08

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Bob
 Test Date: 2021-10-08

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.270
 Humidity: 65.0%
 Test Distance: 7.030m [K=1.0000]
 Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.270
 Humidity:65.0%
 Test Distance:7.030m [K=1.0000]
 Remarks: