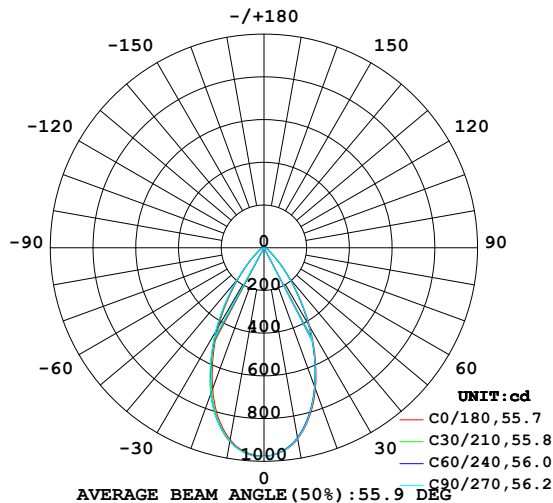


LUMINAIRE PHOTOMETRIC TEST REPORT

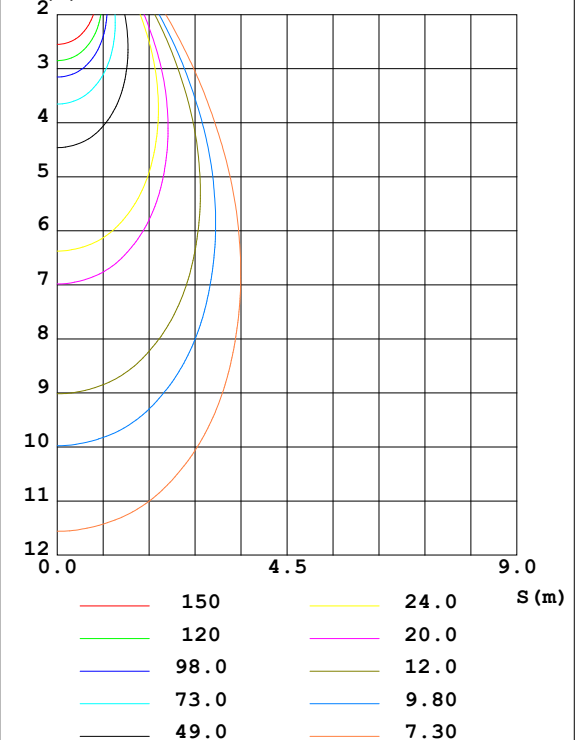
Test:U:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm		
NAME: PFM-10W	TYPE:3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 99.09 lm/W			
MODEL		I _{max} (cd)	979.3	S/MH (C0/180)	0.84
NOMINAL POWER (W)	10	LOR (%)	100.0	S/MH (C90/270)	0.87
RATED VOLTAGE (V)	230	TOTAL FLUX (lm)	923.37	η UP, DN (C0-180)	0.0, 49.4
NOMINAL FLUX (lm)	923.371	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.6
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE (V)	230.1	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: Jone
Test Date: 2021-03-11

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	909.8	905.7	906.4	915.4	912.6	917.0	920.1	914.2	0- 10	90.29	90.29	9.78, 9.78
20	703.7	695.7	695.5	701.9	702.8	718.5	727.4	712.2	10- 20	229.4	319.7	34.6, 34.6
30	429.0	423.1	420.1	425.2	427.7	440.3	454.4	437.8	20- 30	260.1	579.8	62.8, 62.8
40	188.6	182.4	183.3	183.6	183.4	188.8	197.2	185.9	30- 40	186.9	766.6	83, 83
50	62.70	59.63	61.28	61.74	61.69	61.23	65.00	60.78	40- 50	86.76	853.4	92.4, 92.4
60	25.74	26.44	26.50	27.20	26.97	26.26	26.72	26.37	50- 60	35.57	889.0	96.3, 96.3
70	14.30	14.35	14.62	15.06	14.53	14.42	14.37	14.26	60- 70	19.87	908.8	98.4, 98.4
80	7.198	7.133	7.387	7.764	7.452	7.197	7.121	7.120	70- 80	11.21	920.0	99.6, 99.6
90	0.0593	0.0488	0.0523	0.0453	0.0383	0.0523	0.0453	0.0523	80- 90	3.324	923.4	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): 820.05 lm

%lum = 88.8%

%lamp = 88.8%

Conical surface Flux(120deg): 888.96 lm

%lum = 96.3%

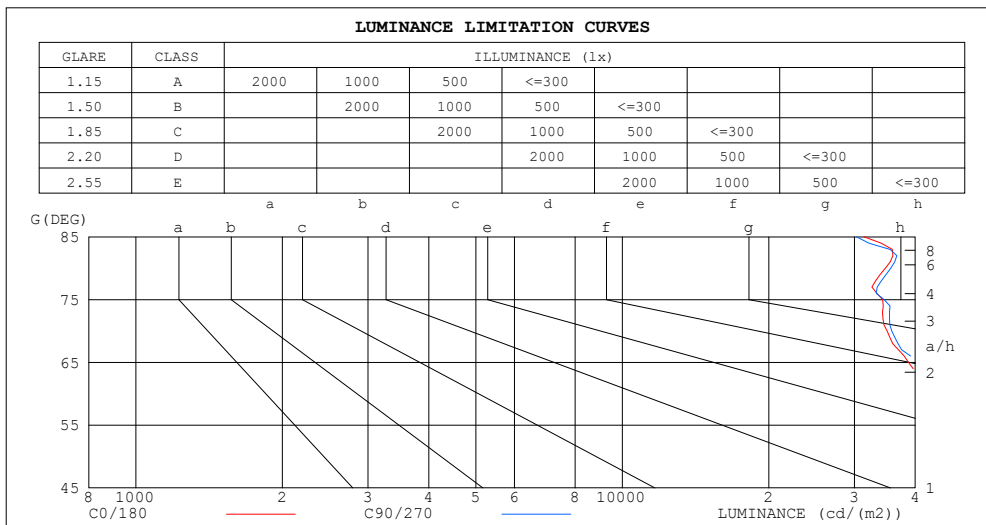
%lamp = 96.3%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jone
 Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm		
NAME: PFM-10W	TYPE:3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	31407	30290
80	34718	35627
75	34274	34526
70	35007	35810
65	38744	40360
60	43124	44387
55	54965	55111
50	81702	79850
45	130603	126543

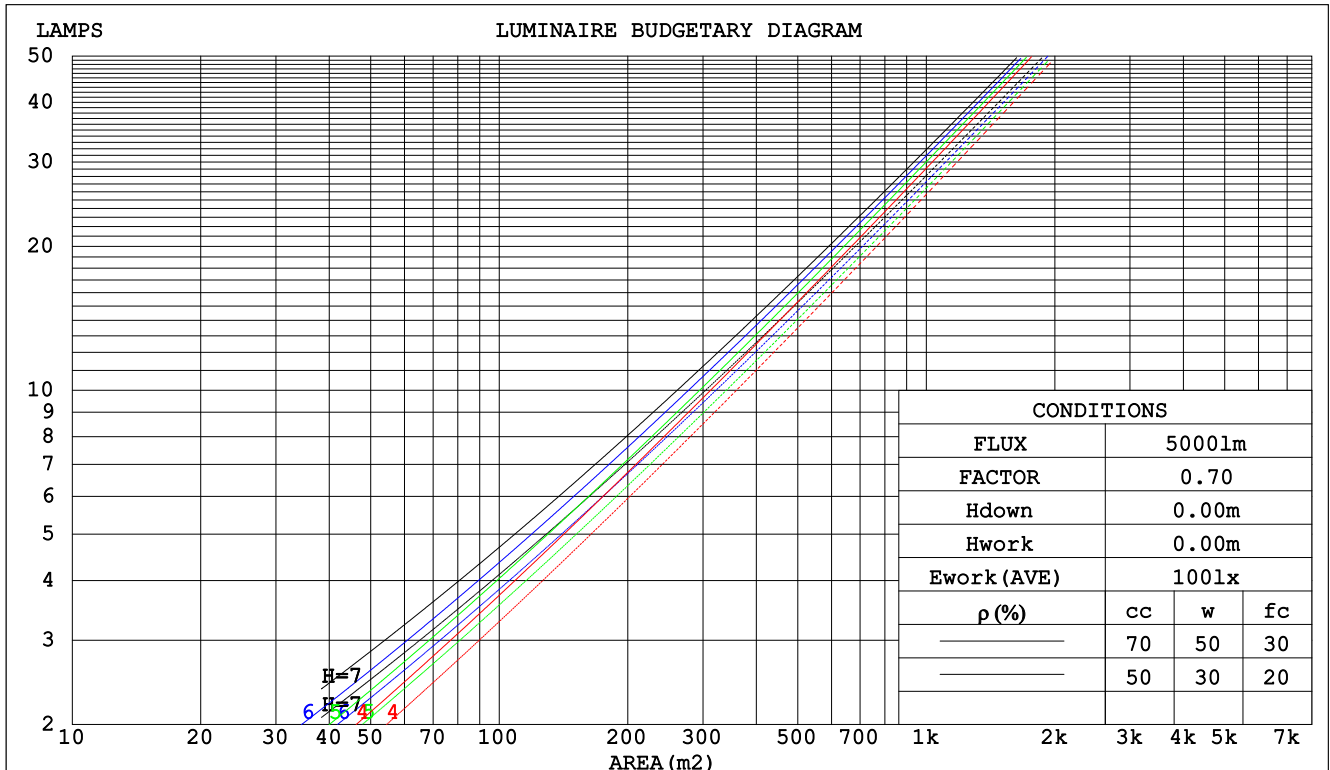
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jone
Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm		
NAME: PFM-10W	TYPE:3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	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						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1.0	1.10	1.07	1.04	1.07	1.05	1.03	1.03	1.01	.99	.00	.98	.96	.96	.95	.94	.92
2.0	1.01	.96	.93	.99	.95	.92	.96	.92	.90	.93	.90	.88	.90	.88	.86	.84
3.0	.93	.88	.83	.92	.87	.83	.89	.85	.81	.87	.83	.80	.84	.81	.79	.77
4.0	.86	.80	.76	.85	.80	.75	.83	.78	.74	.81	.77	.73	.79	.75	.73	.71
5.0	.80	.74	.69	.79	.73	.69	.78	.72	.68	.76	.71	.68	.74	.70	.67	.66
6.0	.75	.68	.64	.74	.68	.64	.73	.67	.63	.71	.66	.63	.70	.66	.62	.61
7.0	.70	.64	.59	.69	.63	.59	.68	.63	.59	.67	.62	.58	.66	.61	.58	.56
8.0	.66	.59	.55	.65	.59	.55	.64	.59	.55	.63	.58	.54	.62	.58	.54	.53
9.0	.62	.56	.51	.61	.55	.51	.60	.55	.51	.60	.55	.51	.59	.54	.51	.49
10.0	.58	.52	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.56	.51	.48	.46



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jone
 Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm									
NAME: PFM-10W					TYPE:3000K			WEIGHT:	
SPEC.:					DIM.:			SERIAL No.:	
MFR.:					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 Coeffcients(WEC)										
0.0																	
1.0	.200	.114	.036	.193	.110	.035	.181	.104	.033	.169	.098	.031	.158	.092	.030		
2.0	.191	.105	.032	.186	.102	.031	.175	.097	.030	.165	.092	.029	.156	.088	.028		
3.0	.181	.096	.029	.176	.094	.028	.167	.090	.028	.158	.087	.027	.150	.083	.026		
4.0	.171	.089	.026	.167	.087	.026	.159	.084	.025	.152	.081	.025	.145	.079	.024		
5.0	.162	.083	.024	.159	.081	.024	.152	.079	.023	.145	.077	.023	.139	.074	.022		
6.0	.154	.077	.022	.151	.076	.022	.145	.074	.022	.139	.072	.021	.133	.070	.021		
7.0	.146	.072	.021	.143	.071	.020	.138	.070	.020	.133	.068	.020	.128	.066	.020		
8.0	.139	.068	.019	.137	.067	.019	.132	.066	.019	.127	.064	.019	.123	.063	.018		
9.0	.133	.064	.018	.131	.064	.018	.126	.062	.018	.122	.061	.017	.118	.060	.017		
10.0	.127	.061	.017	.125	.060	.017	.121	.059	.017	.117	.058	.017	.113	.057	.016		

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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.147	.114	.087	.126	.098	.075	.087	.068	.053	.050	.040	.031	.016	.013	.010	
4.0	.138	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008	
5.0	.129	.088	.057	.111	.076	.050	.077	.053	.035	.044	.031	.021	.014	.010	.007	
6.0	.122	.079	.048	.105	.068	.042	.072	.048	.029	.042	.028	.017	.014	.009	.006	
7.0	.116	.071	.040	.099	.062	.035	.069	.043	.025	.040	.026	.015	.013	.008	.005	
8.0	.110	.065	.035	.095	.057	.030	.065	.040	.021	.038	.023	.013	.012	.008	.004	
9.0	.105	.060	.030	.090	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004	
10.0	.100	.056	.026	.086	.048	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jone
Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm											
NAME: PFM-10W					TYPE:3000K			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
MFR.:					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	25.5	26.6	25.8	26.8	26.9	25.5	26.5	25.7	26.7	26.9	
	3H	25.8	26.7	26.0	26.9	27.1	25.7	26.7	26.0	26.9	27.1
	4H	25.9	26.8	26.2	27.0	27.3	25.9	26.8	26.2	27.0	27.2
	6H	26.0	26.9	26.3	27.1	27.4	26.0	26.9	26.3	27.1	27.4
	8H	26.1	26.9	26.4	27.2	27.4	26.1	26.9	26.4	27.2	27.4
	12H	26.1	26.9	26.4	27.2	27.5	26.1	26.9	26.4	27.2	27.5
4H	2H	25.5	26.4	25.8	26.6	26.9	25.5	26.4	25.7	26.6	26.8
	3H	25.9	26.7	26.2	26.9	27.2	25.8	26.6	26.2	26.9	27.2
	4H	26.1	26.8	26.4	27.1	27.4	26.1	26.8	26.4	27.1	27.4
	6H	26.3	27.0	26.7	27.3	27.7	26.3	27.0	26.7	27.3	27.7
	8H	26.5	27.0	26.9	27.4	27.8	26.5	27.1	26.9	27.4	27.8
	12H	26.5	27.1	27.0	27.5	27.8	26.5	27.1	27.0	27.5	27.8
8H	4H	26.1	26.7	26.5	27.1	27.4	26.1	26.7	26.5	27.1	27.4
	6H	26.5	27.0	26.9	27.4	27.8	26.5	27.0	26.9	27.4	27.8
	8H	26.7	27.1	27.1	27.5	28.0	26.7	27.1	27.1	27.5	28.0
	12H	26.8	27.2	27.3	27.6	28.1	26.8	27.2	27.3	27.6	28.1
12H	4H	26.1	26.6	26.5	27.0	27.4	26.1	26.6	26.5	27.0	27.4
	6H	26.5	26.9	26.9	27.3	27.8	26.5	26.9	27.0	27.3	27.8
	8H	26.7	27.1	27.2	27.5	28.0	26.7	27.1	27.2	27.5	28.0
Variations with the observer position at spacings:											
S = 1.0H	+ 1.4 / - 1.9					+ 1.3 / - 1.8					
1.5H	+ 2.5 / - 1.8					+ 2.4 / - 1.7					
2.0H	+ 2.6 / - 1.2					+ 2.4 / - 1.1					

CIE Pub.117, 923.4 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -0.3)
Area: 0.00119398 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jone
Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm		
NAME: PFM-10W	TYPE:3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

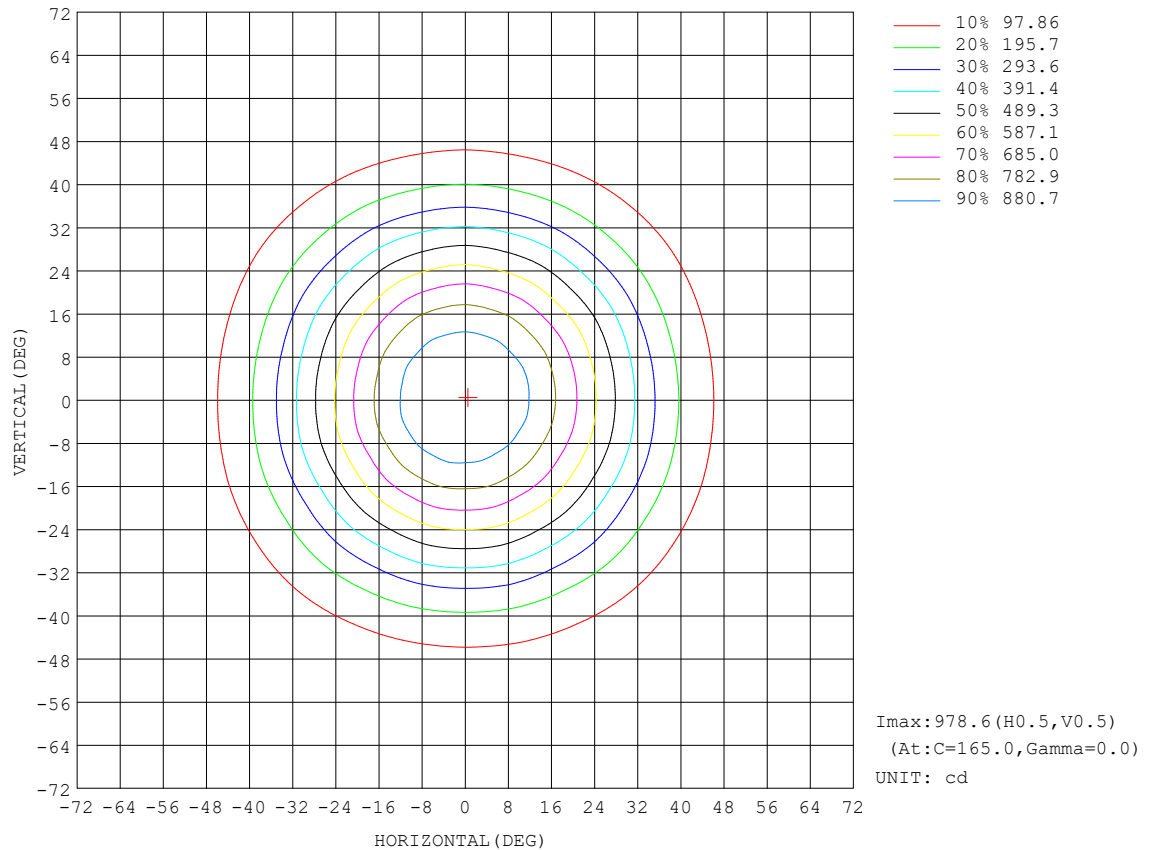
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	81	73	69	80	73	69	80	73	69	65
0.80	89	82	78	88	82	77	87	81	77	73
1.00	95	88	84	94	87	83	92	88	83	78
1.25	99	93	89	98	93	89	96	91	88	83
1.50	103	97	93	101	96	92	99	95	91	86
2.00	106	101	97	105	100	97	102	98	95	89
2.50	108	104	100	106	102	99	103	100	97	91
3.00	110	106	103	108	105	102	105	102	99	93
4.00	112	109	106	110	107	105	107	104	102	95
5.00	114	111	109	112	109	107	108	106	104	96
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:Jone
Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm		
NAME: PFM-10W	TYPE:3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

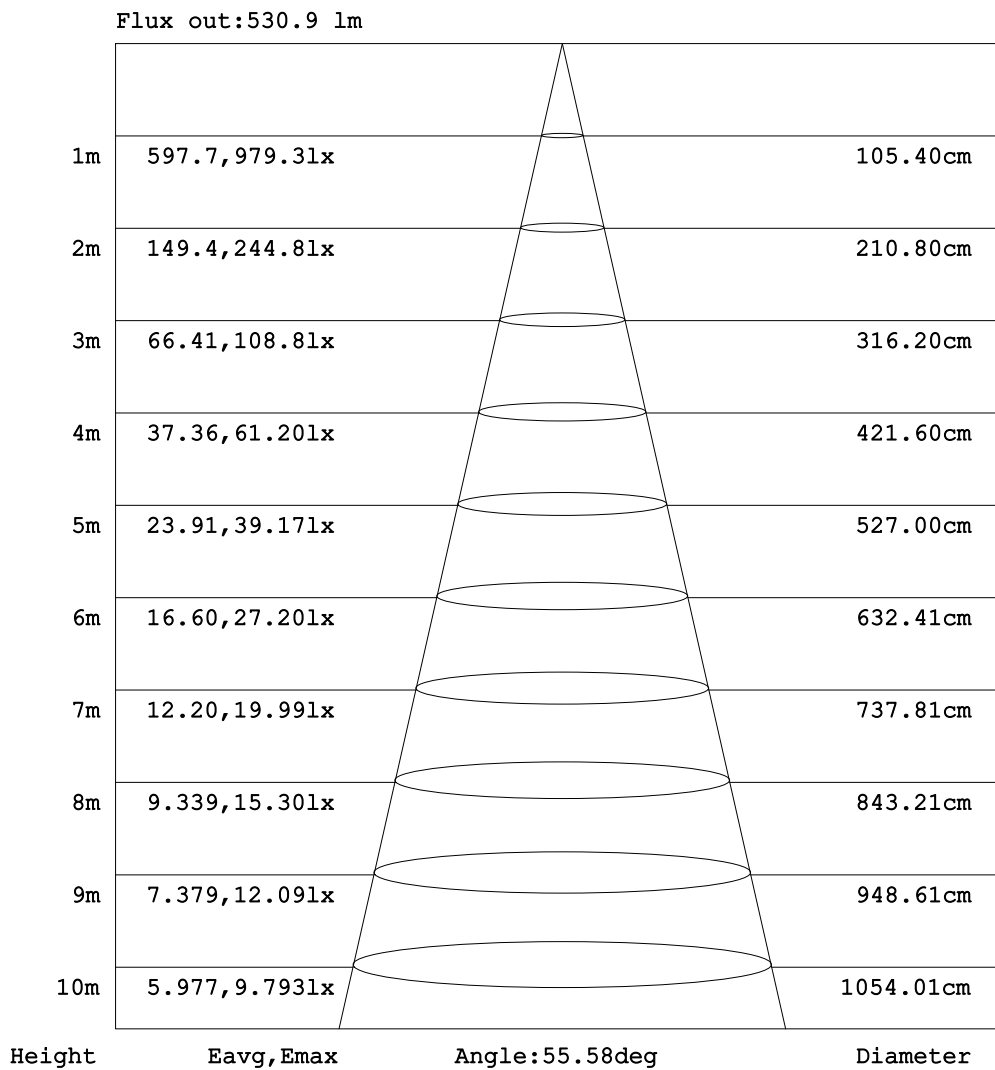


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jone
Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm		
NAME: PFM-10W	TYPE:3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



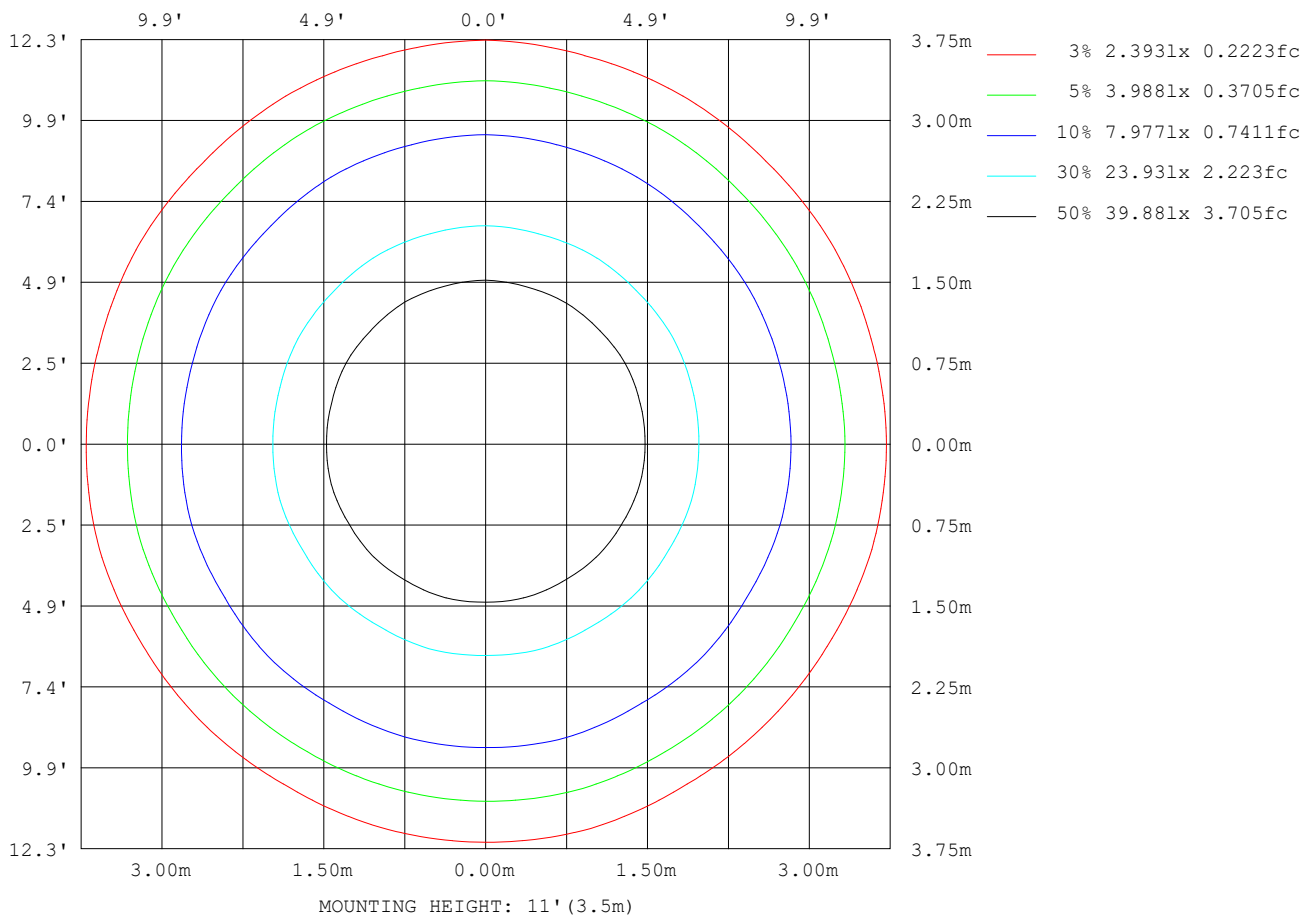
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Jone
 Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm		
NAME: PFM-10W	TYPE:3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jone
Test Date:2021-03-11

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:230.10V I:0.0442A P:9.3187W PF:0.9157 Freq:50.00Hz Lamp Flux:923.371x1 lm		
NAME: PFM-10W	TYPE:3000K	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.:	SUR.:	Shielding Angle:

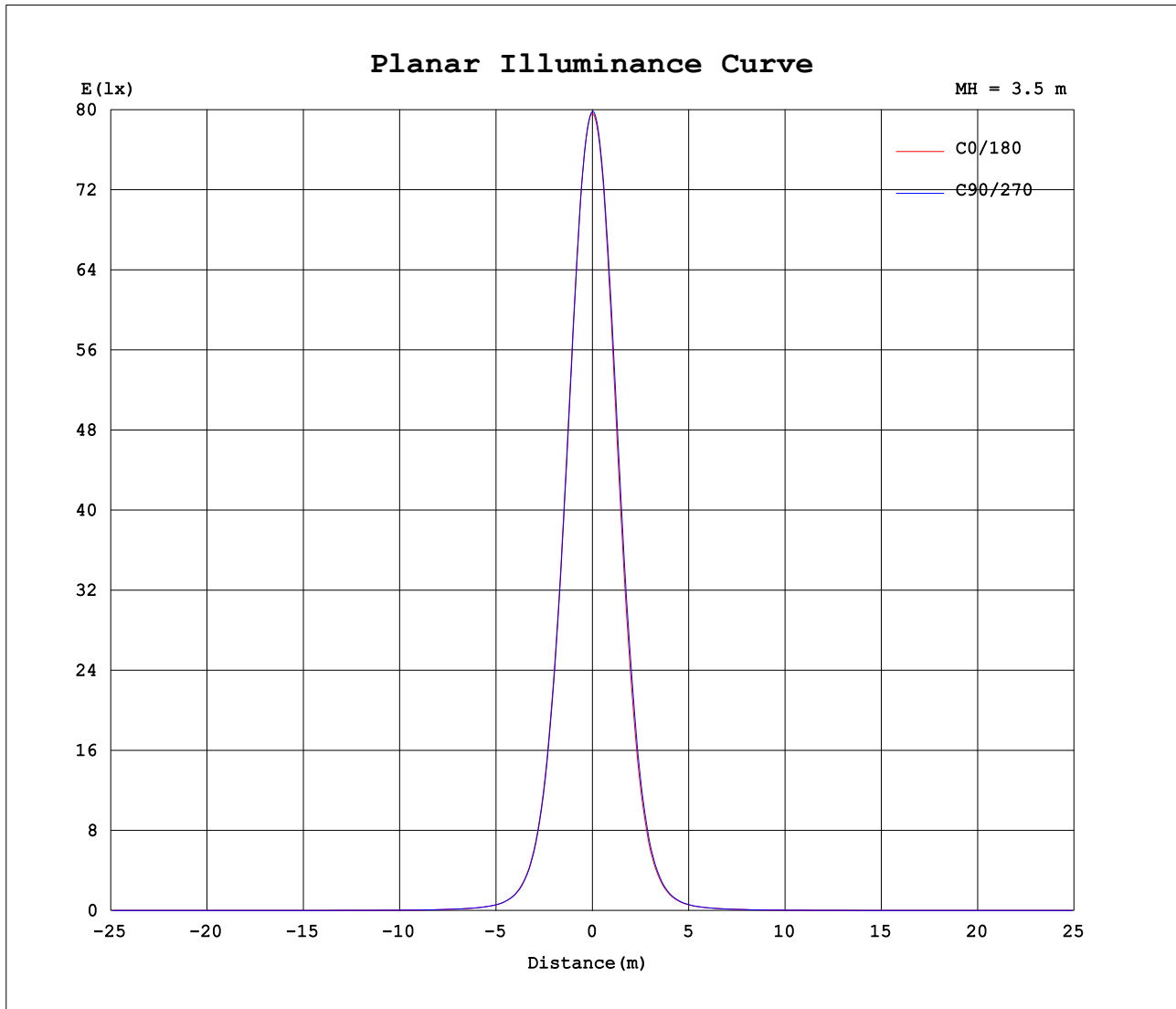
AvgL	cd/m2
L_0~180 (65) av	39421
L_0~180 (75) av	34134
L_0~180 (85) av	25772
L_90~270 (65) av	40026
L_90~270 (75) av	34310
L_90~270 (85) av	29028
L_45 (65) av	39804
L_45 (75) av	34335
L_45 (85) av	28597

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Jone
Test Date:2021-03-11

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: Jone
Test Date: 2021-03-11

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:

```