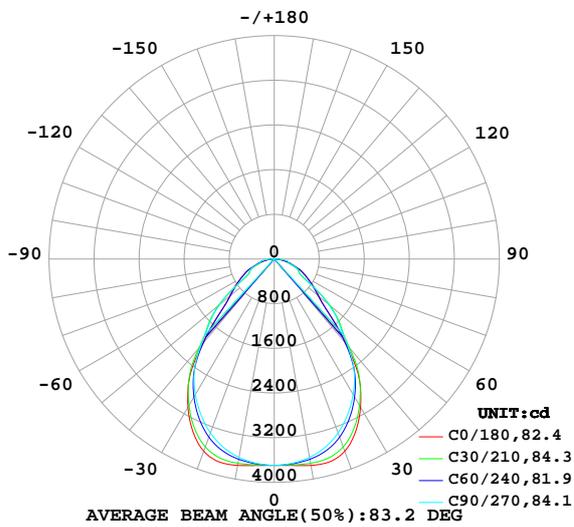


LUMINAIRE PHOTOMETRIC TEST REPORT

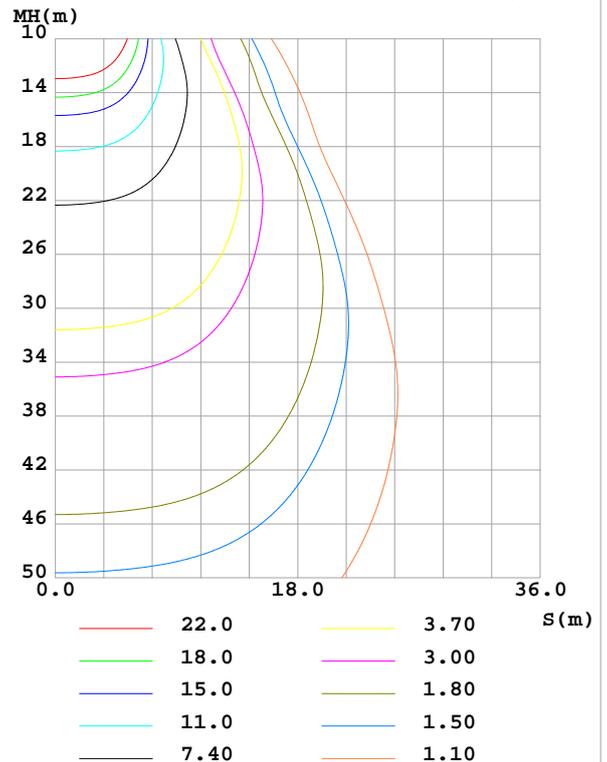
Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 121.87 lm/W			
MODEL	PL-60120-21M-WH16-SS-60W-02476	Imax(cd)	3768	S/MH(C0/180)	1.18
NOMINAL POWER(W)	60	LOR(%)	100.0	S/MH(C90/270)	1.15
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	7265.9	η UP, DN(C0-180)	0.0,50.0
NOMINAL FLUX(lm)	7265.9	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.0,50.0
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE(V)	229.8	η down(%)	100.0	CIBSE SHR MAX	1.15

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: JT
 Test Date: 2025-11-09
 Stability time: 0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity: 65.0%
 Test Distance: 9.180m [K=1.0000]
 Remarks: Stability time: 0 s

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum,lamp
10	3752	3678	3607	3678	3752	3678	3607	3678	0- 10	351.9	351.9	4.84,4.84
20	3664	3488	3315	3488	3664	3488	3315	3488	10- 20	1021	1373	18.9,18.9
30	3065	2942	2804	2942	3065	2942	2804	2942	20- 30	1491	2864	39.4,39.4
40	1998	2020	2035	2020	1998	2020	2035	2020	30- 40	1581	4445	61.2,61.2
50	1040	1152	1254	1152	1040	1152	1254	1152	40- 50	1179	5623	77.4,77.4
60	676.7	597.9	537.0	597.9	676.7	597.9	537.0	597.9	50- 60	747.8	6371	87.7,87.7
70	384.6	374.3	368.4	374.3	384.6	374.3	368.4	374.3	60- 70	495.1	6866	94.5,94.5
80	157.2	198.3	246.0	198.3	157.2	198.3	246.0	198.3	70- 80	290.3	7157	98.5,98.5
90	0	0.1811	3.154	0.1811	0	0.1811	3.154	0.1811	80- 90	109.4	7266	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): 5091.1 lm

%lum = 70.1%

%lamp = 70.1%

Conical surface Flux(130deg): 6639.7 lm

%lum = 91.4%

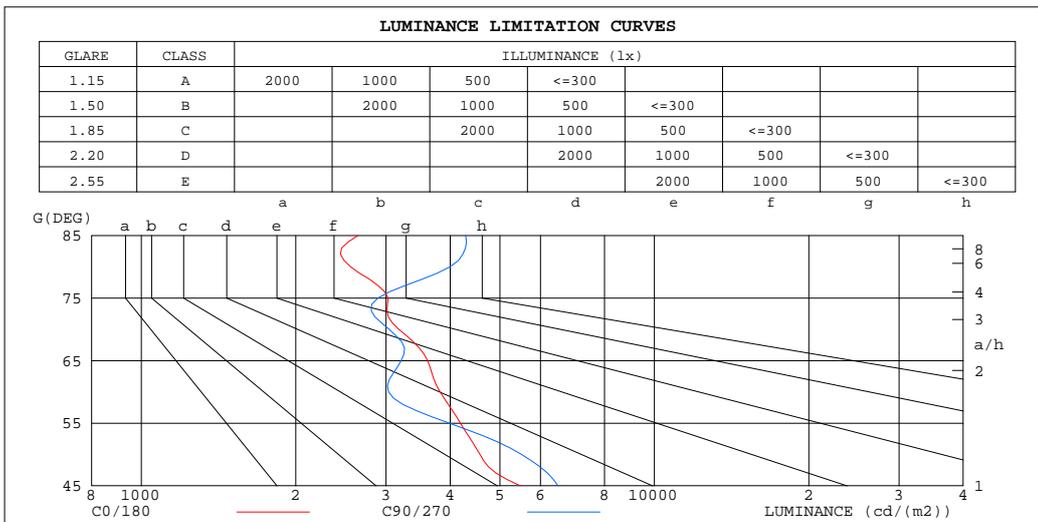
%lamp = 91.4%

C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:JT
 Test Date:2025-11-09
 Stability time:0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity:65.0%
 Test Distance:9.180m [K=1.0000]
 Remarks: Stability time:0 s

LUMINANCE LIMITATION CURVES

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2647	4288
80	2558	4002
75	3028	2893
70	3177	3042
65	3613	3211
60	3823	3034
55	4188	3985
50	4572	5510
45	5480	6494

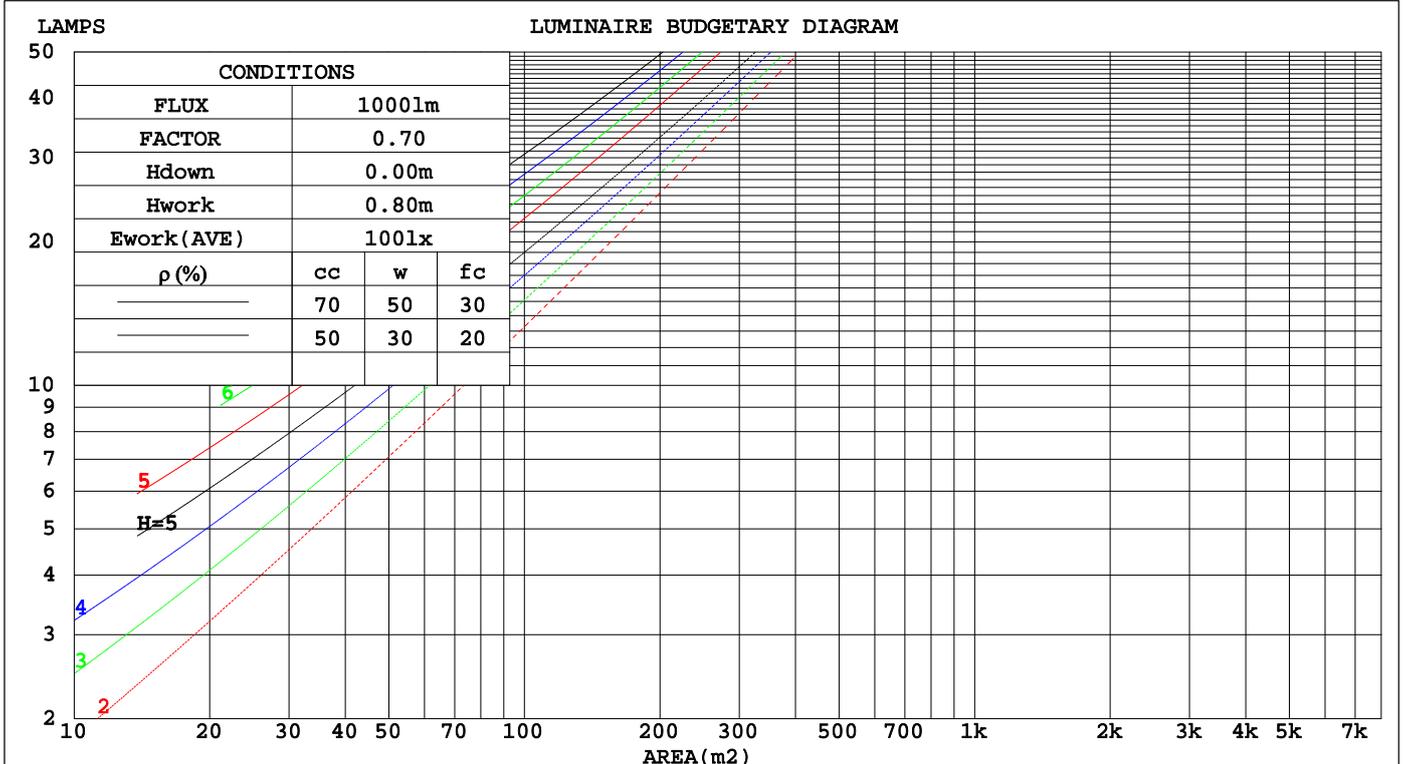
C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:JT
 Test Date:2025-11-09
 Stability time:0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity:65.0%
 Test Distance:9.180m [K=1.0000]
 Remarks: Stability time:0 s

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:

ρcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
ρpw	0															
ρfc	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	1.06	1.03	.99	1.04	1.01	.98	.90	.97	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.95	.89	.84	.93	.88	.83	.90	.85	.81	.86	.83	.79	.84	.80	.78	.76
3.0	.85	.78	.72	.84	.77	.72	.81	.75	.71	.78	.73	.69	.76	.72	.68	.66
4.0	.77	.69	.63	.76	.68	.63	.73	.67	.62	.71	.66	.61	.69	.64	.61	.59
5.0	.70	.62	.56	.69	.61	.56	.67	.60	.55	.65	.59	.55	.63	.58	.54	.52
6.0	.64	.56	.50	.63	.55	.50	.61	.54	.49	.60	.54	.49	.58	.53	.49	.47
7.0	.59	.51	.45	.58	.50	.45	.56	.50	.45	.55	.49	.44	.54	.48	.44	.42
8.0	.54	.46	.41	.53	.46	.41	.52	.45	.41	.51	.45	.40	.50	.44	.40	.38
9.0	.50	.42	.37	.49	.42	.37	.48	.42	.37	.47	.41	.37	.46	.41	.37	.35
10.0	.46	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.43	.38	.34	.32



C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:JT
 Test Date:2025-11-09
 Stability time:0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity:65.0%
 Test Distance:9.180m [K=1.0000]
 Remarks: Stability time:0 s

WEC AND CCEC

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.264	.150	.047	.257	.146	.046	.244	.140	.045	.232	.134	.043	.221	.128	.041	
2.0	.249	.136	.042	.243	.134	.041	.231	.129	.040	.221	.124	.039	.211	.120	.038	
3.0	.232	.124	.037	.227	.122	.037	.217	.118	.036	.208	.114	.035	.200	.111	.034	
4.0	.217	.113	.033	.212	.111	.033	.204	.108	.032	.196	.105	.032	.188	.102	.031	
5.0	.203	.103	.030	.199	.102	.030	.191	.099	.029	.184	.097	.029	.177	.095	.028	
6.0	.190	.095	.027	.186	.094	.027	.180	.092	.027	.173	.090	.026	.167	.088	.026	
7.0	.178	.088	.025	.175	.087	.025	.169	.086	.025	.163	.084	.024	.158	.082	.024	
8.0	.168	.082	.023	.165	.081	.023	.160	.080	.023	.155	.078	.023	.150	.077	.022	
9.0	.159	.077	.021	.156	.076	.021	.151	.075	.021	.147	.073	.021	.142	.072	.021	
10.0	.150	.072	.020	.148	.071	.020	.144	.070	.020	.139	.069	.020	.135	.068	.020	

ρ _{cc}	80%			70%			50%			30%			10%			0
ρ _w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρ _{fc}	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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.103	.143	.114	.089	.098	.079	.062	.056	.046	.036	.018	.015	.012	
3.0	.157	.114	.080	.135	.098	.069	.093	.068	.048	.053	.040	.029	.017	.013	.009	
4.0	.149	.100	.063	.128	.087	.055	.088	.060	.039	.051	.035	.023	.016	.012	.008	
5.0	.141	.089	.051	.121	.077	.045	.084	.054	.031	.048	.032	.019	.016	.010	.006	
6.0	.134	.081	.043	.115	.070	.037	.080	.049	.026	.046	.029	.016	.015	.009	.005	
7.0	.128	.074	.036	.110	.064	.031	.076	.045	.022	.044	.026	.013	.014	.009	.004	
8.0	.122	.068	.031	.105	.059	.027	.072	.041	.019	.042	.024	.011	.014	.008	.004	
9.0	.116	.063	.027	.100	.055	.024	.069	.038	.017	.040	.023	.010	.013	.007	.003	
10.0	.111	.059	.024	.096	.051	.021	.066	.036	.015	.039	.021	.009	.013	.007	.003	

C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:JT
 Test Date:2025-11-09
 Stability time:0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity:65.0%
 Test Distance:9.180m [K=1.0000]
 Remarks: Stability time:0 s

UGR(Unified Glare Rating) Table

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	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	14.5	15.8	14.8	16.0	16.2	14.5	15.8	14.7	16.0	16.2
3H	15.5	16.7	15.8	16.9	17.2	15.5	16.7	15.7	16.9	17.1
4H	15.9	17.1	16.2	17.3	17.5	15.9	17.0	16.2	17.3	17.5
6H	16.2	17.3	16.6	17.6	17.9	16.4	17.5	16.8	17.8	18.1
8H	16.4	17.4	16.7	17.7	18.0	16.7	17.8	17.1	18.1	18.4
12H	16.5	17.5	16.8	17.8	18.0	17.0	18.0	17.3	18.3	18.6
4H 2H	14.8	16.0	15.1	16.2	16.5	14.8	16.0	15.1	16.2	16.5
3H	16.0	17.0	16.3	17.3	17.6	16.0	17.1	16.4	17.3	17.6
4H	16.5	17.4	16.9	17.7	18.1	16.6	17.6	17.0	17.9	18.2
6H	17.1	17.9	17.5	18.2	18.6	17.3	18.2	17.7	18.5	18.9
8H	17.3	18.0	17.7	18.4	18.8	17.7	18.5	18.1	18.8	19.2
12H	17.4	18.1	17.9	18.5	18.9	18.0	18.7	18.5	19.1	19.5
8H 4H	16.7	17.5	17.2	17.9	18.2	16.8	17.6	17.3	18.0	18.3
6H	17.6	18.2	18.0	18.6	19.0	17.7	18.3	18.1	18.7	19.1
8H	17.9	18.5	18.4	18.9	19.3	18.2	18.7	18.6	19.1	19.6
12H	18.2	18.7	18.7	19.1	19.6	18.6	19.1	19.1	19.5	20.0
12H 4H	16.8	17.5	17.2	17.8	18.2	16.9	17.6	17.3	18.0	18.4
6H	17.6	18.2	18.1	18.6	19.1	17.8	18.3	18.2	18.8	19.2
8H	18.1	18.5	18.5	19.0	19.5	18.3	18.8	18.7	19.2	19.7

Variations with the observer position at spacings(CIE Pub.117):		
S = 1.0H	+ 0.4 / - 0.5	+ 0.3 / - 0.4
1.5H	+ 0.4 / - 0.4	+ 0.3 / - 0.2
2.0H	+ 0.7 / - 0.6	+ 0.8 / - 0.7

CIE Pub.117, 7266 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 6.9)
Area: 0.354 m2

C Range: 0 - 90DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3°C
Operators:JT
Test Date:2025-11-09
Stability time:0 s

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
Humidity:65.0%
Test Distance:9.180m [K=1.0000]
Remarks: Stability time:0 s

UTILIZATION FACTORS TABLE

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:

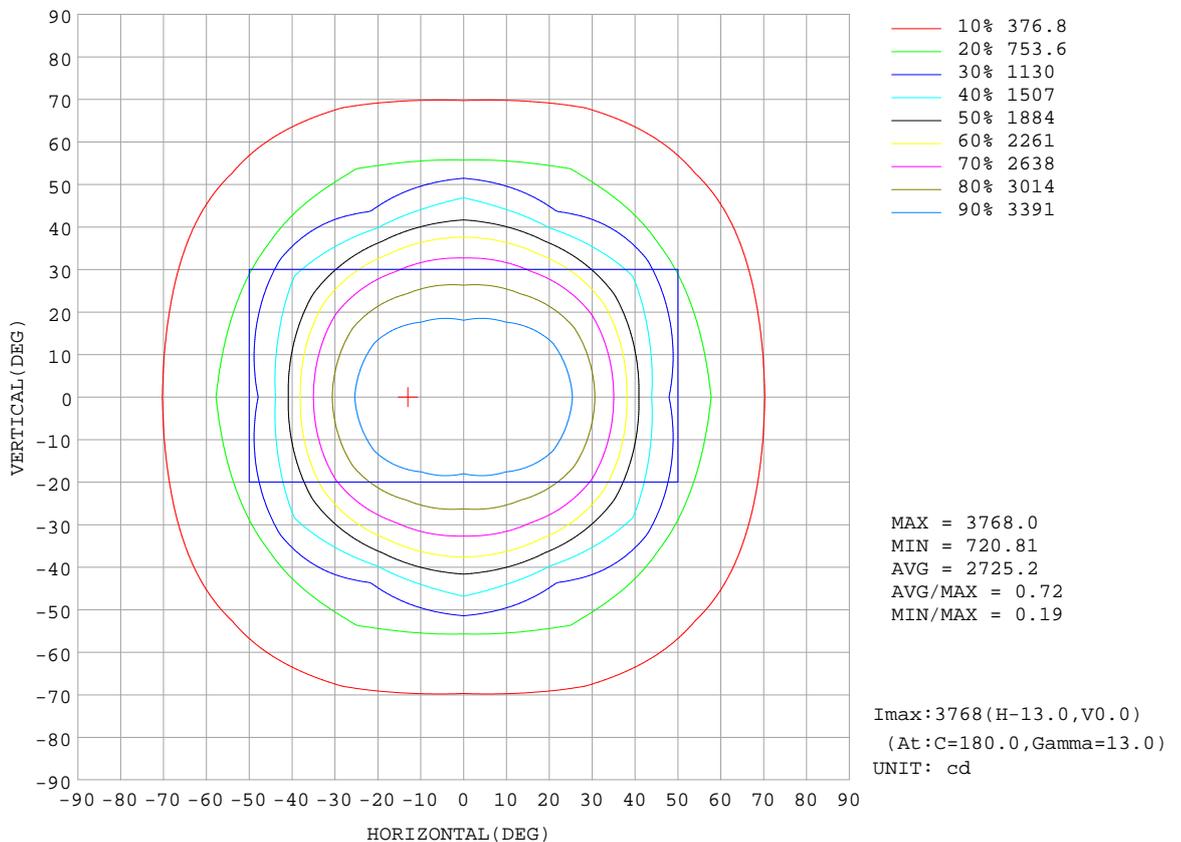
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	67	58	52	67	57	52	66	57	51	46
0.80	77	67	61	76	67	61	74	66	61	55
1.00	84	75	69	83	75	69	81	75	68	62
1.25	90	82	76	89	81	76	87	80	75	69
1.50	95	87	81	93	86	80	90	84	79	73
2.00	100	93	88	98	92	87	95	90	86	79
2.50	103	97	92	101	95	91	98	93	89	82
3.00	106	100	96	104	99	95	100	96	92	85
4.00	109	104	100	107	103	99	103	99	96	88
5.00	111	107	104	108	105	102	104	101	99	90
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:JT
 Test Date:2025-11-09
 Stability time:0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity:65.0%
 Test Distance:9.180m [K=1.0000]
 Remarks: Stability time:0 s

ISOCANDELA DIAGRAM

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:



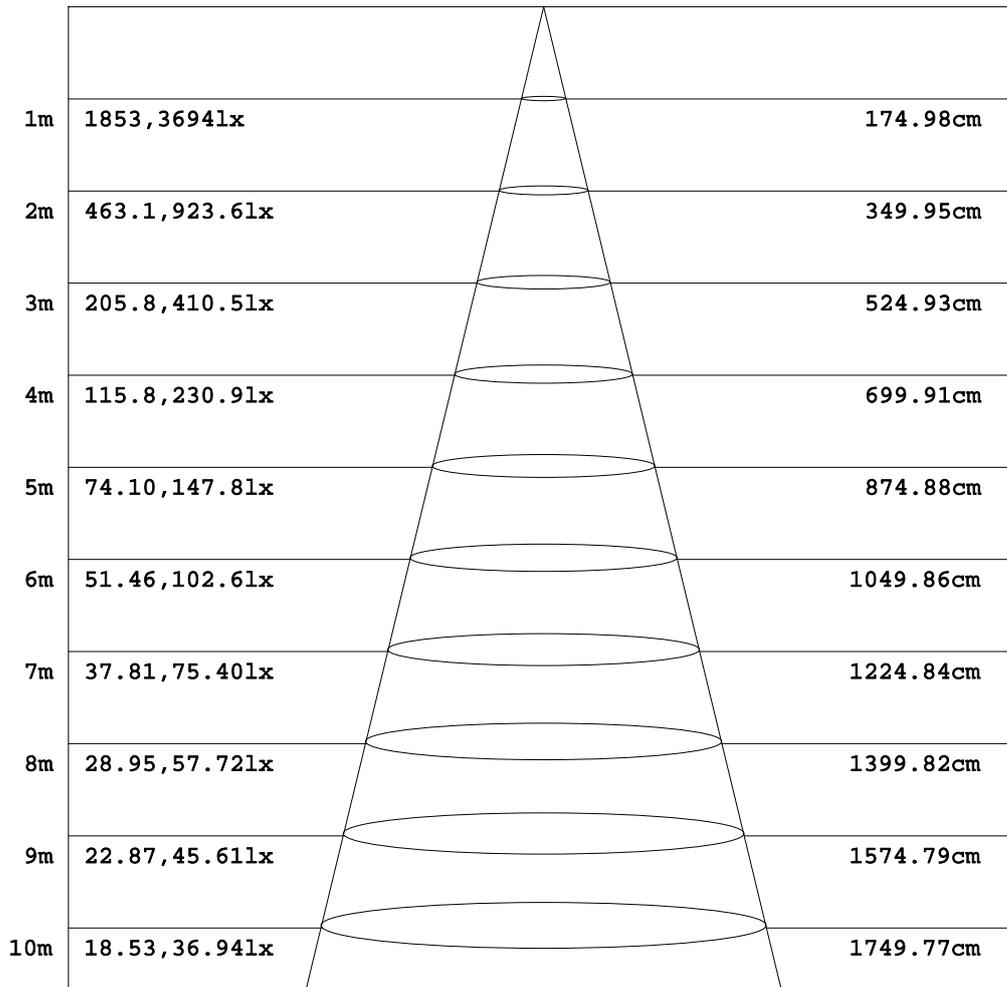
C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: JT
 Test Date: 2025-11-09
 Stability time: 0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity: 65.0%
 Test Distance: 9.180m [K=1.0000]
 Remarks: Stability time: 0 s

AAI Figure

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:

Flux out:4718 lm



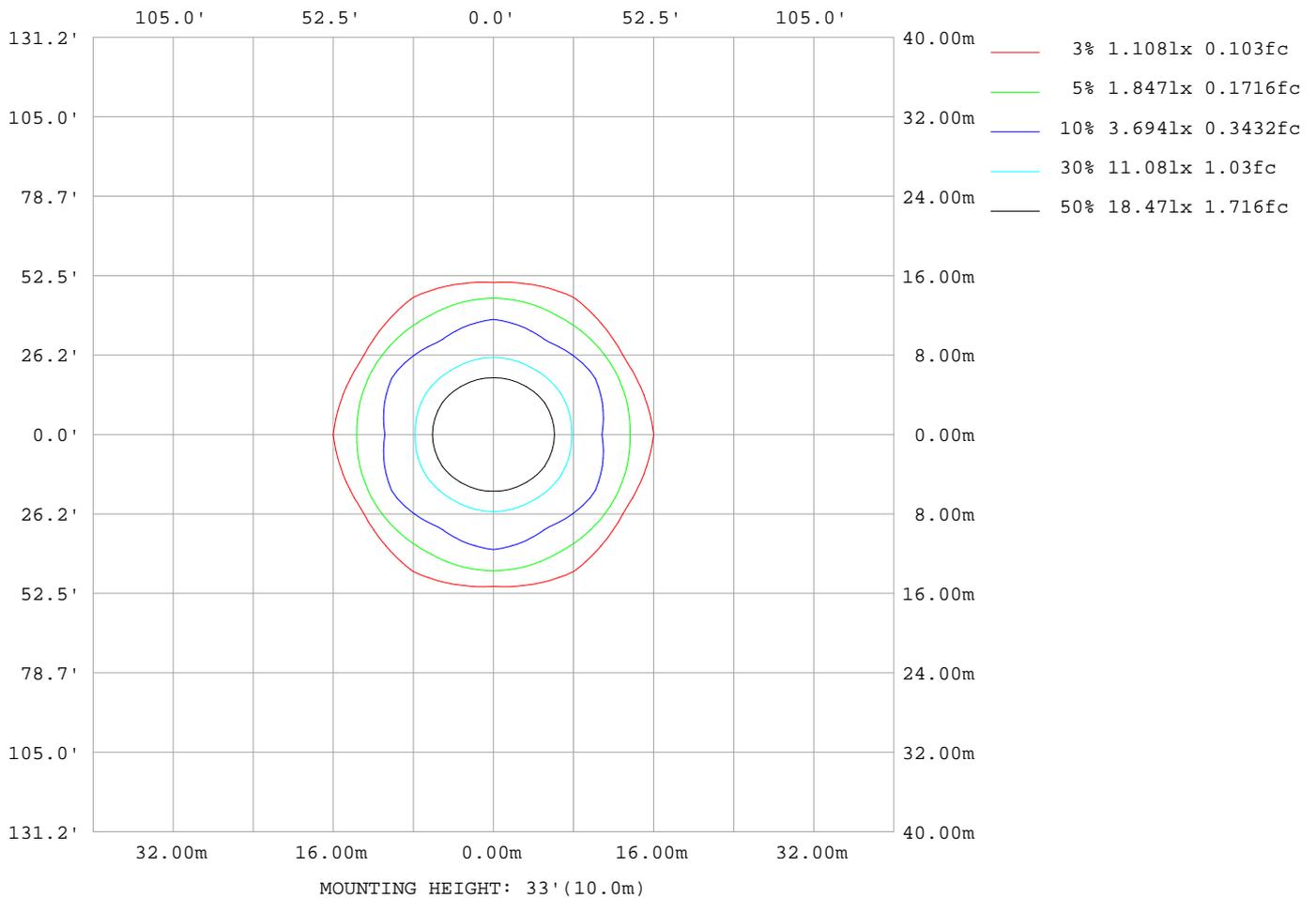
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:JT
 Test Date:2025-11-09
 Stability time:0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity:65.0%
 Test Distance:9.180m [K=1.0000]
 Remarks: Stability time:0 s

ISOLUX DIAGRAM

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:



C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:JT
 Test Date:2025-11-09
 Stability time:0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity:65.0%
 Test Distance:9.180m [K=1.0000]
 Remarks: Stability time:0 s

LED Avg.L Report

Test:U:231.06V I:0.2624A P:59.619W PF:0.9669 Freq:49.99Hz Lamp Flux:7265.9x1 lm		
NAME: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	TYPE:	WEIGHT:
SPEC.: PL-60120-M-CBST-120-2CCT(3000-4000) -UGR	DIM.: 595*1195	SERIAL No.:
MFR.: JT	SUR.: 0.595*1.195	Shielding Angle:

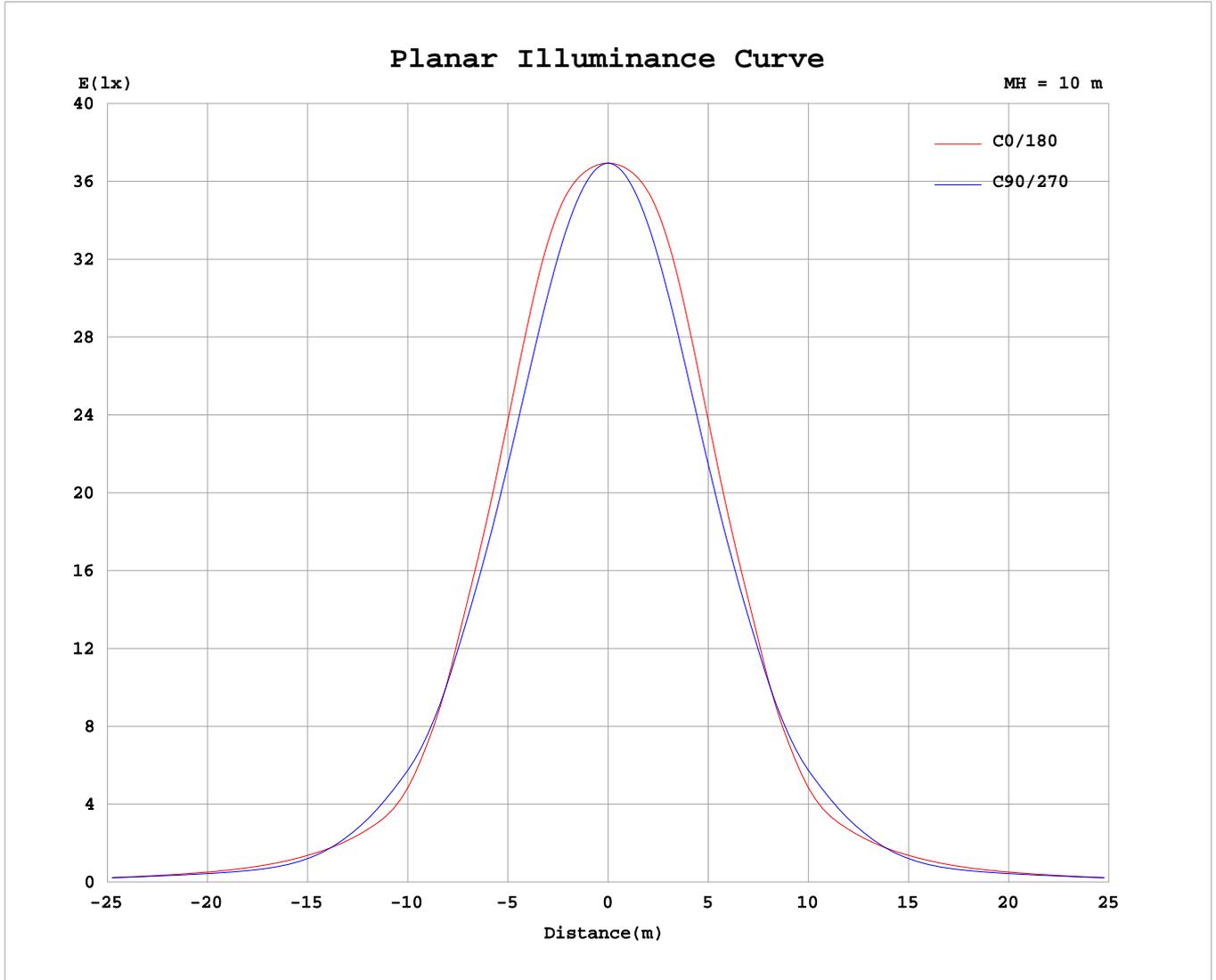
AvgL	cd/m2
L_0~180(65)av	3613
L_0~180(75)av	3028
L_0~180(85)av	2647
L_90~270(65)av	3211
L_90~270(75)av	2893
L_90~270(85)av	4288
L_45(65)av	3398
L_45(75)av	2915
L_45(85)av	3325

Standard: GB/T 29293-2012

C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3°C
 Operators:JT
 Test Date:2025-11-09
 Stability time:0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity:65.0%
 Test Distance:9.180m [K=1.0000]
 Remarks: Stability time:0 s

Planar Illuminance Curve



C Range: 0 - 90DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3°C
 Operators: JT
 Test Date: 2025-11-09
 Stability time: 0 s

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.494
 Humidity: 65.0%
 Test Distance: 9.180m [K=1.0000]
 Remarks: Stability time: 0 s

