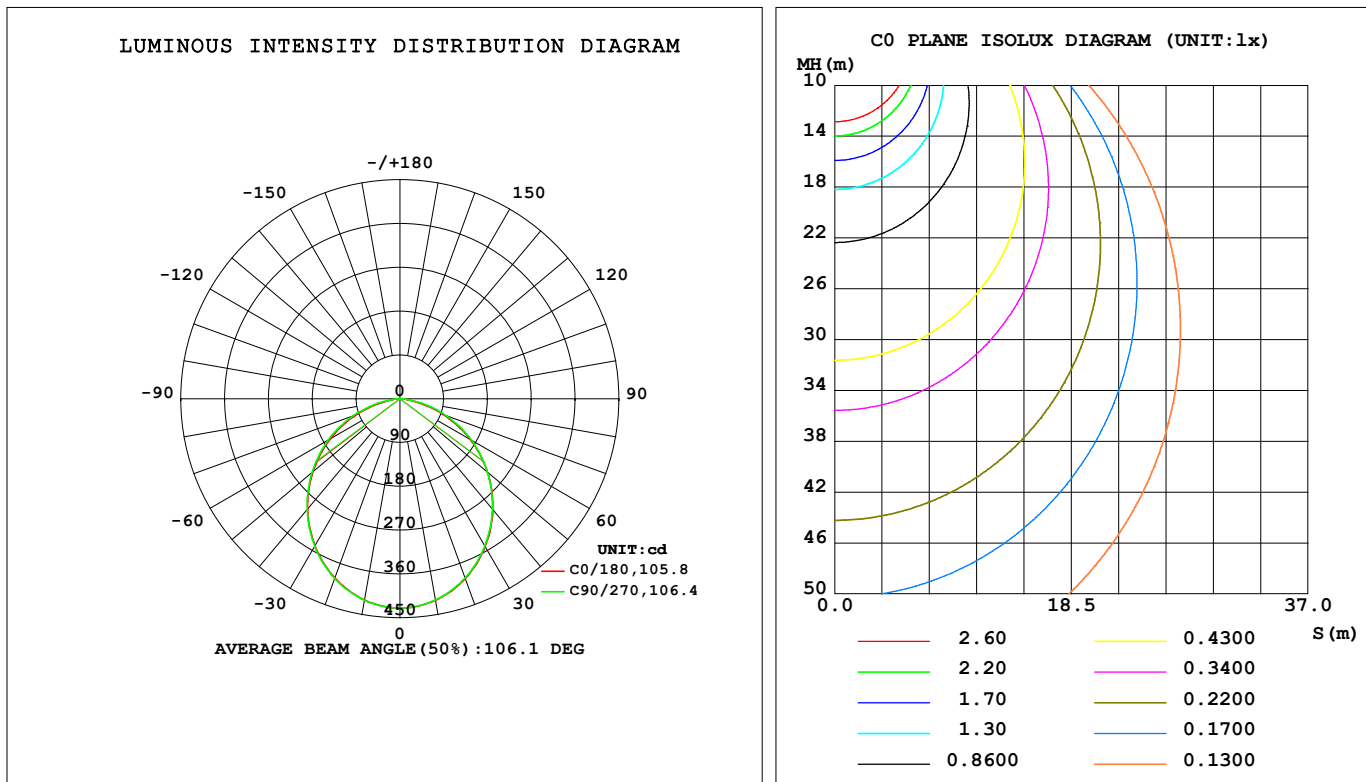


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 82.89 lm/W
MODEL	G1 120MM 2500LM 830 SNC	I _{max} (cd)	429.9	S/MH (C0/180)	1.21	
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.22	
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	1124.2	η UP,DN (C0-180)	0.0,50.0	
NOMINAL FLUX (lm)	1124.23	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.0	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.25	
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [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	420.4	420.1	419.8	419.7	419.8	420.1	420.3	420.6	0- 10	40.57	40.57	3.61,3.61
20	392.9	392.3	391.7	391.4	391.7	392.2	392.7	393.0	10- 20	115.1	155.7	13.8,13.8
30	350.6	349.9	349.0	348.5	349.0	349.6	350.3	350.8	20- 30	171.6	327.3	29.1,29.1
40	297.0	296.5	295.5	295.0	295.3	296.2	297.0	297.5	30- 40	202.7	530.0	47.1,47.1
50	234.9	235.3	234.8	233.8	233.3	234.9	236.1	236.3	40- 50	205.4	735.4	65.4,65.4
60	166.7	168.5	169.2	167.1	165.9	168.6	170.6	169.8	50- 60	180.6	916.0	81.5,81.5
70	94.55	97.96	100.6	96.88	93.93	98.01	101.6	98.79	60- 70	131.7	1048	93.2,93.2
80	26.05	30.58	31.92	29.94	25.96	30.70	32.59	30.69	70- 80	66.45	1114	99.1,99.1
90	0.4755	0.5098	0.5284	0.5129	0.5159	0.5222	0.5439	0.5347	80- 90	10.05	1124	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): 634.12 lm

%lum = 56.4%

%lamp = 56.4%

Conical surface Flux(120deg): 916.01 lm

%lum = 81.5%

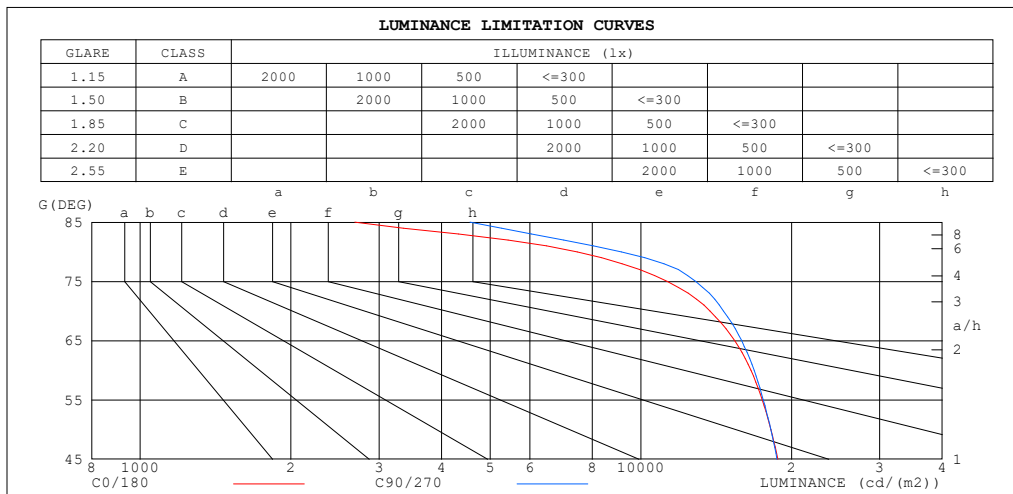
%lamp = 81.5%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2686	4562
80	7465	9144
75	11293	12872
70	13757	14628
65	15402	15902
60	16593	16840
55	17480	17568
50	18187	18178
45	18782	18714

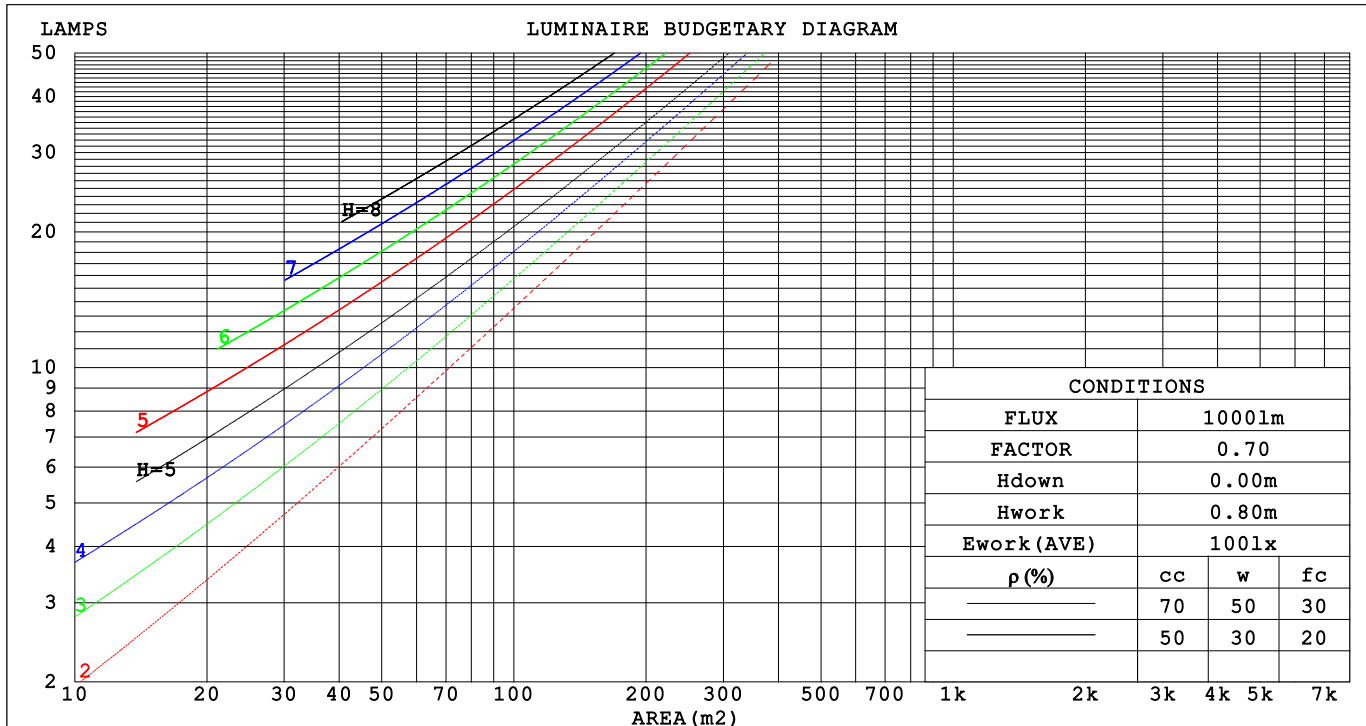
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	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: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	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	.291	.166	.052	.284	.162	.052	.271	.156	.050	.259	.149	.048	.248	.144	.046	
2.0	.279	.153	.047	.273	.150	.046	.261	.145	.045	.251	.141	.044	.241	.136	.043	
3.0	.261	.139	.042	.255	.137	.041	.245	.133	.040	.236	.129	.040	.227	.126	.039	
4.0	.242	.126	.037	.237	.124	.037	.228	.121	.036	.220	.118	.036	.212	.115	.035	
5.0	.225	.115	.033	.221	.113	.033	.212	.111	.033	.205	.108	.032	.198	.106	.032	
6.0	.209	.105	.030	.205	.104	.030	.198	.102	.030	.191	.099	.029	.185	.098	.029	
7.0	.195	.096	.027	.192	.096	.027	.185	.094	.027	.179	.092	.027	.174	.090	.027	
8.0	.183	.089	.025	.180	.088	.025	.174	.087	.025	.168	.085	.025	.163	.084	.024	
9.0	.171	.083	.023	.169	.082	.023	.164	.081	.023	.159	.080	.023	.154	.078	.023	
10.0	.161	.077	.021	.159	.077	.021	.154	.076	.021	.150	.074	.021	.146	.073	.021	

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	.179	.156	.136	.153	.134	.117	.105	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.171	.132	.100	.146	.114	.086	.100	.079	.060	.058	.046	.035	.019	.015	.011	
3.0	.163	.114	.076	.139	.099	.066	.096	.068	.046	.055	.040	.027	.018	.013	.009	
4.0	.155	.101	.059	.133	.087	.052	.092	.061	.036	.053	.036	.021	.017	.012	.007	
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.029	.051	.032	.017	.016	.010	.006	
6.0	.141	.082	.040	.121	.071	.035	.083	.050	.025	.048	.029	.015	.016	.010	.005	
7.0	.134	.075	.034	.115	.065	.029	.080	.046	.021	.046	.027	.012	.015	.009	.004	
8.0	.128	.069	.029	.110	.060	.025	.076	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.122	.064	.026	.105	.056	.022	.073	.039	.016	.042	.023	.009	.014	.008	.003	
10.0	.116	.060	.023	.100	.052	.020	.069	.037	.014	.041	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm											
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K						TYPE:LED			WEIGHT:		
SPEC.:						DIM.:			SERIAL No.:1		
MFR.: DARKON						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	22.4	23.9	22.6	24.1	24.3	22.4	23.9	22.7	24.1	24.3	
	23.7	25.0	24.0	25.3	25.5	23.8	25.2	24.1	25.4	25.7	
	24.1	25.4	24.4	25.6	25.9	24.3	25.6	24.6	25.9	26.1	
	24.3	25.5	24.6	25.8	26.0	24.6	25.8	24.9	26.1	26.4	
	24.3	25.4	24.6	25.7	26.0	24.6	25.8	24.9	26.1	26.4	
	24.2	25.4	24.6	25.7	26.0	24.6	25.7	24.9	26.0	26.3	
4H	2H	22.9	24.2	23.3	24.5	24.7	23.0	24.3	23.3	24.5	24.8
	3H	24.4	25.5	24.8	25.8	26.1	24.5	25.7	24.9	26.0	26.3
	4H	24.9	26.0	25.3	26.3	26.6	25.2	26.2	25.5	26.5	26.8
	6H	25.2	26.1	25.6	26.5	26.8	25.5	26.4	25.9	26.8	27.1
	8H	25.2	26.1	25.6	26.4	26.8	25.5	26.4	26.0	26.8	27.1
	12H	25.2	26.0	25.6	26.3	26.8	25.5	26.3	26.0	26.7	27.1
8H	4H	25.1	26.0	25.5	26.3	26.7	25.3	26.2	25.7	26.6	26.9
	6H	25.5	26.2	25.9	26.6	27.0	25.8	26.5	26.2	26.9	27.3
	8H	25.5	26.1	26.0	26.6	27.0	25.8	26.5	26.3	26.9	27.3
	12H	25.5	26.0	26.0	26.5	27.0	25.9	26.4	26.3	26.8	27.3
12H	4H	25.1	25.9	25.5	26.3	26.7	25.3	26.1	25.7	26.5	26.9
	6H	25.5	26.1	25.9	26.5	27.0	25.8	26.4	26.2	26.8	27.3
	8H	25.5	26.1	26.0	26.5	27.0	25.9	26.4	26.3	26.8	27.3
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.2					
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.3					
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3					

CIE Pub.117, 1124 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.4)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

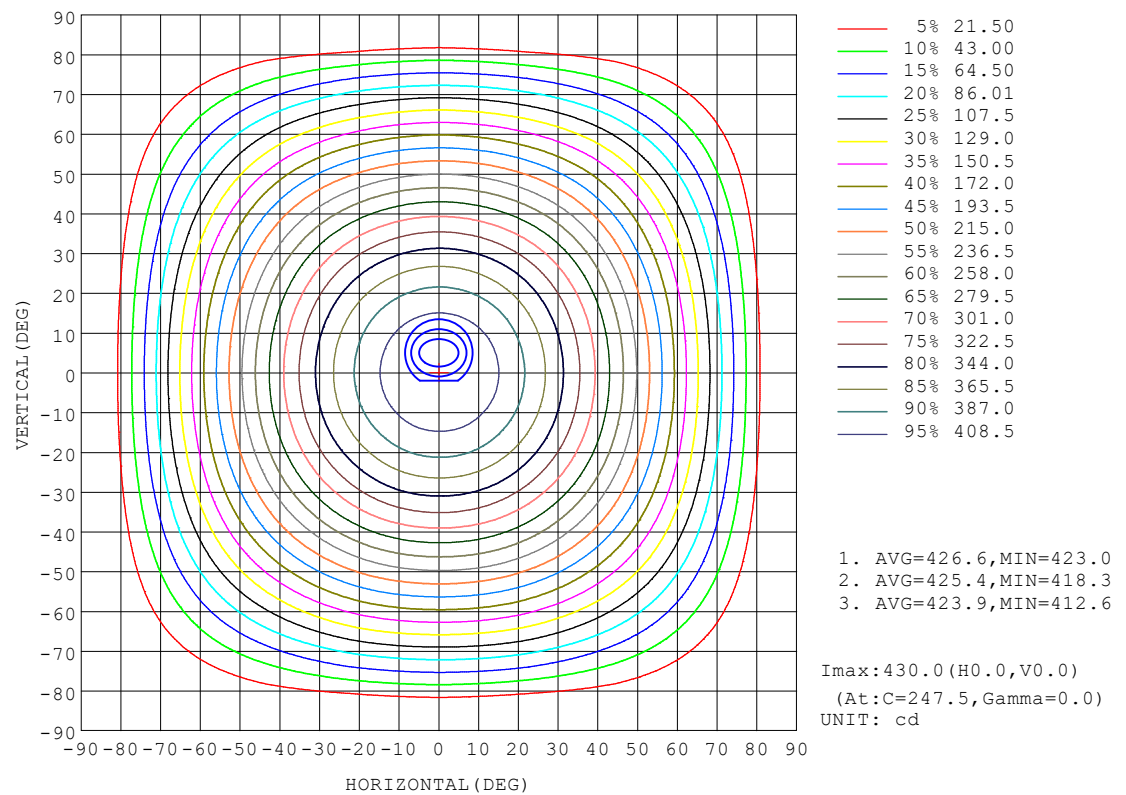
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	58	47	41	57	47	40	34
0.80	69	58	51	68	57	50	66	56	50	43
1.00	77	67	60	76	66	59	74	67	59	52
1.25	85	74	68	83	74	67	80	72	66	59
1.50	89	80	73	88	79	73	85	77	72	64
2.00	96	88	82	94	87	81	91	85	80	72
2.50	100	93	87	98	91	86	94	89	84	76
3.00	103	97	91	101	95	90	97	92	88	80
4.00	107	102	97	105	100	96	101	97	93	85
5.00	109	105	101	107	103	99	103	99	96	87
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:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

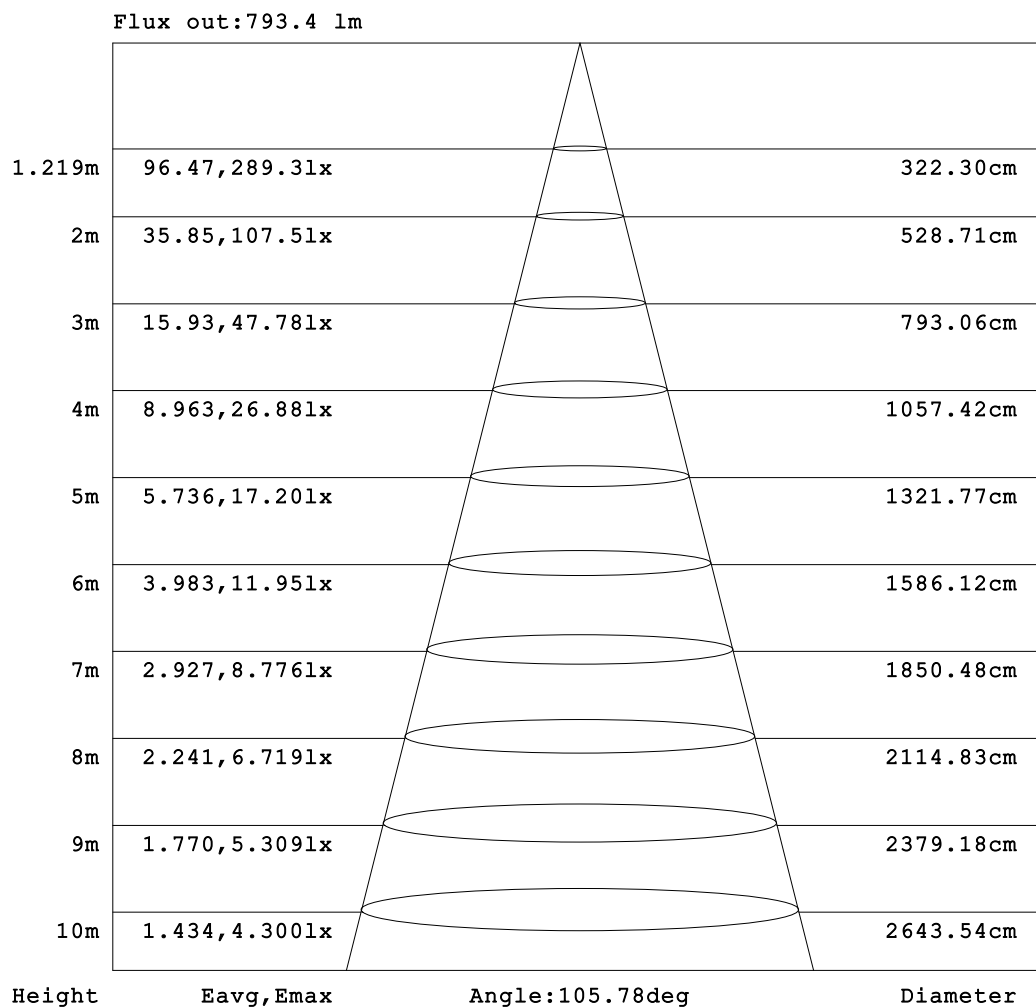


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

AAI Figure

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



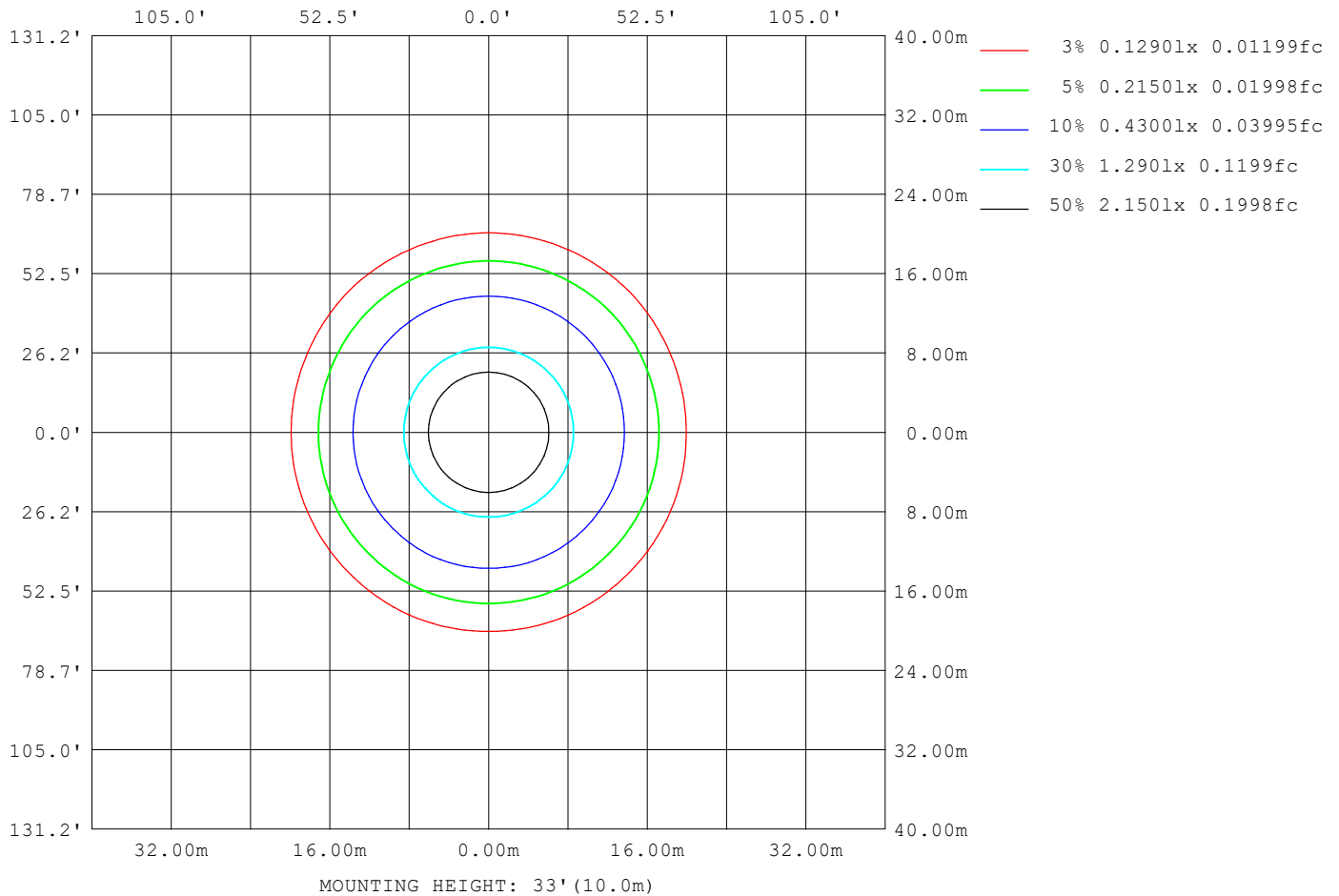
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:239.96V I:0.0615A P:13.563W PF:0.9185 Freq:50.09Hz Lamp Flux:1124.23x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_OPAL V_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

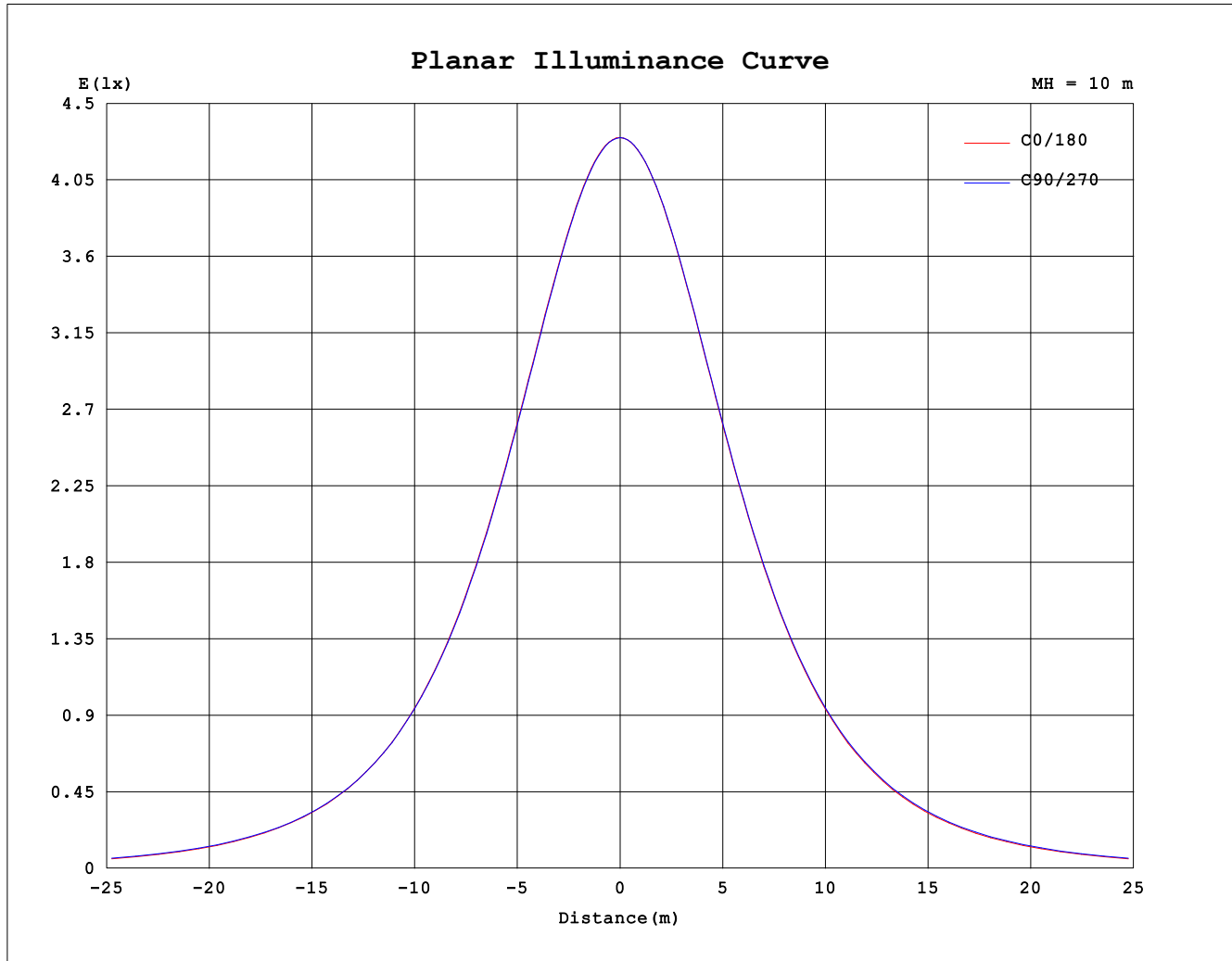
AvgL	cd/m2
L_0~180 (65) av	15361
L_0~180 (75) av	11232
L_0~180 (85) av	2744
L_90~270 (65) av	15972
L_90~270 (75) av	12906
L_90~270 (85) av	4560
L_45 (65) av	15706
L_45 (75) av	12086
L_45 (85) av	3635

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:25 October 2019

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 25 October 2019

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 7.220m [K=1.0000]
Remarks:

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

```