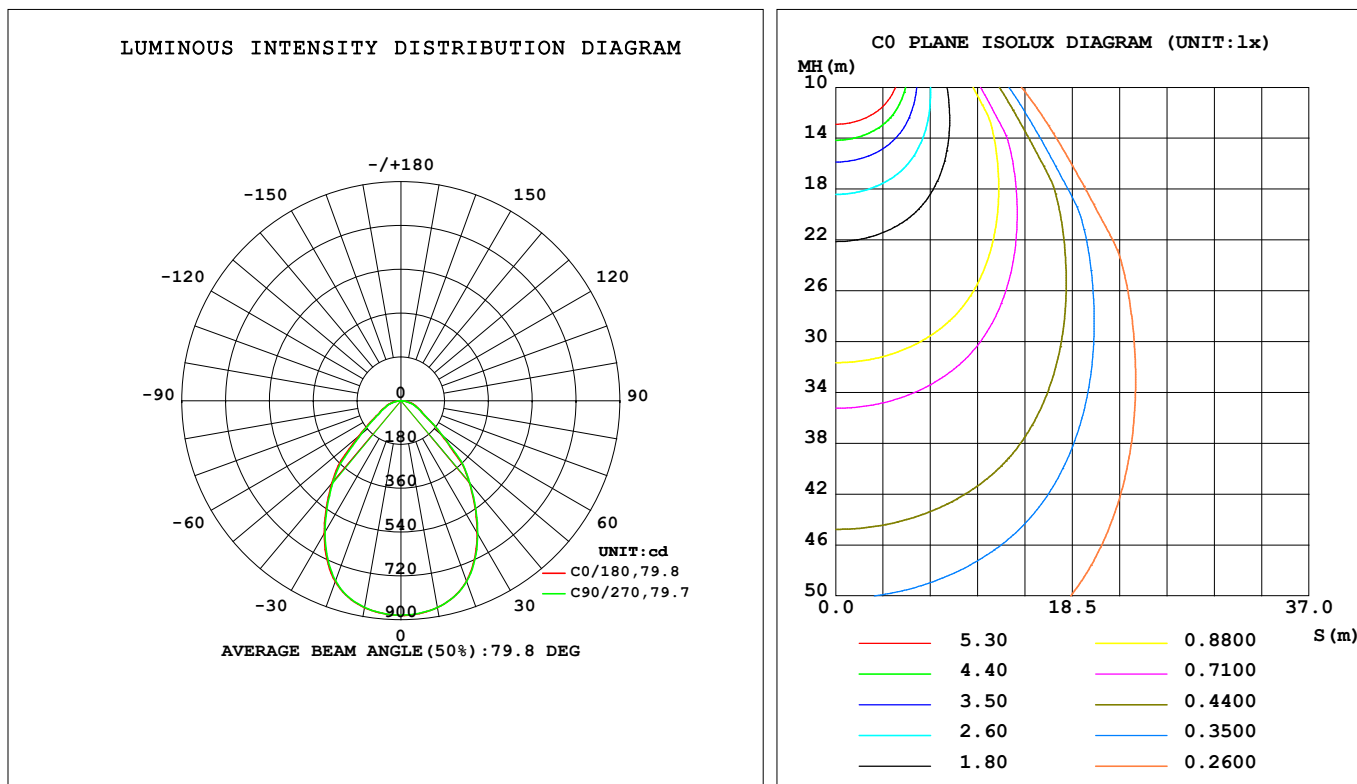


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 75.95 lm/W
MODEL	G1 120MM 2500LM 840 SNC	I _{max} (cd)	881.8	S/MH (C0/180)	1.10	
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.09	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	1504.4	η UP,DN (C0-180)	0.0, 50.3	
NOMINAL FLUX (lm)	1504.36	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0, 49.7	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00	
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX	1.15	



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 22 November 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	862.7	862.7	862.4	861.2	863.2	862.4	861.9	861.6	0- 10	83.21	83.21	5.53,5.53
20	788.5	790.0	790.4	788.7	790.4	789.2	786.8	785.8	10- 20	234.7	317.9	21.1,21.1
30	627.2	631.6	631.2	628.4	631.1	630.3	624.2	622.0	20- 30	328.3	646.2	43,43
40	437.4	435.3	441.3	439.4	441.7	433.0	433.8	432.6	30- 40	331.5	977.6	65,65
50	219.1	206.2	224.5	201.4	225.9	204.4	213.6	191.6	40- 50	249.8	1227	81.6,81.6
60	103.8	110.1	102.6	113.5	105.2	109.0	100.7	112.3	50- 60	135.8	1363	90.6,90.6
70	66.17	60.81	61.12	64.56	64.18	59.83	60.96	66.19	60- 70	82.20	1445	96.1,96.1
80	30.90	28.50	25.36	27.00	29.28	27.25	24.97	27.36	70- 80	48.25	1494	99.3,99.3
90	0.5253	0.3575	0.3357	0.3575	0.3823	0.3854	0.3606	0.3761	80- 90	10.73	1504	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): 1121.5 lm

%lum = 74.5%

%lamp = 74.5%

Conical surface Flux(120deg): 1363.2 lm

%lum = 90.6%

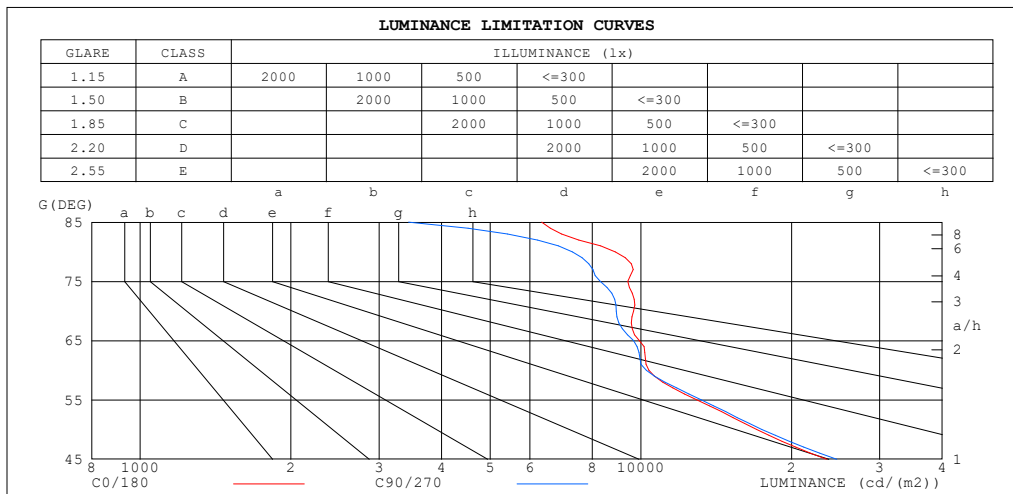
%lamp = 90.6%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:22 November 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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	6339	3439
80	8896	7301
75	9427	8302
70	9673	8934
65	9938	9667
60	10381	10258
55	12928	13200
50	17042	17466
45	23524	24646

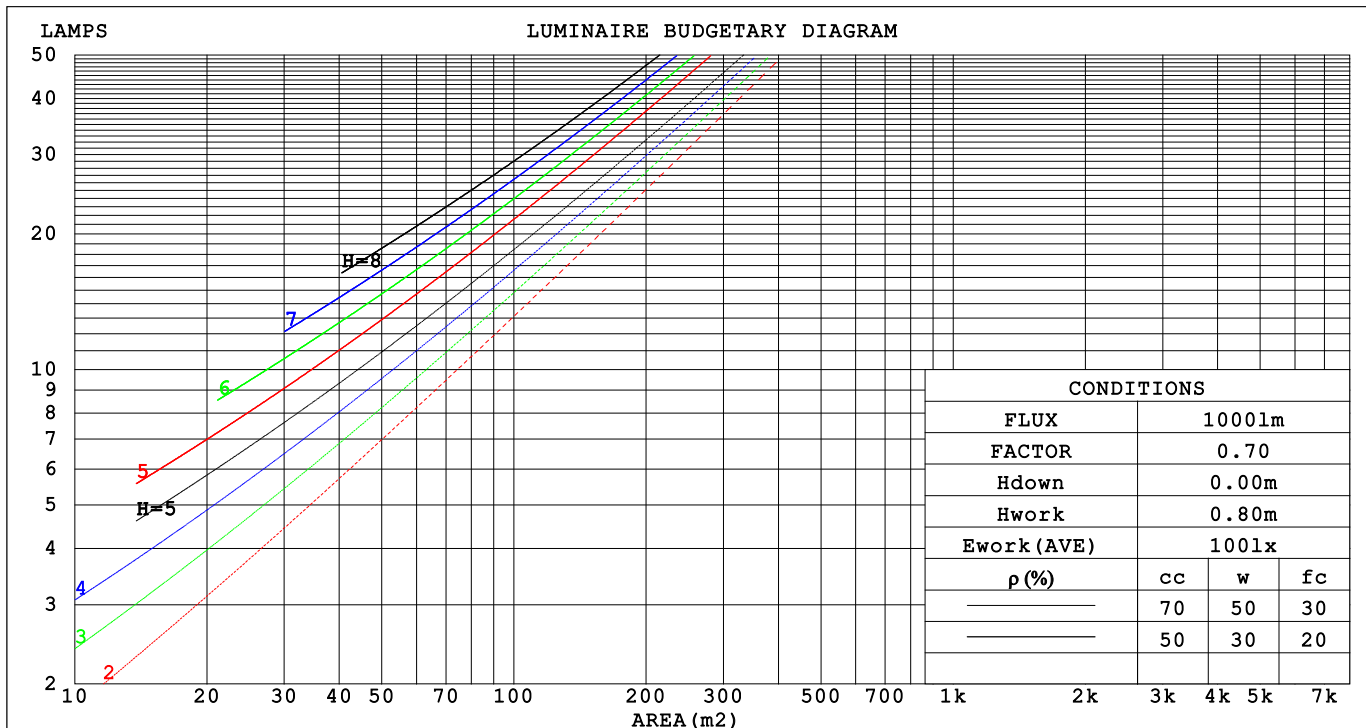
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:22 November 2019

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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
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:22 November 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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
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	.245	.139	.044	.238	.136	.043	.225	.129	.041	.213	.123	.039	.202	.117	.038	
2.0	.234	.128	.039	.228	.126	.039	.217	.121	.037	.207	.116	.036	.197	.112	.035	
3.0	.221	.117	.035	.215	.115	.035	.206	.111	.034	.197	.108	.033	.188	.104	.032	
4.0	.207	.108	.032	.203	.106	.031	.194	.103	.031	.186	.100	.030	.179	.097	.030	
5.0	.195	.099	.029	.191	.098	.028	.183	.095	.028	.176	.093	.028	.169	.090	.027	
6.0	.183	.092	.026	.179	.091	.026	.173	.089	.026	.166	.086	.025	.161	.085	.025	
7.0	.172	.085	.024	.169	.084	.024	.163	.083	.024	.158	.081	.024	.152	.079	.023	
8.0	.163	.080	.022	.160	.079	.022	.155	.077	.022	.150	.076	.022	.145	.074	.022	
9.0	.154	.075	.021	.152	.074	.021	.147	.073	.021	.142	.071	.020	.138	.070	.020	
10.0	.146	.070	.019	.144	.070	.019	.140	.068	.019	.136	.067	.019	.132	.066	.019	

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	.176	.157	.140	.150	.134	.120	.103	.093	.083	.059	.054	.048	.019	.017	.016	
2.0	.165	.132	.105	.141	.114	.091	.097	.079	.063	.056	.046	.037	.018	.015	.012	
3.0	.155	.114	.081	.133	.098	.070	.091	.068	.049	.053	.040	.029	.017	.013	.010	
4.0	.146	.100	.065	.126	.086	.056	.086	.060	.040	.050	.035	.023	.016	.011	.008	
5.0	.139	.089	.052	.119	.077	.046	.082	.054	.032	.048	.032	.019	.015	.010	.006	
6.0	.132	.080	.044	.113	.070	.038	.078	.049	.027	.045	.029	.016	.015	.009	.005	
7.0	.125	.073	.037	.108	.064	.032	.075	.045	.023	.043	.026	.014	.014	.009	.004	
8.0	.120	.067	.032	.103	.058	.028	.071	.041	.020	.041	.024	.012	.013	.008	.004	
9.0	.114	.062	.028	.098	.054	.024	.068	.038	.017	.040	.022	.010	.013	.007	.003	
10.0	.109	.058	.024	.094	.050	.021	.065	.036	.015	.038	.021	.009	.012	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:22 November 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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm											
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K					TYPE:LED			WEIGHT:			
SPEC.:					DIM.:			SERIAL No.:			
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	19.6	20.9	19.8	21.0	21.2	19.6	20.9	19.9	21.1	21.3	
	20.3	21.5	20.6	21.7	21.9	20.3	21.4	20.5	21.6	21.9	
	20.7	21.8	21.0	22.1	22.3	20.6	21.7	20.9	21.9	22.2	
	21.1	22.1	21.4	22.4	22.6	20.8	21.9	21.1	22.1	22.4	
	21.1	22.2	21.5	22.4	22.7	20.9	21.9	21.2	22.1	22.4	
	21.2	22.1	21.5	22.4	22.7	20.9	21.8	21.2	22.1	22.4	
4H	2H	19.8	20.9	20.1	21.1	21.4	19.8	20.9	20.1	21.1	21.4
	3H	20.7	21.7	21.1	22.0	22.3	20.7	21.6	21.0	21.9	22.2
	4H	21.3	22.2	21.7	22.5	22.8	21.1	22.0	21.5	22.3	22.6
	6H	21.8	22.6	22.2	22.9	23.3	21.5	22.3	21.9	22.6	23.0
	8H	21.9	22.6	22.3	23.0	23.4	21.6	22.3	22.0	22.7	23.0
	12H	22.0	22.6	22.4	23.0	23.4	21.6	22.3	22.0	22.6	23.0
8H	4H	21.5	22.2	21.9	22.6	22.9	21.3	22.0	21.7	22.4	22.8
	6H	22.1	22.7	22.5	23.1	23.5	21.8	22.4	22.2	22.8	23.2
	8H	22.3	22.8	22.7	23.2	23.7	22.0	22.5	22.4	22.9	23.3
	12H	22.4	22.8	22.9	23.3	23.7	22.0	22.4	22.5	22.9	23.4
12H	4H	21.5	22.1	21.9	22.5	22.9	21.3	22.0	21.7	22.3	22.7
	6H	22.1	22.7	22.6	23.1	23.5	21.9	22.4	22.3	22.8	23.2
	8H	22.3	22.8	22.8	23.2	23.7	22.0	22.5	22.5	22.9	23.4
Variations with the observer position at spacings:											
S = 1.0H	+ 0.6 / - 0.7					+ 0.7 / - 0.8					
1.5H	+ 0.5 / - 0.5					+ 0.6 / - 0.5					
2.0H	+ 1.4 / - 0.9					+ 1.7 / - 1.1					

CIE Pub.117, 1504 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.4)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:22 November 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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

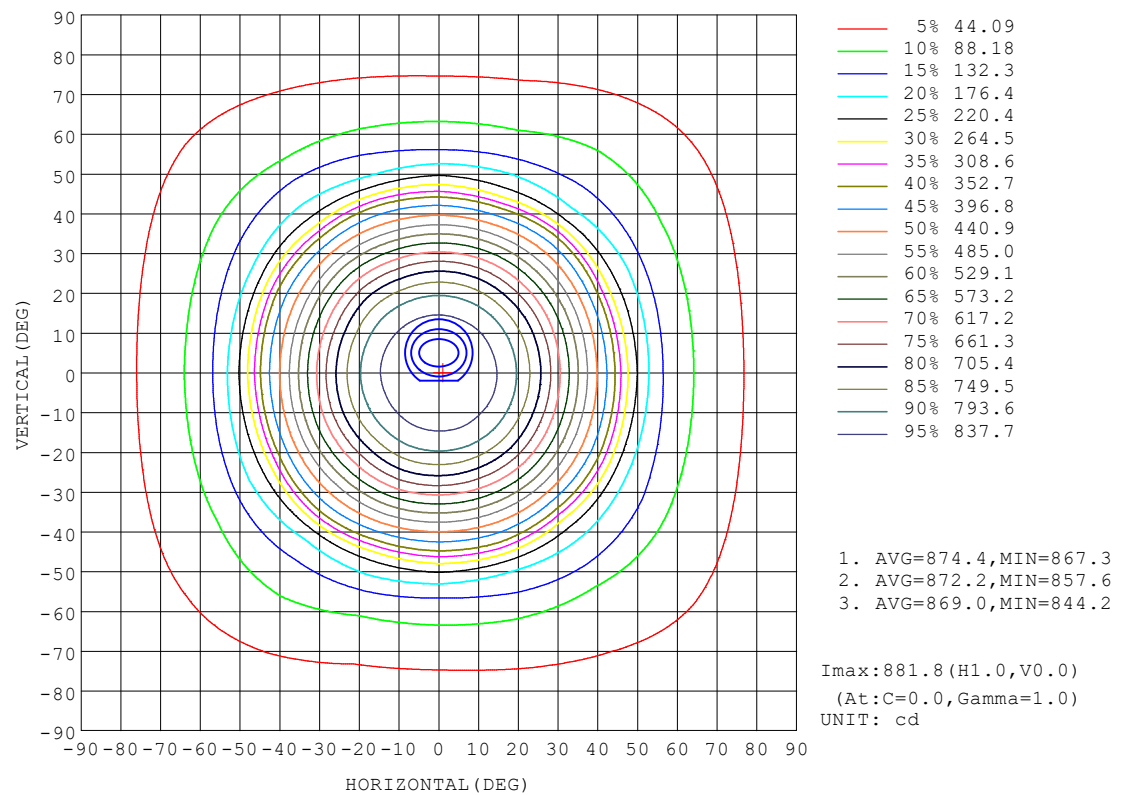
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	70	60	55	69	60	54	68	60	54	49
0.80	79	70	64	78	70	64	77	69	64	58
1.00	86	78	72	85	77	72	83	78	71	66
1.25	92	84	79	91	84	78	89	82	78	72
1.50	96	89	84	95	88	83	92	86	82	76
2.00	101	95	90	100	94	89	97	92	88	81
2.50	104	98	94	102	97	93	99	95	91	84
3.00	107	102	97	105	100	96	101	97	94	87
4.00	110	105	102	108	104	101	104	101	98	90
5.00	112	108	105	109	106	103	105	102	100	92
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:22 November 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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

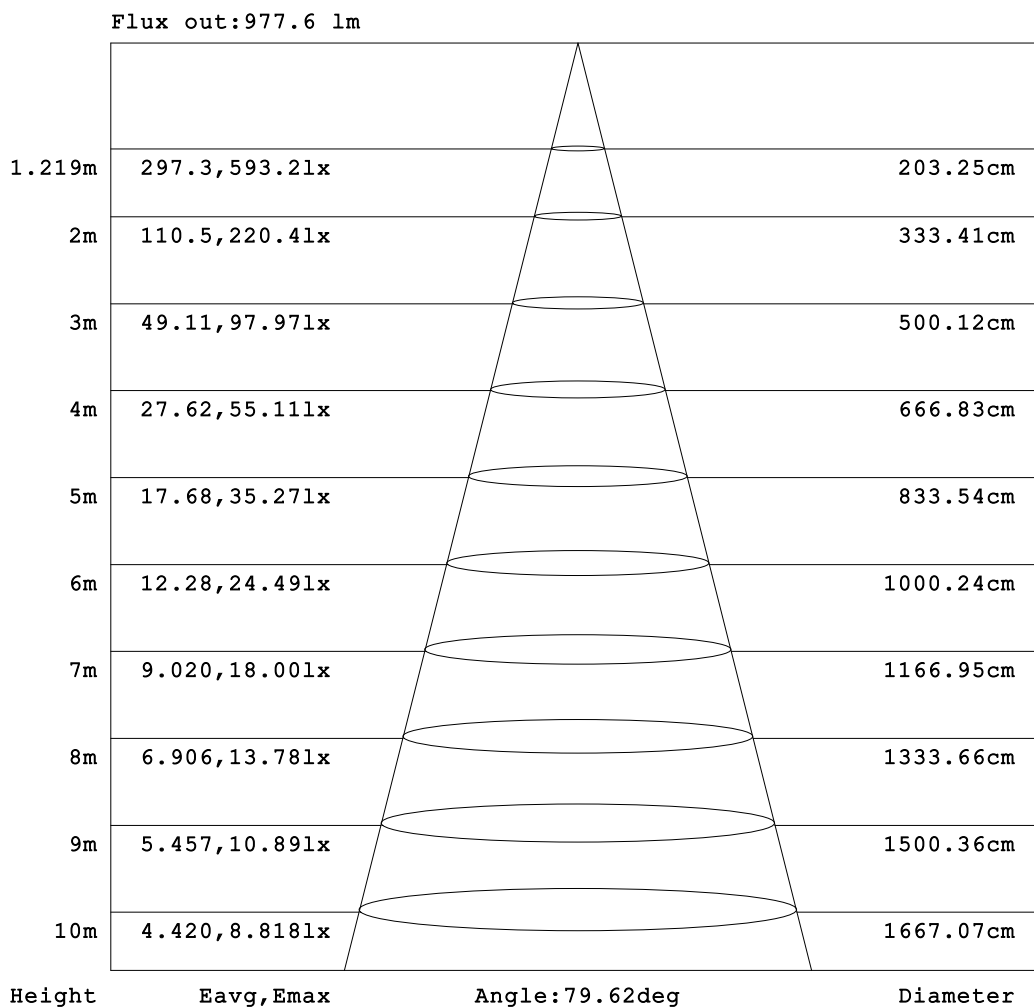


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: JEFF
Test Date: 22 November 2019

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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



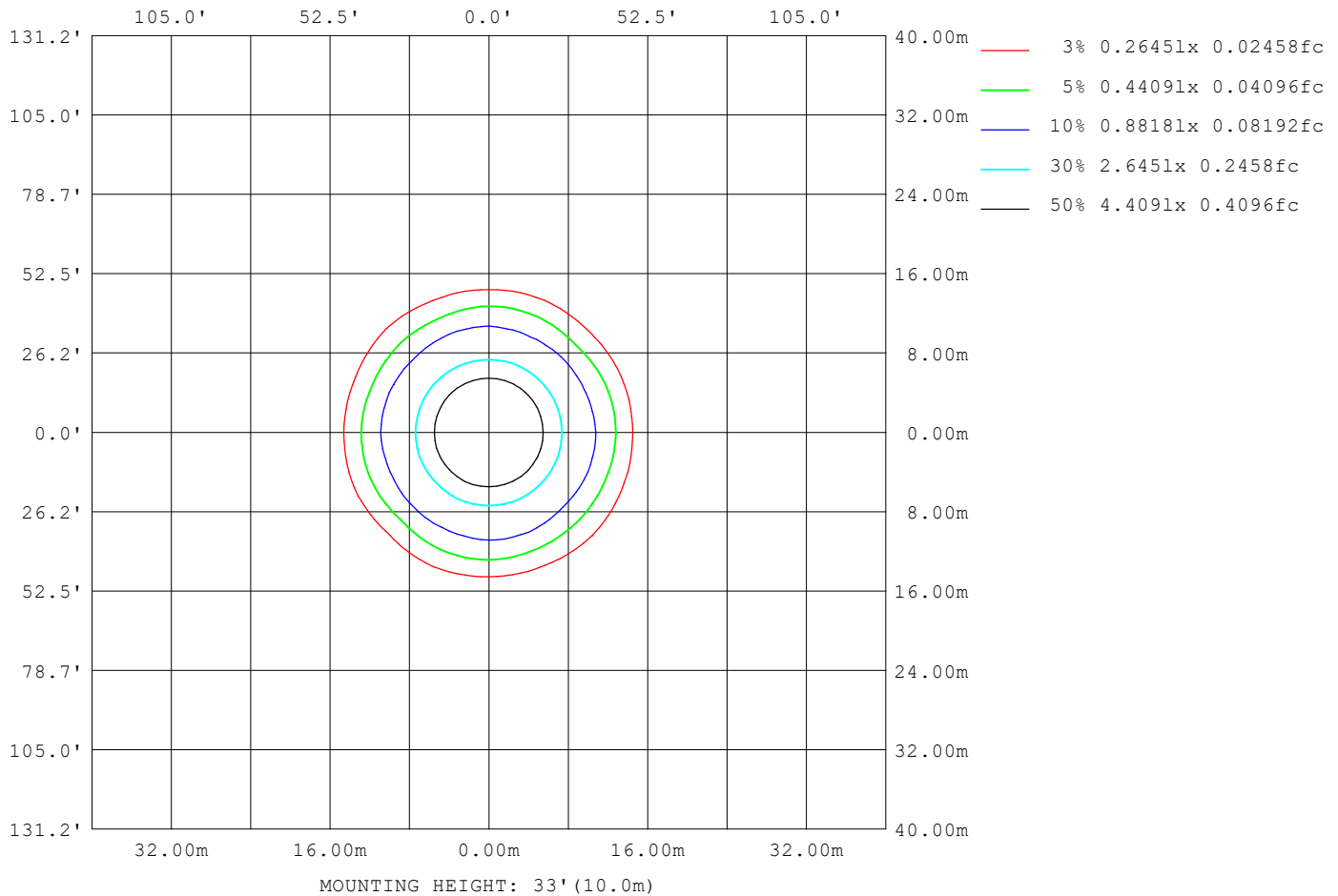
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:22 November 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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:22 November 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:239.98V I:0.0844A P:19.807W PF:0.9784 Freq:50.09Hz Lamp Flux:1504.36x1 lm		
NAME: C FLAT 185_WHT_CLE120_500mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

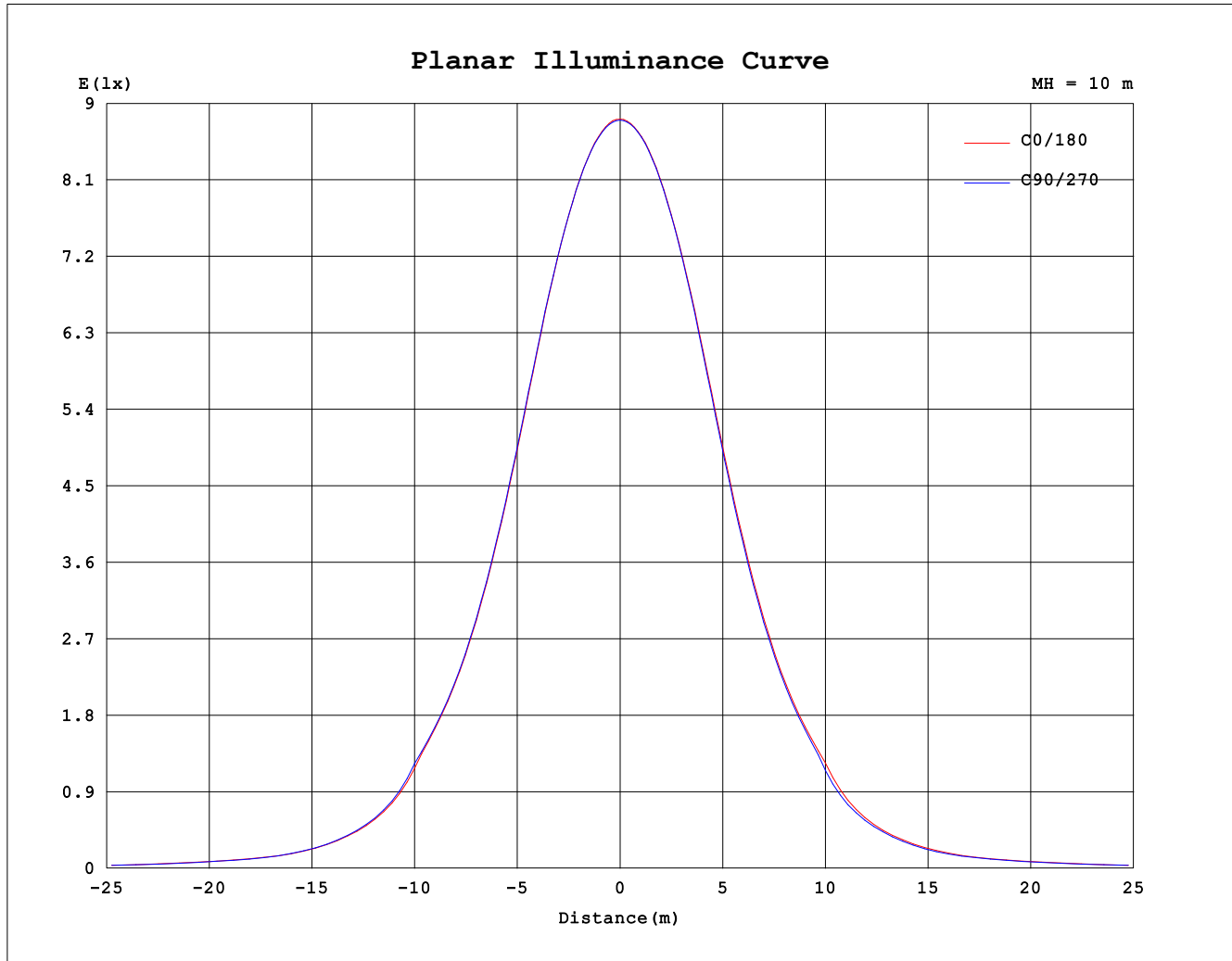
AvgL	cd/m2
L_0~180 (65) av	9924
L_0~180 (75) av	9304
L_0~180 (85) av	6025
L_90~270 (65) av	9549
L_90~270 (75) av	8256
L_90~270 (85) av	3322
L_45 (65) av	9719
L_45 (75) av	9159
L_45 (85) av	4621

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
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Temperature:25.3DEG
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Test Date:22 November 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: 22 November 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:

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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:

```