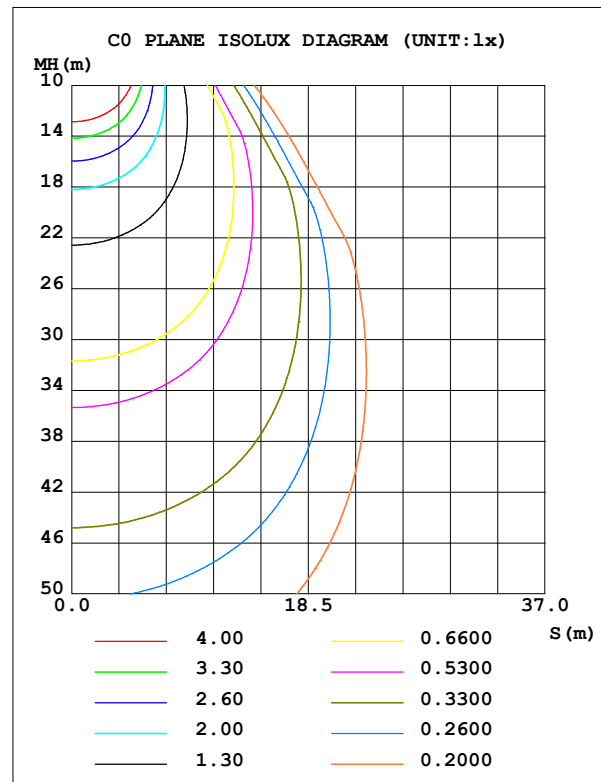
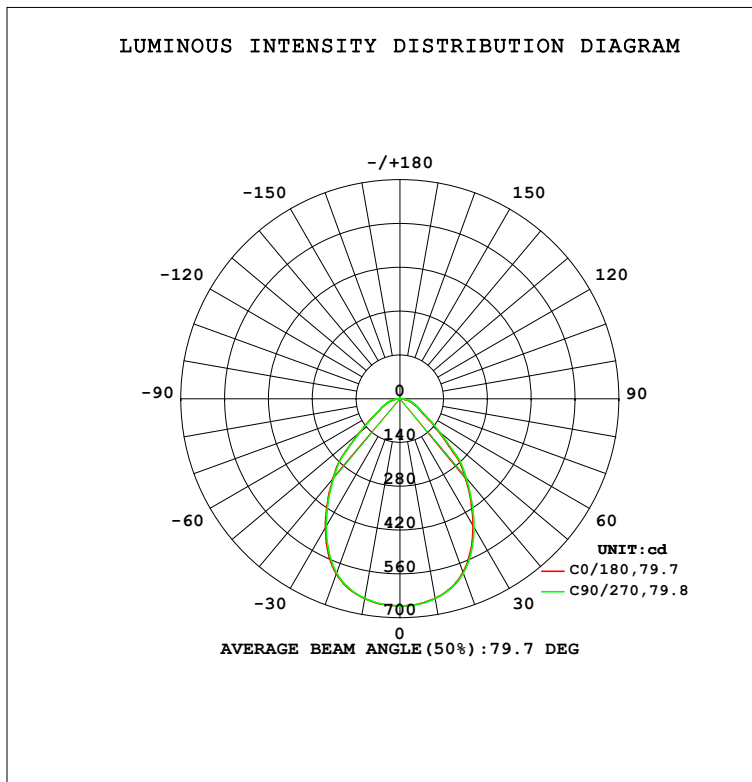


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 85.30 lm/W
MODEL	G1 120MM 2500LM 840 SNC	I <sub>max</sub> (cd)	662.3	S/MH (C0/180)	1.10	
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.09	
RATED VOLTAGE (V)	230.0	TOTAL FLUX (lm)	1129.3	η UP,DN (C0-180)	0.0,50.0	
NOMINAL FLUX (lm)	1129.28	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)	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:29 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:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	647.6	648.2	648.2	648.9	649.0	648.3	647.8	647.2	0- 10	62.56	62.56	5.54,5.54
20	590.2	590.9	593.2	595.2	595.7	594.0	592.4	591.2	10- 20	176.4	239.0	21.2,21.2
30	466.9	467.1	472.6	477.2	476.7	473.3	471.8	470.7	20- 30	246.8	485.8	43,43
40	323.9	324.7	330.2	329.6	333.9	331.2	329.6	322.4	30- 40	249.1	734.9	65.1,65.1
50	158.1	142.8	165.5	156.2	170.3	152.2	167.2	151.4	40- 50	187.4	922.3	81.7,81.7
60	74.41	83.70	78.53	84.03	77.38	85.42	78.25	79.77	50- 60	101.5	1024	90.7,90.7
70	45.33	49.36	49.06	45.57	46.32	48.50	47.04	44.37	60- 70	61.31	1085	96.1,96.1
80	18.57	20.37	23.02	21.50	19.50	20.62	22.00	20.20	70- 80	36.06	1121	99.3,99.3
90	0.2455	0.2580	0.4942	0.2487	0.2393	0.2487	0.2767	0.2735	80- 90	8.103	1129	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): 842.84 lm

%lum = 74.6%

%lamp = 74.6%

Conical surface Flux(120deg): 1023.8 lm

%lum = 90.7%

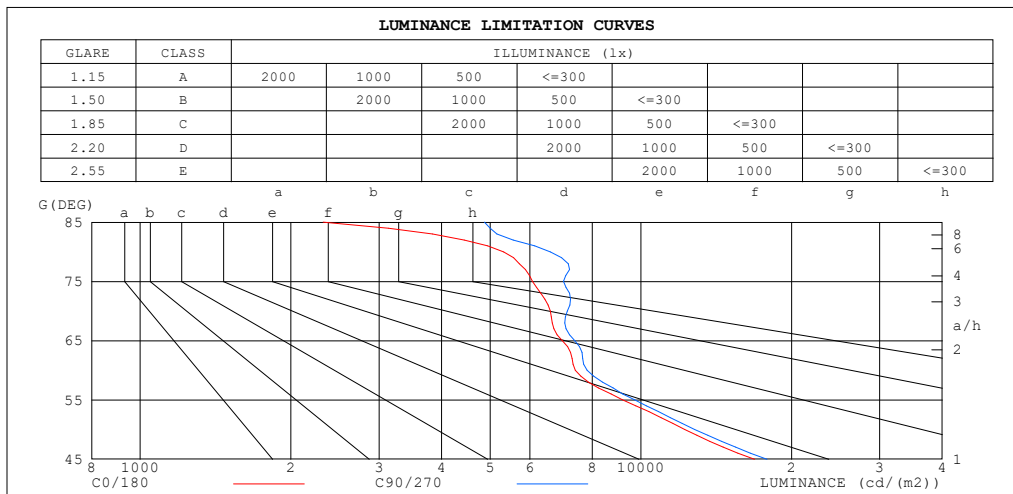
%lamp = 90.7%

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:29 October 2019

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2321	4871
80	5319	6594
75	6071	7009
70	6595	7136
65	6972	7379
60	7405	7813
55	9193	9715
50	12240	12806
45	16862	17880

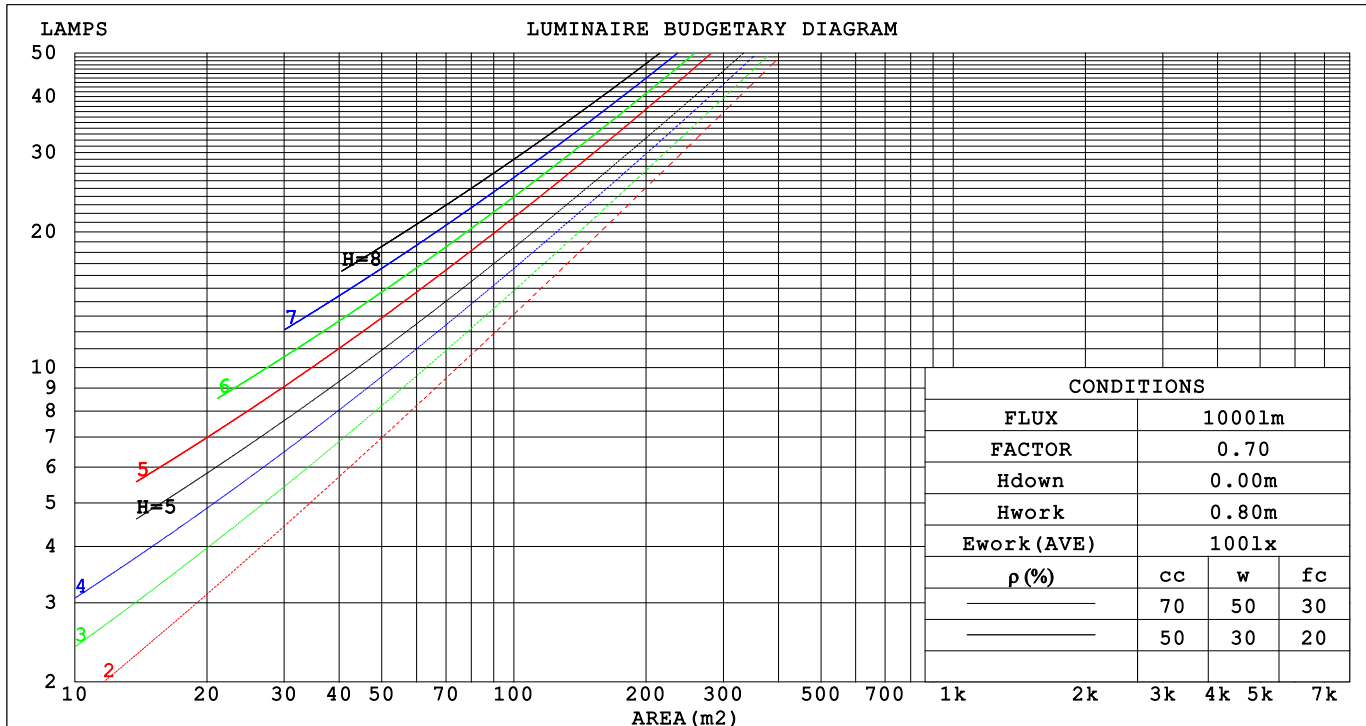
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:29 October 2019

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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	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:29 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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	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	.244	.139	.044	.237	.135	.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	.111	.035	
3.0	.220	.117	.035	.215	.115	.035	.206	.111	.034	.196	.108	.033	.188	.104	.032	
4.0	.207	.108	.032	.202	.106	.031	.194	.103	.031	.186	.100	.030	.179	.097	.030	
5.0	.194	.099	.029	.190	.098	.028	.183	.095	.028	.176	.093	.028	.169	.090	.027	
6.0	.183	.092	.026	.179	.091	.026	.173	.088	.026	.166	.086	.025	.160	.084	.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	.135	.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	.135	.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	.053	.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:29 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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm											
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K					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	2H	19.3	20.5	19.5	20.7	20.9	19.4	20.7	19.7	20.9	21.1
	3H	19.9	21.1	20.2	21.3	21.5	20.2	21.3	20.4	21.5	21.8
	4H	20.3	21.4	20.6	21.6	21.9	20.6	21.7	20.9	21.9	22.1
	6H	20.5	21.6	20.8	21.8	22.1	20.9	22.0	21.2	22.2	22.5
	8H	20.6	21.6	20.9	21.8	22.1	21.0	22.0	21.3	22.3	22.5
	12H	20.5	21.5	20.9	21.8	22.1	21.0	22.0	21.4	22.3	22.6
4H	2H	19.5	20.6	19.8	20.8	21.1	19.6	20.7	19.9	21.0	21.2
	3H	20.4	21.4	20.7	21.6	21.9	20.6	21.6	20.9	21.8	22.1
	4H	20.9	21.7	21.2	22.0	22.4	21.2	22.0	21.5	22.3	22.7
	6H	21.2	22.0	21.6	22.4	22.7	21.6	22.4	22.0	22.8	23.1
	8H	21.3	22.0	21.7	22.4	22.8	21.8	22.5	22.2	22.8	23.2
	12H	21.3	22.0	21.8	22.4	22.8	21.8	22.5	22.3	22.9	23.3
8H	4H	21.1	21.8	21.5	22.1	22.5	21.3	22.0	21.7	22.4	22.8
	6H	21.6	22.1	22.0	22.5	23.0	21.9	22.5	22.4	22.9	23.4
	8H	21.7	22.2	22.2	22.6	23.1	22.1	22.6	22.6	23.1	23.5
	12H	21.7	22.2	22.2	22.6	23.1	22.2	22.7	22.7	23.1	23.6
12H	4H	21.1	21.7	21.5	22.1	22.5	21.3	22.0	21.7	22.4	22.8
	6H	21.6	22.1	22.0	22.5	23.0	22.0	22.5	22.4	22.9	23.4
	8H	21.8	22.2	22.2	22.6	23.1	22.2	22.6	22.6	23.1	23.5
Variations with the observer position at spacings:											
S = 1.0H	+ 0.7 / - 0.8					+ 0.7 / - 0.7					
1.5H	+ 0.7 / - 0.6					+ 0.6 / - 0.6					
2.0H	+ 1.5 / - 0.9					+ 1.6 / - 0.8					

CIE Pub.117, 1129 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:29 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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

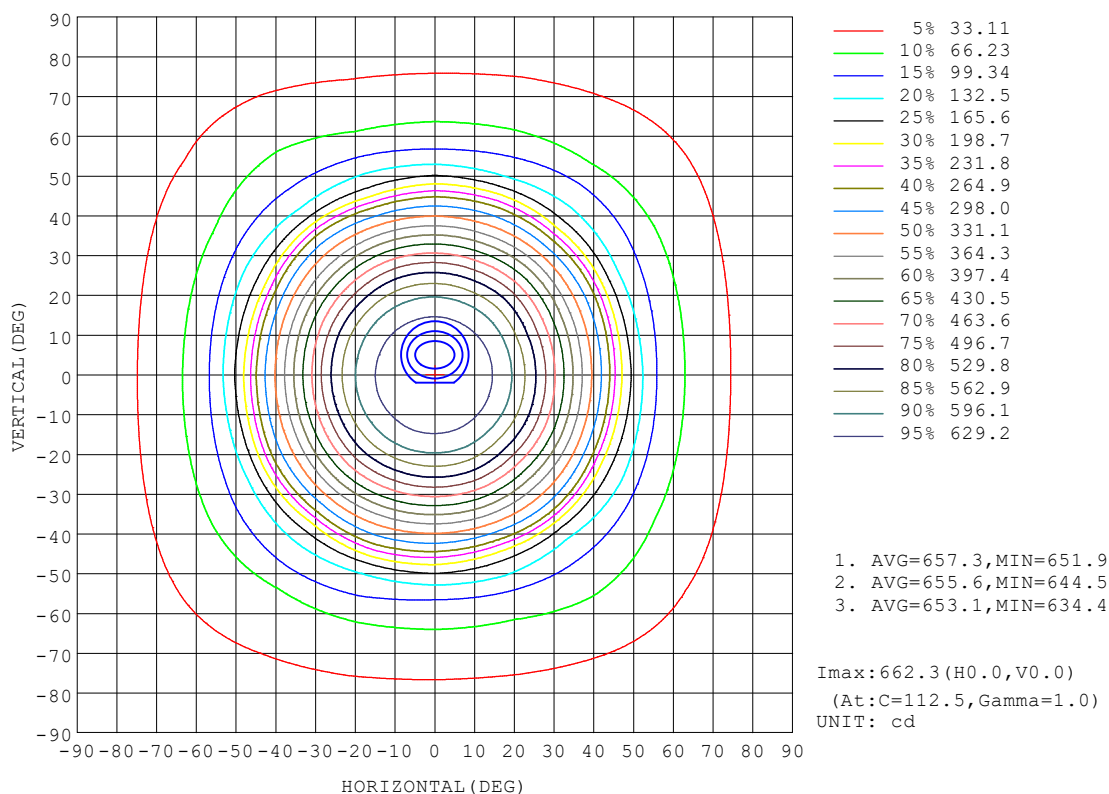
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	70	60	55	69	60	55	68	60	54	49
0.80	79	70	64	78	70	64	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	102	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	103	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:29 October 2019

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



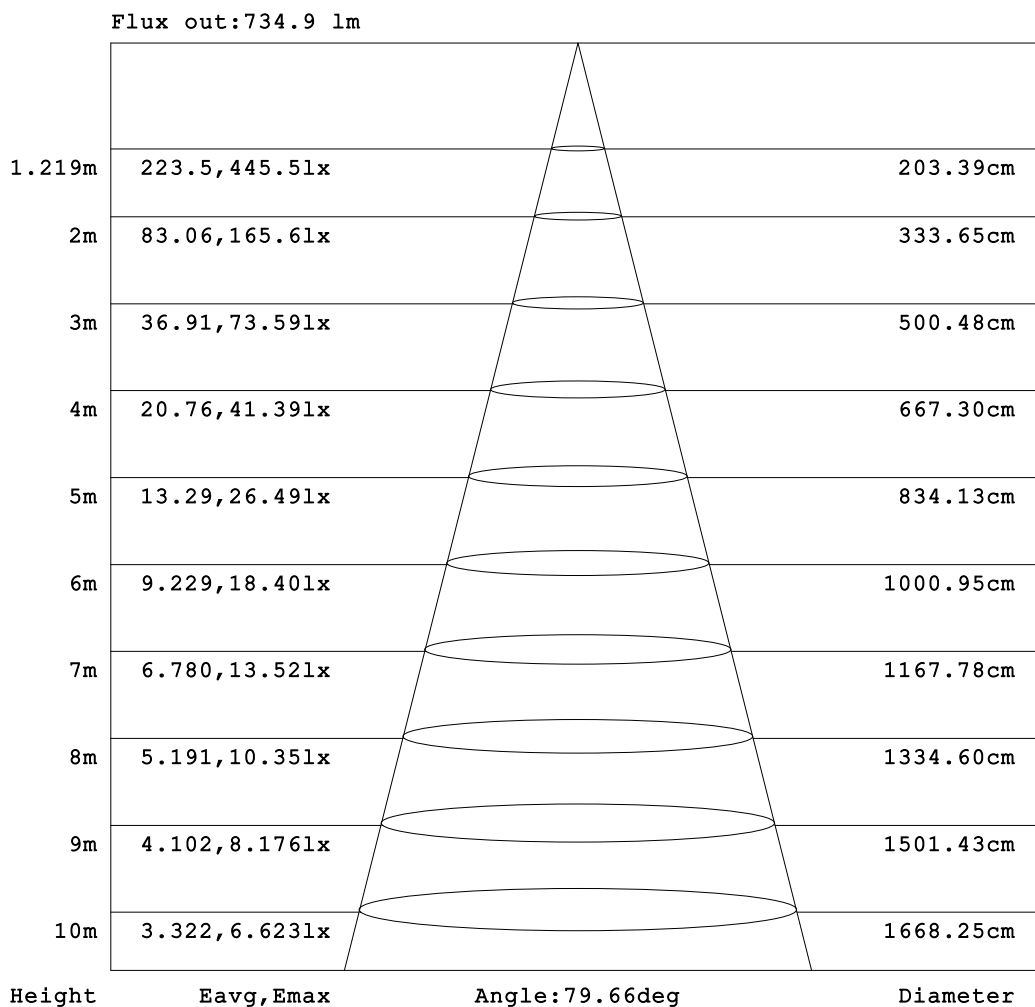
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:29 October 2019

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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:



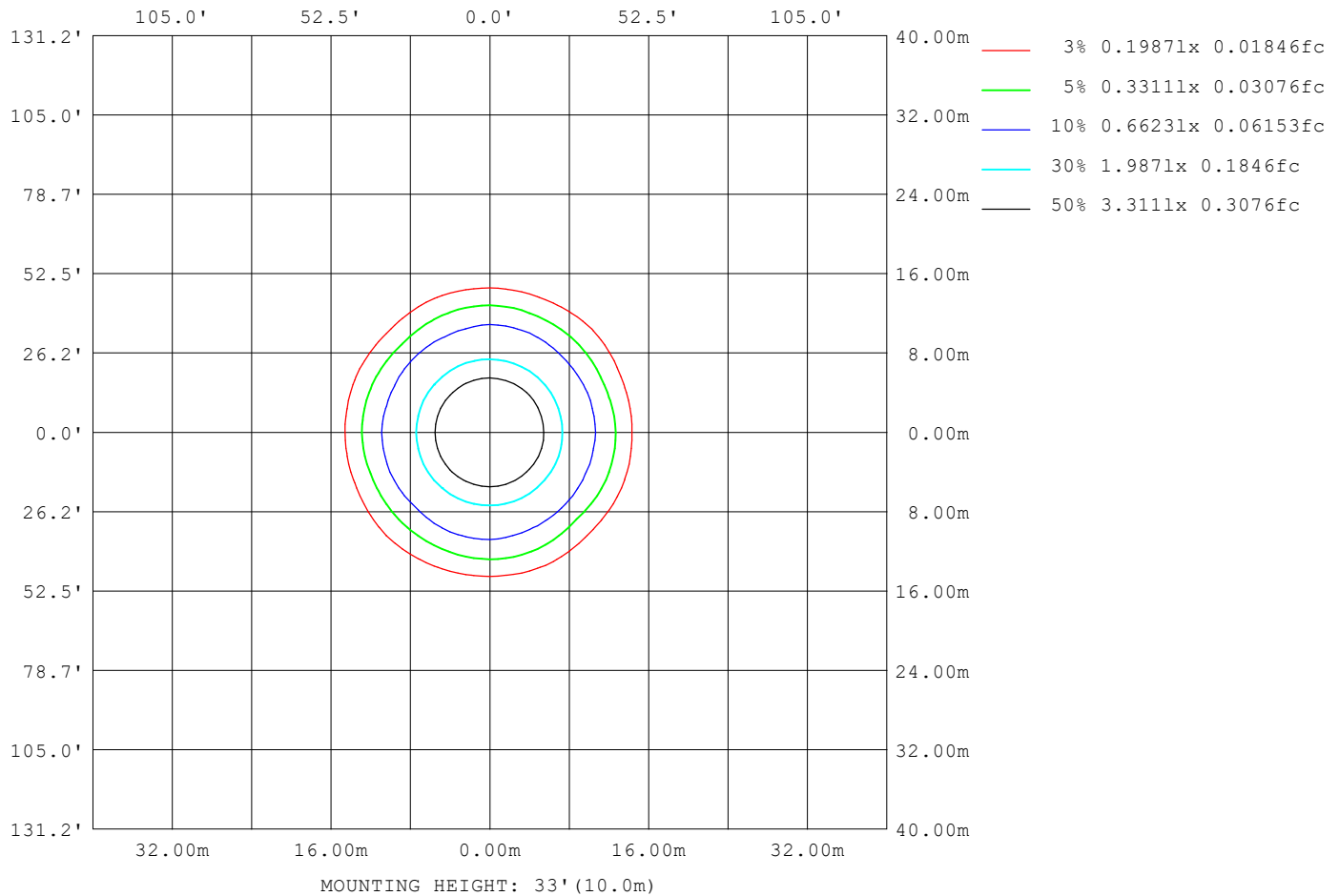
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:29 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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	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:29 October 2019

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:240.02V I:0.0602A P:13.238W PF:0.9159 Freq:50.08Hz Lamp Flux:1129.28x1 lm		
NAME: C FLAT 185_WHT_CLE120_350mA_C-DG_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: DARKON	SUR.:	Shielding Angle:

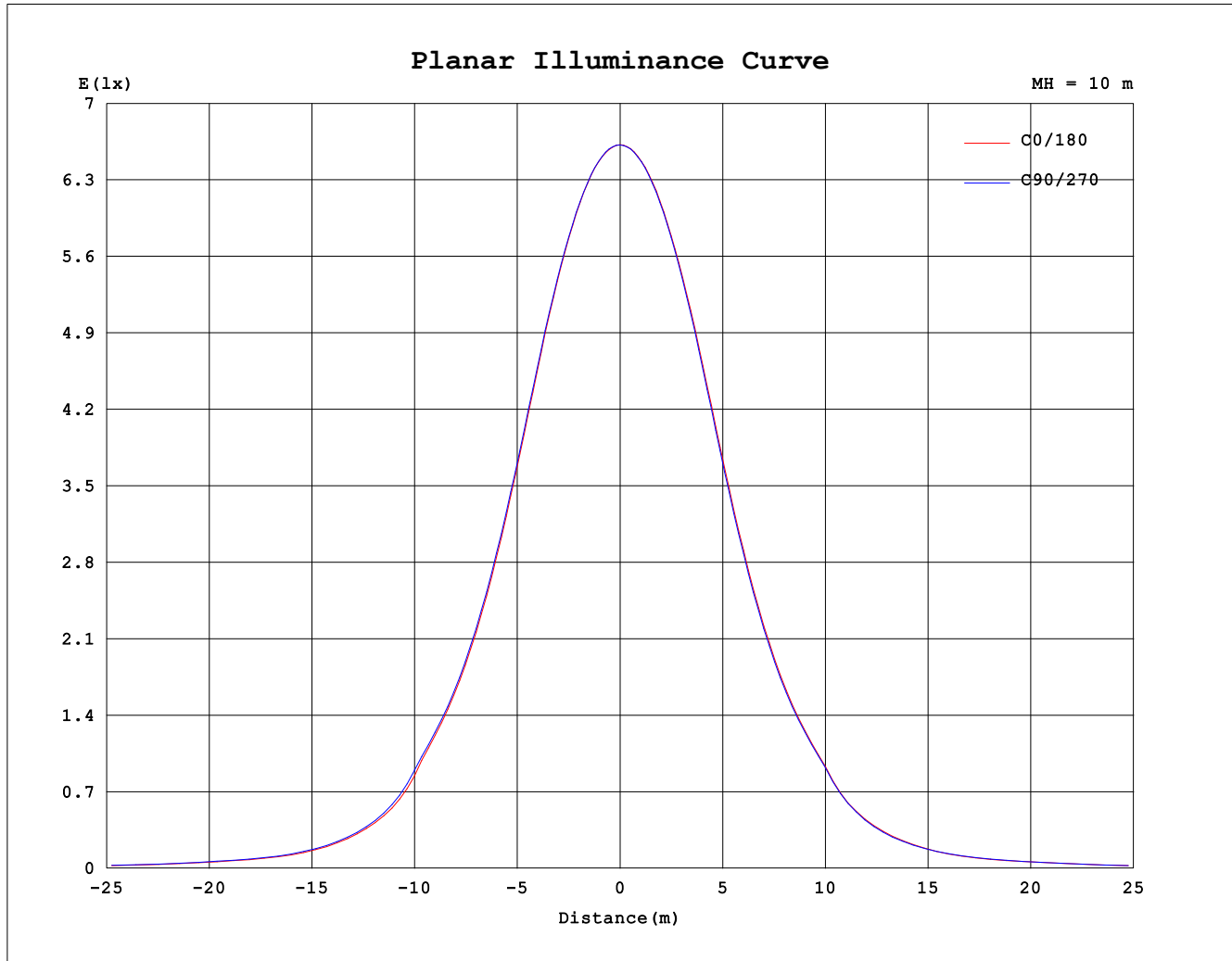
AvgL	cd/m2
L_0~180 (65) av	7114
L_0~180 (75) av	6169
L_0~180 (85) av	2588
L_90~270 (65) av	7307
L_90~270 (75) av	6868
L_90~270 (85) av	4428
L_45 (65) av	7211
L_45 (75) av	6810
L_45 (85) av	3508

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:29 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: 29 October 2019

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:

```