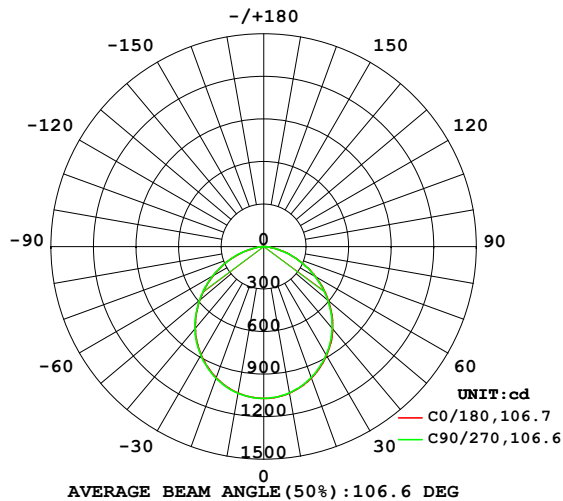


LUMINAIRE PHOTOMETRIC TEST REPORT

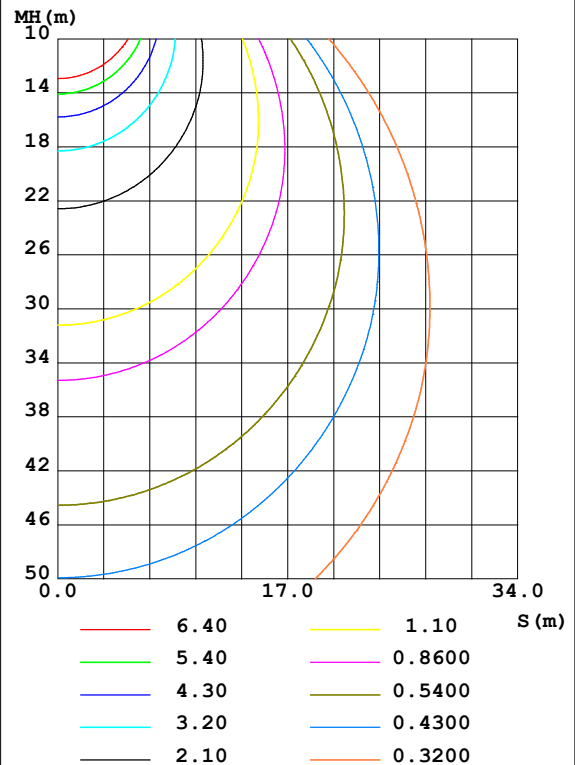
Test:U:239.98V I:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 85.22 lm/W			
CLE315mm	4000lm 830 ADV EM	Imax(cd)	1071	S/MH(C0/180)	1.23
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	1.24
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	2822.3	η UP,DN(C0-180)	0.0,50.1
NOMINAL FLUX(lm)	2822.29	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.9
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

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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	1049	1046	1047	1050	1048	1052	1051	1048	0- 10	101.2	101.2	3.58,3.58
20	986.1	980.2	982.0	987.7	983.6	989.7	987.2	982.3	10- 20	288.2	389.4	13.8,13.8
30	886.7	879.2	881.2	888.3	882.9	890.4	886.9	880.8	20- 30	432.4	821.8	29.1,29.1
40	757.3	747.6	751.0	759.4	751.2	759.6	755.6	748.6	30- 40	514.8	1337	47.4,47.4
50	596.9	586.8	590.5	599.7	589.8	598.6	593.9	586.4	40- 50	520.9	1858	65.8,65.8
60	421.4	411.5	415.7	425.0	413.6	422.3	417.4	409.7	50- 60	452.1	2310	81.8,81.8
70	241.4	232.3	237.0	245.2	233.3	241.9	237.1	229.8	60- 70	323.3	2633	93.3,93.3
80	76.15	69.22	73.00	79.42	69.05	75.63	72.12	66.26	70- 80	160.4	2793	99,99
90	2.488	1.489	1.741	3.616	1.494	1.813	1.489	1.570	80- 90	28.97	2822	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): 1601.3 lm

%lum = 56.7%

%lamp = 56.7%

Conical surface Flux(120deg): 2309.6 lm

%lum = 81.8%

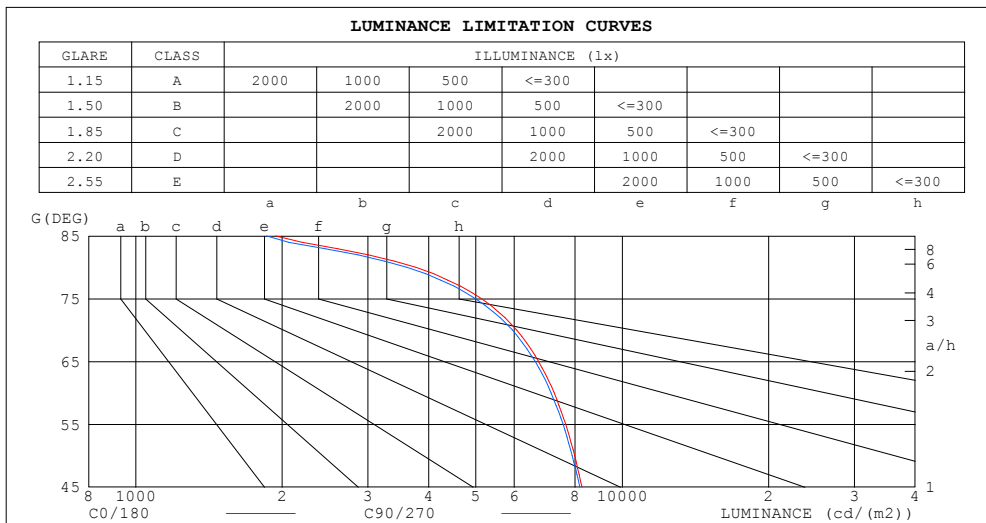
%lamp = 81.8%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1940	1859
80	3769	3611
75	5137	4992
70	6065	5951
65	6732	6624
60	7244	7142
55	7650	7556
50	7982	7891
45	8262	8179

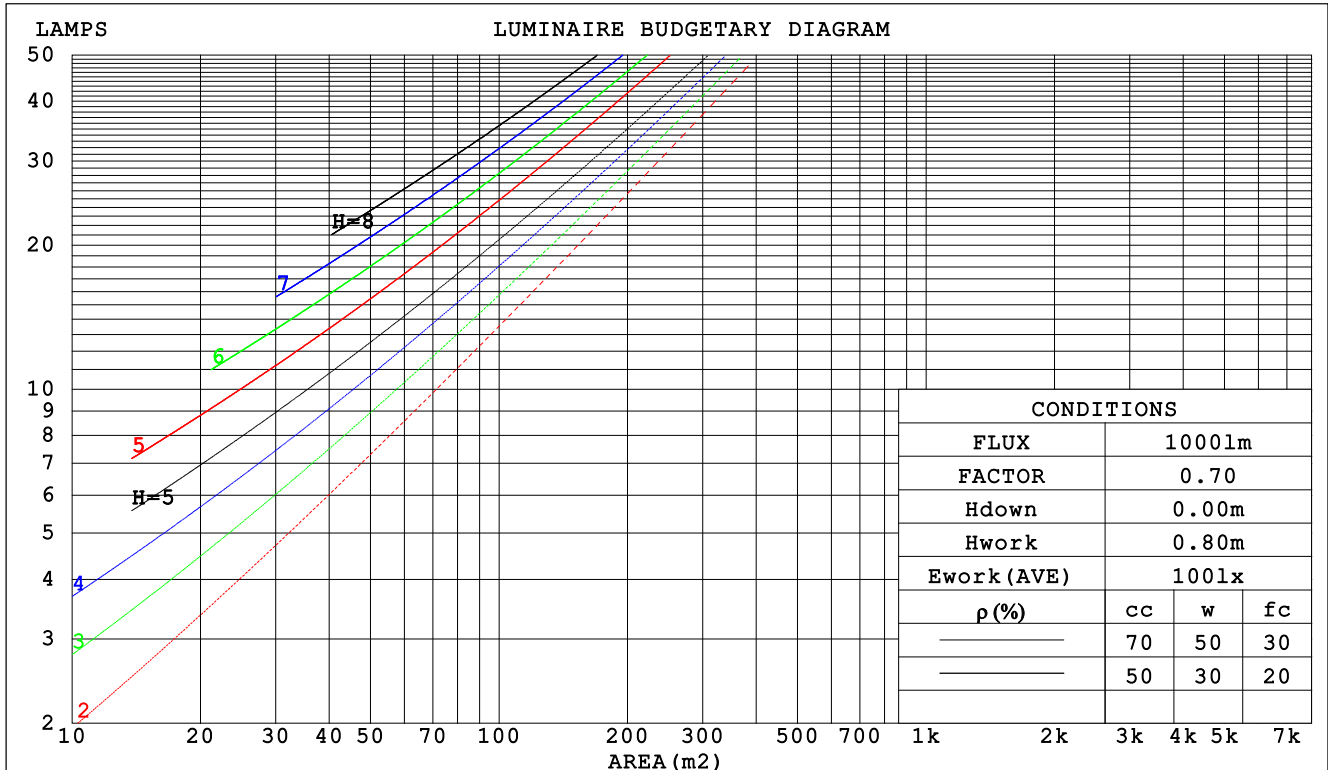
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	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			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	1.05	1.01	.97	1.03	.99	.96	.98	.95	.93	.94	.92	.90	.91	.89	.87	.85
2.0	.92	.85	.80	.90	.84	.79	.86	.81	.77	.83	.79	.75	.80	.77	.74	.71
3.0	.81	.73	.67	.79	.72	.66	.76	.70	.65	.74	.68	.64	.71	.67	.63	.61
4.0	.72	.63	.57	.71	.63	.56	.68	.61	.56	.66	.60	.55	.64	.58	.54	.52
5.0	.64	.55	.49	.63	.55	.49	.61	.54	.48	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.42	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.37	.49	.42	.37	.47	.42	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.31	.44	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.27	.37	.32	.27	.26



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_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	.051	.271	.155	.050	.259	.149	.048	.248	.144	.046		
2.0	.278	.153	.047	.272	.150	.046	.261	.145	.045	.250	.140	.044	.240	.136	.043		
3.0	.260	.138	.041	.255	.136	.041	.244	.132	.040	.235	.129	.039	.226	.125	.039		
4.0	.242	.126	.037	.237	.124	.037	.228	.121	.036	.219	.118	.036	.211	.115	.035		
5.0	.224	.114	.033	.220	.113	.033	.212	.110	.033	.205	.108	.032	.198	.106	.032		
6.0	.209	.105	.030	.205	.104	.030	.198	.101	.029	.191	.099	.029	.185	.097	.029		
7.0	.195	.096	.027	.192	.095	.027	.185	.094	.027	.179	.092	.027	.173	.090	.026		
8.0	.182	.089	.025	.179	.088	.025	.174	.087	.025	.168	.085	.025	.163	.084	.024		
9.0	.171	.083	.023	.169	.082	.023	.163	.081	.023	.159	.079	.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	.170	.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	.091	.061	.036	.053	.036	.022	.017	.012	.007		
5.0	.148	.090	.048	.127	.078	.042	.087	.055	.030	.051	.032	.018	.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	.040	.022	.008	.013	.007	.003		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm										
NAME: Deep C 385_WHT_CLE315G3_900mA_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	16.3	17.7	16.5	17.9	18.1	16.2	17.7	16.5	17.9	18.1
3H	17.6	18.9	17.8	19.1	19.4	17.5	18.8	17.8	19.1	19.3
4H	18.0	19.3	18.3	19.5	19.8	17.9	19.2	18.2	19.5	19.7
6H	18.2	19.4	18.6	19.7	20.0	18.1	19.3	18.5	19.6	19.9
8H	18.2	19.4	18.6	19.7	20.0	18.1	19.3	18.5	19.6	19.9
12H	18.2	19.4	18.6	19.6	19.9	18.1	19.2	18.5	19.5	19.8
4H 2H	16.8	18.1	17.1	18.3	18.6	16.7	18.0	17.0	18.3	18.5
3H	18.2	19.4	18.6	19.7	20.0	18.2	19.3	18.5	19.6	19.9
4H	18.8	19.8	19.2	20.1	20.5	18.7	19.7	19.1	20.1	20.4
6H	19.1	20.0	19.5	20.4	20.7	19.0	19.9	19.4	20.3	20.6
8H	19.1	20.0	19.6	20.4	20.7	19.0	19.9	19.5	20.3	20.6
12H	19.1	19.9	19.6	20.3	20.7	19.0	19.8	19.5	20.2	20.6
8H 4H	18.9	19.8	19.3	20.2	20.5	18.9	19.7	19.3	20.1	20.5
6H	19.3	20.0	19.8	20.4	20.9	19.2	19.9	19.7	20.4	20.8
8H	19.4	20.0	19.9	20.5	20.9	19.3	19.9	19.8	20.4	20.8
12H	19.4	20.0	19.9	20.4	20.9	19.3	19.9	19.8	20.3	20.8
12H 4H	18.9	19.7	19.3	20.1	20.5	18.8	19.6	19.3	20.0	20.4
6H	19.3	20.0	19.8	20.4	20.8	19.3	19.9	19.7	20.3	20.7
8H	19.4	20.0	19.9	20.4	20.9	19.3	19.9	19.8	20.3	20.8
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.3				

CIE Pub.117, 2822 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = 3.6$)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:

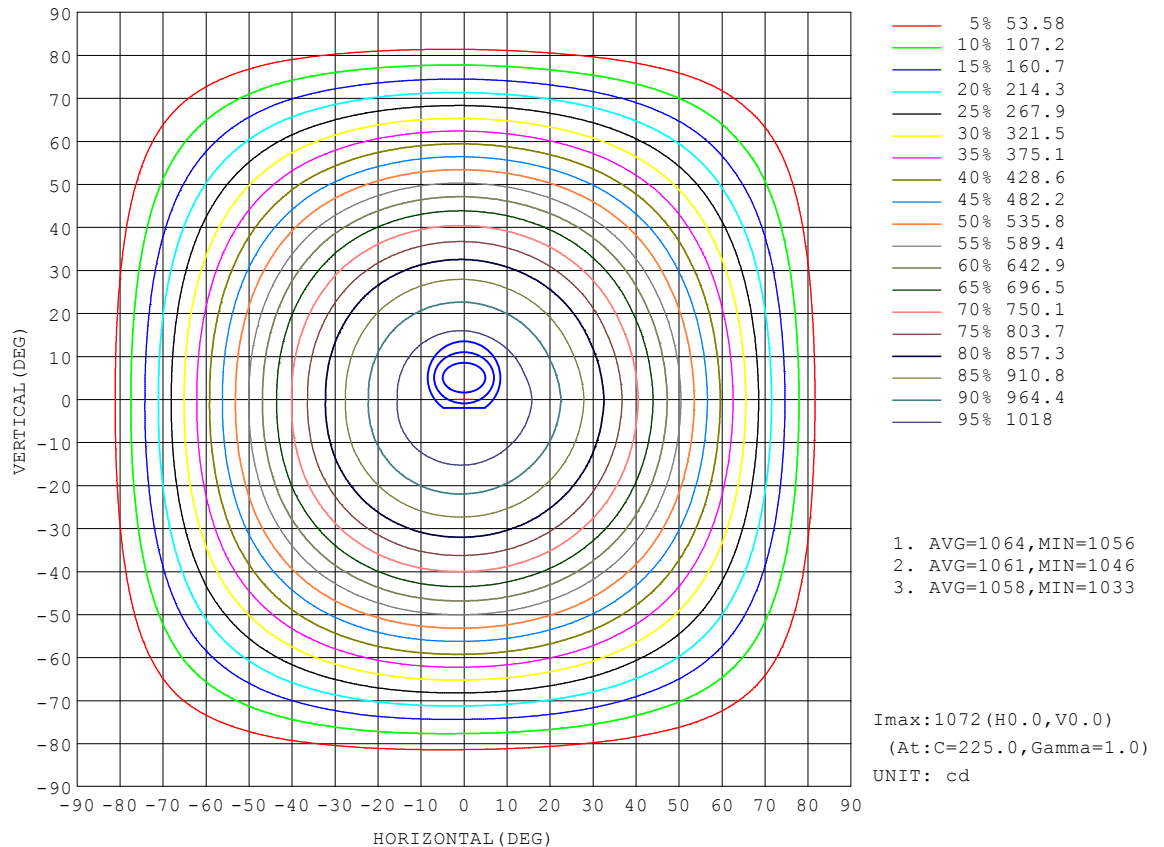
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	59	48	41	58	47	41	57	47	41	34
0.80	69	58	51	68	57	51	66	57	50	43
1.00	78	67	60	76	66	60	74	68	59	52
1.25	85	75	68	83	74	67	81	72	67	59
1.50	90	80	73	88	79	73	85	77	72	65
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	92	101	95	91	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:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:

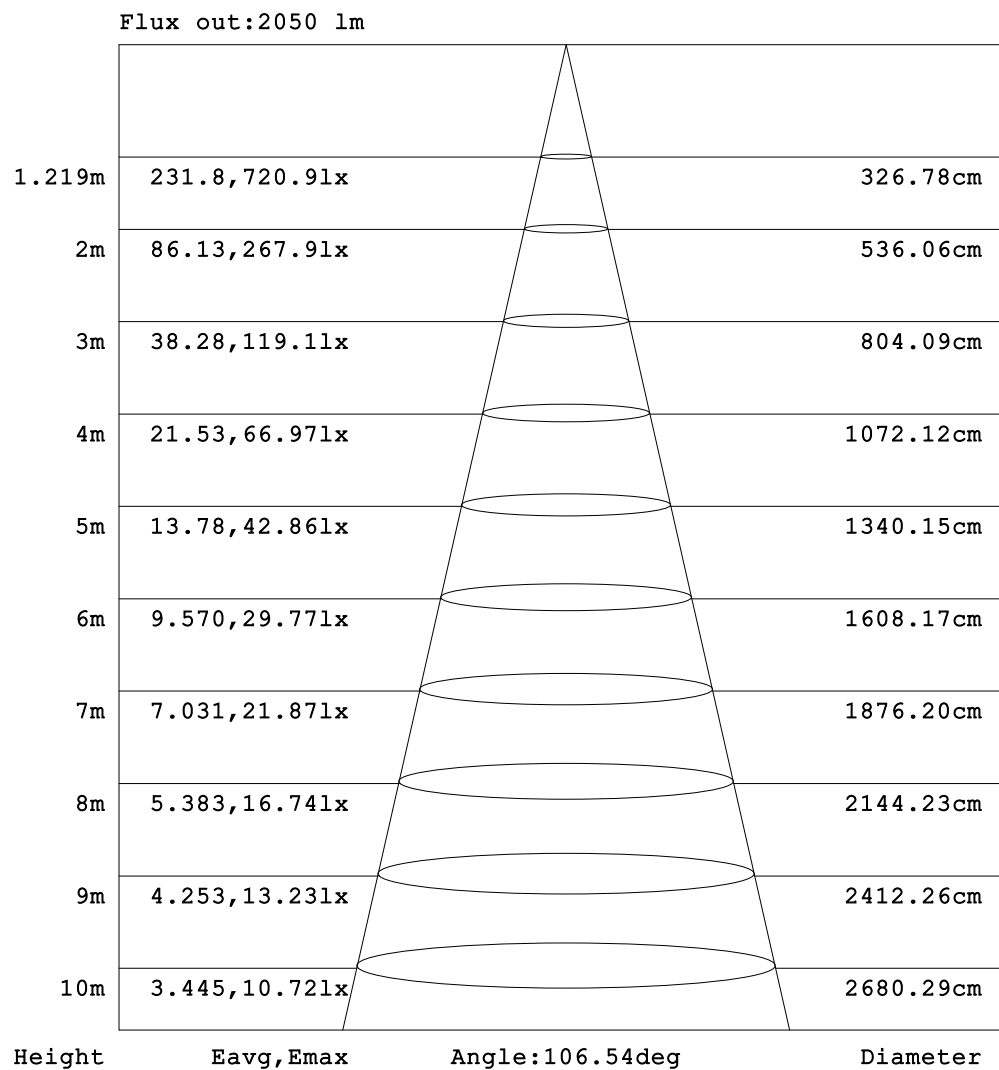


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:



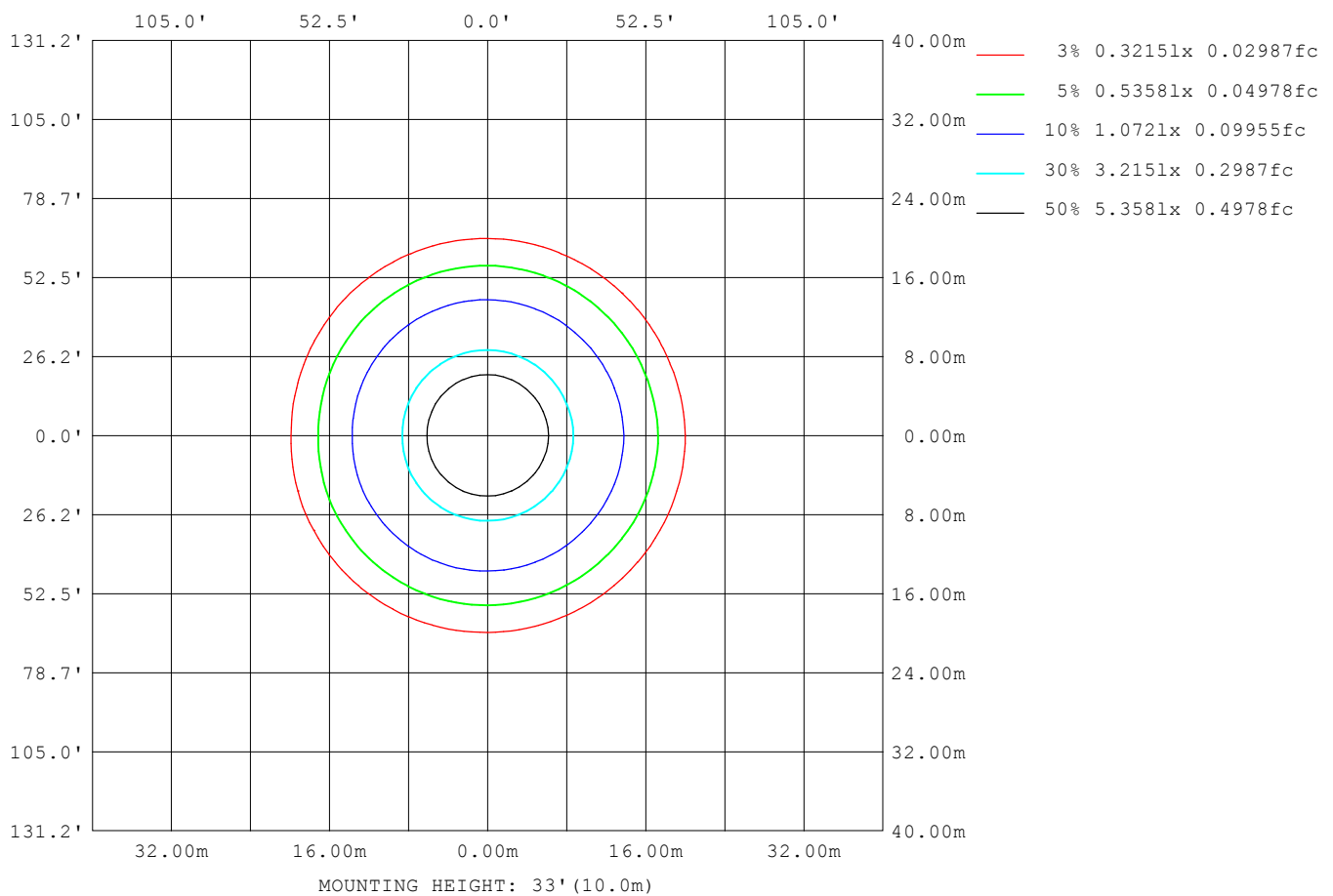
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_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:Ky
Test Date:06 June 2017

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:0.1448A P:33.119W PF:0.9531 Freq:50.09Hz Lamp Flux:2822.29x1 lm		
NAME: Deep C 385_WHT_CLE315G3_900mA_3K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:1
MFR.: Darkon	SUR.:	Shielding Angle:

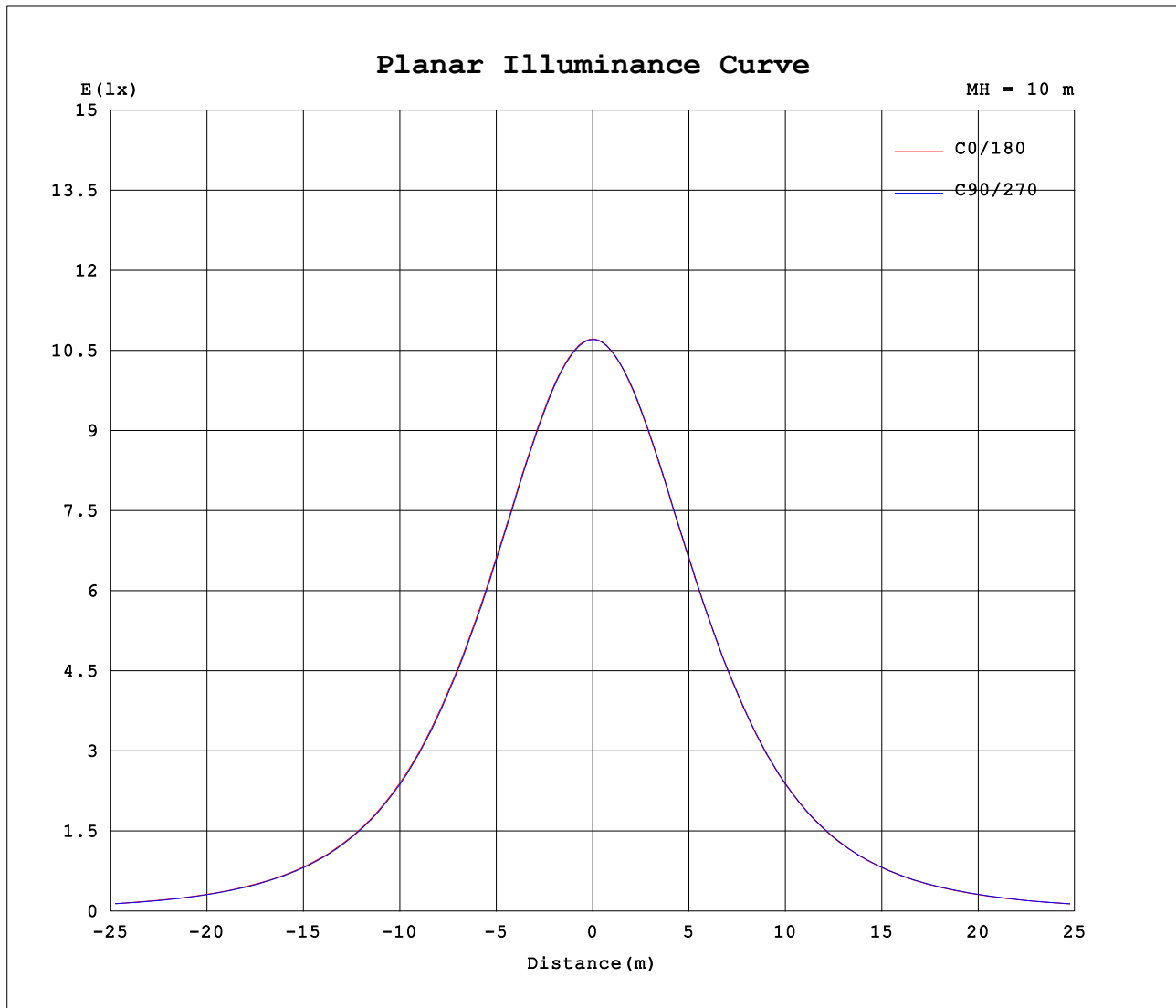
AvgL	cd/m2
L_0~180 (65) av	6646
L_0~180 (75) av	5013
L_0~180 (85) av	1869
L_90~270 (65) av	6632
L_90~270 (75) av	5002
L_90~270 (85) av	1855
L_45 (65) av	6644
L_45 (75) av	5013
L_45 (85) av	1888

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:06 June 2017

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: Ky
Test Date: 06 June 2017

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:

