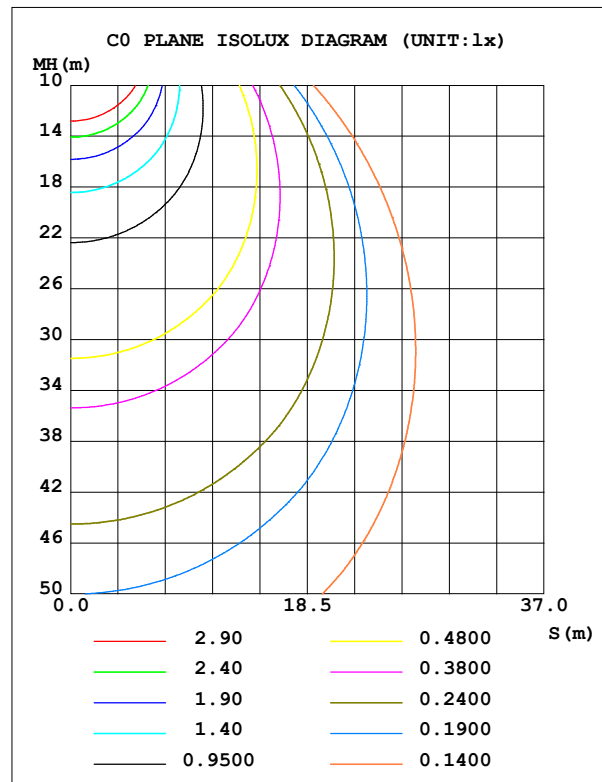
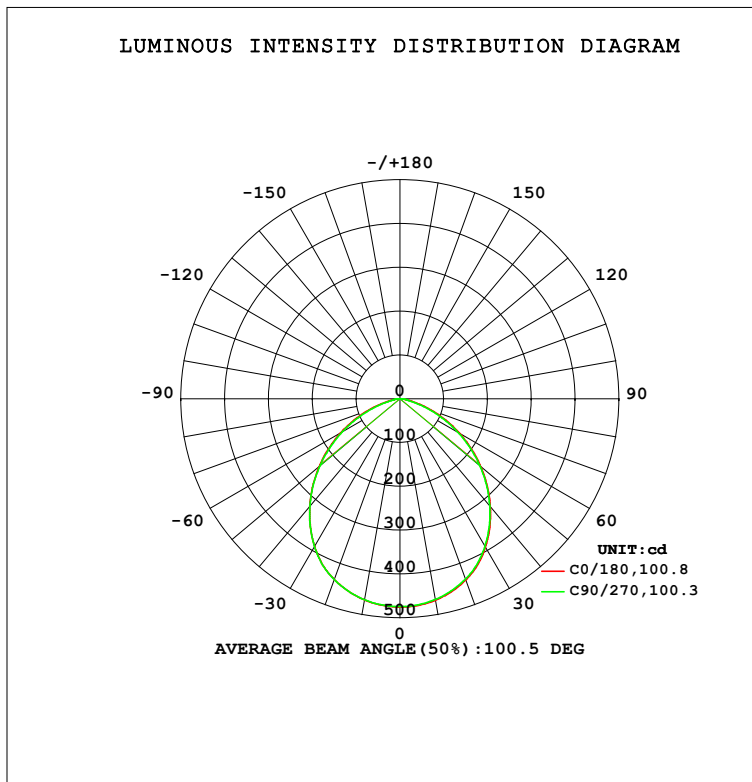


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 73.06 lm/W
MODEL	G3 160mm 3000lm 830 ADV	I _{max} (cd)	475.6	S/MH (C0/180)	1.22	
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.22	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	1141.8	η UP,DN (C0-180)	0.0,50.1	
NOMINAL FLUX (lm)	1141.83	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)	220.0	η down (%)	100.0	CIBSE SHR MAX	1.35	



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Ky
 Test Date:18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 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
5	473.5	472.7	472.2	471.6	473.2	472.8	472.5	472.0	0- 5	11.32	11.32	0.99,0.99
10	467.0	466.1	465.4	464.7	466.4	466.3	466.1	465.7	5- 10	33.56	44.88	3.93,3.93
15	455.8	454.6	453.8	453.2	454.9	454.9	454.9	454.6	10- 15	54.59	99.47	8.71,8.71
20	439.8	438.8	437.9	437.2	438.9	439.1	439.2	438.8	15- 20	73.60	173.1	15.2,15.2
25	419.3	417.8	416.8	416.5	418.1	418.3	418.4	417.9	20- 25	89.86	262.9	23,23
30	390.9	389.3	388.5	388.2	389.7	390.3	390.1	389.7	25- 30	102.2	365.1	32,32
35	357.8	356.3	355.5	355.2	356.8	357.3	356.9	356.8	30- 35	109.8	474.9	41.6,41.6
40	321.2	319.8	319.2	318.9	320.2	320.8	320.0	320.2	35- 40	112.8	587.8	51.5,51.5
45	282.0	280.7	279.9	280.1	281.4	281.7	280.4	280.9	40- 45	111.2	698.9	61.2,61.2
50	241.1	239.7	238.5	239.5	240.9	240.7	238.7	239.7	45- 50	105.1	804.1	70.4,70.4
55	199.1	197.6	195.8	197.6	199.0	198.4	195.7	197.4	50- 55	95.02	899.1	78.7,78.7
60	156.9	154.9	152.5	155.2	157.2	155.9	152.8	154.9	55- 60	81.41	980.5	85.9,85.9
65	115.2	112.7	109.9	113.2	115.6	113.3	109.8	112.5	60- 65	64.96	1045	91.6,91.6
70	76.04	73.08	69.79	73.68	75.61	72.92	68.84	72.32	65- 70	46.73	1092	95.7,95.7
75	40.57	37.73	34.01	38.21	40.04	37.48	33.11	37.22	70- 75	28.44	1121	98.1,98.1
80	15.93	15.96	16.15	16.04	15.71	15.69	15.95	15.51	75- 80	13.11	1134	99.3,99.3
85	7.443	7.461	7.070	7.368	7.483	7.196	6.813	7.235	80- 85	6.420	1140	99.9,99.9
90	0.4383	0.4010	0.3761	0.4134	0.4631	0.4258	0.4290	0.4383	85- 90	1.632	1142	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 698.95 lm

%lum = 61.2%
%lamp = 61.2%

Conical surface Flux(120deg): 980.53 lm

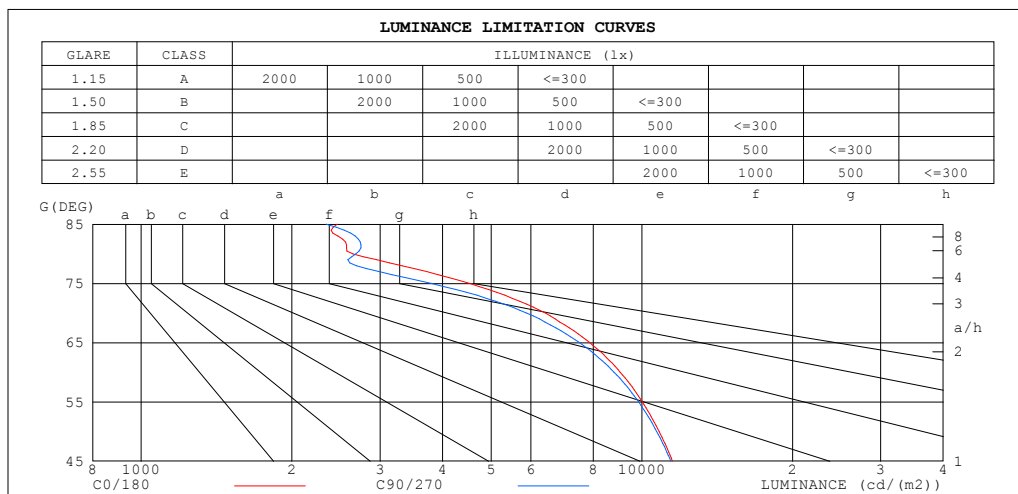
%lum = 85.9%
%lamp = 85.9%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:18 May 2017

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	2466	2342
80	2649	2685
75	4527	3794
70	6420	5892
65	7870	7512
60	9059	8806
55	10025	9858
50	10830	10714
45	11515	11431

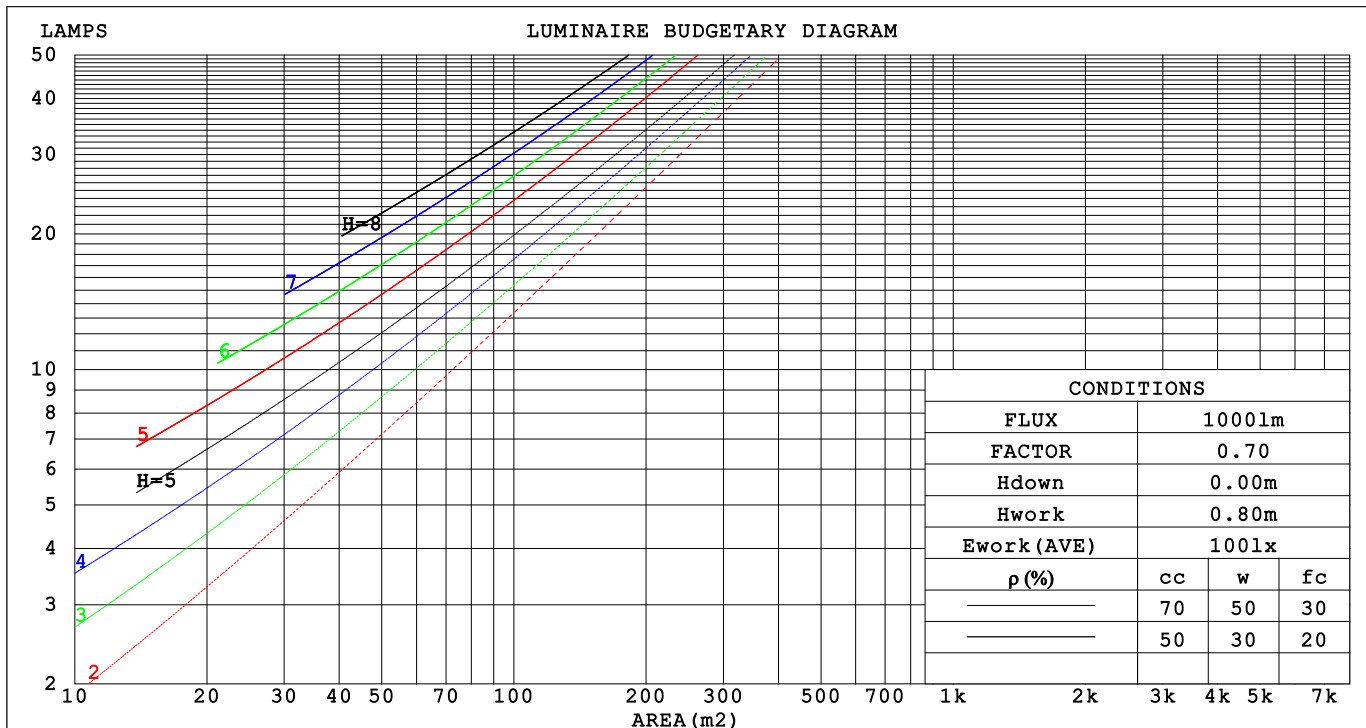
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Ky
 Test Date: 18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 7.220m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	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: Ky
 Test Date: 18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 7.220m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	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	.271	.154	.049	.264	.151	.048	.251	.144	.046	.239	.138	.044	.228	.132	.043	
2.0	.262	.144	.044	.256	.141	.043	.245	.136	.042	.234	.131	.041	.224	.127	.040	
3.0	.247	.131	.039	.242	.129	.039	.232	.126	.038	.222	.122	.037	.214	.118	.037	
4.0	.231	.120	.035	.226	.118	.035	.217	.115	.034	.209	.112	.034	.202	.109	.033	
5.0	.216	.110	.032	.212	.109	.032	.204	.106	.031	.196	.104	.031	.190	.101	.030	
6.0	.202	.101	.029	.198	.100	.029	.191	.098	.028	.185	.096	.028	.178	.094	.028	
7.0	.189	.094	.027	.186	.093	.026	.180	.091	.026	.174	.089	.026	.168	.087	.026	
8.0	.178	.087	.024	.175	.086	.024	.169	.084	.024	.164	.083	.024	.159	.081	.024	
9.0	.167	.081	.023	.165	.080	.023	.159	.079	.022	.155	.078	.022	.150	.076	.022	
10.0	.158	.076	.021	.155	.075	.021	.151	.074	.021	.146	.073	.021	.142	.072	.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	.178	.156	.137	.152	.134	.118	.104	.092	.082	.060	.053	.048	.019	.017	.015		
2.0	.168	.132	.102	.144	.114	.088	.099	.079	.061	.057	.046	.036	.018	.015	.012		
3.0	.160	.114	.078	.137	.098	.067	.094	.068	.047	.054	.040	.028	.017	.013	.009		
4.0	.152	.101	.061	.131	.087	.053	.090	.061	.037	.052	.035	.022	.017	.012	.007		
5.0	.145	.090	.049	.125	.078	.043	.086	.054	.030	.050	.032	.018	.016	.010	.006		
6.0	.138	.082	.041	.119	.071	.036	.082	.049	.025	.048	.029	.015	.015	.010	.005		
7.0	.132	.075	.035	.113	.065	.030	.078	.045	.021	.045	.027	.013	.015	.009	.004		
8.0	.126	.069	.030	.108	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004		
9.0	.120	.064	.026	.103	.055	.023	.072	.039	.016	.042	.023	.010	.013	.008	.003		
10.0	.114	.060	.023	.099	.052	.020	.068	.036	.014	.040	.022	.009	.013	.007	.003		

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:18 May 2017

γ Range: 0 - 90DEG
γ Interval: 0.5DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm											
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K						TYPE:		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	2H	20.7	22.1	21.0	22.3	22.5	20.6	22.1	20.9	22.3	22.5
	3H	21.6	23.0	21.9	23.2	23.4	21.5	22.8	21.8	23.0	23.2
	4H	21.9	23.1	22.2	23.3	23.6	21.6	22.9	21.9	23.1	23.4
	6H	21.9	23.1	22.2	23.3	23.6	21.6	22.8	22.0	23.1	23.3
	8H	21.9	23.0	22.2	23.3	23.6	21.6	22.8	22.0	23.0	23.3
	12H	21.9	22.9	22.2	23.2	23.5	21.6	22.7	22.0	23.0	23.3
4H	2H	21.1	22.4	21.4	22.6	22.9	21.1	22.3	21.4	22.5	22.8
	3H	22.2	23.3	22.5	23.6	23.9	22.0	23.1	22.4	23.4	23.7
	4H	22.5	23.4	22.8	23.8	24.1	22.2	23.2	22.6	23.5	23.9
	6H	22.5	23.4	22.9	23.8	24.1	22.3	23.2	22.7	23.5	23.9
	8H	22.6	23.4	23.0	23.7	24.1	22.3	23.1	22.7	23.5	23.9
	12H	22.6	23.3	23.0	23.7	24.1	22.3	23.1	22.7	23.4	23.8
8H	4H	22.5	23.3	22.9	23.7	24.0	22.3	23.1	22.7	23.4	23.8
	6H	22.6	23.3	23.1	23.7	24.1	22.4	23.1	22.8	23.5	23.9
	8H	22.7	23.3	23.1	23.7	24.1	22.5	23.0	22.9	23.5	23.9
	12H	22.7	23.2	23.2	23.7	24.1	22.5	23.0	23.0	23.4	23.9
12H	4H	22.5	23.2	22.9	23.6	24.0	22.3	23.0	22.7	23.4	23.8
	6H	22.6	23.2	23.1	23.6	24.1	22.4	23.0	22.8	23.4	23.8
	8H	22.7	23.2	23.2	23.6	24.1	22.5	23.0	22.9	23.4	23.9
Variations with the observer position at spacings:											
S = 1.0H	+ 0.3 / - 0.4					+ 0.3 / - 0.4					
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.4					
2.0H	+ 0.5 / - 0.5					+ 0.6 / - 0.5					

CIE Pub.117 Corrected 1142 lm Total Lamp Luminous Flux. (8log(F/F0) = 0.5)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Ky
 Test Date: 18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 7.220m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

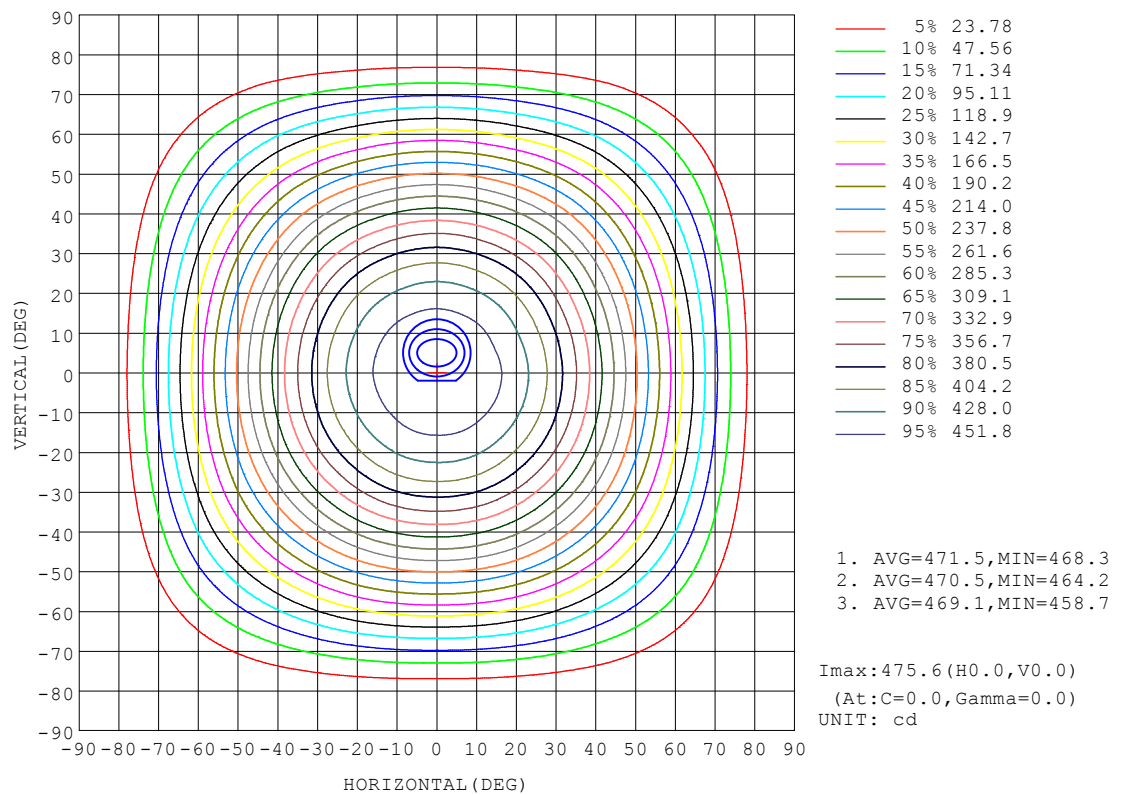
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	61	50	44	60	50	44	59	50	43	37
0.80	71	61	54	70	60	54	69	59	53	47
1.00	80	70	63	79	69	63	77	70	62	56
1.25	87	77	71	86	77	71	83	75	70	63
1.50	92	83	77	90	82	76	87	80	75	68
2.00	98	90	85	96	89	84	93	87	82	75
2.50	101	95	89	100	93	88	96	91	86	79
3.00	105	99	94	102	97	93	99	94	90	82
4.00	108	103	99	106	101	98	102	98	95	87
5.00	110	106	102	108	104	101	103	100	98	89
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: 18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 7.220m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

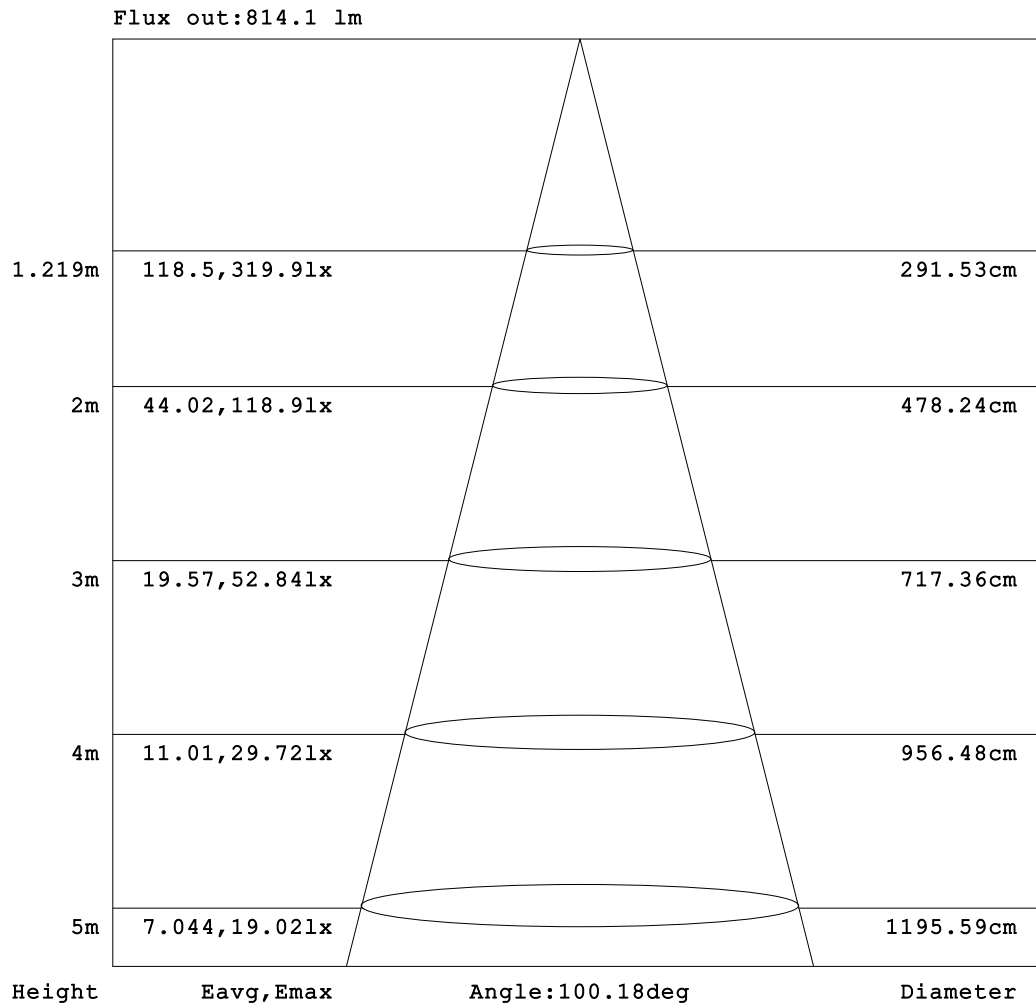


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Ky
 Test Date: 18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 7.220m [K=1.0000]
 Remarks:

AAI Figure

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:



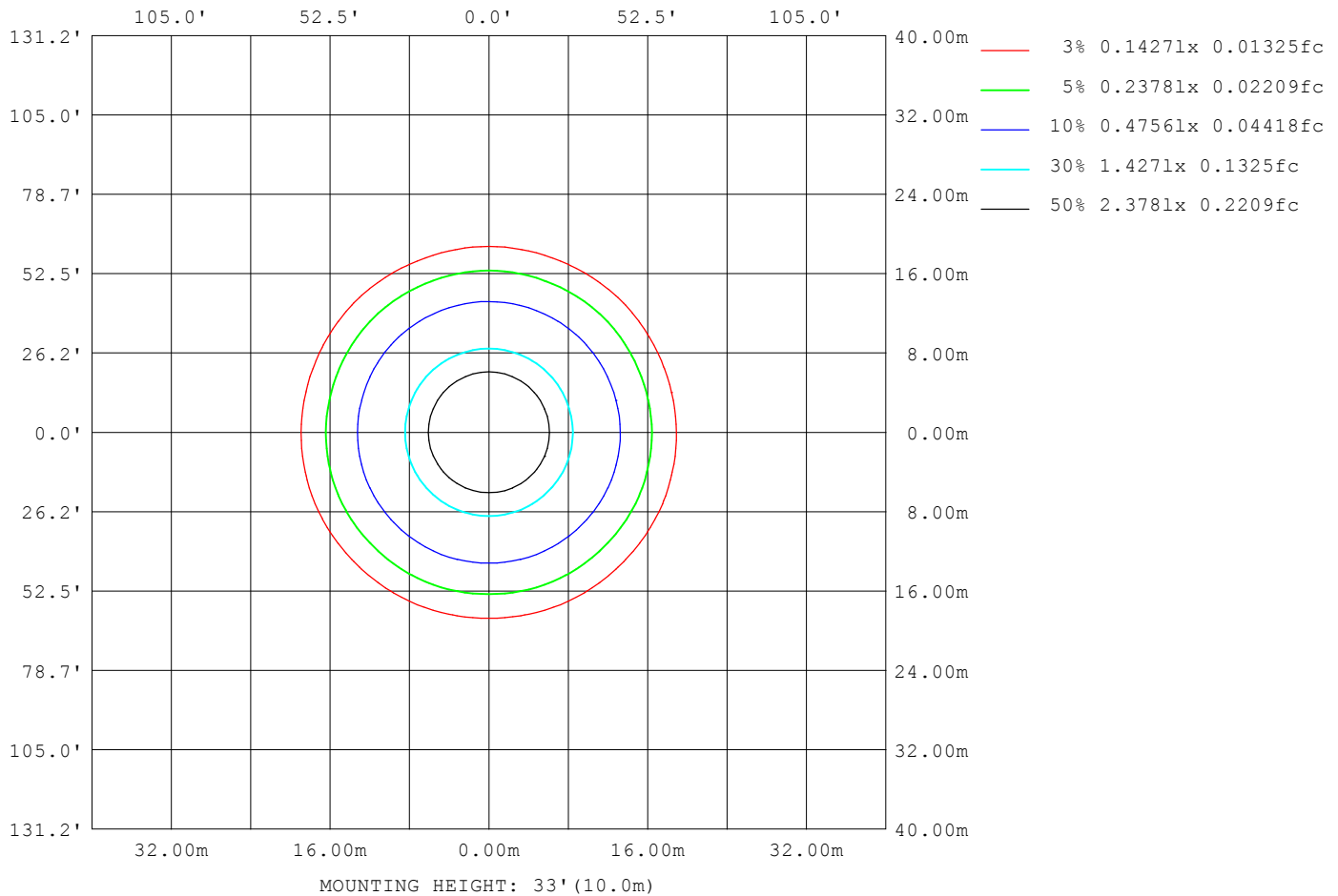
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Ky
 Test Date:18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity:65.0%
 Test Distance:7.220m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	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: Ky
 Test Date: 18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 7.220m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:240.0V I:0.0684A P:15.63W PF:0.9515 Lamp Flux:1141.83x1 lm		
NAME: DEEP C 210 LED_WHT_CLE160G3_350mA_3K	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

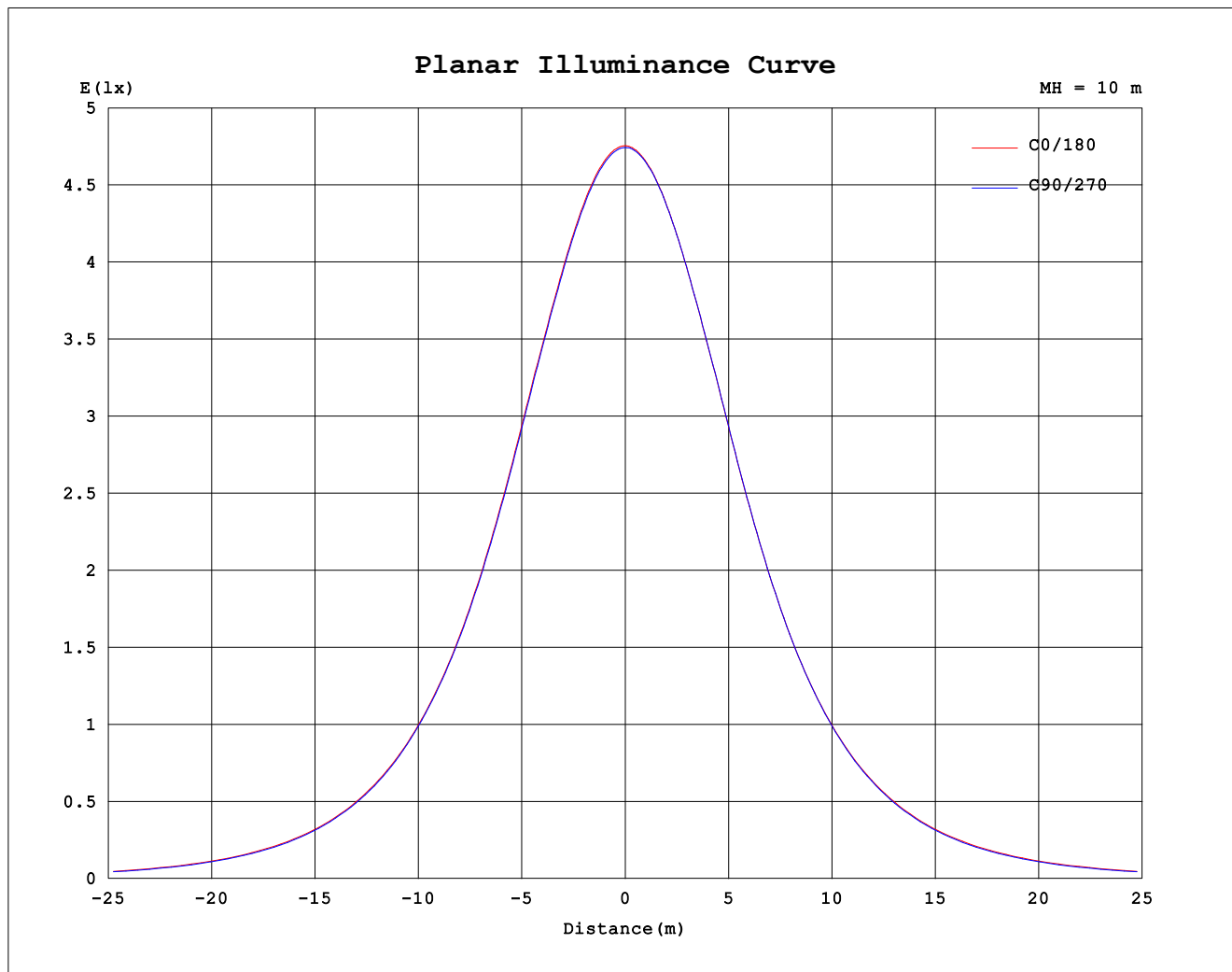
AvgL	cd/m2
L_0~180 (65) av	7882
L_0~180 (75) av	4497
L_0~180 (85) av	2473
L_90~270 (65) av	7506
L_90~270 (75) av	3744
L_90~270 (85) av	2300
L_45 (65) av	7717
L_45 (75) av	4202
L_45 (85) av	2424

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Ky
 Test Date:18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 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: 18 May 2017

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.295
 Humidity: 65.0%
 Test Distance: 7.220m [K=1.0000]
 Remarks:

