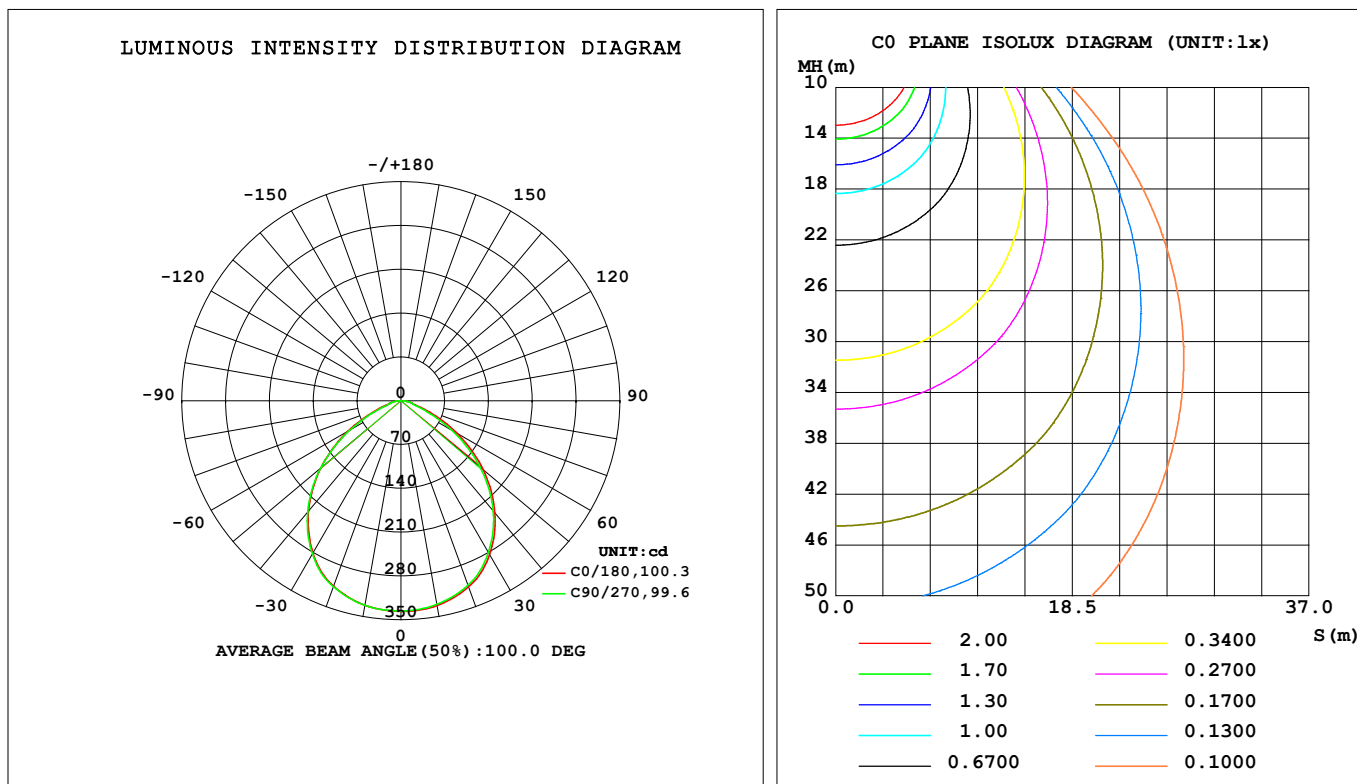


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 62.70 lm/W
MODEL	CLE G1 80mm 2000lm 4000K	I _{max} (cd)	336.7	S/MH (C0/180)	1.24	
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	1.24	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	789.72	η UP,DN (C0-180)	0.0,49.9	
NOMINAL FLUX (lm)	789.722	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,50.1	
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: 17 September 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 7.250m [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	332.2	331.5	330.5	330.4	331.7	332.3	331.9	331.9	0- 10	31.88	31.88	4.04,4.04
20	316.3	314.9	313.5	313.4	315.1	316.1	316.0	316.0	10- 20	91.71	123.6	15.6,15.6
30	283.7	281.3	279.8	279.5	281.2	282.6	282.9	283.4	20- 30	138.7	262.3	33.2,33.2
40	233.6	230.5	229.5	228.1	229.7	230.6	232.0	232.5	30- 40	161.1	423.3	53.6,53.6
50	171.7	168.7	165.3	165.6	167.3	167.9	167.7	170.1	40- 50	154.4	577.7	73.2,73.2
60	102.2	99.39	93.51	96.06	98.65	97.92	94.47	100.6	50- 60	118.8	696.5	88.2,88.2
70	39.18	35.81	30.66	33.53	37.26	35.47	30.74	36.81	60- 70	63.61	760.1	96.3,96.3
80	14.86	14.06	13.71	13.17	14.54	14.54	12.69	13.64	70- 80	22.56	782.7	99.1,99.1
90	1.222	0.8525	3.971	0.6645	3.482	2.611	0.6833	0.8243	80- 90	7.045	789.7	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): 503.23 lm

%lum = 63.7%

%lamp = 63.7%

Conical surface Flux(120deg): 696.51 lm

%lum = 88.2%

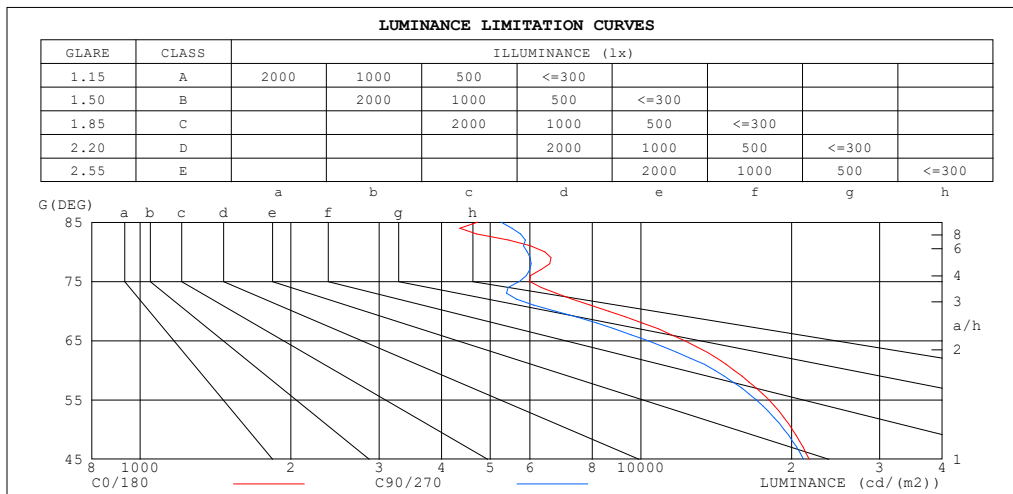
%lamp = 88.2%

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:17 September 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	4722	5263
80	6433	5935
75	5993	5731
70	8614	6740
65	12223	10321
60	15363	14061
55	18034	17006
50	20079	19330
45	21686	21135

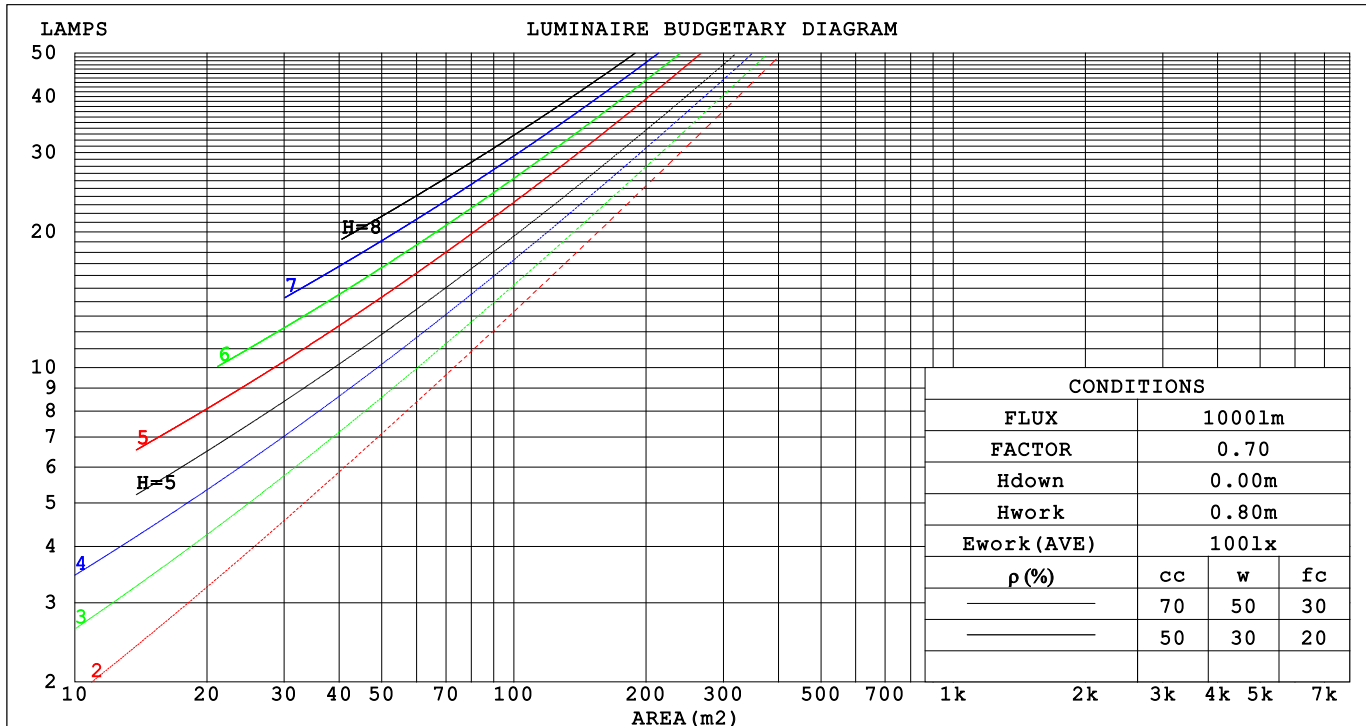
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: JEFF
 Test Date: 17 September 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 7.250m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_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						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	.00
1.0	1.06	1.03	.99	1.04	1.01	.98	.00	.97	.95	.96	.94	.92	.92	.91	.89	.87
2.0	.94	.88	.83	.92	.87	.82	.89	.84	.80	.86	.82	.79	.83	.80	.77	.75
3.0	.84	.77	.71	.82	.76	.70	.79	.74	.69	.77	.72	.68	.74	.70	.67	.65
4.0	.75	.67	.61	.74	.66	.61	.71	.65	.60	.69	.63	.59	.67	.62	.58	.56
5.0	.68	.59	.53	.66	.59	.53	.64	.58	.52	.63	.56	.52	.61	.55	.51	.49
6.0	.61	.53	.47	.60	.52	.47	.59	.51	.46	.57	.51	.46	.55	.50	.45	.44
7.0	.56	.47	.42	.55	.47	.42	.53	.46	.41	.52	.46	.41	.51	.45	.41	.39
8.0	.51	.43	.37	.50	.43	.37	.49	.42	.37	.48	.41	.37	.47	.41	.37	.35
9.0	.47	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.33	.43	.37	.33	.31
10.0	.43	.36	.31	.43	.36	.31	.42	.35	.31	.41	.35	.30	.40	.34	.30	.29



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:17 September 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_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	.265	.150	.048	.258	.147	.047	.245	.140	.045	.233	.134	.043	.222	.128	.041	
2.0	.255	.140	.043	.249	.137	.042	.238	.132	.041	.227	.127	.040	.217	.123	.039	
3.0	.241	.128	.038	.236	.126	.038	.226	.122	.037	.216	.119	.036	.208	.115	.036	
4.0	.226	.117	.035	.221	.116	.034	.212	.113	.034	.204	.110	.033	.197	.107	.033	
5.0	.212	.108	.031	.208	.107	.031	.200	.104	.031	.192	.102	.030	.186	.099	.030	
6.0	.198	.099	.028	.195	.098	.028	.188	.096	.028	.181	.094	.028	.175	.092	.027	
7.0	.186	.092	.026	.183	.091	.026	.177	.089	.026	.171	.088	.025	.165	.086	.025	
8.0	.175	.086	.024	.172	.085	.024	.167	.083	.024	.161	.082	.024	.156	.080	.023	
9.0	.165	.080	.022	.163	.079	.022	.158	.078	.022	.153	.077	.022	.148	.075	.022	
10.0	.156	.075	.021	.154	.074	.021	.149	.073	.021	.145	.072	.020	.141	.071	.020	

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	.177	.157	.138	.152	.134	.119	.104	.092	.082	.060	.053	.048	.019	.017	.015	
2.0	.167	.132	.102	.143	.114	.089	.098	.079	.062	.057	.046	.036	.018	.015	.012	
3.0	.159	.114	.078	.136	.098	.068	.094	.068	.048	.054	.040	.028	.017	.013	.009	
4.0	.151	.100	.062	.130	.087	.054	.089	.061	.038	.052	.035	.022	.017	.012	.007	
5.0	.144	.090	.050	.124	.078	.043	.085	.054	.031	.049	.032	.018	.016	.010	.006	
6.0	.137	.081	.041	.118	.070	.036	.081	.049	.025	.047	.029	.015	.015	.009	.005	
7.0	.131	.074	.035	.112	.064	.030	.078	.045	.022	.045	.027	.013	.015	.009	.004	
8.0	.125	.069	.030	.107	.059	.026	.074	.042	.019	.043	.025	.011	.014	.008	.004	
9.0	.119	.064	.026	.102	.055	.023	.071	.039	.016	.041	.023	.010	.013	.008	.003	
10.0	.114	.059	.023	.098	.052	.020	.068	.036	.014	.040	.021	.009	.013	.007	.003	

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:17 September 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm											
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_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	2H	23.5	24.9	23.7	25.1	25.3	23.2	24.6	23.5	24.8	25.0
	3H	24.1	25.3	24.3	25.6	25.8	23.6	24.9	23.9	25.1	25.3
	4H	24.1	25.4	24.4	25.6	25.8	23.7	24.9	24.0	25.1	25.4
	6H	24.2	25.4	24.6	25.6	25.9	23.8	24.9	24.1	25.2	25.4
	8H	24.2	25.3	24.6	25.6	25.9	23.8	24.9	24.1	25.2	25.4
	12H	24.2	25.3	24.6	25.6	25.9	23.8	24.9	24.1	25.1	25.4
4H	2H	23.8	25.0	24.1	25.2	25.5	23.5	24.7	23.8	25.0	25.2
	3H	24.4	25.5	24.8	25.8	26.1	24.0	25.1	24.3	25.3	25.6
	4H	24.6	25.5	24.9	25.8	26.2	24.1	25.1	24.5	25.4	25.7
	6H	24.7	25.6	25.1	25.9	26.3	24.3	25.2	24.7	25.5	25.9
	8H	24.8	25.6	25.2	25.9	26.3	24.4	25.2	24.8	25.5	25.9
	12H	24.8	25.5	25.2	25.9	26.3	24.4	25.2	24.9	25.5	25.9
8H	4H	24.6	25.3	25.0	25.7	26.1	24.2	24.9	24.6	25.3	25.7
	6H	24.8	25.5	25.3	25.9	26.3	24.4	25.1	24.9	25.5	25.9
	8H	24.9	25.5	25.4	25.9	26.4	24.6	25.1	25.0	25.6	26.0
	12H	25.0	25.5	25.5	25.9	26.4	24.7	25.2	25.1	25.6	26.1
12H	4H	24.5	25.3	25.0	25.6	26.0	24.1	24.9	24.6	25.2	25.6
	6H	24.8	25.4	25.3	25.8	26.3	24.5	25.0	24.9	25.4	25.9
	8H	25.0	25.4	25.4	25.9	26.4	24.6	25.1	25.1	25.5	26.0
Variations with the observer position at spacings:											
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5					
1.5H	+ 0.2 / - 0.4					+ 0.2 / - 0.5					
2.0H	+ 0.8 / - 0.8					+ 0.8 / - 0.9					

CIE Pub.117, 789.7 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.8$)

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:17 September 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

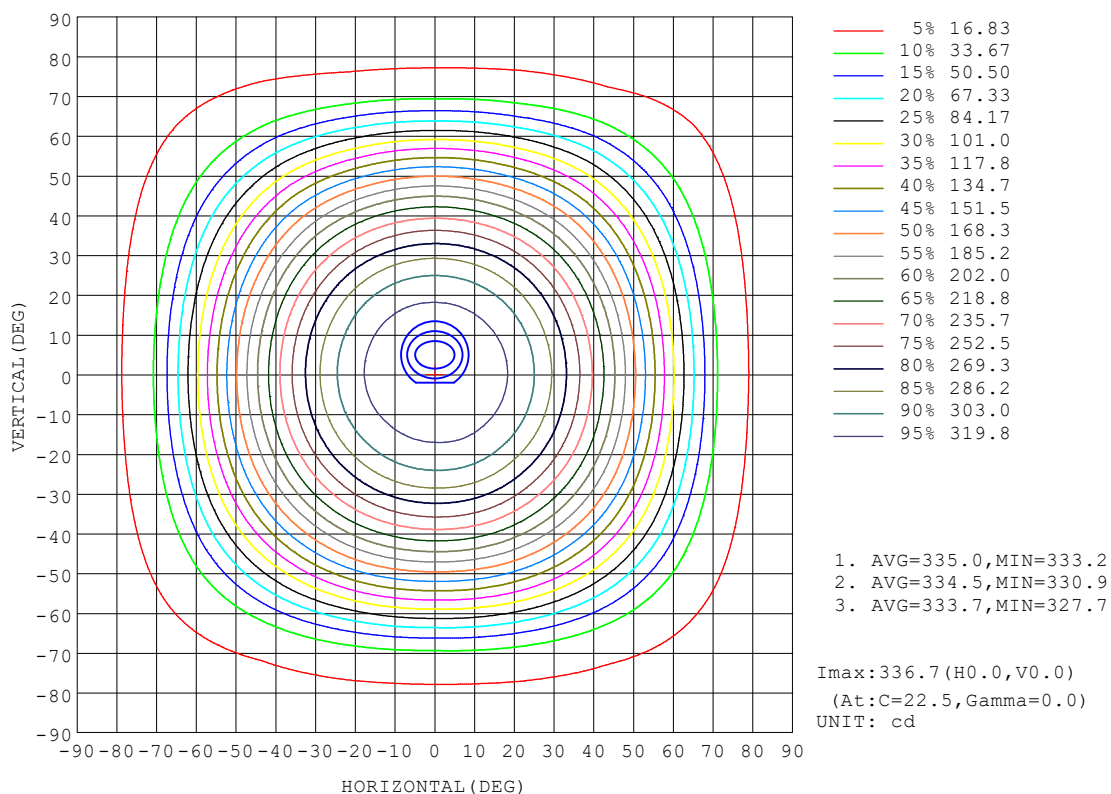
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	62	51	45	62	51	45	60	51	45	39
0.80	73	62	55	72	62	55	70	61	55	49
1.00	81	71	65	80	71	65	78	72	64	58
1.25	88	79	73	87	78	72	84	77	71	65
1.50	93	84	78	91	83	78	88	82	77	70
2.00	99	92	86	97	90	85	94	88	84	77
2.50	102	96	90	100	94	89	97	92	88	80
3.00	105	99	95	103	98	93	99	95	91	83
4.00	108	104	100	106	102	98	102	99	96	87
5.00	110	106	103	108	104	101	104	101	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:JEFF
Test Date:17 September 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

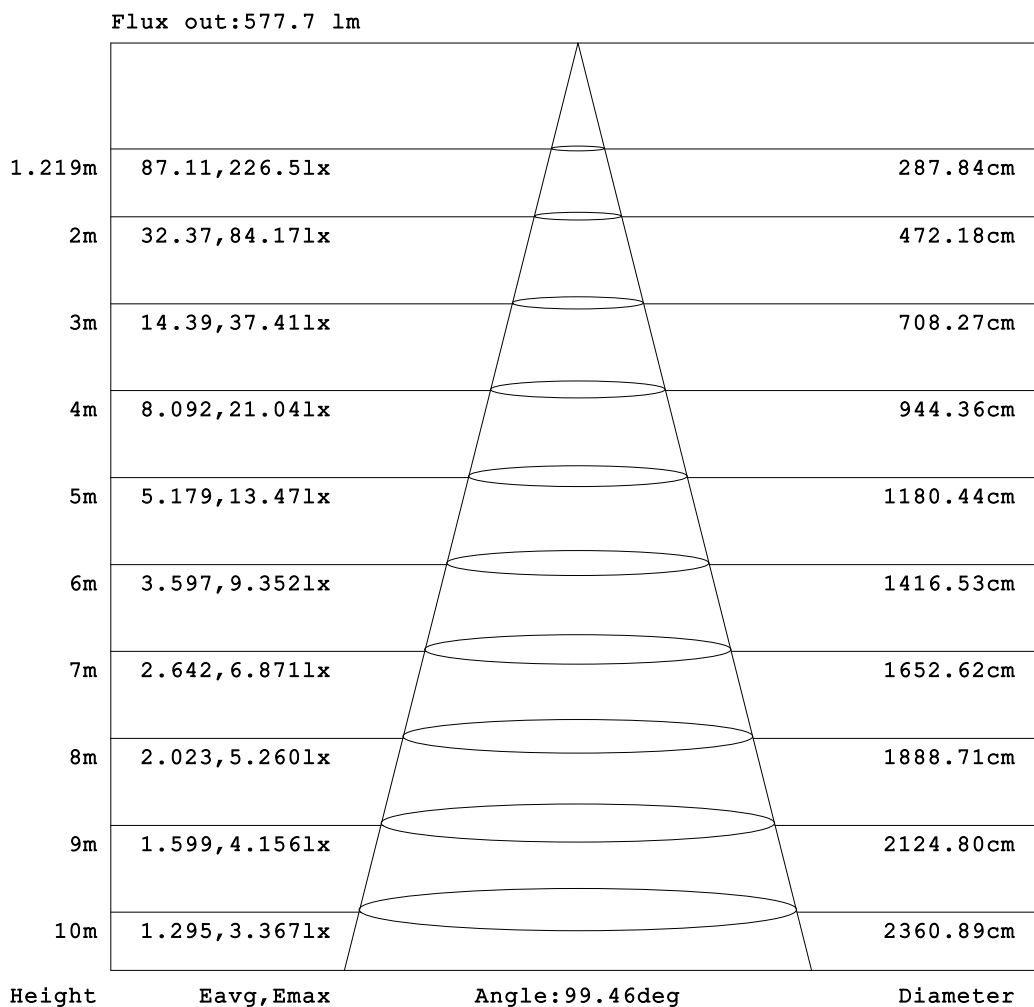


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:17 September 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [K=1.0000]
Remarks:

AAI Figure

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



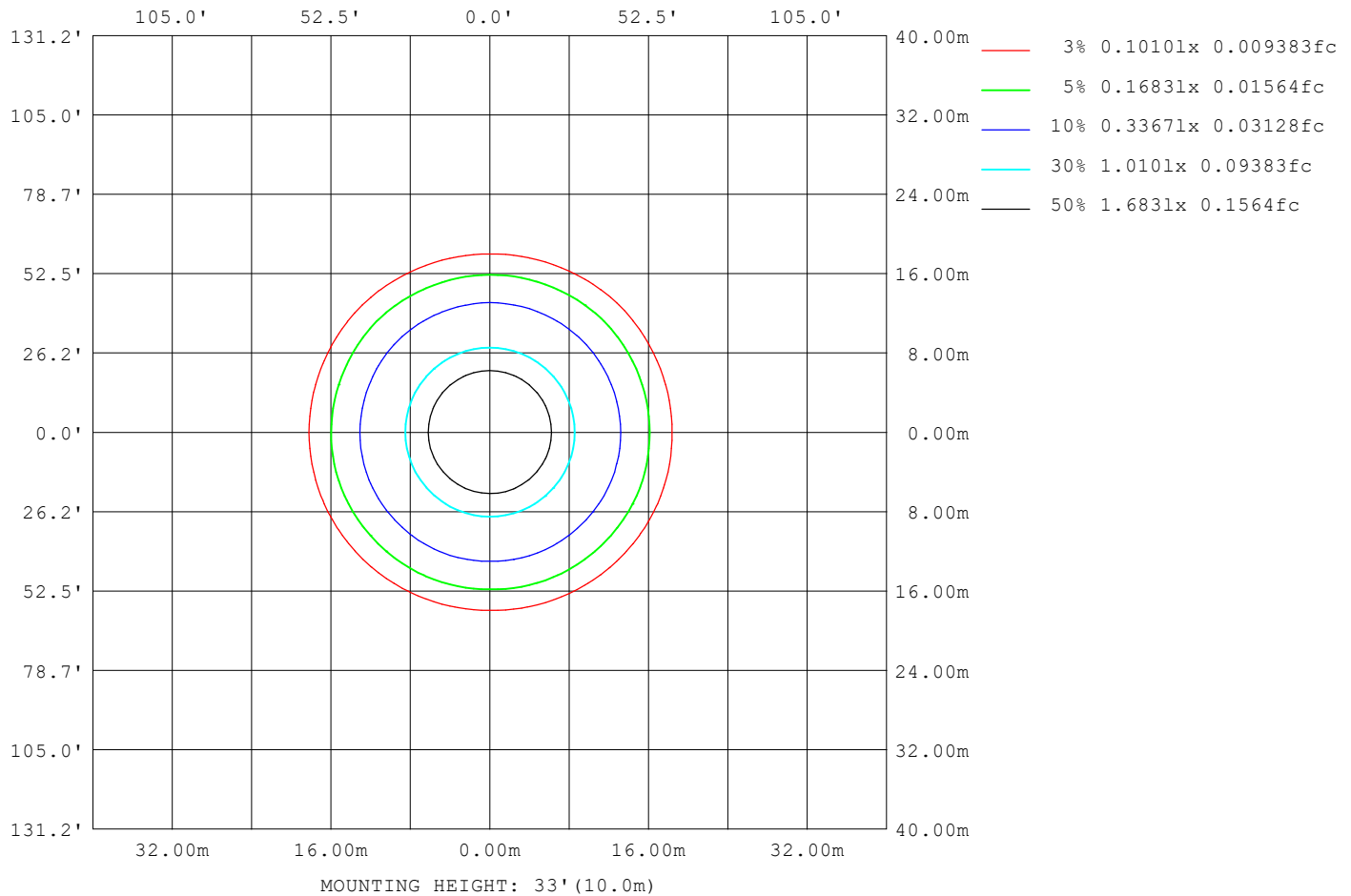
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:17 September 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_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:17 September 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [K=1.0000]
Remarks:

LED Avg.L Report

Test:U:239.83V I:0.0647A P:12.596W PF:0.8112 Freq:50.09Hz Lamp Flux:789.722x1 lm		
NAME: DEEP C 150 LED_WHT_CLE G1 80mm_500mA_4K	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

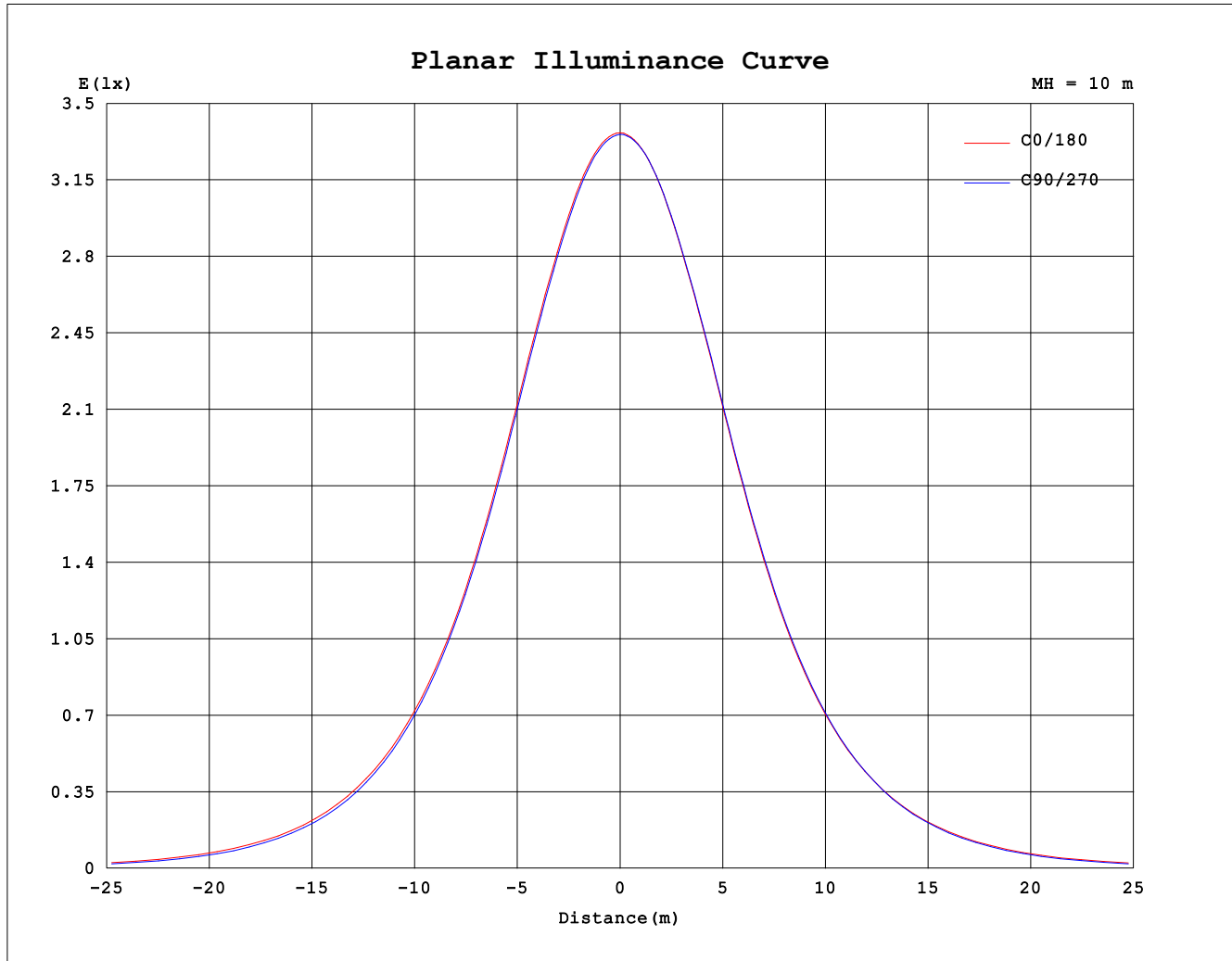
AvgL	cd/m2
L_0~180 (65) av	11865
L_0~180 (75) av	5957
L_0~180 (85) av	5096
L_90~270 (65) av	10405
L_90~270 (75) av	5612
L_90~270 (85) av	4506
L_45 (65) av	11473
L_45 (75) av	5581
L_45 (85) av	5351

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:17 September 2020

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.250m [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: 17 September 2020

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 7.250m [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:7.250m [K=1.0000]
Remarks:

```