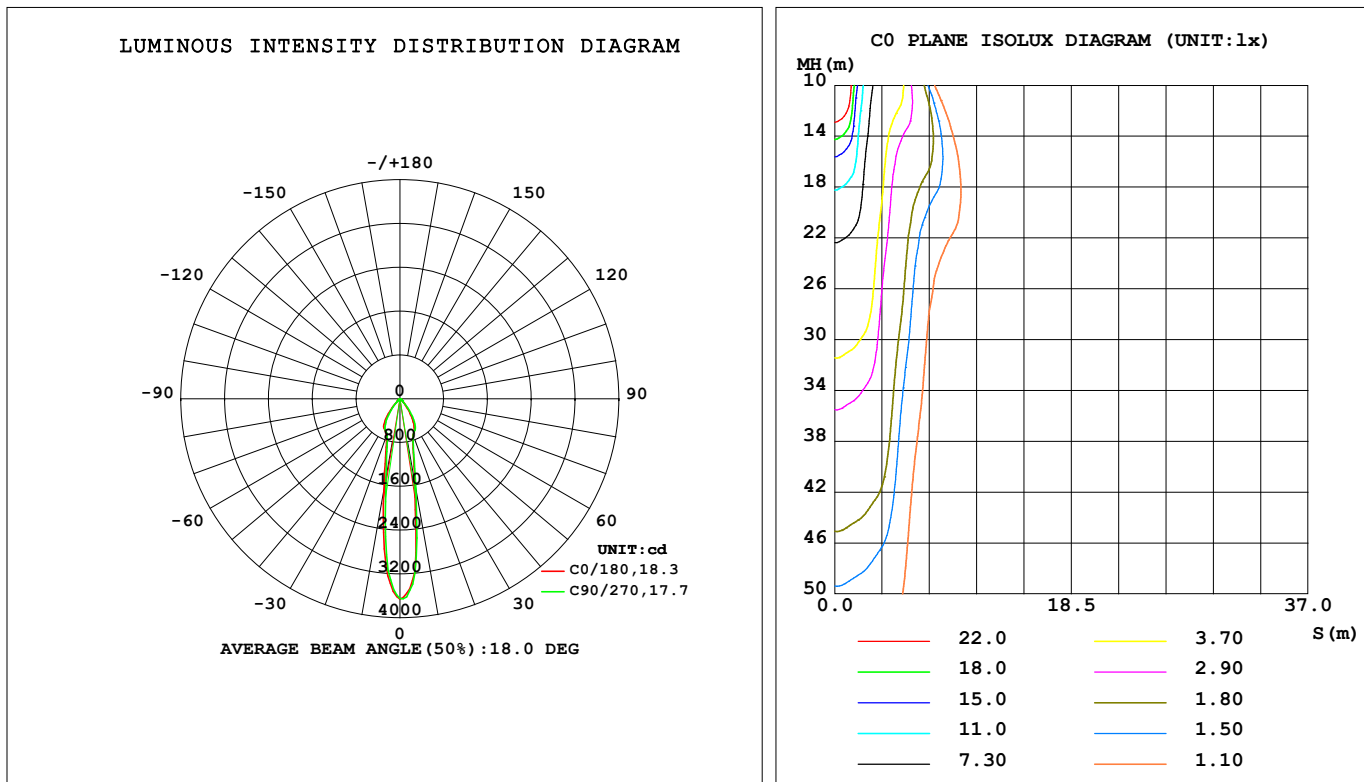


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 83.50 lm/W
MODEL G7 09mm 1200lm 830 R ADV		I <sub>max</sub> (cd)	3664	S/MH (C0/180)		0.32
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)		0.28
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	1181.0	η UP,DN (C0-180)		0.0,50.8
NOMINAL FLUX (lm)	1180.97	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,49.2
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.00
TEST VOLTAGE (V)	230	η down (%)	100.0	CIBSE SHR MAX		1.00



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

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1585	1717	1685	1685	1710	1655	1481	1503	0- 10	238.2	238.2	20.2,20.2
20	714.4	727.2	717.9	724.1	724.5	723.4	701.5	702.7	10- 20	278.9	517.1	43.8,43.8
30	488.7	515.4	557.9	589.6	598.3	585.1	535.6	490.6	20- 30	292.1	809.2	68.5,68.5
40	172.9	192.8	220.0	255.6	269.1	237.5	192.3	165.5	30- 40	237.4	1047	88.6,88.6
50	60.47	59.78	55.14	60.07	61.05	57.19	51.91	57.24	40- 50	83.43	1130	95.7,95.7
60	21.72	21.10	18.78	24.16	25.95	22.11	16.83	20.41	50- 60	33.36	1163	98.5,98.5
70	6.476	6.295	6.273	6.132	6.210	6.132	6.276	6.269	60- 70	10.65	1174	99.4,99.4
80	3.719	3.734	3.417	3.676	3.827	3.534	3.207	3.633	70- 80	5.494	1180	99.9,99.9
90	0.0094	0.0031	0	0	0.0063	0.0031	0	0	80- 90	1.413	1181	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): 1100.9 lm

%lum = 93.2%

%lamp = 93.2%

Conical surface Flux(120deg): 1163.4 lm

%lum = 98.5%

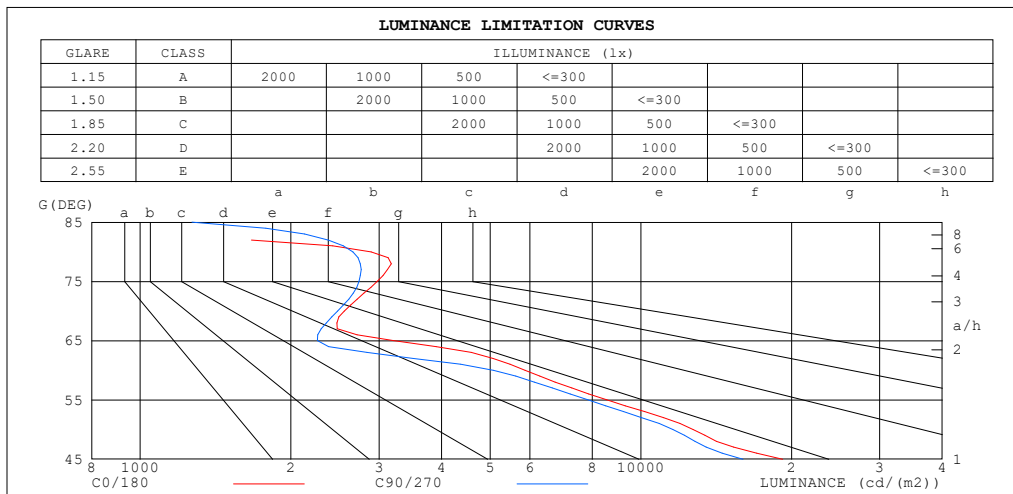
%lamp = 98.5%

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

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1103	1269
80	2894	2659
75	2977	2735
70	2559	2479
65	3203	2261
60	5870	5075
55	8553	7837
50	12712	11592
45	19212	16005

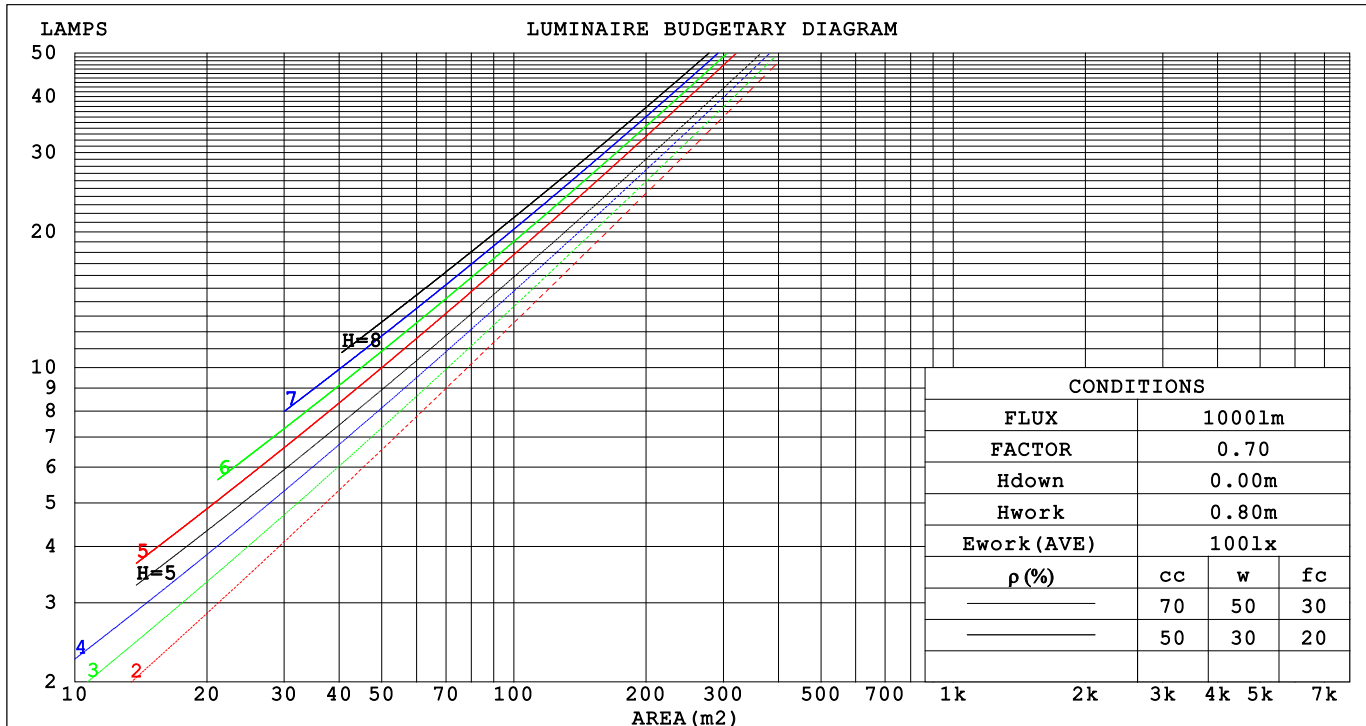
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 November 2020

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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	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	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	1.11	1.08	1.06	1.09	1.06	1.04	1.05	1.03	1.01	1.01	.99	.98	.97	.96	.95	.94
2.0	1.03	.99	.96	1.01	.98	.95	.98	.95	.93	.95	.93	.91	.92	.90	.89	.87
3.0	.96	.91	.87	.95	.90	.87	.92	.88	.85	.90	.87	.84	.88	.85	.83	.81
4.0	.90	.85	.81	.89	.84	.80	.87	.83	.79	.85	.81	.78	.83	.80	.77	.76
5.0	.85	.79	.75	.84	.79	.75	.82	.77	.74	.80	.76	.73	.79	.75	.73	.71
6.0	.80	.74	.70	.79	.74	.70	.78	.73	.69	.76	.72	.69	.75	.71	.68	.67
7.0	.76	.70	.66	.75	.69	.65	.74	.69	.65	.72	.68	.65	.71	.67	.64	.63
8.0	.72	.66	.62	.71	.66	.62	.70	.65	.62	.69	.65	.61	.68	.64	.61	.60
9.0	.68	.62	.59	.68	.62	.58	.67	.62	.58	.66	.61	.58	.65	.61	.58	.57
10.0	.65	.59	.56	.64	.59	.56	.64	.59	.55	.63	.58	.55	.62	.58	.55	.54



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 November 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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	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	.178	.101	.032	.171	.098	.031	.159	.091	.029	.147	.085	.027	.136	.079	.026	
2.0	.170	.093	.029	.165	.091	.028	.154	.086	.027	.144	.081	.025	.135	.076	.024	
3.0	.162	.086	.026	.157	.084	.025	.148	.080	.024	.139	.076	.023	.132	.073	.023	
4.0	.153	.080	.023	.149	.078	.023	.141	.075	.022	.134	.072	.022	.127	.069	.021	
5.0	.145	.074	.021	.142	.073	.021	.135	.070	.021	.129	.068	.020	.123	.066	.020	
6.0	.138	.069	.020	.135	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018	
7.0	.131	.065	.018	.129	.064	.018	.123	.062	.018	.118	.061	.018	.114	.059	.017	
8.0	.125	.061	.017	.123	.060	.017	.118	.059	.017	.114	.058	.017	.110	.056	.016	
9.0	.120	.058	.016	.117	.057	.016	.113	.056	.016	.109	.055	.016	.106	.054	.015	
10.0	.114	.055	.015	.112	.054	.015	.109	.053	.015	.105	.052	.015	.102	.051	.015	

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	.171	.157	.145	.146	.135	.125	.100	.093	.086	.058	.054	.050	.018	.017	.016	
2.0	.156	.132	.113	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.144	.114	.090	.123	.098	.078	.085	.068	.055	.049	.040	.032	.016	.013	.011	
4.0	.133	.099	.073	.114	.085	.063	.079	.060	.044	.045	.035	.026	.015	.011	.009	
5.0	.124	.087	.060	.107	.075	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007	
6.0	.117	.078	.050	.100	.067	.044	.069	.047	.031	.040	.028	.018	.013	.009	.006	
7.0	.110	.070	.042	.095	.061	.037	.065	.043	.026	.038	.025	.016	.012	.008	.005	
8.0	.104	.064	.036	.090	.055	.032	.062	.039	.023	.036	.023	.013	.012	.008	.004	
9.0	.099	.059	.032	.085	.051	.028	.059	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.094	.054	.028	.081	.047	.024	.056	.033	.017	.033	.020	.010	.011	.006	.003	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 November 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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm											
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG						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	17.7	18.7	18.0	18.8	19.0	18.0	18.9	18.2	19.1	19.3	
3H	17.7	18.5	17.9	18.7	18.9	17.9	18.7	18.1	18.9	19.1	
4H	17.6	18.4	17.9	18.7	18.9	17.9	18.7	18.1	18.9	19.1	
6H	17.6	18.4	17.9	18.6	18.9	17.8	18.6	18.1	18.8	19.1	
8H	17.6	18.3	17.9	18.6	18.8	17.8	18.5	18.1	18.8	19.0	
12H	17.5	18.3	17.9	18.5	18.8	17.8	18.5	18.1	18.7	19.0	
4H 2H	17.6	18.4	17.9	18.6	18.8	17.8	18.6	18.1	18.9	19.1	
3H	17.5	18.2	17.8	18.5	18.8	17.7	18.4	18.1	18.7	19.0	
4H	17.5	18.2	17.9	18.5	18.8	17.7	18.4	18.1	18.7	19.0	
6H	17.6	18.1	17.9	18.5	18.8	17.7	18.3	18.1	18.6	19.0	
8H	17.5	18.1	17.9	18.4	18.8	17.7	18.2	18.1	18.6	19.0	
12H	17.5	18.0	17.9	18.4	18.7	17.7	18.2	18.1	18.5	18.9	
8H 4H	17.4	18.0	17.8	18.3	18.7	17.6	18.2	18.0	18.5	18.9	
6H	17.5	17.9	17.9	18.3	18.8	17.7	18.1	18.1	18.5	18.9	
8H	17.5	17.9	18.0	18.3	18.8	17.7	18.1	18.1	18.5	18.9	
12H	17.5	17.8	18.0	18.3	18.7	17.7	18.0	18.1	18.4	18.9	
12H 4H	17.4	17.9	17.8	18.3	18.6	17.6	18.1	18.0	18.5	18.8	
6H	17.5	17.9	17.9	18.3	18.7	17.6	18.0	18.1	18.4	18.9	
8H	17.5	17.8	18.0	18.3	18.7	17.7	18.0	18.1	18.4	18.9	
Variations with the observer position at spacings:											
S = 1.0H	+ 2.0 / - 3.7					+ 2.8 / - 4.8					
1.5H	+ 3.4 / - 2.8					+ 4.6 / - 3.4					
2.0H	+ 3.3 / - 2.9					+ 2.8 / - 3.7					

CIE Pub.117, 1181 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.6)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 November 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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

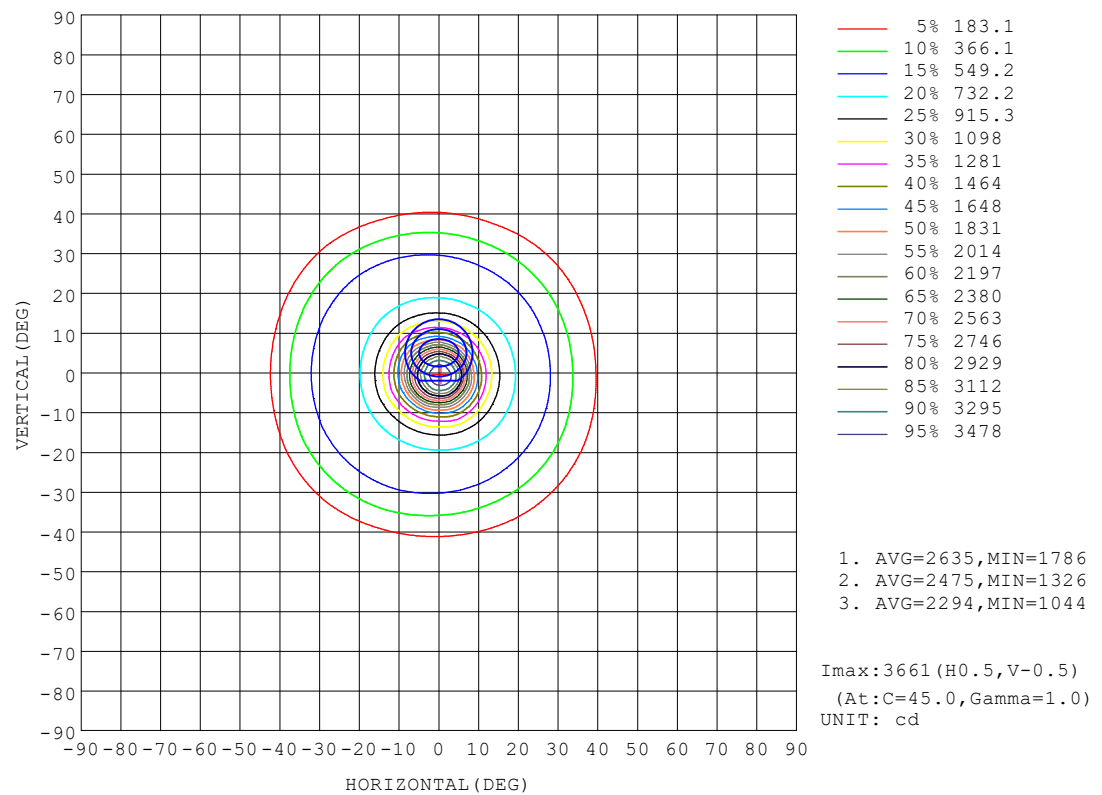
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	84	77	73	84	77	73	83	77	73	69
0.80	92	86	82	92	85	82	90	85	81	77
1.00	97	91	87	96	91	87	95	91	86	82
1.25	102	96	92	101	95	92	99	94	91	87
1.50	105	99	96	103	99	95	101	97	94	90
2.00	108	103	100	106	102	99	103	100	97	92
2.50	109	105	102	108	104	101	105	102	99	93
3.00	111	107	105	109	106	103	106	103	101	95
4.00	113	110	108	111	109	106	108	105	104	97
5.00	115	112	110	112	110	108	108	107	105	98
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 November 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



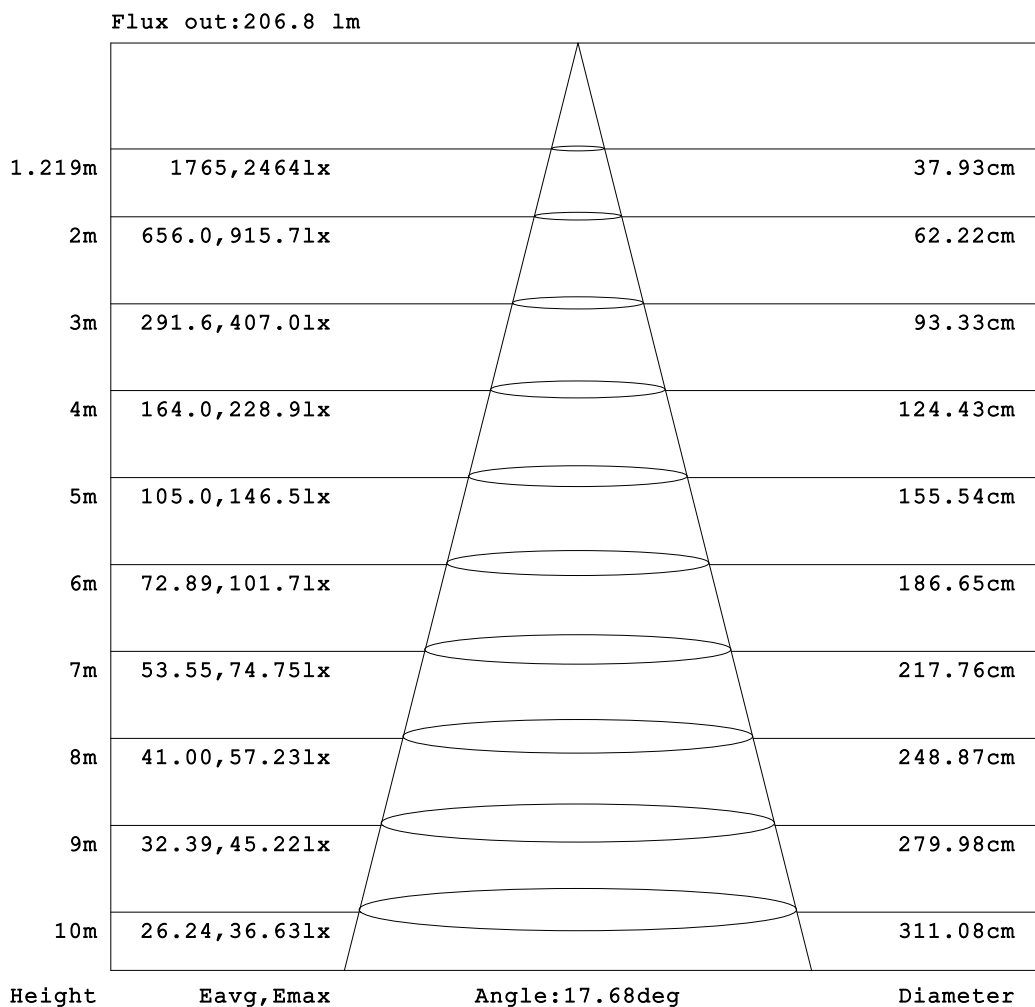
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 November 2020

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



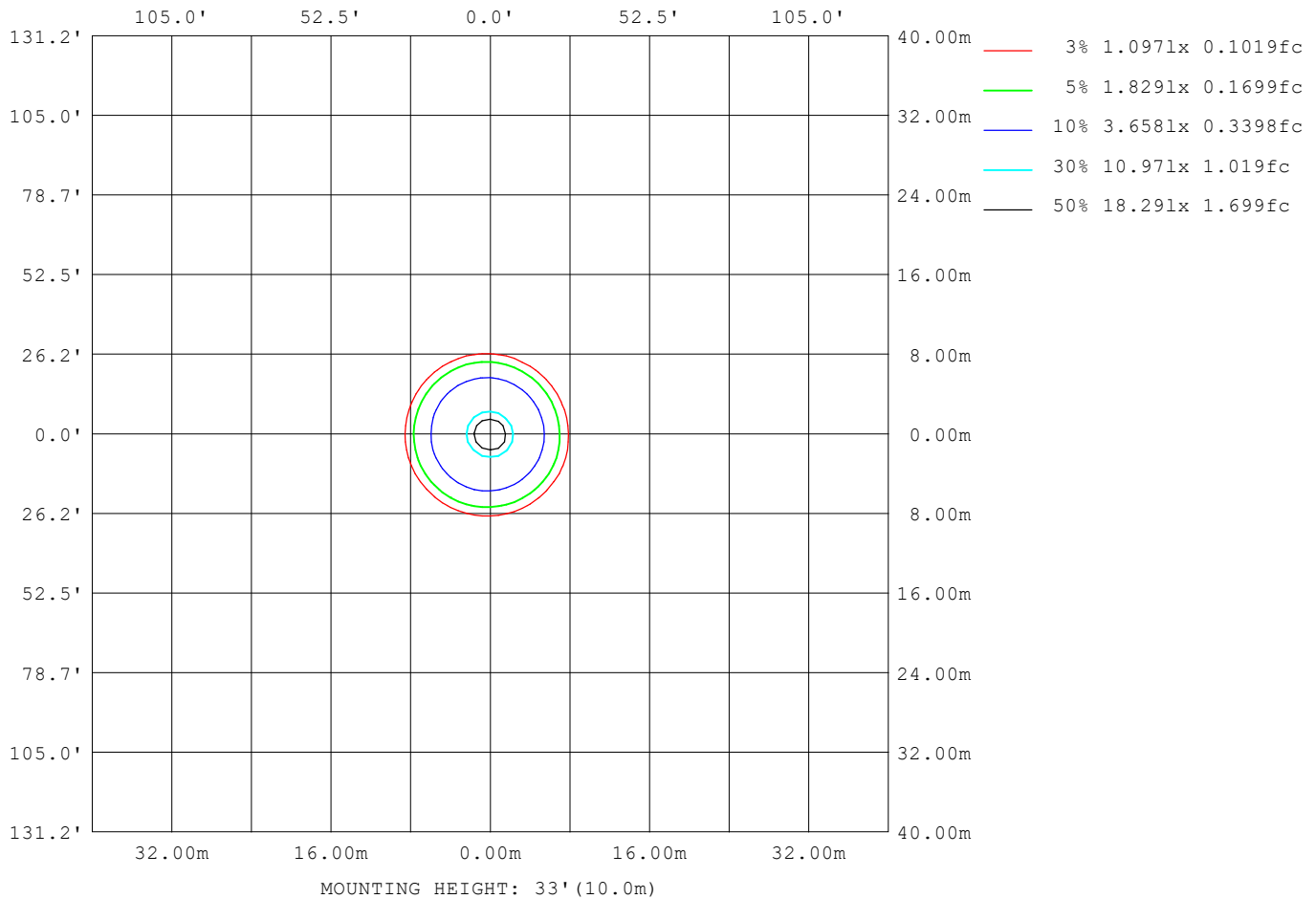
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:17 November 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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	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 November 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:239.82V I:0.0639A P:14.143W PF:0.9226 Freq:50.09Hz Lamp Flux:1180.97x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_3K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

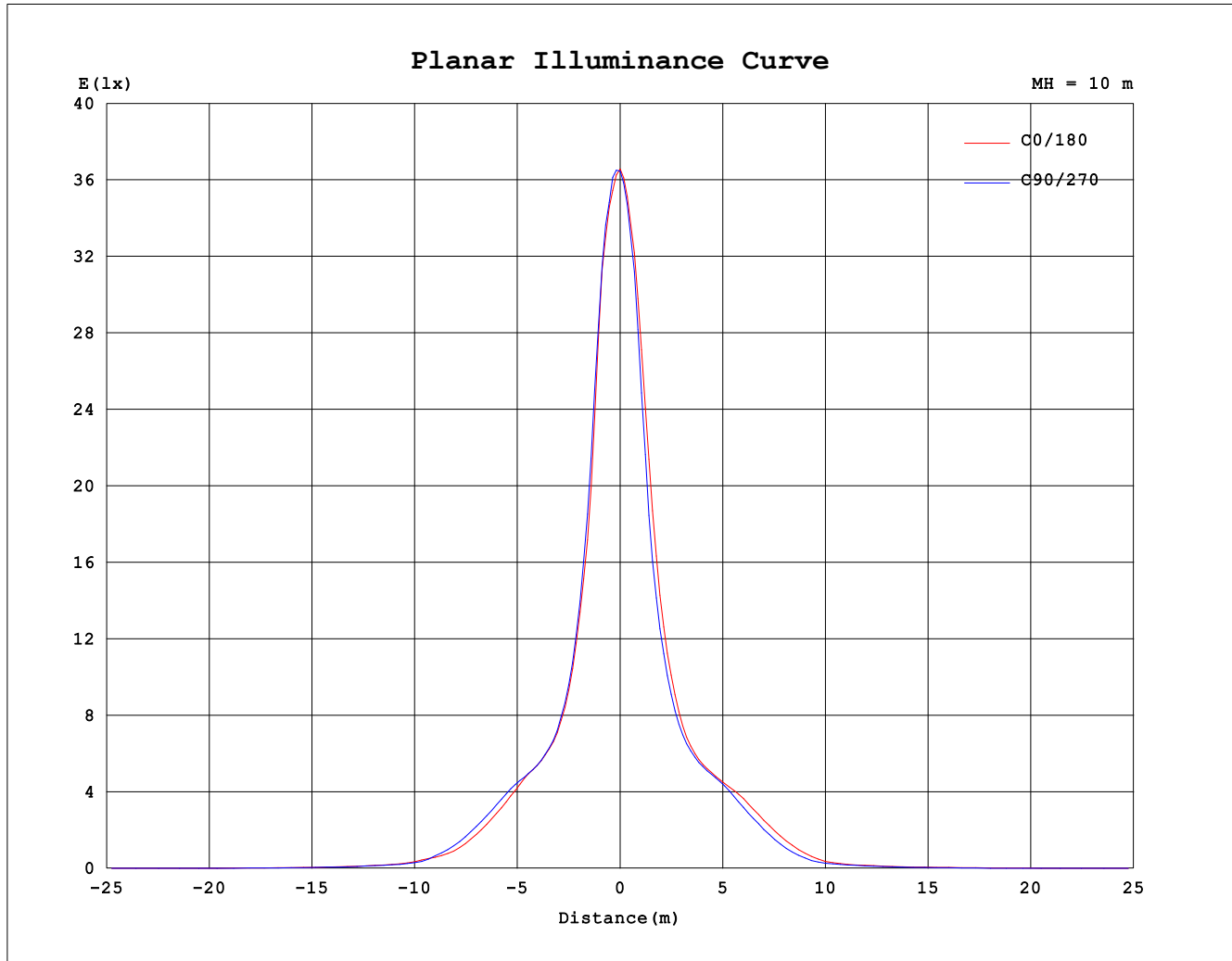
AvgL	cd/m2
L_0~180 (65) av	3300
L_0~180 (75) av	2923
L_0~180 (85) av	1055
L_90~270 (65) av	2252
L_90~270 (75) av	2709
L_90~270 (85) av	1050
L_45 (65) av	2871
L_45 (75) av	2771
L_45 (85) av	1793

Standard: GB/T 29293-2012

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

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

```