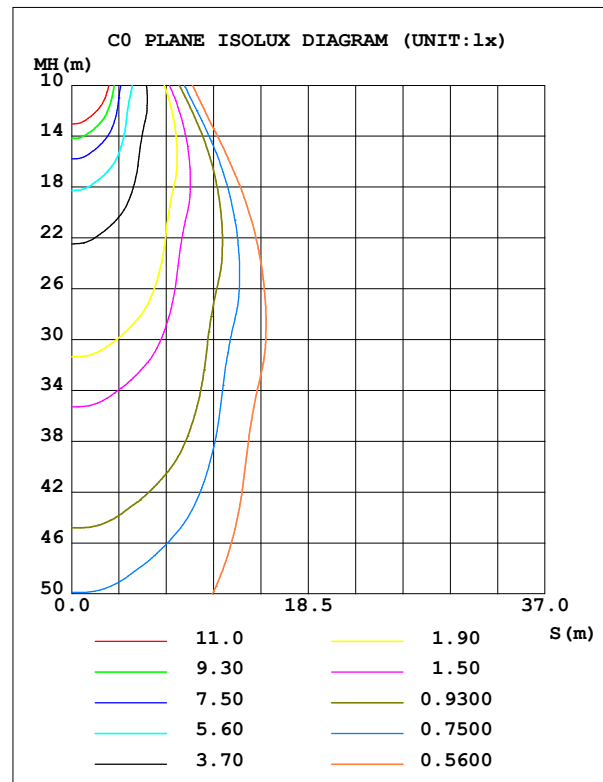
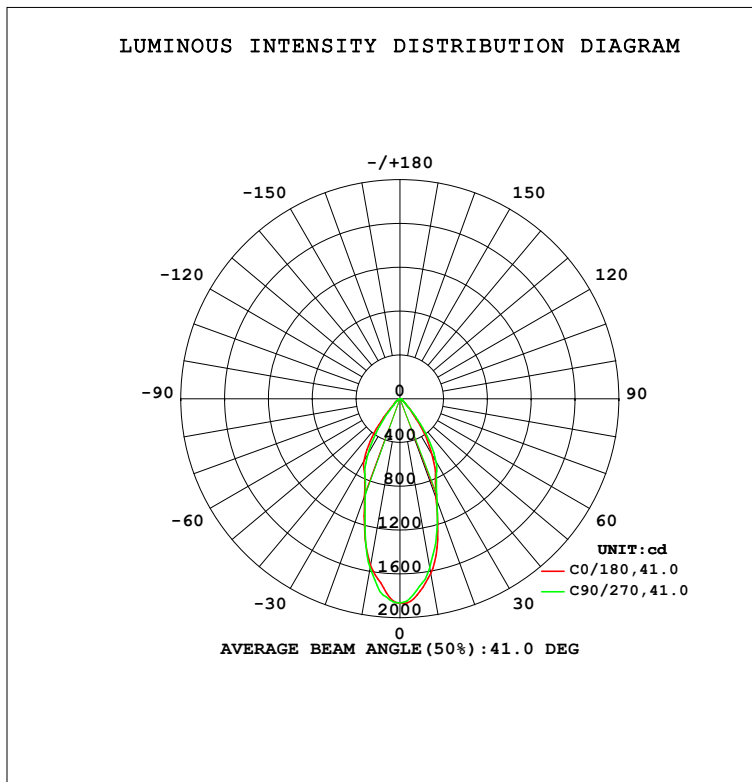


**LUMINAIRE PHOTOMETRIC TEST REPORT**

Test:U:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA			
MODEL:G7 09mm 1200lm 840 R ADV		Eff: 90.45 lm/W			
NOMINAL POWER(W)		I <sub>max</sub> (cd)	1870	S/MH (C0/180)	0.64
RATED VOLTAGE(V)	220.0	LOR (%)	100.0	S/MH (C90/270)	0.63
NOMINAL FLUX(lm)	1283.23	TOTAL FLUX(lm)	1283.2	η UP,DN (C0-180)	0.0,51.2
LAMPS INSIDE	1	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,48.8
TEST VOLTAGE (V)	230	η up (%)	0.0	CIBSE SHR NOM	0.75
		η down (%)	100.0	CIBSE SHR MAX	0.75



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 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	1619	1579	1566	1569	1547	1544	1568	1642	0- 10	163.1	163.1	12.7,12.7
20	972.8	996.1	990.5	972.1	948.0	929.7	926.9	945.6	10- 20	352.3	515.4	40.2,40.2
30	586.9	625.6	657.6	674.5	661.9	630.6	587.6	577.9	20- 30	356.4	871.8	67.9,67.9
40	208.5	229.0	256.9	277.2	266.9	228.9	200.0	203.1	30- 40	264.7	1137	88.6,88.6
50	63.81	65.09	61.45	66.95	65.42	61.38	54.26	61.08	40- 50	91.27	1228	95.7,95.7
60	24.97	24.74	20.57	25.89	26.74	22.74	17.03	22.28	50- 60	36.59	1264	98.5,98.5
70	6.883	6.755	6.831	6.749	6.822	6.635	6.715	6.663	60- 70	11.33	1276	99.4,99.4
80	4.039	4.112	3.806	4.090	4.235	3.776	3.405	3.889	70- 80	5.954	1282	99.9,99.9
90	0.0188	0.0125	0.0031	0	0.0157	0	0.0063	0.0094	80- 90	1.557	1283	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): 1196 lm

%lum = 93.2%

%lamp = 93.2%

Conical surface Flux(120deg): 1264.4 lm

%lum = 98.5%

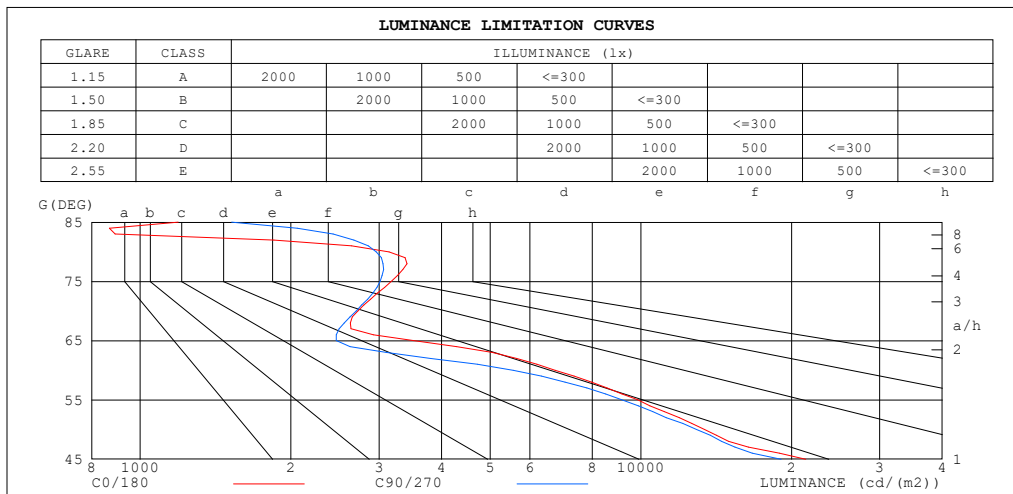
%lamp = 98.5%

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1190	1522
80	3144	2962
75	3176	3013
70	2720	2699
65	3512	2463
60	6749	5559
55	9861	9154
50	13415	12919
45	21356	19059

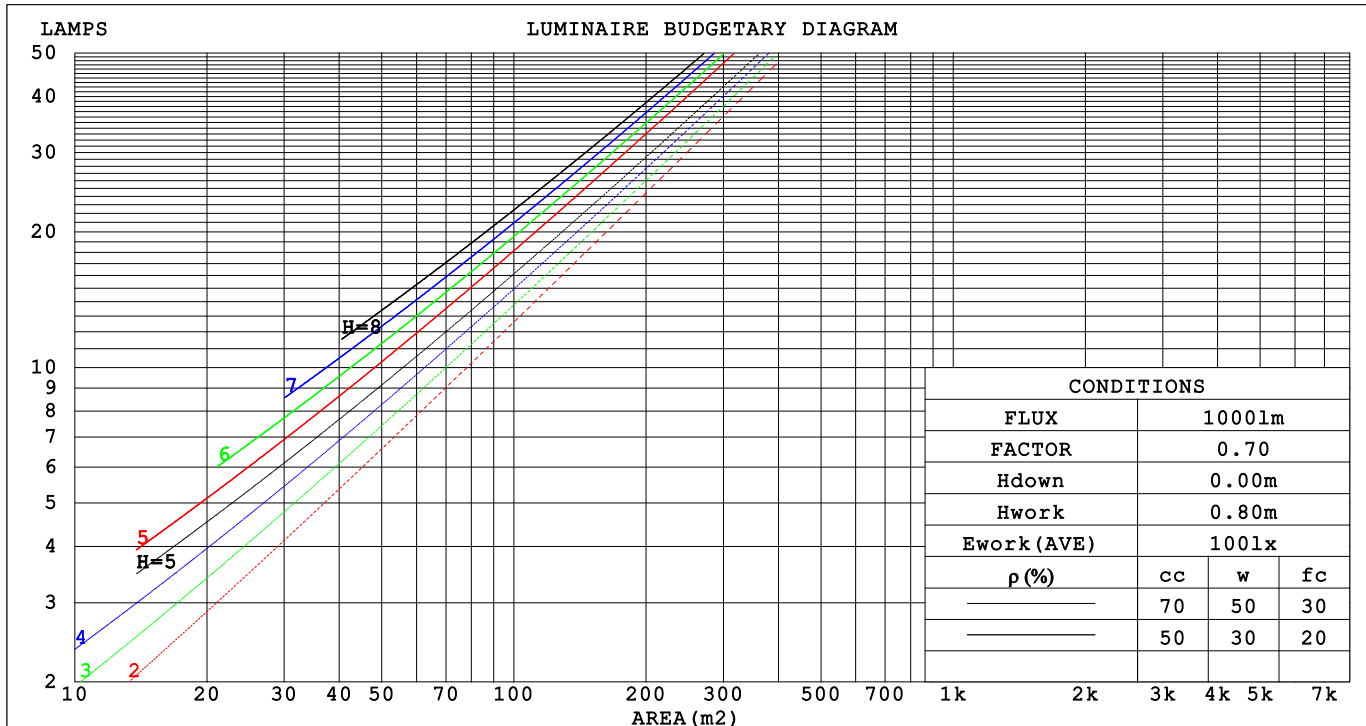
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 November 2020

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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 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															



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 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	.184	.104	.033	.177	.101	.032	.164	.094	.030	.153	.088	.028	.142	.082	.027	
2.0	.176	.096	.030	.170	.094	.029	.160	.089	.028	.150	.084	.026	.141	.080	.025	
3.0	.167	.089	.027	.162	.087	.026	.153	.083	.025	.145	.079	.024	.137	.076	.023	
4.0	.159	.083	.024	.155	.081	.024	.147	.078	.023	.140	.075	.023	.133	.072	.022	
5.0	.151	.077	.022	.148	.076	.022	.141	.073	.022	.134	.071	.021	.128	.069	.021	
6.0	.144	.072	.021	.141	.071	.020	.135	.069	.020	.129	.067	.020	.124	.065	.019	
7.0	.137	.068	.019	.134	.067	.019	.129	.065	.019	.124	.064	.018	.119	.062	.018	
8.0	.131	.064	.018	.128	.063	.018	.124	.062	.018	.119	.060	.017	.115	.059	.017	
9.0	.125	.061	.017	.123	.060	.017	.119	.059	.017	.115	.057	.016	.111	.056	.016	
10.0	.120	.057	.016	.118	.057	.016	.114	.056	.016	.110	.055	.016	.107	.054	.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	.172	.157	.144	.147	.135	.124	.100	.093	.086	.058	.054	.050	.019	.017	.016	
2.0	.157	.132	.112	.134	.114	.097	.092	.079	.068	.053	.046	.040	.017	.015	.013	
3.0	.145	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010	
4.0	.135	.099	.072	.116	.086	.062	.079	.060	.044	.046	.035	.026	.015	.011	.009	
5.0	.126	.087	.059	.108	.076	.051	.075	.053	.036	.043	.031	.021	.014	.010	.007	
6.0	.119	.078	.049	.102	.068	.043	.070	.047	.030	.041	.028	.018	.013	.009	.006	
7.0	.112	.071	.042	.096	.061	.036	.067	.043	.026	.039	.025	.015	.013	.008	.005	
8.0	.106	.064	.036	.092	.056	.031	.063	.039	.022	.037	.023	.013	.012	.008	.004	
9.0	.101	.059	.031	.087	.051	.027	.060	.036	.019	.035	.021	.011	.011	.007	.004	
10.0	.097	.055	.027	.083	.048	.024	.058	.034	.017	.034	.020	.010	.011	.007	.003	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm											
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 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	2H	18.2	19.2	18.4	19.4	19.5	18.5	19.4	18.7	19.6	19.8
	3H	18.1	19.0	18.4	19.2	19.4	18.3	19.2	18.6	19.4	19.6
	4H	18.1	18.9	18.3	19.1	19.4	18.3	19.1	18.6	19.4	19.6
	6H	18.0	18.8	18.3	19.1	19.3	18.3	19.1	18.6	19.3	19.5
	8H	18.0	18.8	18.3	19.0	19.3	18.2	19.0	18.5	19.3	19.5
	12H	18.0	18.7	18.3	19.0	19.2	18.2	18.9	18.5	19.2	19.5
4H	2H	18.0	18.9	18.3	19.1	19.3	18.3	19.1	18.6	19.4	19.6
	3H	18.0	18.7	18.3	19.0	19.2	18.2	18.9	18.5	19.2	19.5
	4H	18.0	18.6	18.3	18.9	19.2	18.2	18.8	18.5	19.1	19.4
	6H	18.0	18.6	18.3	18.9	19.2	18.2	18.7	18.5	19.1	19.4
	8H	17.9	18.5	18.3	18.8	19.2	18.2	18.7	18.5	19.0	19.4
	12H	17.9	18.4	18.3	18.8	19.2	18.1	18.6	18.5	19.0	19.4
8H	4H	17.9	18.4	18.2	18.7	19.1	18.1	18.6	18.5	19.0	19.3
	6H	17.9	18.4	18.3	18.8	19.2	18.1	18.5	18.5	18.9	19.4
	8H	17.9	18.3	18.4	18.7	19.2	18.1	18.5	18.5	18.9	19.4
	12H	17.9	18.2	18.4	18.7	19.1	18.1	18.4	18.5	18.9	19.3
12H	4H	17.8	18.3	18.2	18.7	19.1	18.0	18.5	18.4	18.9	19.3
	6H	17.9	18.3	18.3	18.7	19.1	18.1	18.5	18.5	18.9	19.3
	8H	17.9	18.2	18.4	18.7	19.1	18.1	18.4	18.5	18.9	19.3
Variations with the observer position at spacings:											
S = 1.0H		+ 2.2 / - 4.0					+ 2.9 / - 4.9				
1.5H		+ 3.8 / - 2.9					+ 4.7 / - 3.4				
2.0H		+ 3.3 / - 3.0					+ 3.1 / - 3.8				

CIE Pub.117, 1283 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.9)

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

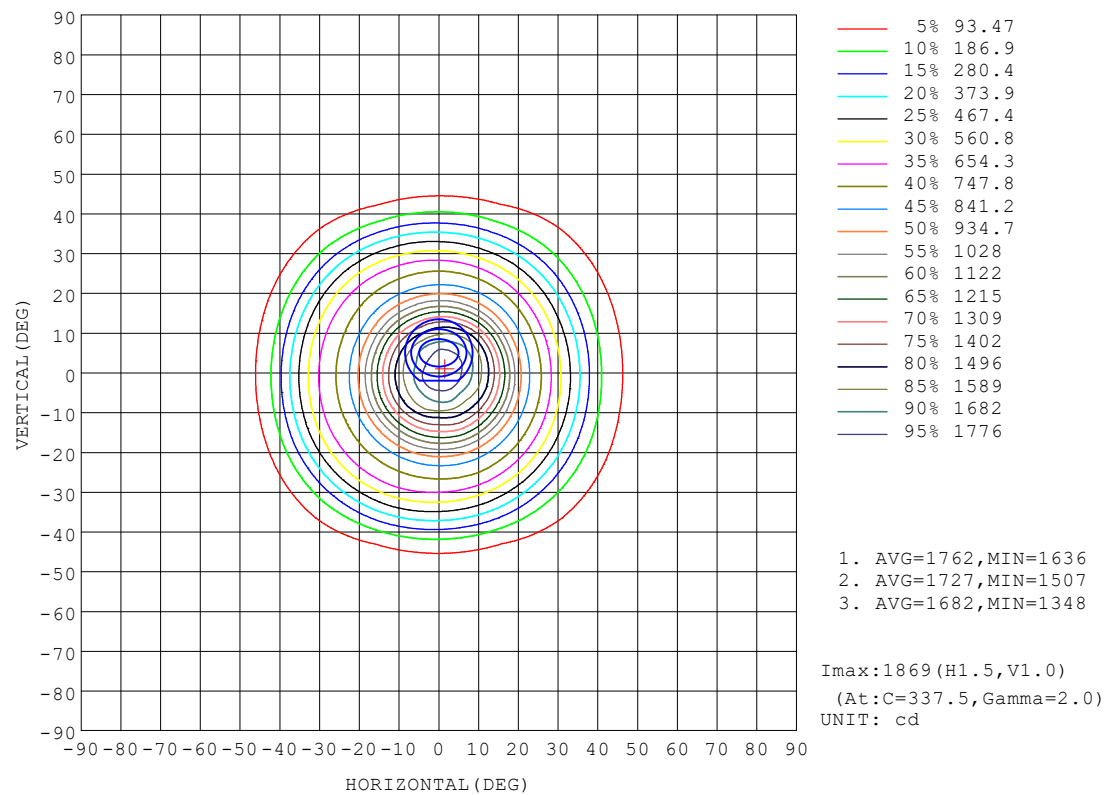
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	84	77	73	84	77	73	83	77	73	69
0.80	92	86	82	91	85	82	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	107	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:12 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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



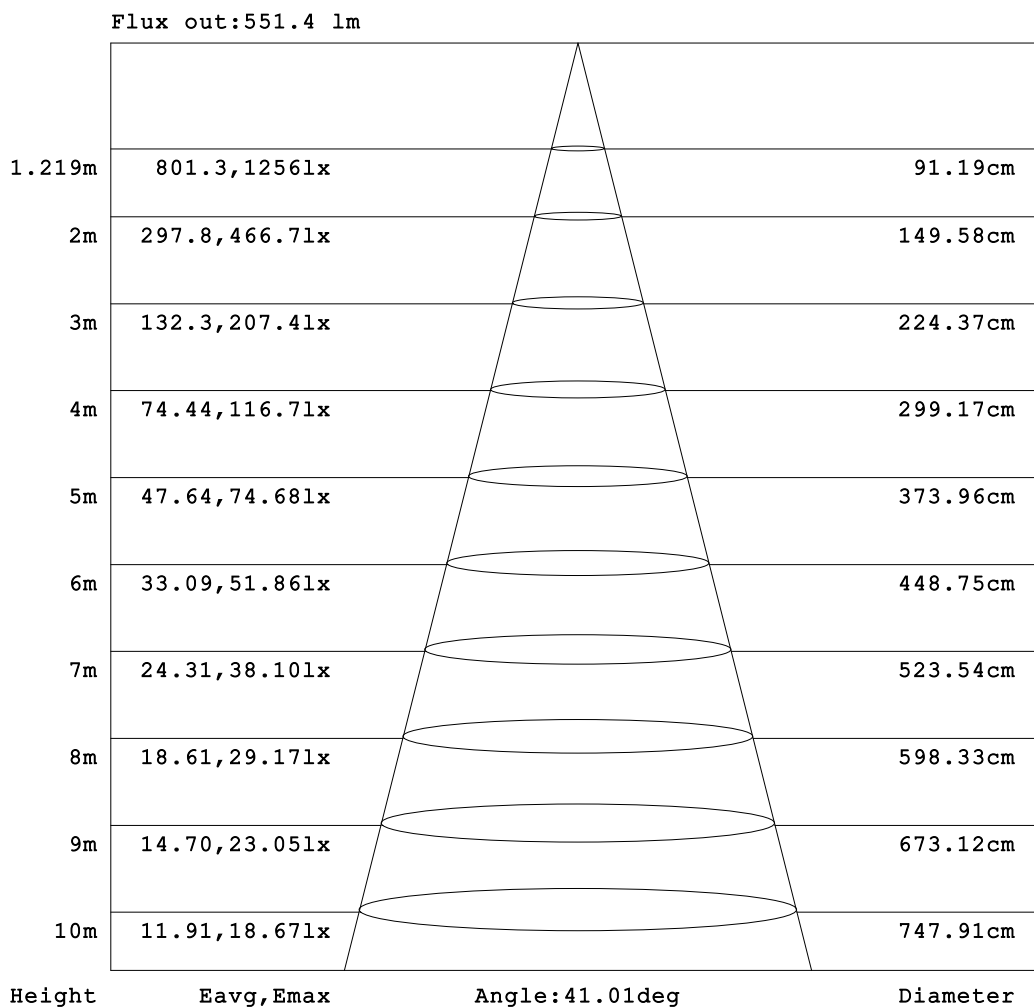
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 November 2020

$\gamma$  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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



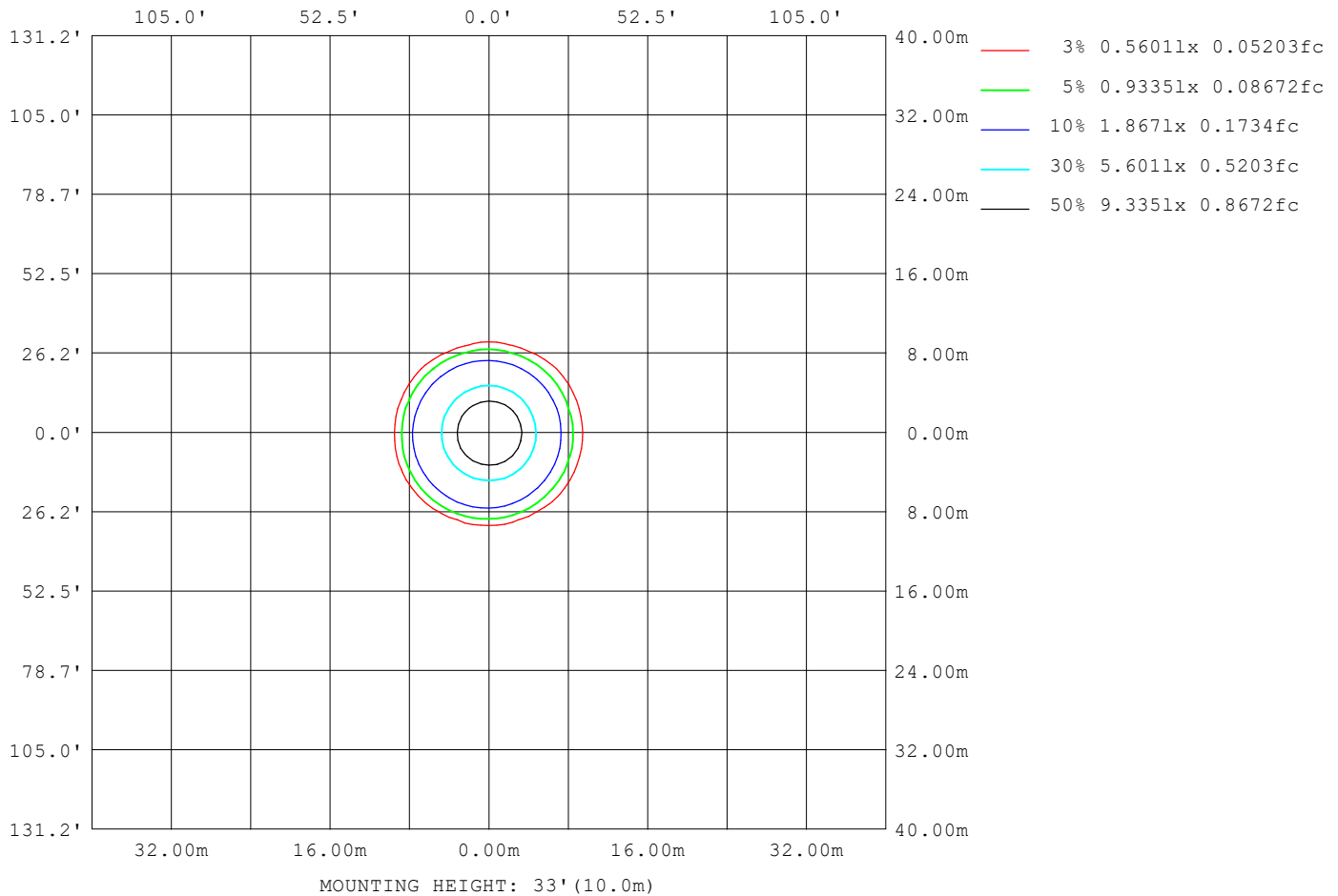
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 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:12 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:239.98V I:0.0640A P:14.187W PF:0.9231 Freq:0Hz Lamp Flux:1283.23x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_350mA_4K_32 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

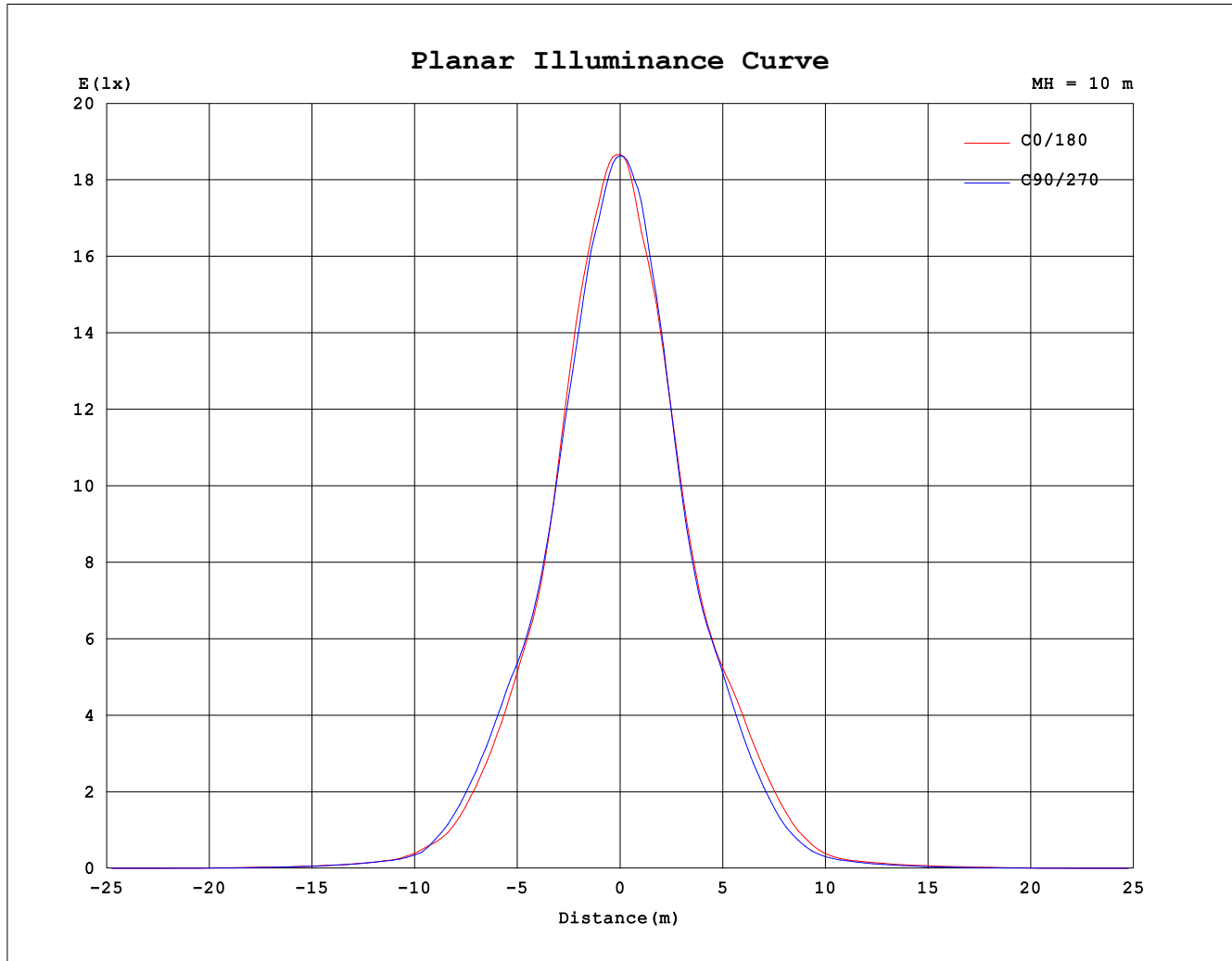
AvgL	cd/m2
L_0~180 (65) av	3471
L_0~180 (75) av	3164
L_0~180 (85) av	1118
L_90~270 (65) av	2428
L_90~270 (75) av	2942
L_90~270 (85) av	1187
L_45 (65) av	3059
L_45 (75) av	3002
L_45 (85) av	1999

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:12 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: 12 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:

```