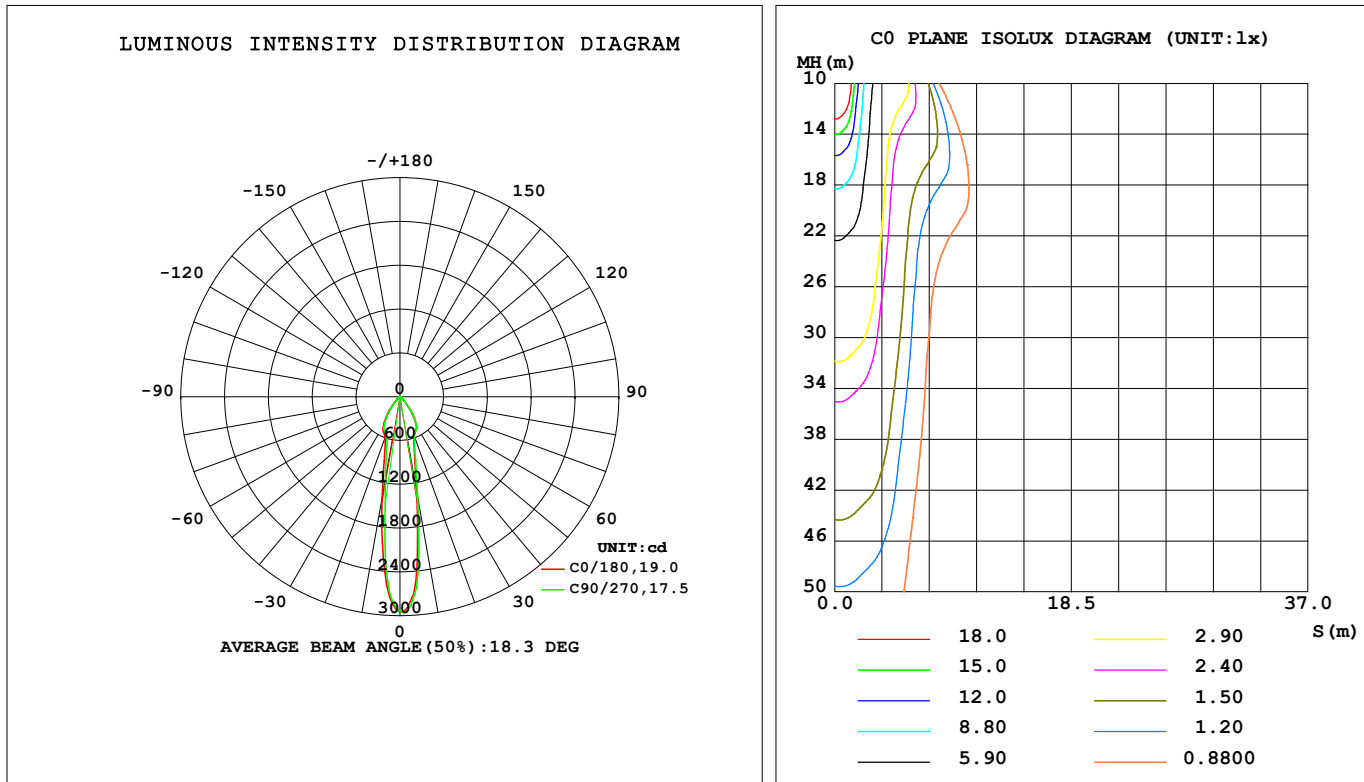


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_24 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: 91.91 lm/W			
NOMINAL POWER(W)		I _{max} (cd)	2969	S/MH(C0/180)	0.33
RATED VOLTAGE(V)	220.0	LOR(%)	100.0	S/MH(C90/270)	0.27
NOMINAL FLUX(lm)	957.291	TOTAL FLUX(lm)	957.29	η UP,DN(C0-180)	0.0,51.7
LAMPS INSIDE	1	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,48.3
TEST VOLTAGE(V)	230	η up(%)	0.0	CIBSE SHR NOM	0.00
		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: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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
10	1349	1388	1392	1436	1419	1271	1147	1217	0- 10	193.3	193.3	20.2,20.2
20	572.3	583.2	578.8	600.0	600.2	576.8	555.5	560.2	10- 20	227.1	420.4	43.9,43.9
30	447.6	457.2	453.3	455.8	452.6	438.2	422.7	433.6	20- 30	237.2	657.6	68.7,68.7
40	168.7	183.3	186.8	186.4	181.3	162.3	144.8	155.0	30- 40	192.9	850.4	88.8,88.8
50	48.94	48.36	44.55	48.77	49.57	44.98	40.56	45.16	40- 50	66.25	916.7	95.8,95.8
60	19.10	18.23	14.94	18.61	19.69	16.62	12.67	16.61	50- 60	26.73	943.4	98.6,98.6
70	5.232	5.062	5.028	4.893	4.952	4.864	4.999	5.022	60- 70	8.463	951.9	99.4,99.4
80	2.920	2.945	2.664	2.891	2.949	2.710	2.395	2.798	70- 80	4.358	956.2	99.9,99.9
90	0	0	0	0	0	0	0	0	80- 90	1.051	957.3	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): 893.23 lm

%lum = 93.3%

%lamp = 93.3%

Conical surface Flux(120deg): 943.42 lm

%lum = 98.6%

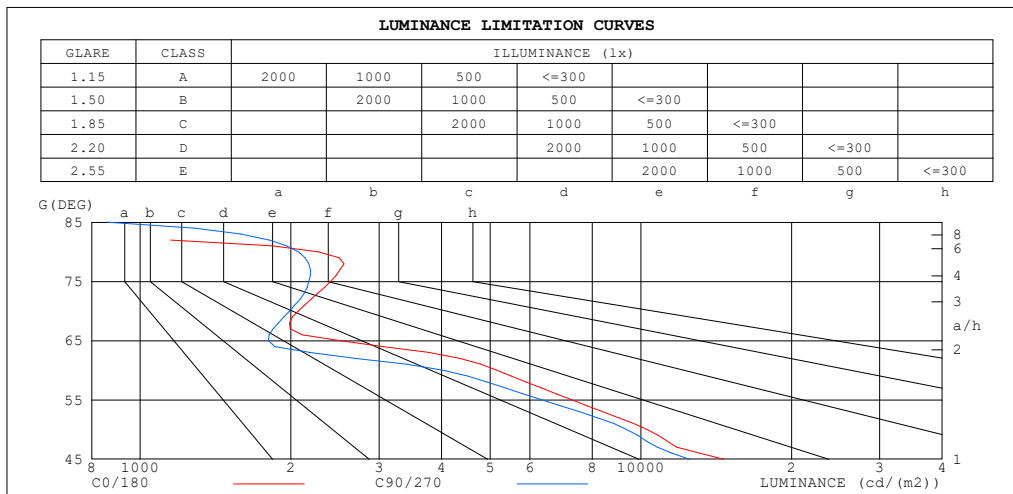
%lamp = 98.6%

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:

LUMINANCE LIMITATION CURVES

Test:U:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	873	858
80	2272	2073
75	2402	2172
70	2067	1987
65	2502	1805
60	5162	4037
55	7283	6341
50	10289	9366
45	14644	12520

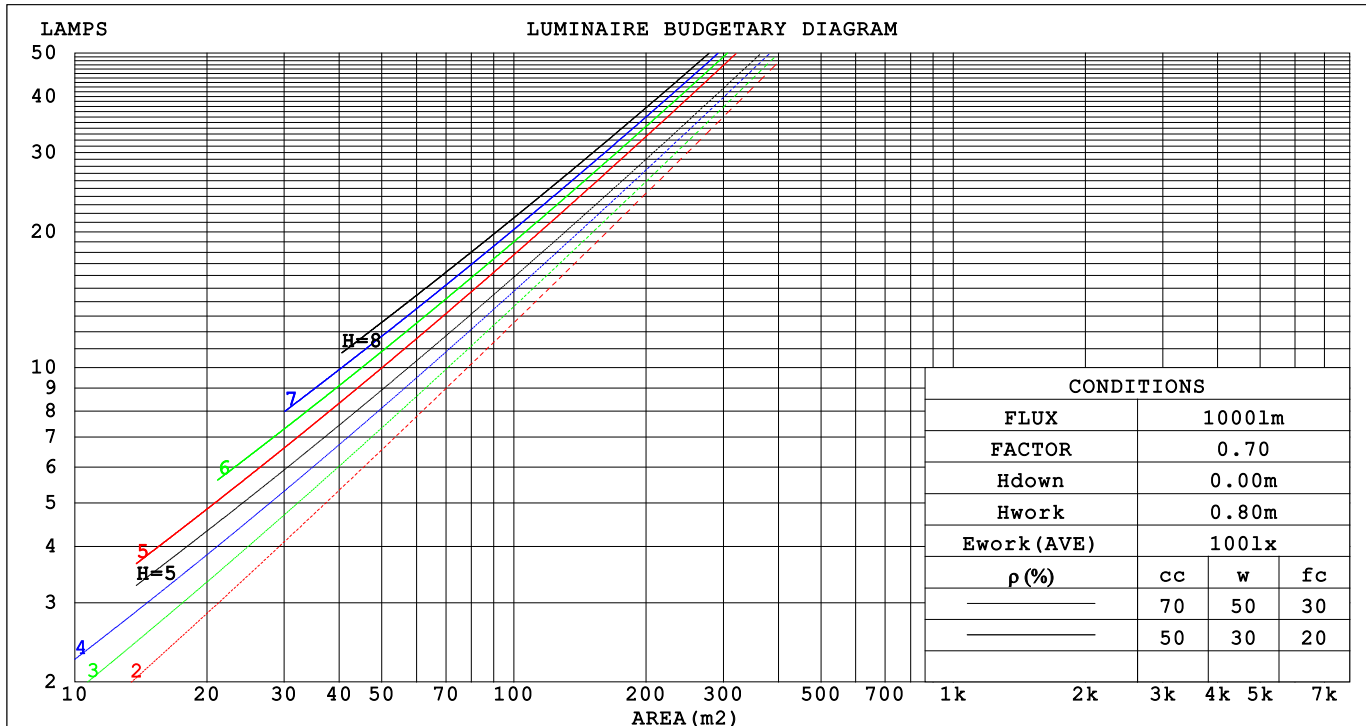
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:12 November 2020

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:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_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															



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:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm											
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_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	.097	.031	.158	.091	.029	.147	.085	.027	.136	.079	.025	
2.0	.170	.093	.029	.164	.090	.028	.154	.085	.027	.144	.081	.025	.135	.076	.024	
3.0	.161	.086	.026	.156	.084	.025	.147	.080	.024	.139	.076	.023	.131	.073	.022	
4.0	.153	.079	.023	.149	.078	.023	.141	.075	.022	.134	.072	.022	.127	.069	.021	
5.0	.145	.074	.021	.141	.073	.021	.135	.070	.021	.128	.068	.020	.122	.065	.020	
6.0	.138	.069	.020	.135	.068	.020	.129	.066	.019	.123	.064	.019	.118	.062	.018	
7.0	.131	.065	.018	.128	.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	.109	.056	.016	
9.0	.119	.058	.016	.117	.057	.016	.113	.056	.016	.109	.055	.016	.105	.054	.015	
10.0	.114	.055	.015	.112	.054	.015	.108	.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	.084	.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	.073	.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	.089	.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: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:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm											
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_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	2H	18.4	19.4	18.6	19.5	19.7	18.3	19.2	18.5	19.4	19.6
	3H	18.3	19.2	18.6	19.4	19.6	18.2	19.1	18.5	19.3	19.5
	4H	18.3	19.1	18.6	19.3	19.5	18.2	19.0	18.4	19.2	19.4
	6H	18.3	19.0	18.6	19.3	19.5	18.1	18.9	18.4	19.1	19.4
	8H	18.2	19.0	18.5	19.2	19.5	18.1	18.8	18.4	19.1	19.3
	12H	18.2	18.9	18.5	19.1	19.4	18.0	18.8	18.4	19.0	19.3
4H	2H	18.3	19.1	18.5	19.3	19.5	18.1	19.0	18.4	19.2	19.4
	3H	18.2	18.9	18.5	19.1	19.4	18.1	18.8	18.4	19.0	19.3
	4H	18.2	18.8	18.5	19.1	19.4	18.0	18.7	18.4	19.0	19.3
	6H	18.2	18.7	18.5	19.1	19.4	18.0	18.6	18.4	18.9	19.3
	8H	18.1	18.7	18.5	19.0	19.4	18.0	18.5	18.4	18.9	19.2
	12H	18.1	18.6	18.5	18.9	19.3	18.0	18.4	18.4	18.8	19.2
8H	4H	18.1	18.6	18.4	18.9	19.3	17.9	18.5	18.3	18.8	19.2
	6H	18.1	18.5	18.5	18.9	19.3	17.9	18.4	18.4	18.8	19.2
	8H	18.1	18.5	18.5	18.9	19.3	17.9	18.3	18.4	18.7	19.2
	12H	18.1	18.4	18.5	18.8	19.3	17.9	18.2	18.4	18.7	19.1
12H	4H	18.0	18.5	18.4	18.9	19.2	17.9	18.4	18.3	18.7	19.1
	6H	18.1	18.4	18.5	18.9	19.3	17.9	18.3	18.4	18.7	19.2
	8H	18.1	18.4	18.5	18.8	19.3	17.9	18.2	18.4	18.7	19.1
Variations with the observer position at spacings:											
S = 1.0H	+ 2.4 / - 4.4					+ 2.7 / - 5.2					
1.5H	+ 4.2 / - 3.2					+ 4.6 / - 3.6					
2.0H	+ 2.8 / - 3.0					+ 2.6 / - 3.9					

CIE Pub.117, 957.3 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.2$)

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:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

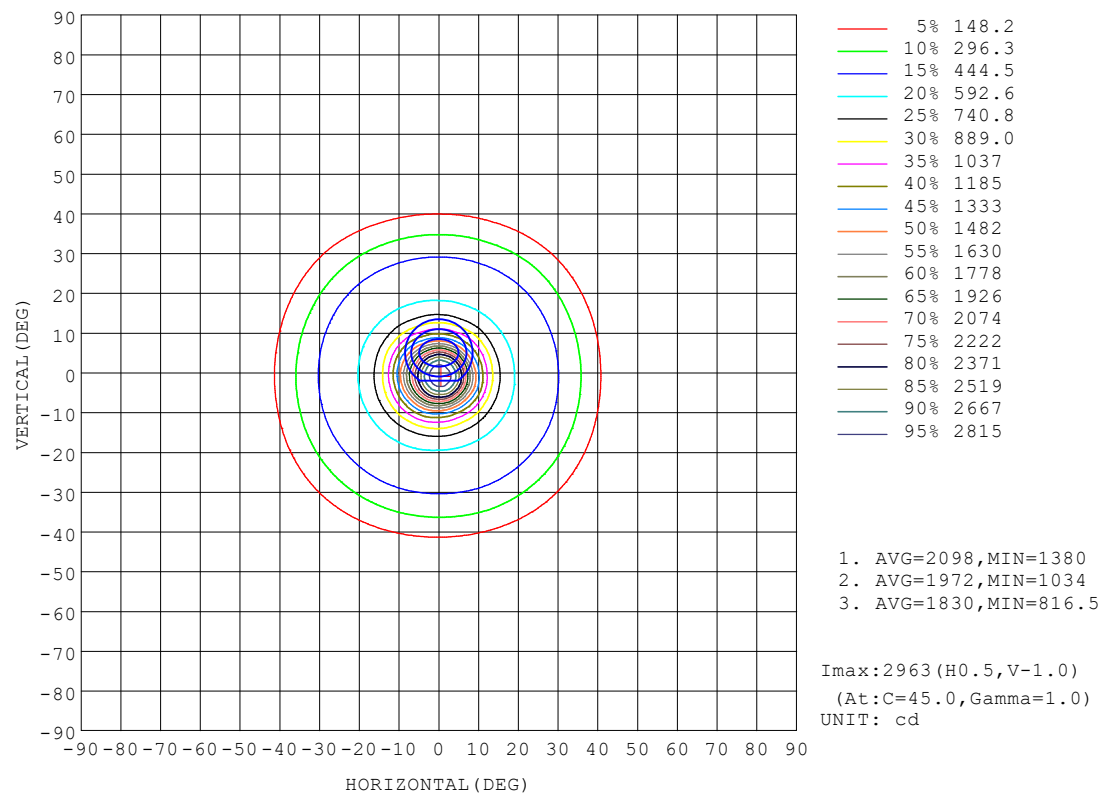
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	84	78	73	84	77	73	83	77	73	69
0.80	92	86	82	92	86	82	90	85	81	77
1.00	97	91	87	96	91	87	95	91	87	82
1.25	102	96	92	101	96	92	99	94	91	87
1.50	105	100	96	103	99	95	101	97	94	90
2.00	108	103	100	106	102	99	103	100	98	92
2.50	109	105	102	108	104	101	105	102	99	93
3.00	111	108	105	109	106	104	106	103	101	95
4.00	113	110	108	111	109	107	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: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:

ISOCANDELA DIAGRAM

Test:U:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

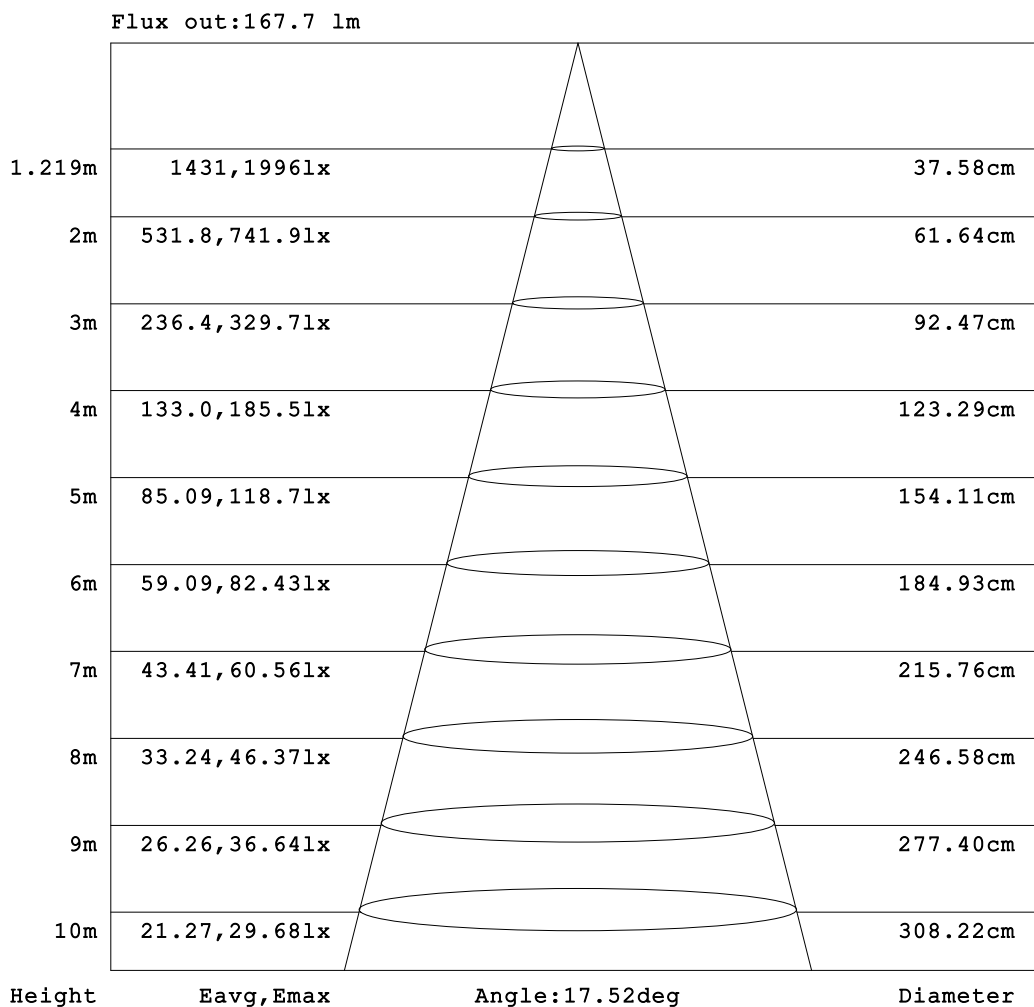


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date:12 November 2020

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:

AAI Figure

Test:U:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.29lx1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:



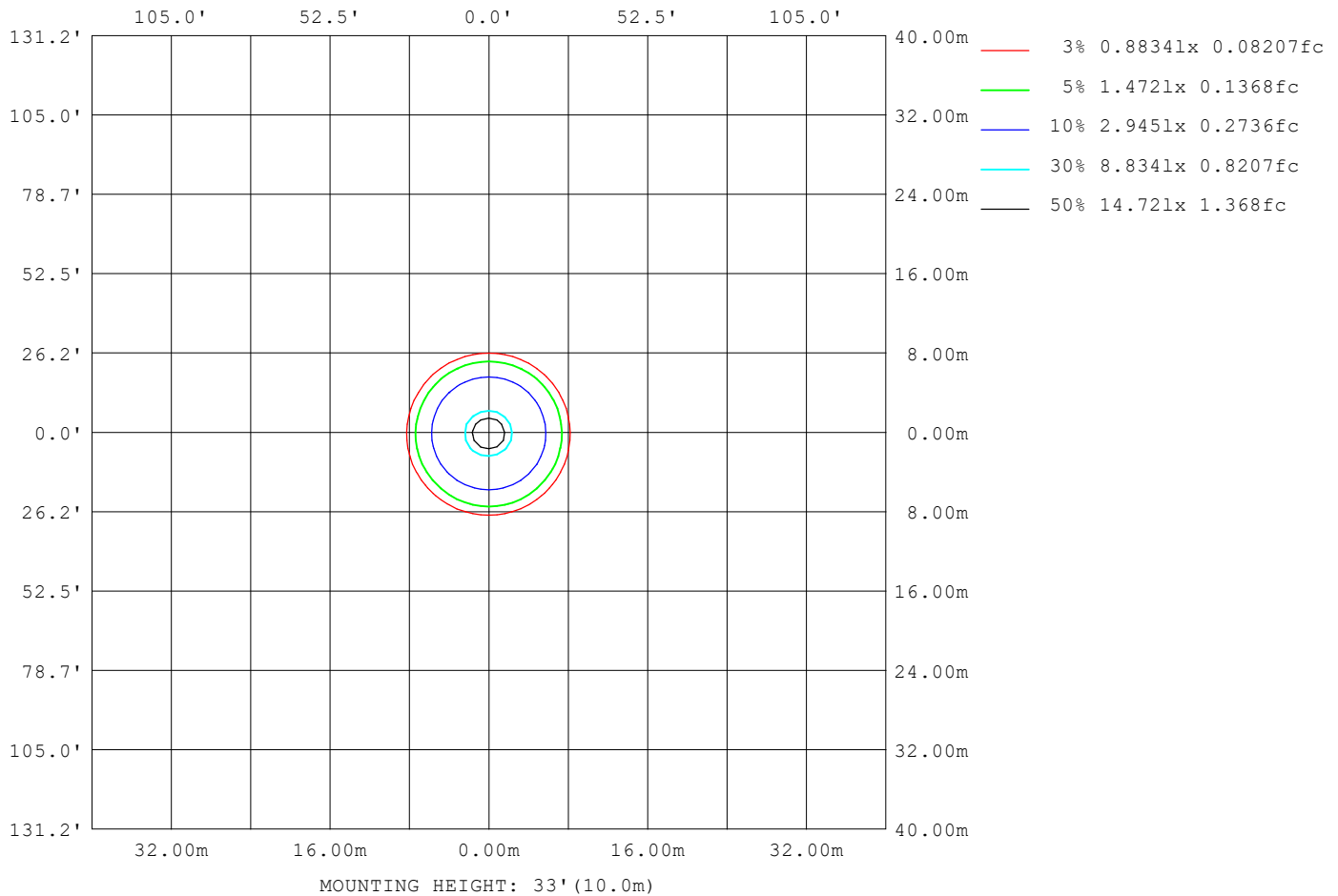
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JEFF
Test Date: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:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_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: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:239.95V I:0.0493A P:10.415W PF:0.8806 Freq:50.09Hz Lamp Flux:957.291x1 lm		
NAME: DEEP DOWN IP44_WHT_SLE G7 09mm_250mA_4K_24 DEG	TYPE:LED	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:	Shielding Angle:

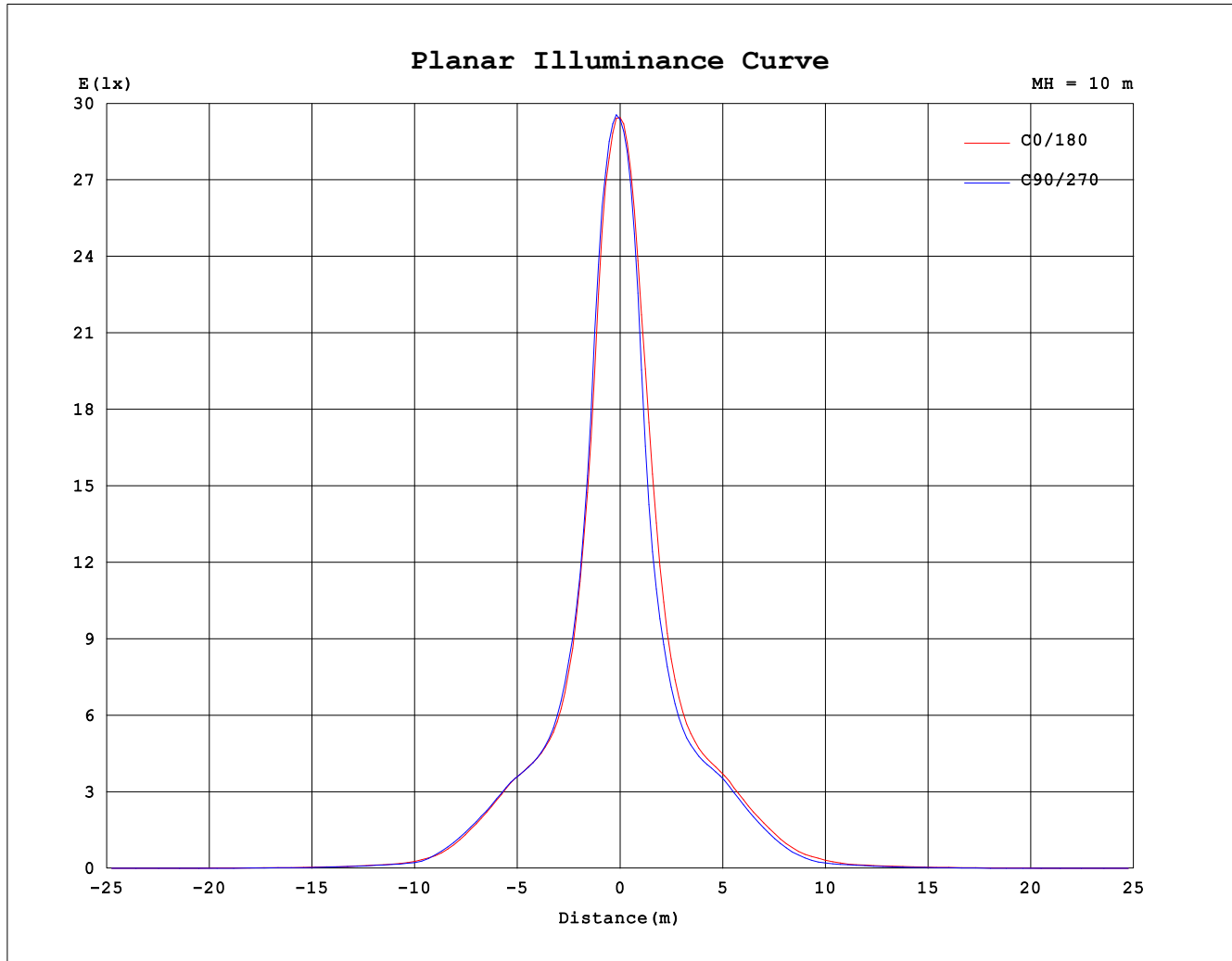
AvgL	cd/m2
L_0~180 (65) av	2684
L_0~180 (75) av	2343
L_0~180 (85) av	852
L_90~270 (65) av	1793
L_90~270 (75) av	2131
L_90~270 (85) av	620
L_45 (65) av	2246
L_45 (75) av	2199
L_45 (85) av	1215

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

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:

```