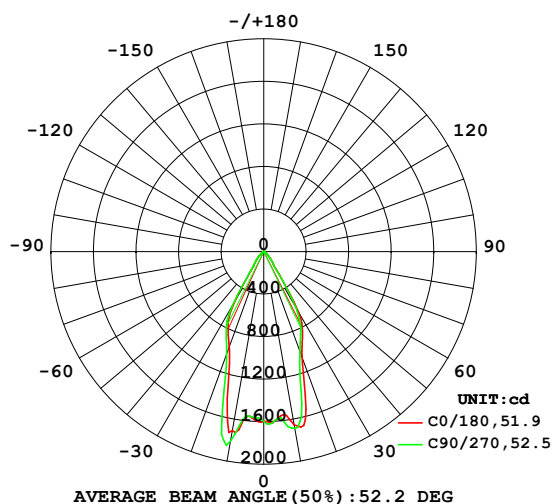


## LUMINAIRE PHOTOMETRIC TEST REPORT

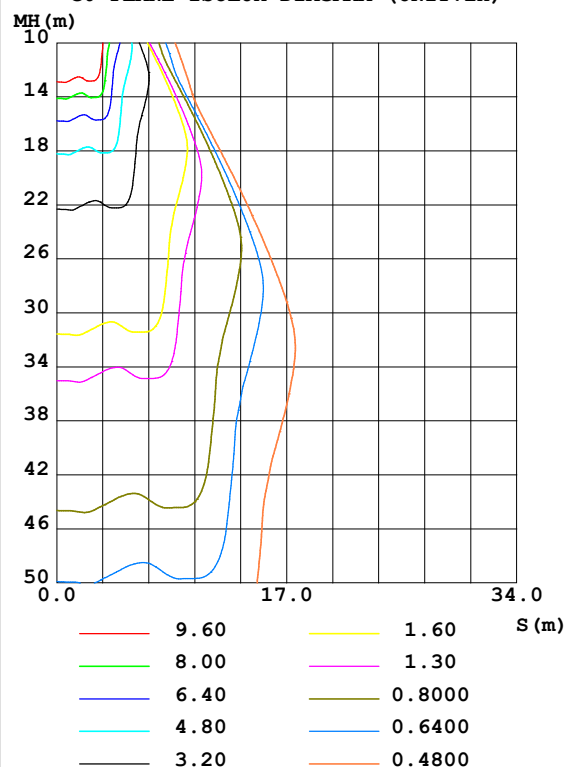
Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		

DATA OF LAMP		PHOTOMETRIC DATA Eff: 80.85 lm/W			
MODEL	SLE G7 09mm 1200lm	Imax(cd)	1870	S/MH(C0/180)	0.72
NOMINAL POWER(W)		LOR(%)	100.0	S/MH(C90/270)	0.77
RATED VOLTAGE(V)	230.0	TOTAL FLUX(lm)	1156.1	$\eta$ UP,DN(C0-180)	0.0,49.9
NOMINAL FLUX(lm)	1156.11	CIE CLASS	DIRECT	$\eta$ UP,DN(C180-360)	0.0,50.1
LAMPS INSIDE	1	$\eta$ up(%)	0.0	CIBSE SHR NOM	0.75
TEST VOLTAGE(V)	230	$\eta$ down(%)	100.0	CIBSE SHR MAX	0.75

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:24 February 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.995m [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	1654	1702	1688	1679	1709	1846	1810	1676	0- 10	155.3	155.3	13.4,13.4
20	1058	1021	1002	985.1	951.0	972.7	1020	1083	10- 20	386.3	541.6	46.8,46.8
30	653.5	640.8	611.6	582.2	563.5	557.8	589.8	644.4	20- 30	377.9	919.5	79.5,79.5
40	123.9	122.8	119.8	116.1	116.0	116.7	120.0	126.8	30- 40	157.5	1077	93.2,93.2
50	45.97	45.95	43.00	41.52	41.62	42.67	44.75	45.54	40- 50	60.06	1137	98.4,98.4
60	3.593	3.621	3.033	2.517	2.595	2.917	3.422	3.647	50- 60	18.25	1155	99.9,99.9
70	0.1388	0.1494	0.1565	0.1454	0.1127	0.1093	0.0837	0.0945	60- 70	0.6848	1156	100,100
80	0.0438	0.0401	0.0474	0.0655	0.0547	0.0036	0	0.0073	70- 80	0.0693	1156	100,100
90	0.0073	0.0036	0	0.0182	0.0328	0	0	0	80- 90	0.0195	1156	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): 1113.2 lm

%lum = 96.3%

%lamp = 96.3%

Conical surface Flux(120deg): 1155.3 lm

%lum = 99.9%

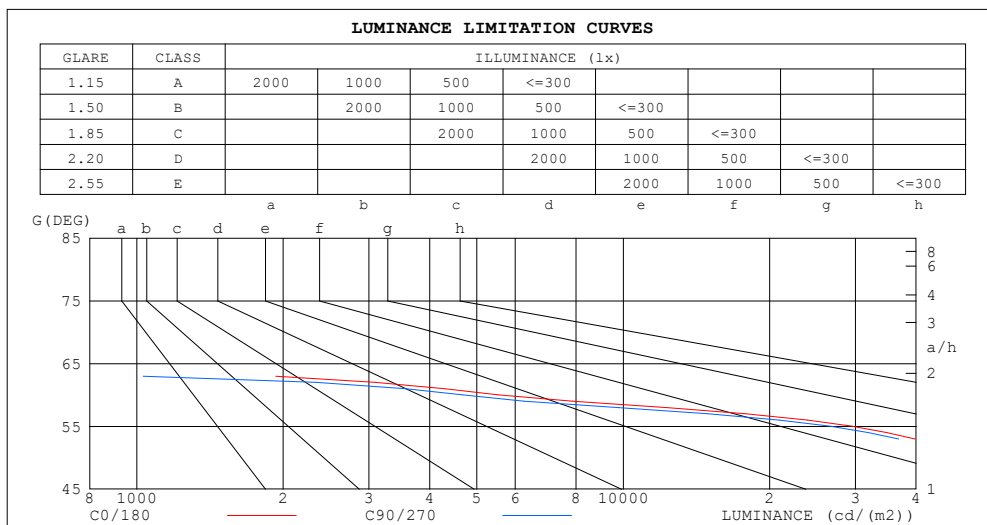
%lamp = 99.9%

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:JEFF  
 Test Date:24 February 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
 Humidity:65.0%  
 Test Distance:7.995m [K=1.0000]  
 Remarks:

### LUMINANCE LIMITATION CURVES

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	193	161
80	194	210
75	238	260
70	312	352
65	456	431
60	5522	4668
55	29520	26633
50	54961	51475
45	86346	82591

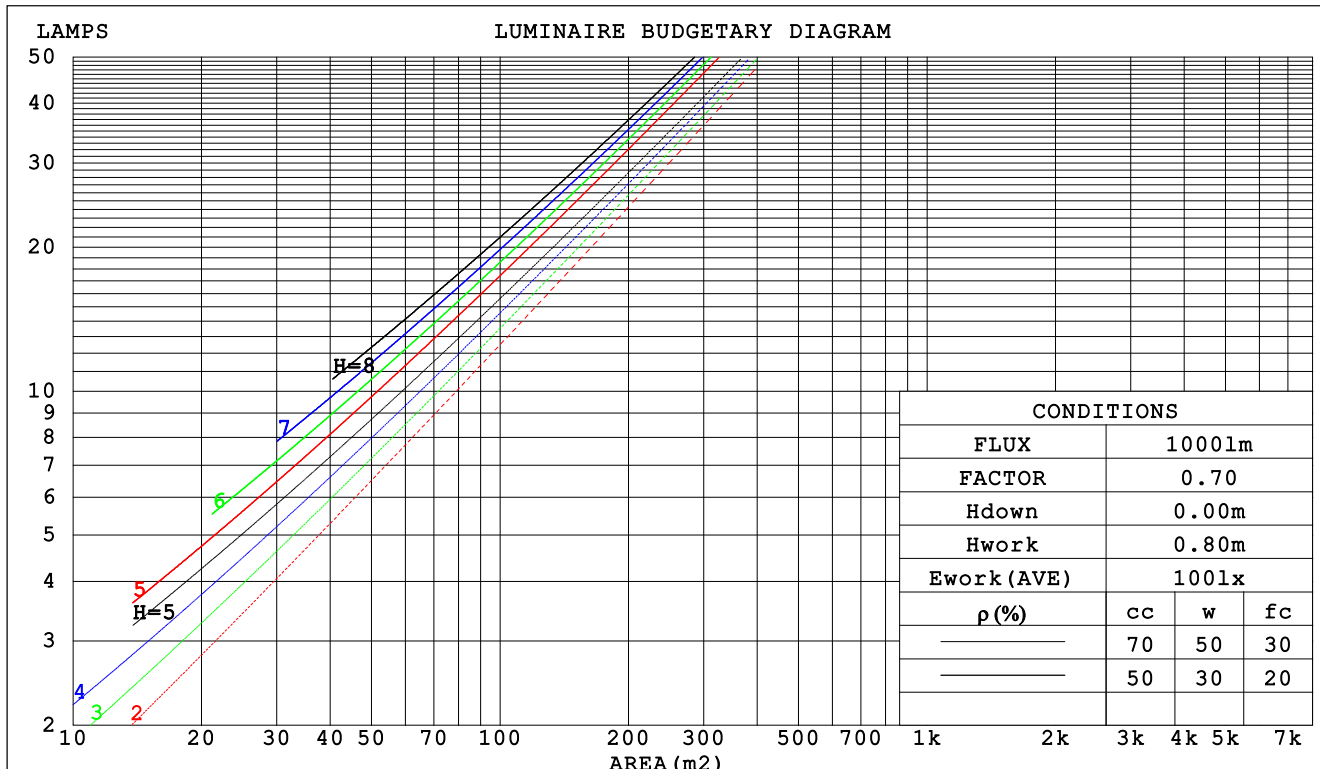
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JEFF  
Test Date: 24 February 2023

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 7.995m [K=1.0000]  
Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		

$\rho_{cc}$	80%			70%			50%			30%			10%			0
$\rho_w$	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
$\rho_{fc}$	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	1.00
1.0	1.11	1.09	1.07	1.09	1.07	1.05	1.05	1.03	1.02	1.01	1.00	.99	.98	.97	.96	.94
2.0	1.04	1.00	.97	1.02	.99	.96	.99	.96	.94	.96	.94	.92	.93	.92	.90	.88
3.0	.98	.93	.89	.96	.92	.88	.94	.90	.87	.91	.88	.86	.89	.87	.84	.83
4.0	.92	.87	.83	.91	.86	.82	.88	.84	.81	.87	.83	.80	.85	.82	.79	.78
5.0	.86	.81	.77	.85	.80	.77	.84	.79	.76	.82	.78	.75	.81	.77	.75	.73
6.0	.82	.76	.72	.81	.76	.72	.79	.75	.71	.78	.74	.71	.77	.73	.70	.69
7.0	.77	.72	.68	.77	.71	.67	.75	.71	.67	.74	.70	.67	.73	.69	.66	.65
8.0	.73	.68	.64	.73	.67	.64	.72	.67	.63	.71	.66	.63	.70	.66	.63	.62
9.0	.70	.64	.60	.69	.64	.60	.68	.63	.60	.67	.63	.60	.66	.62	.60	.58
10.0	.66	.61	.57	.66	.61	.57	.65	.60	.57	.64	.60	.57	.63	.59	.57	.55



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:24 February 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.995m [K=1.0000]  
Remarks:

**WEC AND CCEC**

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		

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	.169	.096	.030	.162	.093	.029	.150	.086	.027	.138	.080	.026	.127	.074	.024	
2.0	.161	.088	.027	.156	.086	.026	.145	.081	.025	.135	.076	.024	.126	.072	.023	
3.0	.153	.082	.024	.149	.080	.024	.140	.076	.023	.131	.072	.022	.124	.069	.021	
4.0	.146	.076	.022	.142	.074	.022	.134	.071	.021	.127	.068	.021	.120	.065	.020	
5.0	.139	.071	.021	.136	.070	.020	.129	.067	.020	.123	.065	.019	.117	.062	.019	
6.0	.133	.067	.019	.130	.066	.019	.124	.063	.018	.118	.062	.018	.113	.060	.018	
7.0	.127	.063	.018	.124	.062	.018	.119	.060	.017	.114	.059	.017	.110	.057	.017	
8.0	.122	.059	.017	.119	.059	.017	.115	.057	.016	.110	.056	.016	.106	.054	.016	
9.0	.117	.056	.016	.114	.056	.016	.110	.055	.015	.106	.053	.015	.103	.052	.015	
10.0	.112	.054	.015	.110	.053	.015	.106	.052	.015	.103	.051	.015	.099	.050	.014	

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	.146	.146	.135	.125	.100	.093	.087	.057	.054	.050	.018	.017	.016	
2.0	.155	.133	.114	.133	.114	.098	.091	.079	.069	.052	.046	.040	.017	.015	.013	
3.0	.142	.114	.091	.122	.098	.079	.084	.068	.055	.048	.040	.033	.016	.013	.011	
4.0	.131	.099	.074	.113	.085	.064	.078	.059	.045	.045	.035	.027	.014	.011	.009	
5.0	.122	.087	.061	.105	.075	.053	.072	.053	.037	.042	.031	.022	.014	.010	.007	
6.0	.115	.078	.051	.099	.067	.044	.068	.047	.031	.040	.028	.019	.013	.009	.006	
7.0	.108	.070	.043	.093	.061	.037	.064	.042	.027	.037	.025	.016	.012	.008	.005	
8.0	.103	.064	.037	.088	.055	.032	.061	.039	.023	.036	.023	.014	.011	.007	.004	
9.0	.097	.058	.032	.084	.051	.028	.058	.036	.020	.034	.021	.012	.011	.007	.004	
10.0	.093	.054	.028	.080	.047	.024	.056	.033	.017	.032	.019	.010	.010	.006	.003	

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:24 February 2023

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.995m [K=1.0000]  
Remarks:

**UGR(Unified Glare Rating) Table**

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm										
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG										
MFR.: DARKON										
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	22.5	23.4	22.7	23.6	23.7	22.1	23.0	22.4	23.2	23.4
3H	22.3	23.2	22.6	23.4	23.6	22.0	22.8	22.2	23.0	23.2
4H	22.3	23.0	22.5	23.3	23.5	21.9	22.7	22.2	22.9	23.1
6H	22.2	22.9	22.5	23.1	23.4	21.8	22.5	22.1	22.8	23.0
8H	22.1	22.8	22.4	23.1	23.3	21.7	22.4	22.1	22.7	23.0
12H	22.1	22.8	22.4	23.0	23.3	21.7	22.4	22.0	22.6	22.9
4H 2H	22.3	23.1	22.6	23.3	23.5	21.9	22.7	22.2	22.9	23.1
3H	22.1	22.8	22.4	23.0	23.3	21.7	22.4	22.0	22.7	22.9
4H	22.0	22.6	22.4	22.9	23.2	21.6	22.2	22.0	22.5	22.8
6H	21.9	22.4	22.3	22.8	23.1	21.5	22.1	21.9	22.4	22.7
8H	21.9	22.4	22.3	22.7	23.1	21.5	22.0	21.9	22.3	22.7
12H	21.8	22.3	22.2	22.6	23.0	21.4	21.9	21.8	22.3	22.6
8H 4H	21.9	22.4	22.3	22.7	23.1	21.5	22.0	21.9	22.3	22.7
6H	21.8	22.2	22.2	22.6	23.0	21.4	21.8	21.8	22.2	22.6
8H	21.7	22.1	22.2	22.5	22.9	21.3	21.7	21.8	22.1	22.5
12H	21.6	22.0	22.1	22.4	22.9	21.3	21.6	21.7	22.0	22.5
12H 4H	21.8	22.3	22.2	22.6	23.0	21.4	21.9	21.8	22.3	22.6
6H	21.7	22.1	22.2	22.5	22.9	21.3	21.7	21.8	22.1	22.5
8H	21.6	22.0	22.1	22.4	22.9	21.3	21.6	21.7	22.0	22.5
Variations with the observer position at spacings:										
S = 1.0H	+ 2.4 / - 8.8					+ 2.4 / - 9.6				
1.5H	+ 3.0 / - 4.7					+ 2.9 / - 4.8				
2.0H	+ 5.2 / -24.5					+ 5.2 / -27.1				

CIE Pub.117 Corrected 1156 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:JEFF  
Test Date:24 February 2023

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.995m [K=1.0000]  
Remarks:

**UTILIZATION FACTORS TABLE**

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		

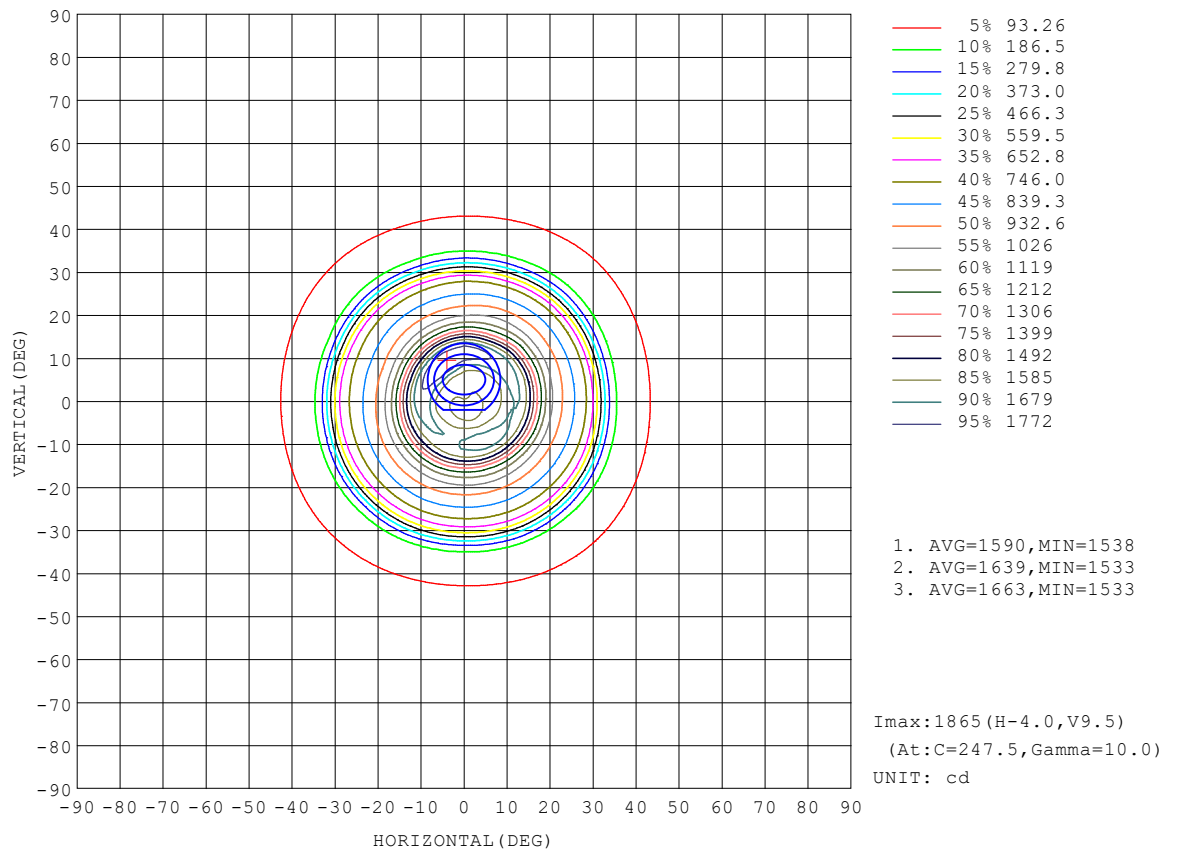
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	87	81	77	87	81	77	86	80	77	73
0.80	95	89	85	94	89	85	93	88	85	81
1.00	99	94	90	98	93	90	97	93	89	85
1.25	103	98	95	102	98	94	100	97	94	90
1.50	106	101	98	105	101	98	103	99	97	92
2.00	109	105	102	107	104	101	105	102	99	94
2.50	110	107	104	109	105	103	106	103	101	95
3.00	112	109	106	110	107	105	107	104	103	96
4.00	114	111	109	112	110	108	108	106	105	98
5.00	115	113	111	113	111	109	109	108	106	99
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHR NOM = 1.25		

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JEFF  
Test Date: 24 February 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 7.995m [K=1.0000]  
Remarks:

# ISOCANDELA DIAGRAM

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		



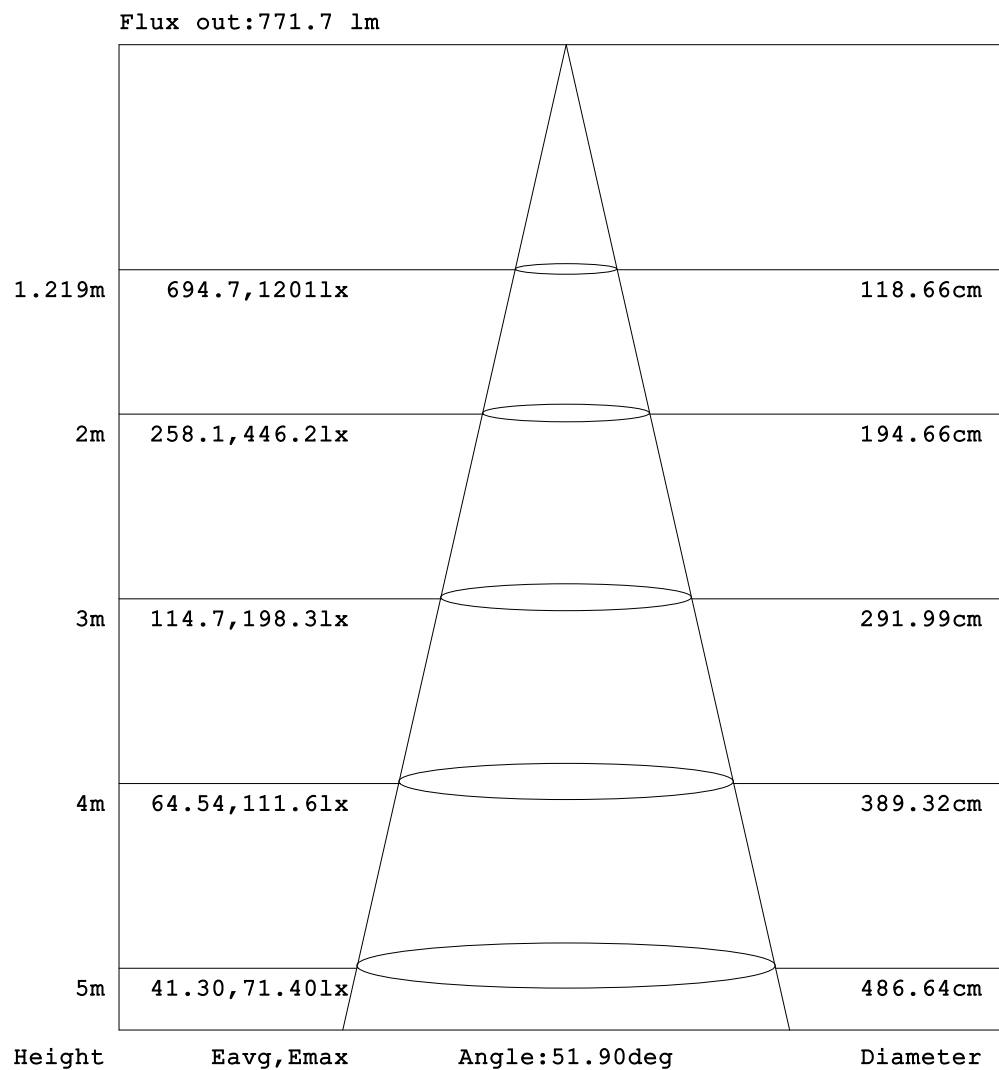
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:24 February 2023

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.995m [K=1.0000]  
Remarks:



**AAI Figure**

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		



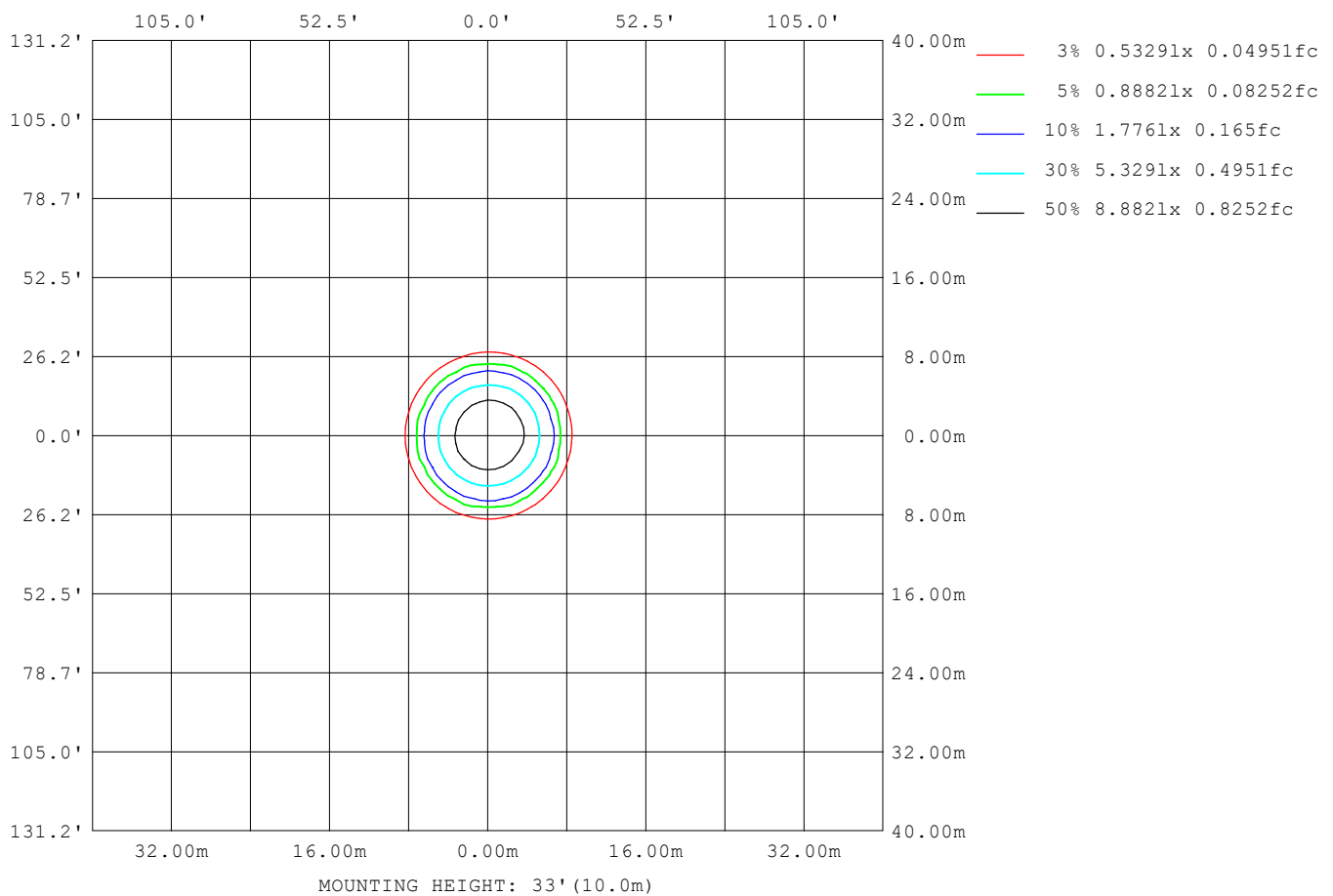
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: JEFF  
Test Date: 24 February 2023

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 7.995m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:24 February 2023

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.995m [K=1.0000]  
Remarks:

### LED Avg.L Report

Test:U:239.9V I:0.0641A P:14.30W PF:0.9293 Lamp Flux:1156.11x1 lm		
NAME: DEEP DOWN MINI_CHROME REF_SLE G7 09mm_350mA_4000K CRI90_32 DEG		
MFR.: DARKON		

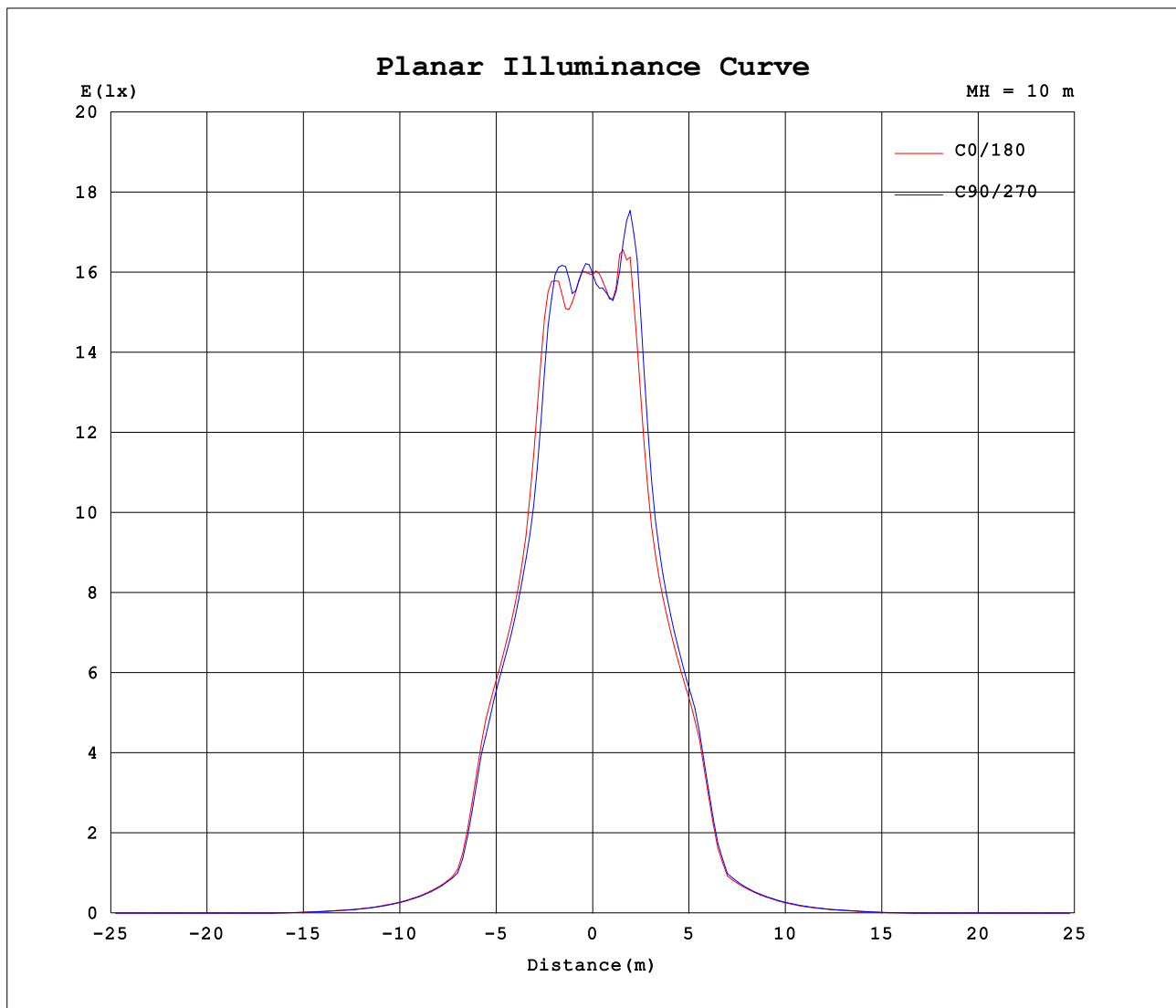
AvgL	cd/m2
L_0~180 (65) av	390
L_0~180 (75) av	206
L_0~180 (85) av	241
L_90~270 (65) av	364
L_90~270 (75) av	168
L_90~270 (85) av	81
L_45 (65) av	366
L_45 (75) av	181
L_45 (85) av	177

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:JEFF  
Test Date:24 February 2023

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity:65.0%  
Test Distance:7.995m [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: 24 February 2023

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.295  
Humidity: 65.0%  
Test Distance: 7.995m [K=1.0000]  
Remarks:

