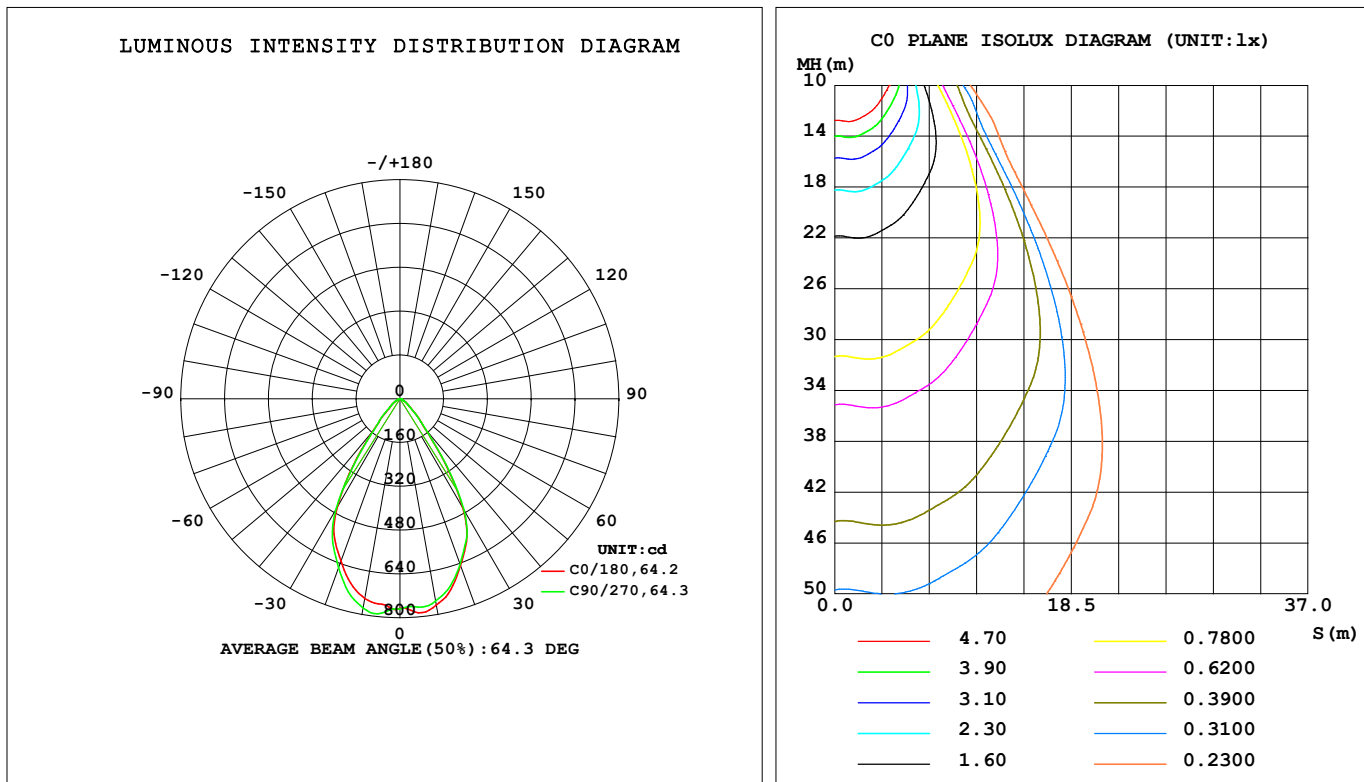


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 72.89 lm/W
MODEL G6 10mm 1200lm 830 R ADV		I _{max} (cd)	796.8	S/MH (C0/180)	0.95	
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)	0.95	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	835.75	η UP, DN (C0-180)	0.0, 49.9	
NOMINAL FLUX (lm)	835.747	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.0, 50.1	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00	
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	1.00	



C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: Ky

Test Date: 28 June 2018

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366

Humidity: 65.0%

Test Distance: 7.220m [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	765.1	758.2	750.2	750.9	740.5	756.9	775.9	786.7	0- 10	73.48	73.48	8.79, 8.79
20	648.1	641.9	643.5	649.5	631.0	640.4	655.7	668.2	10- 20	200.6	274.1	32.8, 32.8
30	459.8	460.6	465.1	471.6	459.6	464.6	467.8	469.6	20- 30	261.0	535.1	64, 64
40	142.6	143.2	145.8	153.3	149.2	150.4	146.4	147.8	30- 40	183.3	718.4	86, 86
50	48.41	48.00	47.62	49.06	47.42	47.97	49.19	50.09	40- 50	68.62	787.0	94.2, 94.2
60	20.90	20.01	20.04	20.27	20.44	20.76	20.80	21.09	50- 60	29.82	816.8	97.7, 97.7
70	6.392	6.236	6.146	6.177	6.245	6.337	6.423	6.483	60- 70	10.88	827.7	99, 99
80	4.301	4.158	4.096	4.127	4.189	4.286	4.355	4.389	70- 80	5.780	833.5	99.7, 99.7
90	0.0031	0	0.0062	0.0031	0.0031	0	0	0	80- 90	2.287	835.7	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): 760.8 lm

%lum = 91.0%

%lamp = 91.0%

Conical surface Flux(120deg): 816.8 lm

%lum = 97.7%

%lamp = 97.7%

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:Ky

Test Date:28 June 2018

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366

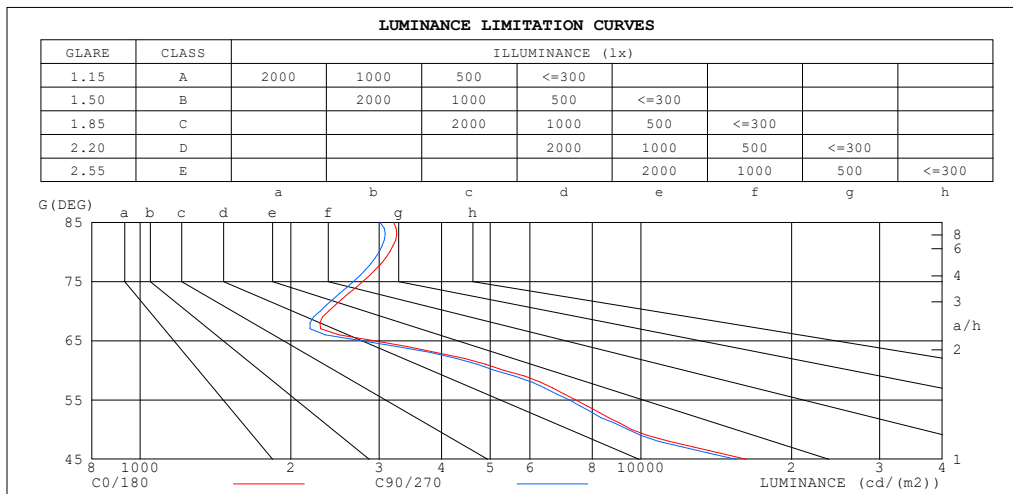
Humidity:65.0%

Test Distance:7.220m [K=1.0000]

Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3205	3013
80	3153	3003
75	2786	2670
70	2379	2288
65	2918	2756
60	5323	5103
55	7404	7195
50	9589	9433
45	16230	15484

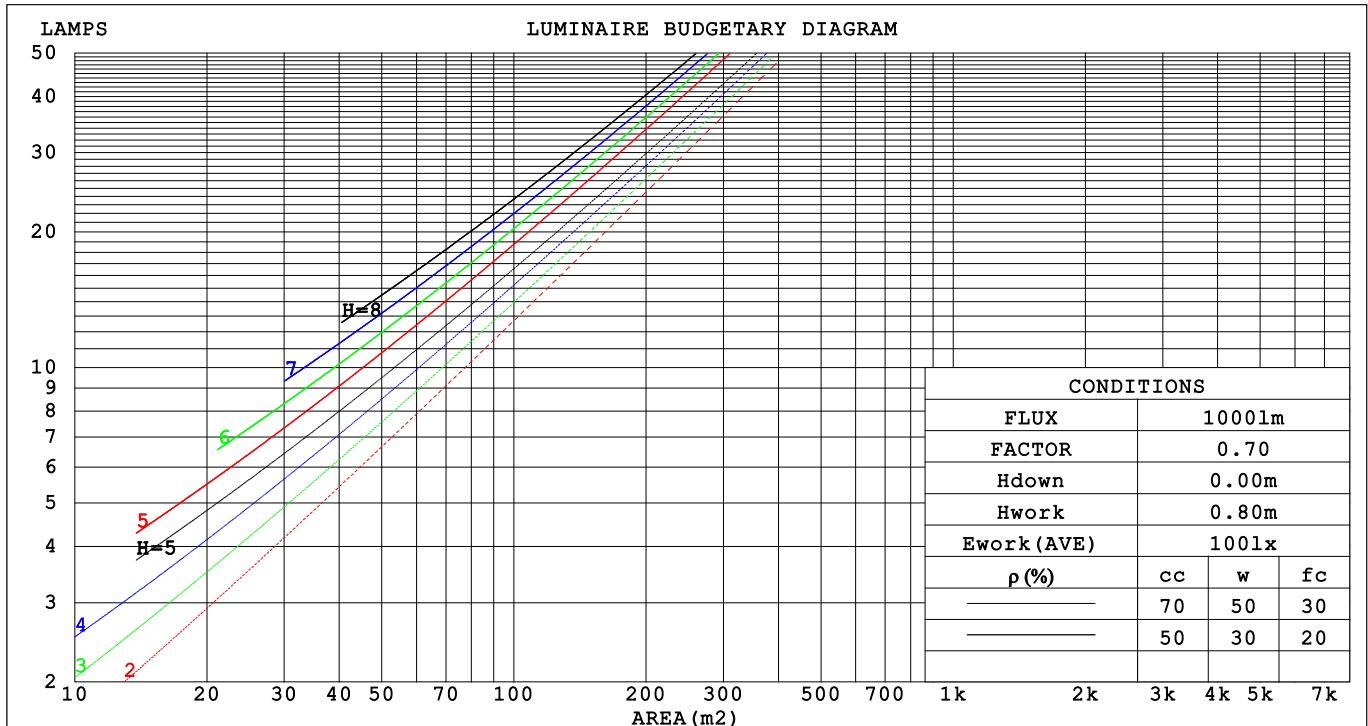
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:28 June 2018

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	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	1.00	
1.0	1.10	1.07	1.05	1.08	1.05	1.03	1.04	1.02	.00	.00	.98	.97	.96	.95	.94	.92	
2.0	1.01	.97	.93	.00	.96	.92	.96	.93	.90	.93	.91	.88	.91	.88	.86	.85	
3.0	.94	.88	.84	.92	.87	.83	.90	.86	.82	.87	.84	.81	.85	.82	.79	.78	
4.0	.87	.81	.76	.86	.80	.76	.84	.79	.75	.82	.77	.74	.80	.76	.73	.72	
5.0	.81	.75	.70	.80	.74	.70	.78	.73	.69	.76	.72	.68	.75	.71	.68	.66	
6.0	.75	.69	.64	.75	.69	.64	.73	.68	.64	.72	.67	.63	.70	.66	.63	.61	
7.0	.71	.64	.60	.70	.64	.59	.69	.63	.59	.67	.62	.59	.66	.62	.58	.57	
8.0	.66	.60	.55	.66	.59	.55	.64	.59	.55	.63	.58	.55	.62	.58	.54	.53	
9.0	.62	.56	.52	.62	.56	.52	.61	.55	.51	.60	.55	.51	.59	.54	.51	.50	
10.0	.59	.52	.48	.58	.52	.48	.57	.52	.48	.56	.51	.48	.56	.51	.48	.46	



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:28 June 2018

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

WEC AND CCEC

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	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	.195	.111	.035	.188	.107	.034	.175	.101	.032	.164	.094	.030	.153	.089	.029	
2.0	.187	.102	.031	.181	.100	.031	.170	.095	.029	.160	.090	.028	.151	.085	.027	
3.0	.177	.094	.028	.173	.092	.028	.163	.089	.027	.155	.085	.026	.147	.081	.025	
4.0	.169	.088	.026	.164	.086	.025	.156	.083	.025	.149	.080	.024	.142	.077	.023	
5.0	.160	.082	.024	.157	.080	.023	.150	.078	.023	.143	.075	.022	.137	.073	.022	
6.0	.152	.076	.022	.149	.075	.022	.143	.073	.021	.137	.071	.021	.132	.069	.021	
7.0	.145	.072	.020	.142	.071	.020	.137	.069	.020	.132	.068	.020	.127	.066	.019	
8.0	.139	.068	.019	.136	.067	.019	.131	.065	.019	.126	.064	.018	.122	.063	.018	
9.0	.132	.064	.018	.130	.063	.018	.126	.062	.018	.122	.061	.017	.118	.060	.017	
10.0	.127	.061	.017	.125	.060	.017	.121	.059	.017	.117	.058	.016	.113	.057	.016	

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	.143	.147	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016		
2.0	.158	.132	.111	.136	.114	.096	.093	.079	.067	.054	.046	.039	.017	.015	.013		
3.0	.147	.114	.087	.126	.098	.076	.086	.068	.053	.050	.040	.031	.016	.013	.010		
4.0	.137	.099	.070	.118	.086	.061	.081	.060	.043	.047	.035	.025	.015	.011	.008		
5.0	.129	.088	.058	.111	.076	.050	.076	.053	.035	.044	.031	.021	.014	.010	.007		
6.0	.122	.079	.048	.104	.068	.042	.072	.048	.030	.042	.028	.018	.013	.009	.006		
7.0	.115	.071	.041	.099	.062	.035	.068	.043	.025	.040	.026	.015	.013	.008	.005		
8.0	.110	.065	.035	.094	.057	.030	.065	.040	.021	.038	.023	.013	.012	.008	.004		
9.0	.104	.060	.030	.090	.052	.026	.062	.037	.019	.036	.022	.011	.012	.007	.004		
10.0	.100	.056	.026	.086	.048	.023	.060	.034	.016	.035	.020	.010	.011	.007	.003		

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:Ky

Test Date:28 June 2018

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366

Humidity:65.0%

Test Distance:7.220m [K=1.0000]

Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm											
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG					TYPE:			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	18.8	19.8	19.0	20.0	20.2	18.8	19.8	19.0	20.0	20.2
	3H	18.7	19.7	19.0	19.9	20.1	18.7	19.7	19.0	19.9	20.1
	4H	18.7	19.6	19.0	19.8	20.1	18.7	19.6	19.0	19.8	20.1
	6H	18.7	19.6	19.0	19.8	20.1	18.7	19.6	19.0	19.8	20.1
	8H	18.7	19.6	19.1	19.8	20.1	18.7	19.5	19.0	19.8	20.1
	12H	18.8	19.5	19.1	19.8	20.1	18.7	19.5	19.0	19.8	20.0
4H	2H	18.6	19.5	18.9	19.8	20.0	18.6	19.5	18.9	19.8	20.0
	3H	18.6	19.4	18.9	19.7	19.9	18.6	19.4	18.9	19.7	19.9
	4H	18.7	19.4	19.0	19.7	20.0	18.6	19.3	19.0	19.6	20.0
	6H	18.8	19.4	19.1	19.7	20.1	18.7	19.3	19.1	19.7	20.0
	8H	18.8	19.4	19.2	19.7	20.1	18.8	19.3	19.2	19.7	20.1
	12H	18.8	19.4	19.3	19.7	20.1	18.8	19.3	19.2	19.7	20.1
8H	4H	18.6	19.2	19.0	19.5	19.9	18.6	19.2	19.0	19.5	19.9
	6H	18.8	19.2	19.2	19.6	20.0	18.7	19.2	19.2	19.6	20.0
	8H	18.9	19.3	19.3	19.7	20.1	18.8	19.2	19.3	19.7	20.1
	12H	18.9	19.3	19.4	19.7	20.2	18.9	19.3	19.4	19.7	20.2
12H	4H	18.6	19.1	19.0	19.5	19.9	18.6	19.1	19.0	19.4	19.8
	6H	18.8	19.2	19.2	19.6	20.0	18.7	19.1	19.2	19.6	20.0
	8H	18.9	19.2	19.3	19.7	20.1	18.8	19.2	19.3	19.6	20.1
Variations with the observer position at spacings:											
S = 1.0H		+ 2.1 / - 2.8					+ 2.2 / - 3.0				
1.5H		+ 3.4 / - 2.1					+ 3.7 / - 2.2				
2.0H		+ 3.2 / - 2.4					+ 3.1 / - 2.3				

CIE Pub.117, 835.7 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -0.6$)

C Range: 0 - 360DEG

C Interval: 22.5DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:Ky

Test Date:28 June 2018

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366

Humidity:65.0%

Test Distance:7.220m [K=1.0000]

Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

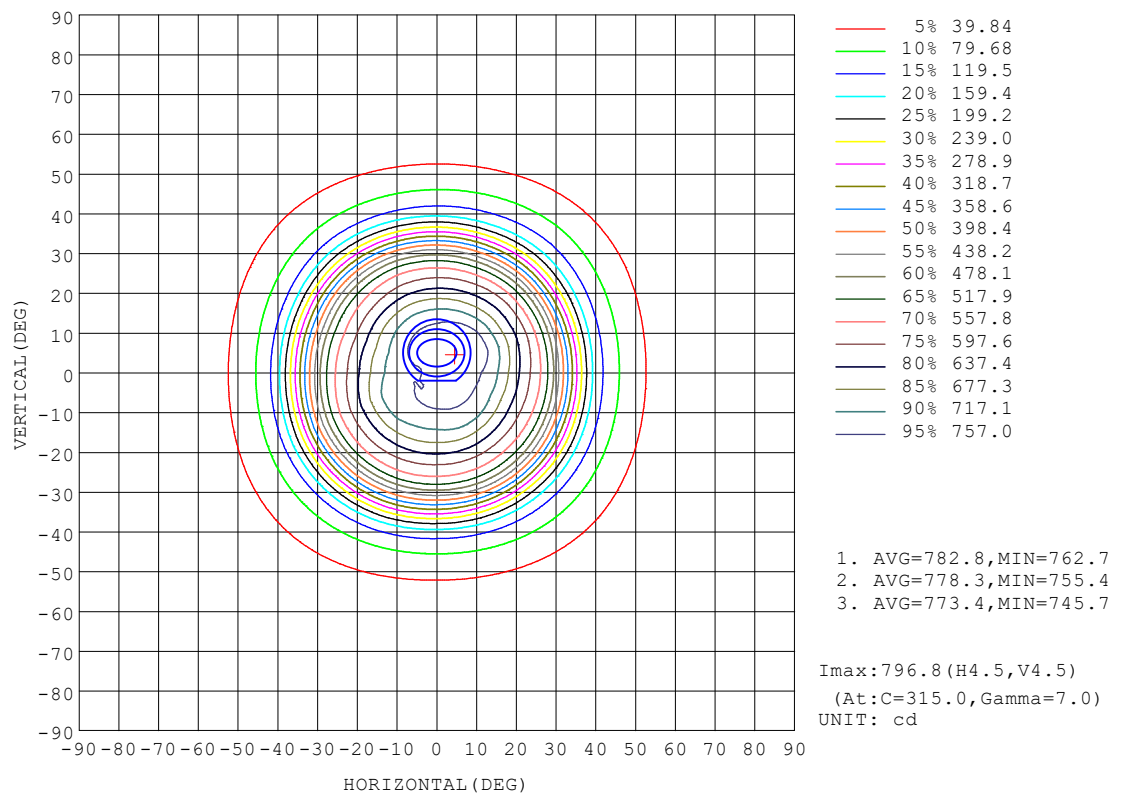
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	83	75	71	82	75	71	81	75	71	67
0.80	91	84	80	90	84	80	89	83	79	75
1.00	96	90	86	95	89	85	93	89	85	80
1.25	101	95	91	99	94	90	97	93	90	85
1.50	104	98	94	102	97	94	100	96	93	88
2.00	107	102	99	105	101	98	103	99	96	91
2.50	109	105	101	107	103	100	104	101	98	92
3.00	111	107	104	109	105	103	105	103	100	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	109	112	110	108	108	106	105	97
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:Ky
Test Date:28 June 2018

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

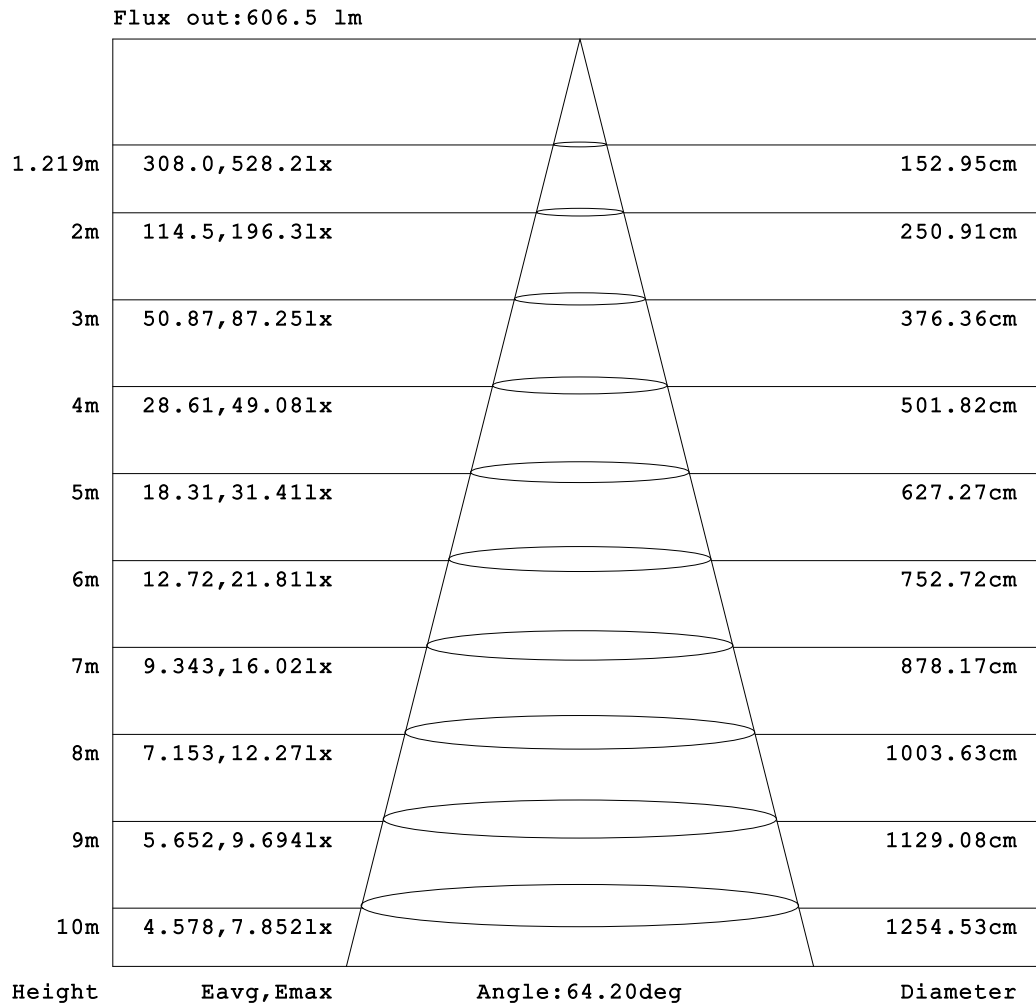


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:28 June 2018

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

AAI Figure

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	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:Ky

Test Date:28 June 2018

γ Range: 0 - 90DEG

γ Interval: 1.0DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366

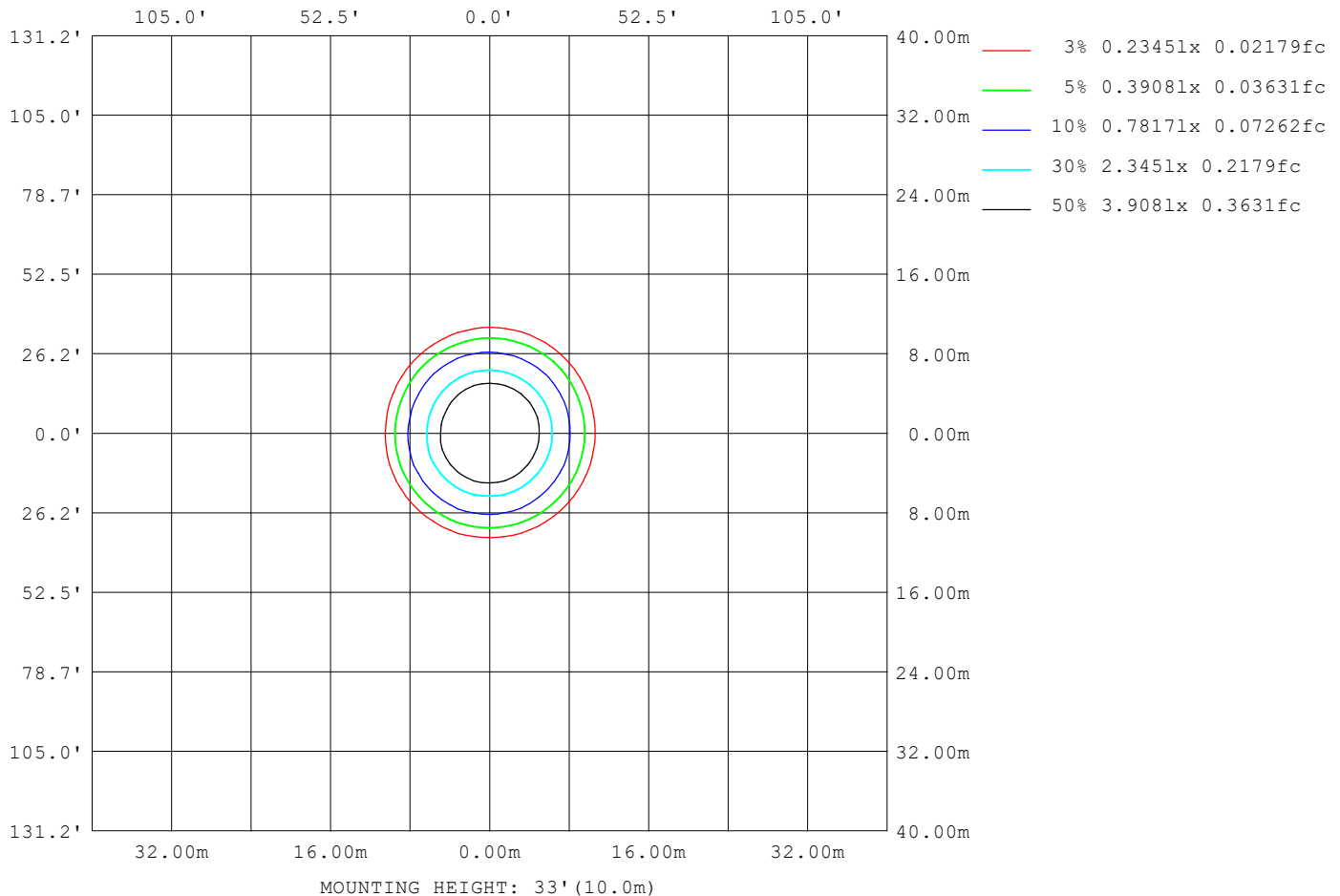
Humidity:65.0%

Test Distance:7.220m [K=1.0000]

Remarks:

ISOLUX DIAGRAM

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	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:Ky
 Test Date:28 June 2018

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:7.220m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:240.01V I:0.0501A P:11.466W PF:0.9543 Freq:50.08Hz Lamp Flux:835.747x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_250mA_3K_50DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

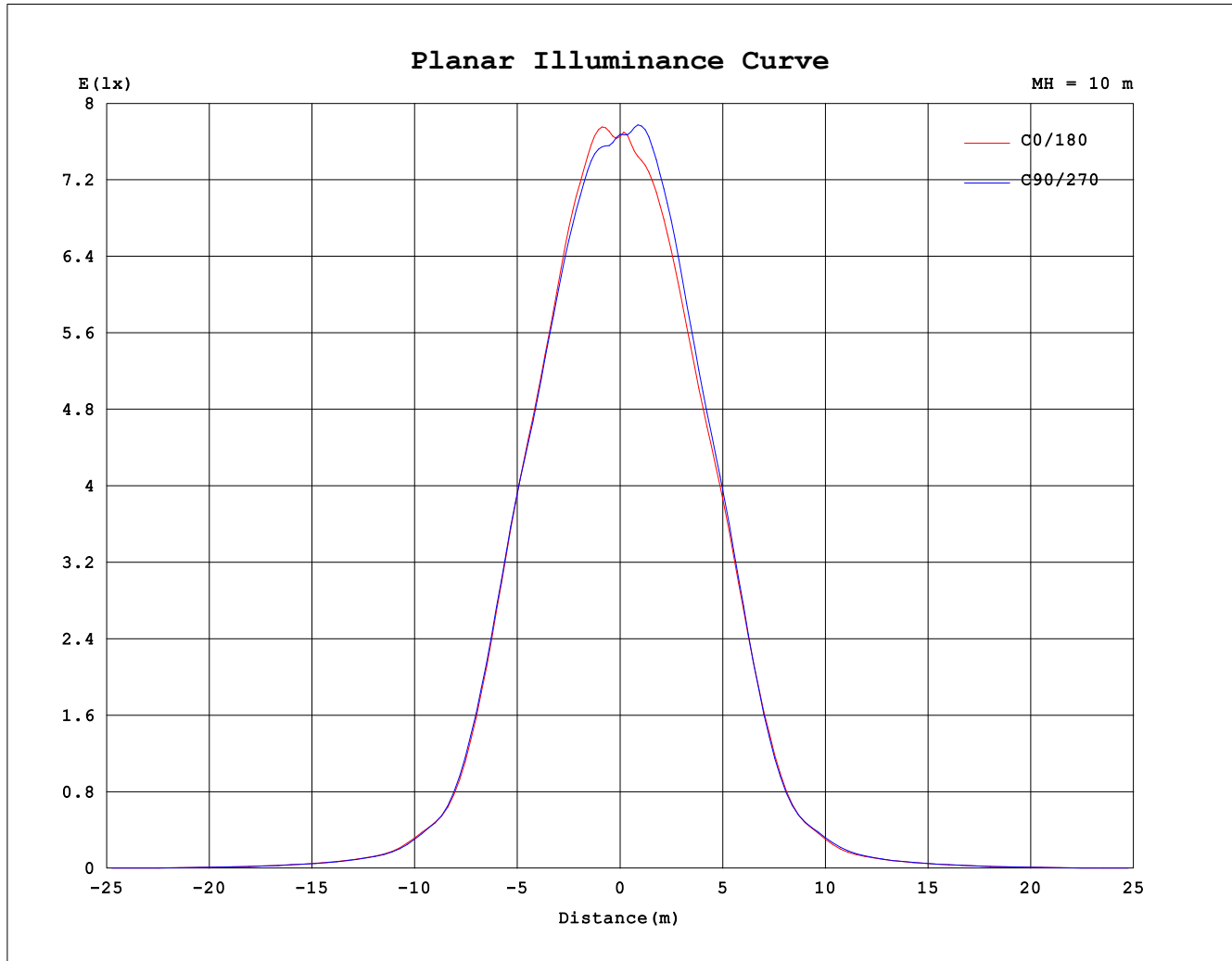
AvgL	cd/m2
L_0~180 (65) av	2888
L_0~180 (75) av	2751
L_0~180 (85) av	3164
L_90~270 (65) av	2860
L_90~270 (75) av	2738
L_90~270 (85) av	3163
L_45 (65) av	2870
L_45 (75) av	2748
L_45 (85) av	3166

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:28 June 2018

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity:65.0%
Test Distance:7.220m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Ky
Test Date: 28 June 2018

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 7.220m [K=1.0000]
Remarks:

