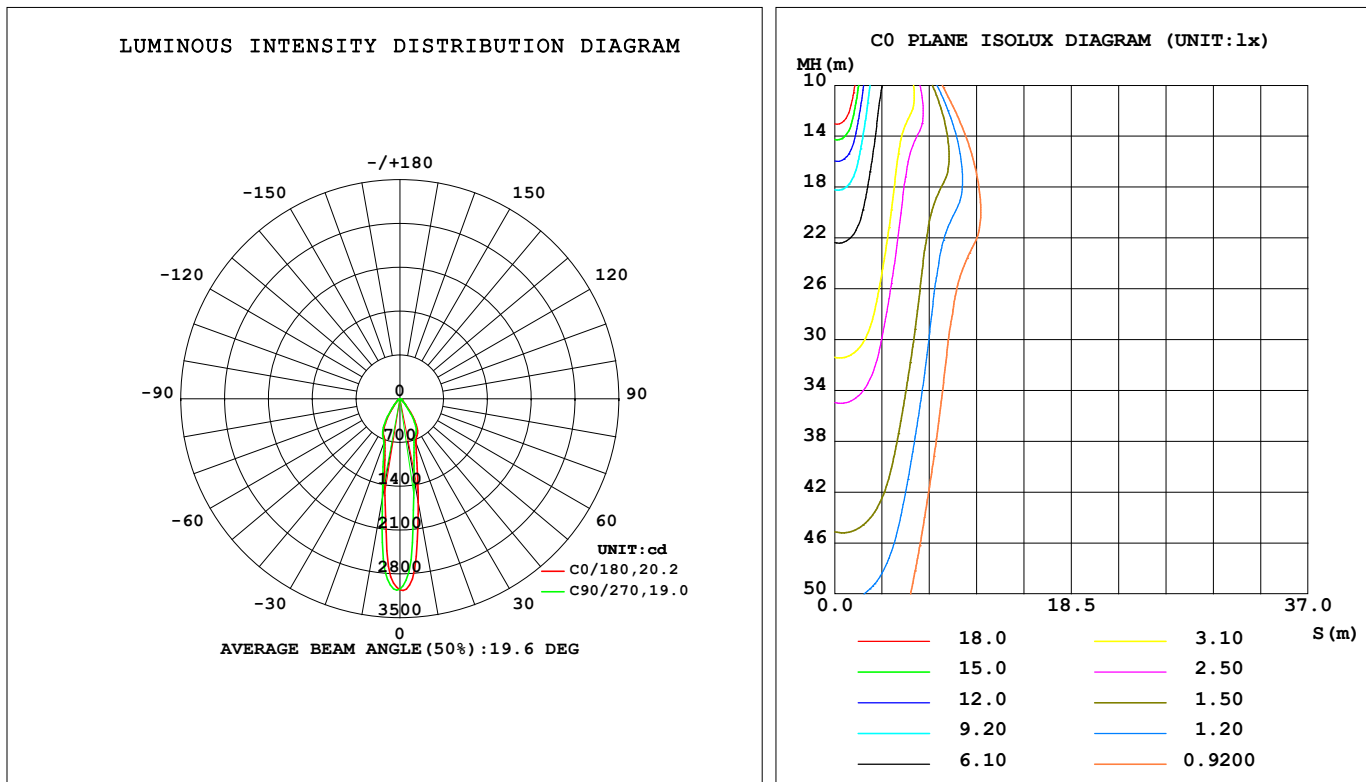


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 71.14 lm/W
MODEL G6 10mm 1200lm 830 R ADV		I _{max} (cd)	3068	S/MH (C0/180)		0.31
NOMINAL POWER (W)		LOR (%)	100.0	S/MH (C90/270)		0.36
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	1128.4	η UP,DN (C0-180)		0.0,48.7
NOMINAL FLUX (lm)	1128.37	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,51.3
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM		0.00
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	1685	1527	1314	1330	1433	1569	1630	1707	0- 10	206.4	206.4	18.3,18.3
20	758.2	727.0	677.5	682.5	713.1	744.2	758.6	772.4	10- 20	279.5	485.9	43.1,43.1
30	554.2	537.3	509.2	479.8	490.8	505.6	532.7	552.2	20- 30	289.1	775.0	68.7,68.7
40	206.5	182.4	160.4	156.9	161.0	179.0	192.0	212.7	30- 40	212.6	987.5	87.5,87.5
50	56.51	54.75	53.82	54.93	55.75	55.95	56.56	57.43	40- 50	82.21	1070	94.8,94.8
60	25.57	25.42	24.98	24.56	24.23	24.12	24.67	25.25	50- 60	33.95	1104	97.8,97.8
70	7.831	8.276	8.687	8.864	8.672	8.148	7.682	7.543	60- 70	14.24	1118	99.1,99.1
80	5.224	5.487	5.743	5.873	5.758	5.434	5.149	5.054	70- 80	7.496	1125	99.7,99.7
90	0.0311	0.0249	0.0280	0.0249	0.0249	0.0249	0.0280	0.0280	80- 90	2.955	1128	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): 1038.9 lm

%lum = 92.1%

%lamp = 92.1%

Conical surface Flux(120deg): 1103.7 lm

%lum = 97.8%

%lamp = 97.8%

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

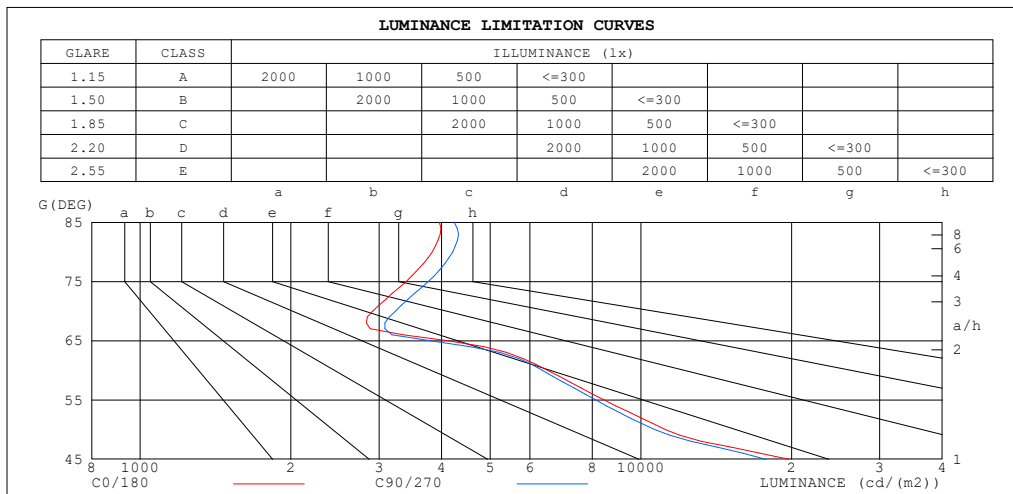
Humidity:65.0%

Test Distance:7.220m [K=1.0000]

Remarks:

LUMINANCE LIMITATION CURVES

Test:U:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	3958	4234
80	3831	4211
75	3401	3767
70	2915	3234
65	4094	3774
60	6511	6362
55	8430	8124
50	11193	10661
45	19757	17772

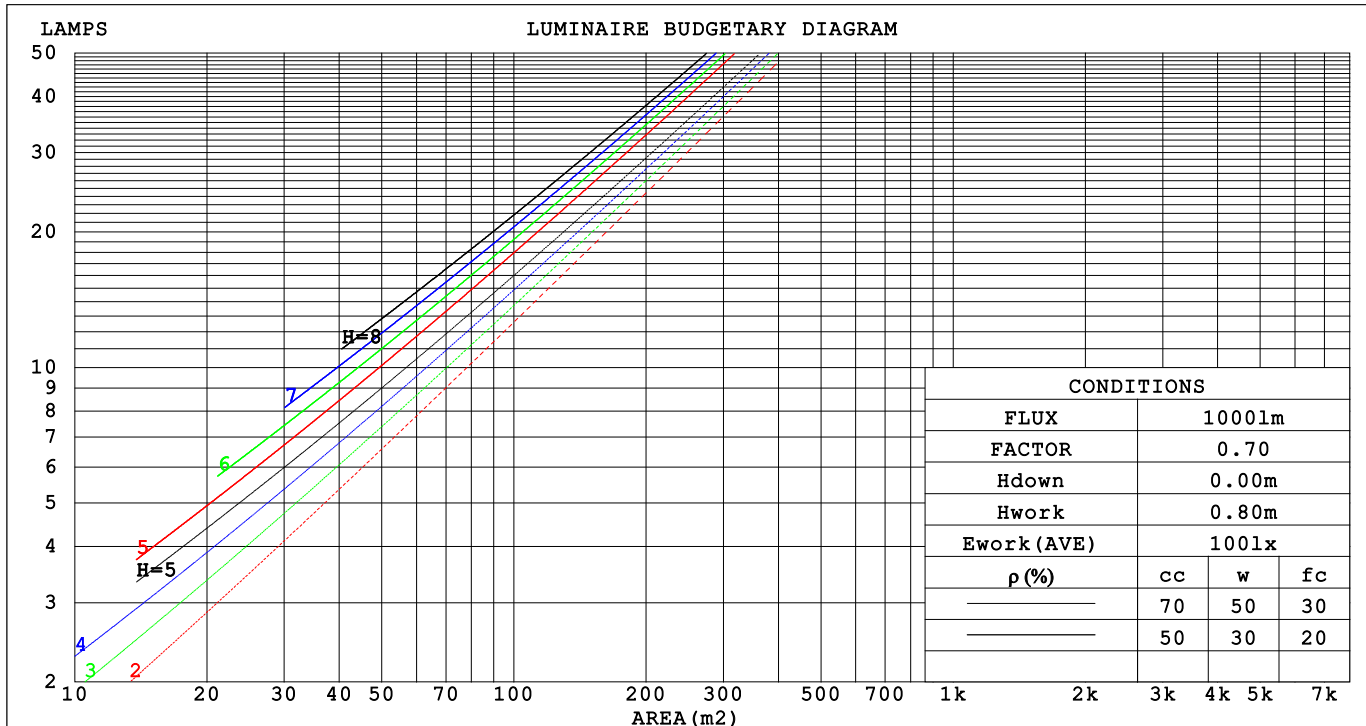
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Ky
Test Date:28 June 2018

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:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	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															



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:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	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	.183	.104	.033	.176	.100	.032	.163	.094	.030	.152	.088	.028	.141	.082	.026	
2.0	.174	.095	.029	.168	.093	.029	.158	.088	.027	.148	.083	.026	.139	.079	.025	
3.0	.165	.088	.026	.160	.086	.026	.151	.082	.025	.143	.078	.024	.135	.075	.023	
4.0	.156	.081	.024	.152	.079	.023	.144	.076	.023	.137	.073	.022	.130	.071	.022	
5.0	.148	.075	.022	.144	.074	.022	.137	.072	.021	.131	.069	.021	.125	.067	.020	
6.0	.140	.070	.020	.137	.069	.020	.131	.067	.020	.126	.065	.019	.120	.063	.019	
7.0	.133	.066	.019	.131	.065	.019	.125	.063	.018	.120	.062	.018	.116	.060	.018	
8.0	.127	.062	.017	.125	.061	.017	.120	.060	.017	.116	.059	.017	.111	.057	.017	
9.0	.121	.059	.016	.119	.058	.016	.115	.057	.016	.111	.056	.016	.107	.054	.016	
10.0	.116	.056	.015	.114	.055	.015	.110	.054	.015	.107	.053	.015	.103	.052	.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	.144	.114	.089	.124	.098	.077	.085	.068	.054	.049	.040	.032	.016	.013	.010		
4.0	.134	.099	.072	.115	.085	.063	.079	.060	.044	.046	.035	.026	.015	.011	.009		
5.0	.125	.087	.059	.107	.076	.052	.074	.053	.037	.043	.031	.022	.014	.010	.007		
6.0	.117	.078	.050	.101	.068	.043	.070	.047	.031	.040	.028	.018	.013	.009	.006		
7.0	.111	.070	.042	.095	.061	.037	.066	.043	.026	.038	.025	.015	.012	.008	.005		
8.0	.105	.064	.036	.090	.056	.032	.062	.039	.022	.036	.023	.013	.012	.008	.004		
9.0	.100	.059	.031	.086	.051	.027	.059	.036	.019	.035	.021	.012	.011	.007	.004		
10.0	.095	.054	.028	.082	.047	.024	.057	.033	.017	.033	.020	.010	.011	.006	.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:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm											
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG						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	18.3	19.2	18.5	19.4	19.6	17.8	18.8	18.0	18.9	19.1	
	3H	18.2	19.1	18.5	19.3	19.5	17.8	18.6	18.0	18.8	19.0
	4H	18.2	19.0	18.5	19.3	19.5	17.8	18.6	18.1	18.8	19.1
	6H	18.2	19.0	18.5	19.3	19.5	17.9	18.6	18.2	18.9	19.1
	8H	18.2	19.0	18.6	19.2	19.5	17.9	18.6	18.2	18.9	19.1
	12H	18.2	19.0	18.6	19.2	19.5	17.9	18.6	18.2	18.9	19.2
4H	2H	18.1	19.0	18.4	19.2	19.4	17.7	18.5	18.0	18.7	19.0
	3H	18.1	18.8	18.4	19.1	19.4	17.7	18.4	18.0	18.7	19.0
	4H	18.2	18.8	18.5	19.1	19.4	17.8	18.4	18.1	18.7	19.1
	6H	18.3	18.8	18.6	19.2	19.5	17.9	18.5	18.3	18.8	19.2
	8H	18.3	18.8	18.7	19.2	19.6	18.0	18.5	18.4	18.9	19.3
	12H	18.3	18.8	18.7	19.2	19.6	18.1	18.6	18.5	18.9	19.3
8H	4H	18.1	18.6	18.5	19.0	19.4	17.8	18.3	18.1	18.6	19.0
	6H	18.3	18.7	18.7	19.1	19.5	18.0	18.4	18.4	18.8	19.2
	8H	18.4	18.8	18.8	19.2	19.6	18.1	18.5	18.6	18.9	19.4
	12H	18.5	18.8	18.9	19.2	19.7	18.2	18.5	18.7	19.0	19.5
12H	4H	18.1	18.6	18.5	18.9	19.3	17.7	18.2	18.1	18.6	19.0
	6H	18.3	18.7	18.7	19.1	19.5	18.0	18.4	18.4	18.8	19.2
	8H	18.4	18.7	18.9	19.2	19.6	18.1	18.5	18.6	18.9	19.4
Variations with the observer position at spacings:											
S = 1.0H	+ 2.4 / - 3.2					+ 1.9 / - 2.6					
1.5H	+ 4.1 / - 2.6					+ 3.3 / - 2.0					
2.0H	+ 3.2 / - 1.7					+ 2.7 / - 1.5					

CIE Pub.117, 1128 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.4)

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:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	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) $k(RI) \times RCR = 5$									
$k = 0.60$	84	77	72	83	76	72	82	76	72	68
0.80	92	85	81	91	85	81	90	84	80	76
1.00	97	91	86	96	90	86	94	90	86	81
1.25	101	95	92	100	95	91	98	94	90	86
1.50	104	99	95	103	98	95	101	97	94	89
2.00	107	103	99	106	102	98	103	100	97	91
2.50	109	105	102	107	104	101	104	101	99	93
3.00	111	107	104	109	106	103	106	103	101	94
4.00	113	110	107	111	108	106	107	105	103	96
5.00	114	112	110	112	110	108	108	107	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

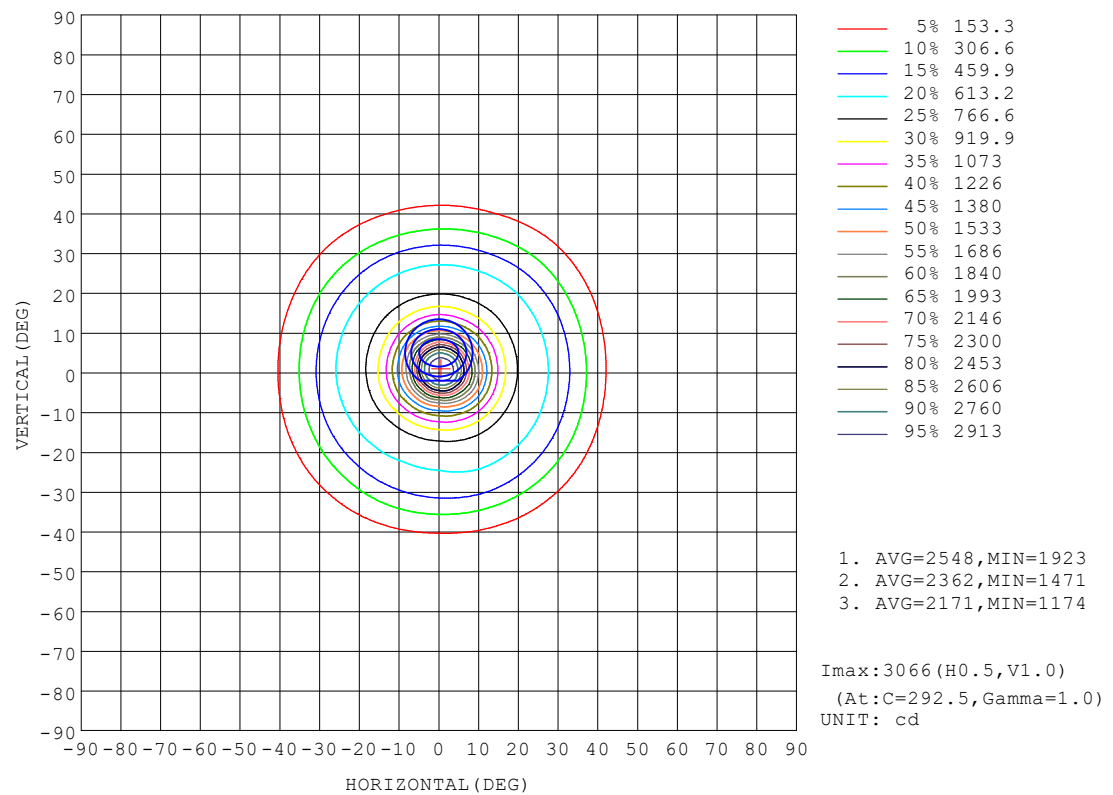
Humidity:65.0%

Test Distance:7.220m [K=1.0000]

Remarks:

ISOCANDELA DIAGRAM

Test:U:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

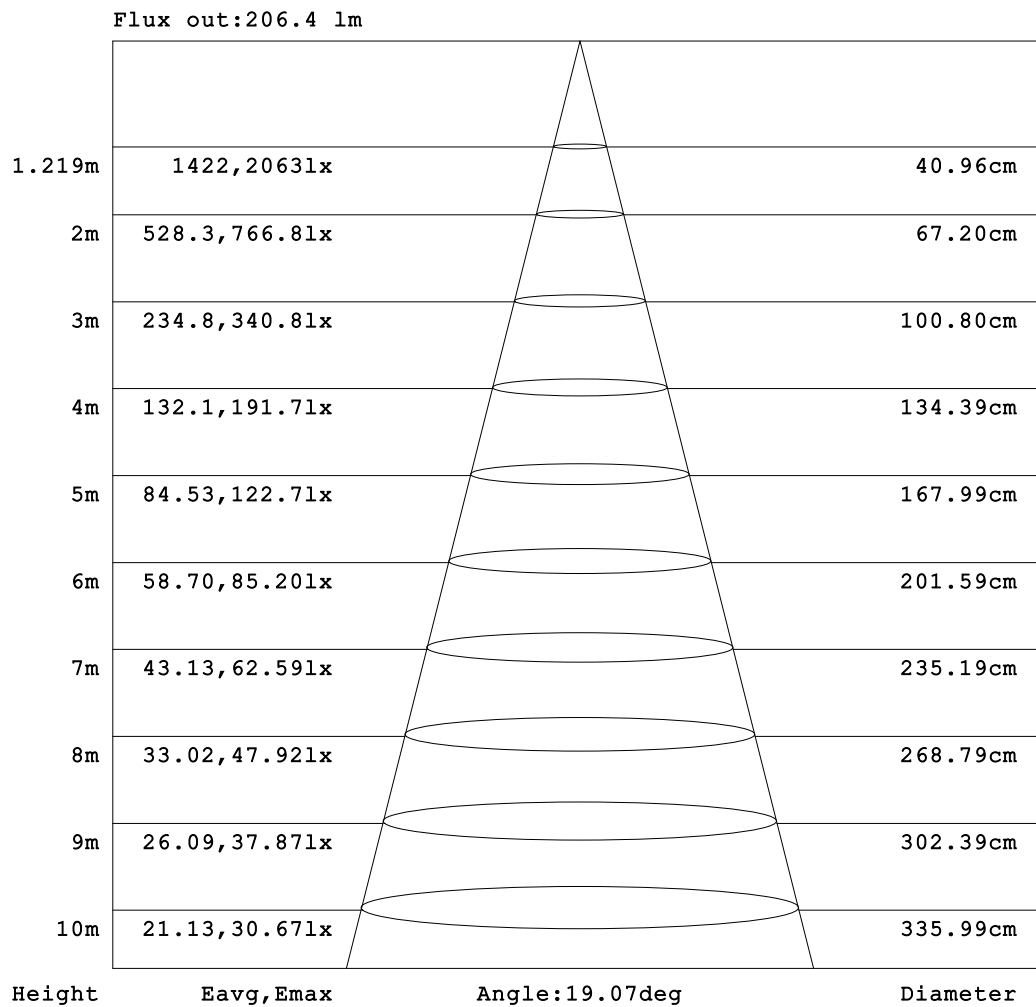


C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Ky
Test Date: 28 June 2018

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:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	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

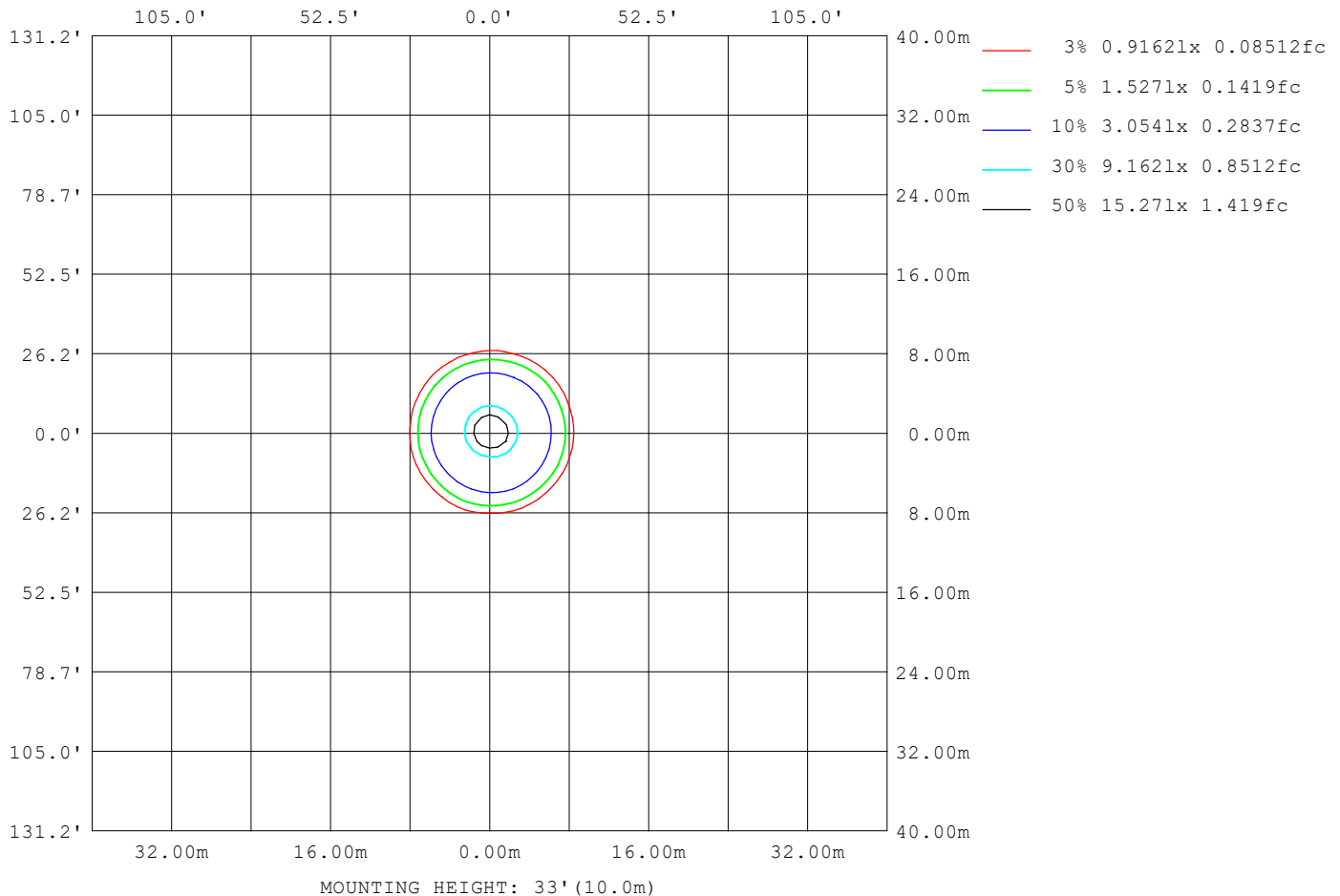
Humidity:65.0%

Test Distance:7.220m [K=1.0000]

Remarks:

ISOLUX DIAGRAM

Test:U:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	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:239.91V I:0.0681A P:15.860W PF:0.9713 Freq:50.08Hz Lamp Flux:1128.37x1 lm		
NAME: DeepDownLED_WHT_SLE 10mm_350mA_3K_24DEG	TYPE:	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Darkon	SUR.:	Shielding Angle:

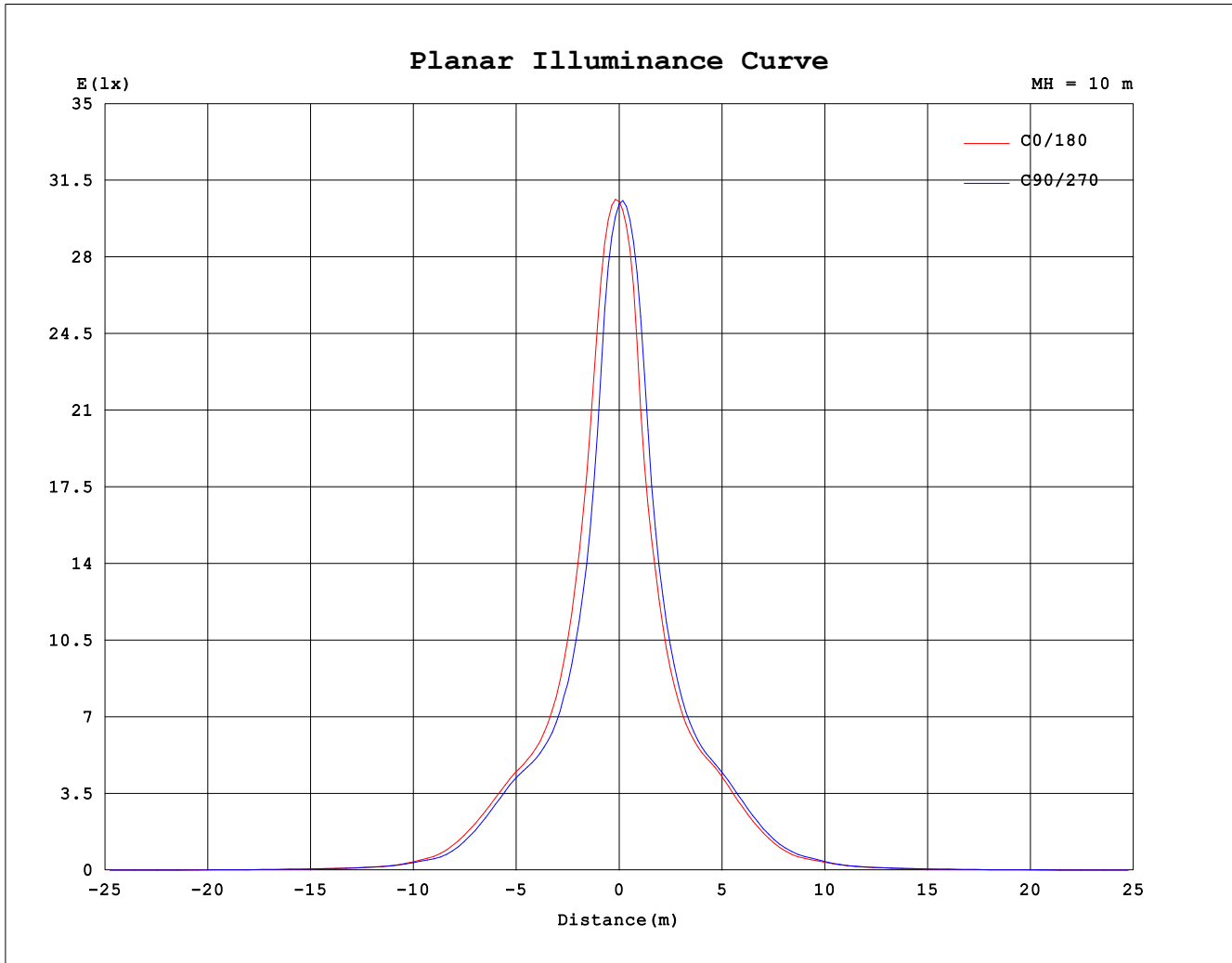
AvgL	cd/m2
L_0~180 (65) av	3977
L_0~180 (75) av	3585
L_0~180 (85) av	4101
L_90~270 (65) av	3908
L_90~270 (75) av	3554
L_90~270 (85) av	4070
L_45 (65) av	3943
L_45 (75) av	3564
L_45 (85) av	4078

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:

