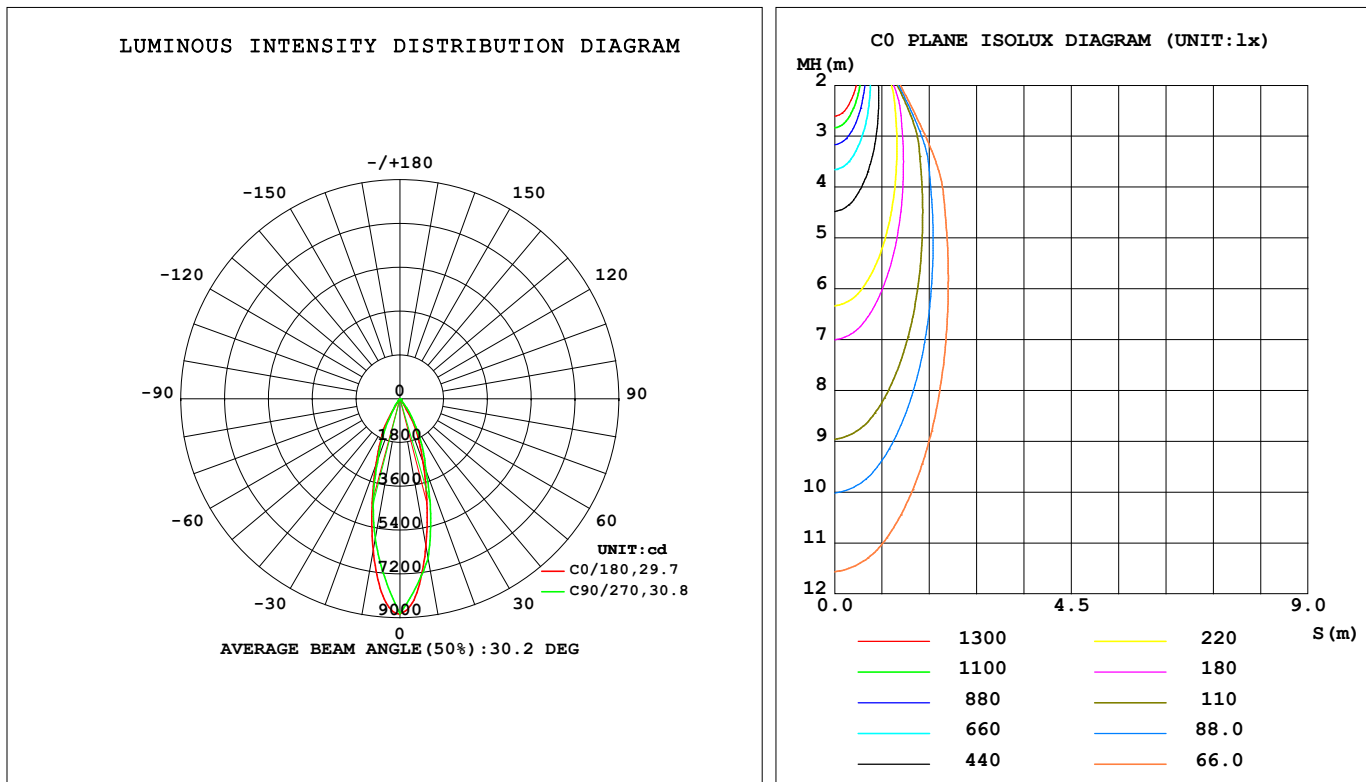


## LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°	TYPE:CEJ1150	WEIGHT:
SPEC.:30 <sub>i</sub> ā	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.12	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 72.36 lm/W
MODEL	1050MA 3000K V15	I <sub>max</sub> (cd)	8835	S/MH (C0/180)	0.49	
NOMINAL POWER (W)	38	LOR (%)	100.0	S/MH (C90/270)	0.47	
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	2928.2	η UP,DN (C0-180)	0.0,53.1	
NOMINAL FLUX (lm)	2928.24	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0,46.9	
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	0.50	
TEST VOLTAGE (V)	220.0	η down (%)	100.0	CIBSE SHR MAX	0.50	



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: ZhangZhenNan  
 Test Date: 2015-11-11

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.284  
 Humidity: 65.0%  
 Test Distance: 7.500m [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
5	8001	7680	7752	7754	8127	7488	7345	7409	0- 5	193.7	193.7	6.61,6.61
10	6166	6144	6670	6250	6345	5808	5856	5692	5- 10	485.5	679.2	23.2,23.2
15	4285	4579	4891	4670	4435	4202	4241	4081	10- 15	611.7	1291	44.1,44.1
20	2800	3044	3112	3095	2916	2808	2627	2706	15- 20	586.2	1877	64.1,64.1
25	1797	1954	2179	1967	1878	1818	1644	1751	20- 25	483.3	2360	80.6,80.6
30	890.6	1125	1246	1137	1007	945.1	662.2	888.6	25- 30	347.7	2708	92.5,92.5
35	101.6	368.7	651.7	407.0	117.9	253.7	349.0	228.5	30- 35	149.4	2857	97.6,97.6
40	47.30	52.84	57.35	57.18	50.40	41.80	35.72	42.14	35- 40	44.31	2902	99.1,99.1
45	21.01	26.20	34.54	28.47	22.72	21.31	21.74	21.34	40- 45	13.30	2915	99.6,99.6
50	11.26	11.48	11.73	11.53	11.18	9.194	7.752	8.288	45- 50	6.726	2922	99.8,99.8
55	6.809	5.774	6.611	5.420	5.776	4.527	4.360	3.958	50- 55	3.482	2925	99.9,99.9
60	1.349	1.572	1.491	1.430	1.504	1.180	0.9677	0.9477	55- 60	1.492	2927	100,100
65	0.8876	1.030	1.090	0.9563	0.9787	0.8187	0.6576	0.6576	60- 65	0.5636	2927	100,100
70	0.5850	0.6752	0.6890	0.6399	0.6545	0.5484	0.4701	0.4364	65- 70	0.3668	2928	100,100
75	0.3644	0.4345	0.4915	0.4251	0.4133	0.3475	0.3248	0.2780	70- 75	0.2496	2928	100,100
80	0.2021	0.2697	0.2941	0.2667	0.2272	0.2051	0.1795	0.1705	75- 80	0.1624	2928	100,100
85	0.0720	0.0744	0	0.0733	0.0779	0.0521	0	0.0458	80- 85	0.0779	2928	100,100
90	0	0	0	0	0	0	0	0	85- 90	0.0075	2928	100,100
95									90- 95			
100									95-100			
105									100-105			
110									105-110			
115									110-115			
120									115-120			
125									120-125			
130									125-130			
135									130-135			
140									135-140			
145									140-145			
150									145-150			
155									150-155			
160									155-160			
165									160-165			
170									165-170			
175									170-175			
180									175-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 2915.1 lm

%lum = 99.6%

%lamp = 99.6%

Conical surface Flux(120deg): 2926.8 lm

%lum = 100.0%

%lamp = 100.0%

C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ZhangZhenNan

Test Date:2015-11-11

$\gamma$  Range: 0 - 90DEG

$\gamma$  Interval: 0.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284

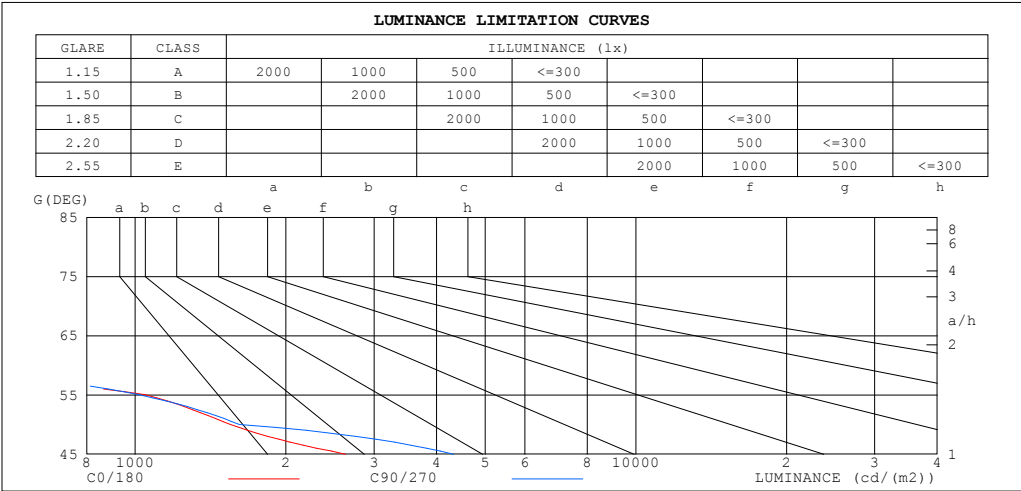
Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

LUMINANCE LIMITATION CURVES

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°	TYPE:CEJ1150	WEIGHT:
SPEC.:30 <sub>i</sub> ã	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.12	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	73	0
80	103	150
75	125	168
70	151	178
65	186	228
60	239	264
55	1050	1020
50	1549	1615
45	2629	4321

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:ZhangZhenNan  
Test Date:2015-11-11

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284  
Humidity:65.0%  
Test Distance:7.500m [K=1.0000]  
Remarks:



## WEC AND CCEC

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm																	
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°									TYPE:CEJ1150			WEIGHT:					
SPEC.:30 <sub>i</sub> ã									DIM.:			SERIAL No.:					
MFR.: DARKON									SUR.:D=0.12			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
pf <sub>c</sub>	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Wall Exitance Coefficients (WEC)									
0.0																
1.0	.149	.085	.027	.143	.081	.026	.130	.075	.024	.119	.068	.022	.108	.063	.020	
2.0	.140	.077	.024	.134	.074	.023	.124	.069	.021	.115	.064	.020	.106	.060	.019	
3.0	.132	.070	.021	.127	.068	.020	.118	.064	.020	.110	.061	.019	.103	.057	.018	
4.0	.125	.065	.019	.121	.063	.019	.113	.060	.018	.106	.057	.017	.100	.054	.017	
5.0	.118	.060	.017	.115	.059	.017	.108	.056	.017	.103	.054	.016	.097	.052	.016	
6.0	.112	.056	.016	.110	.055	.016	.104	.053	.016	.099	.051	.015	.094	.050	.015	
7.0	.107	.053	.015	.105	.052	.015	.100	.051	.015	.096	.049	.014	.091	.047	.014	
8.0	.103	.050	.014	.101	.050	.014	.096	.048	.014	.092	.047	.013	.089	.045	.013	
9.0	.099	.048	.013	.097	.047	.013	.093	.046	.013	.089	.045	.013	.086	.044	.013	
10.0	.095	.045	.013	.093	.045	.013	.090	.044	.012	.086	.043	.012	.083	.042	.012	

pcc	80%			70%			50%			30%			10%			0
pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
ρfc	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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.116	.130	.114	.101	.089	.079	.070	.051	.046	.041	.017	.015	.013	
3.0	.138	.113	.094	.118	.098	.081	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.126	.098	.077	.108	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.116	.086	.064	.100	.075	.056	.069	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.108	.076	.054	.093	.066	.047	.064	.046	.033	.037	.027	.020	.012	.009	.006	
7.0	.101	.068	.046	.087	.059	.040	.060	.042	.028	.035	.025	.017	.011	.008	.006	
8.0	.095	.062	.039	.082	.054	.034	.056	.038	.024	.033	.022	.014	.011	.007	.005	
9.0	.089	.056	.034	.077	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.085	.052	.030	.073	.045	.026	.051	.032	.019	.030	.019	.011	.010	.006	.004	

C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ZhangZhenNan

Test Date:2015-11-11

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284

Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

## UGR(Unified Glare Rating) Table

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm											
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°					TYPE:CEJ1150			WEIGHT:			
SPEC.:30ᵢᄁ					DIM.:			SERIAL No.:			
MFR.: DARKON					SUR.:D=0.12			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	8.2	9.0	8.4	9.1	9.3	15.1	15.8	15.3	16.0	16.1	
3H	8.1	8.8	8.3	8.9	9.1	14.9	15.6	15.2	15.8	16.0	
4H	8.0	8.6	8.2	8.8	9.1	14.8	15.5	15.1	15.7	15.9	
6H	7.9	8.5	8.2	8.7	9.0	14.7	15.4	15.0	15.6	15.8	
8H	7.9	8.4	8.2	8.7	8.9	14.7	15.3	15.0	15.5	15.8	
12H	7.8	8.4	8.1	8.6	8.9	14.7	15.2	15.0	15.5	15.8	
4H 2H	8.0	8.6	8.3	8.9	9.1	14.8	15.5	15.1	15.7	15.9	
3H	7.8	8.4	8.1	8.7	8.9	14.7	15.2	15.0	15.5	15.8	
4H	7.7	8.2	8.1	8.5	8.8	14.6	15.1	14.9	15.4	15.7	
6H	7.6	8.1	8.0	8.4	8.8	14.5	14.9	14.8	15.3	15.6	
8H	7.6	8.0	8.0	8.4	8.7	14.4	14.8	14.8	15.2	15.5	
12H	7.5	7.9	7.9	8.3	8.7	14.4	14.7	14.8	15.1	15.5	
8H 4H	7.6	8.0	8.0	8.3	8.7	14.4	14.8	14.8	15.2	15.5	
6H	7.5	7.8	7.9	8.2	8.6	14.3	14.7	14.7	15.0	15.5	
8H	7.4	7.7	7.9	8.1	8.6	14.2	14.6	14.7	15.0	15.4	
12H	7.4	7.6	7.8	8.1	8.5	14.2	14.4	14.6	14.9	15.4	
12H 4H	7.5	7.9	7.9	8.3	8.7	14.4	14.7	14.8	15.1	15.5	
6H	7.4	7.7	7.9	8.1	8.6	14.2	14.6	14.7	15.0	15.4	
8H	7.4	7.6	7.8	8.1	8.5	14.2	14.4	14.6	14.9	15.4	
Variations with the observer position at spacings:											
S = 1.0H	+ 3.0 / -10.6					+ 5.1 / -17.6					
1.5H	+ 4.8 / - 6.5					+ 7.8 / -14.3					
2.0H	+ 5.0 / - 8.2					+ 6.5 / - 9.6					

CIE Pub.117 Corrected 2928 lm Total Lamp Luminous Flux.(8log(F/F0) = 3.7)

C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ZhangZhenNan

Test Date:2015-11-11

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284

Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

## UTILIZATION FACTORS TABLE

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°	TYPE:CEJ1150	WEIGHT:
SPEC.:30 <sub>i</sub> ã	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.12	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) x RCR = 5									
k = 0.60	91	85	82	91	85	82	90	85	82	78
0.80	98	93	89	97	92	89	96	92	89	86
1.00	102	97	94	101	96	93	99	96	93	89
1.25	105	101	98	104	100	97	102	99	96	93
1.50	108	103	101	106	103	100	104	101	99	95
2.00	110	106	103	108	105	102	106	103	101	96
2.50	111	108	105	110	107	104	107	104	102	97
3.00	113	110	107	111	108	106	108	106	104	98
4.00	115	112	110	113	110	109	109	107	106	99
5.00	116	114	112	114	112	111	110	109	107	100
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ZhangZhenNan

Test Date:2015-11-11

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284

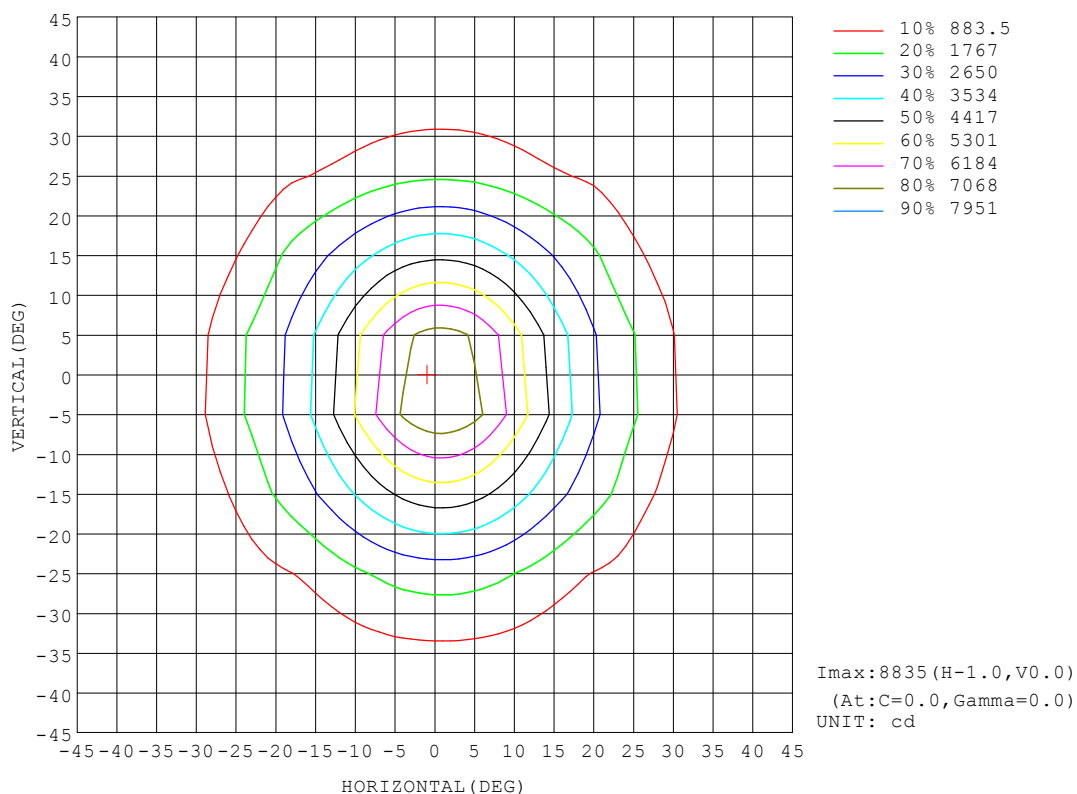
Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

## ISOCANDELA DIAGRAM

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°	TYPE:CEJ1150	WEIGHT:
SPEC.:30 <sub>i</sub> ã	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.12	Shielding Angle:



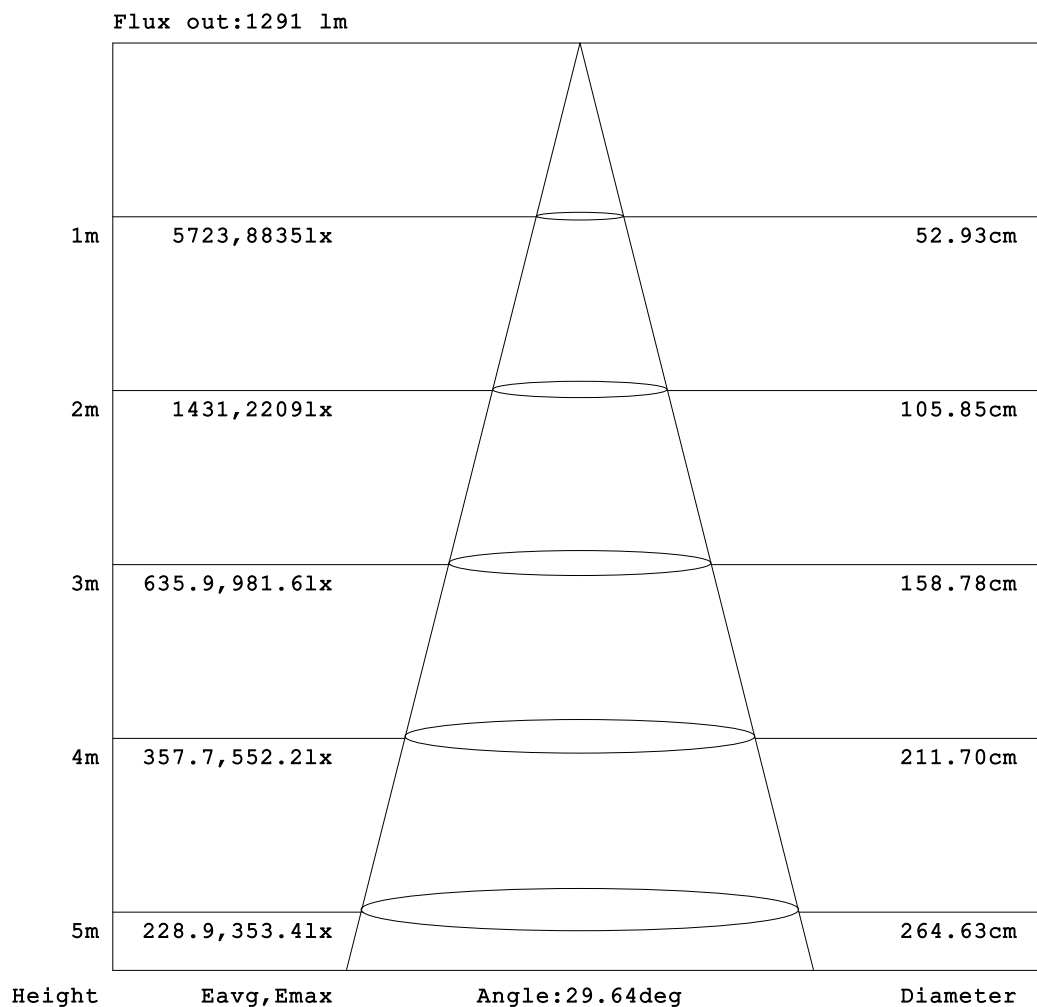
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZhangZhenNan  
 Test Date:2015-11-11

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:



### AAI Figure

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°	TYPE:CEJ1150	WEIGHT:
SPEC.:30,ã	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.12	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: 5.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ZhangZhenNan

Test Date:2015-11-11

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284

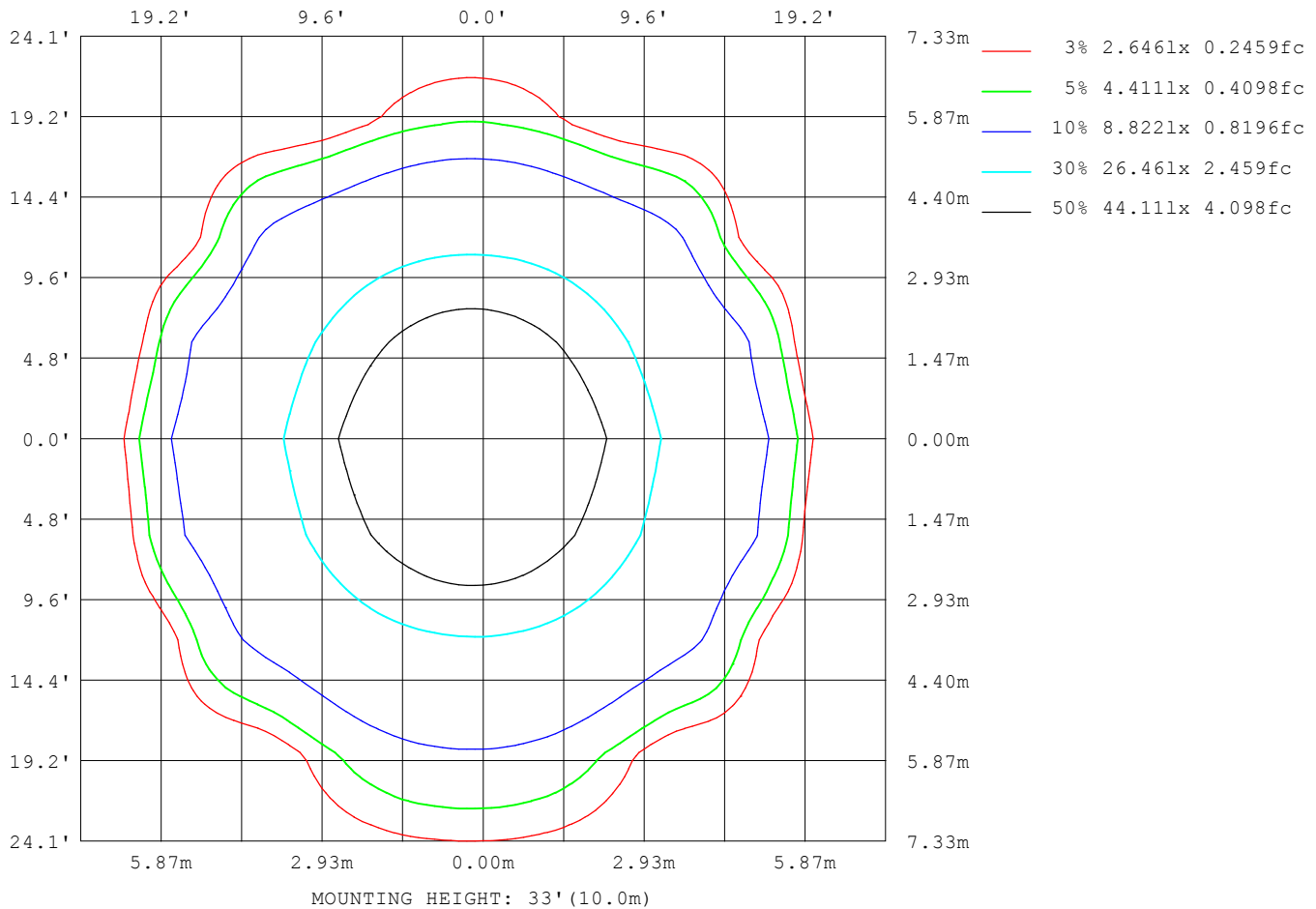
Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

## ISOLUX DIAGRAM

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°	TYPE:CEJ1150	WEIGHT:
SPEC.:30 <sub>i</sub> ā	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.12	Shielding Angle:



C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:ZhangZhenNan  
 Test Date:2015-11-11

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284  
 Humidity:65.0%  
 Test Distance:7.500m [K=1.0000]  
 Remarks:

### LED Avg.L Report

Test:U:226.9V I:0.1908A P:40.47W PF:0.9351 Lamp Flux:2928.24x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_38W_3K_30°	TYPE:CEJ1150	WEIGHT:
SPEC.:30 <sub>i</sub> ã	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.12	Shielding Angle:

AvgL	cd/m2
L_0~180 (65) av	195
L_0~180 (75) av	133
L_0~180 (85) av	76
L_90~270 (65) av	189
L_90~270 (75) av	140
L_90~270 (85) av	0
L_45 (65) av	181
L_45 (75) av	127
L_45 (85) av	62

Standard: GB/T 29293-2012

C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ZhangZhenNan

Test Date:2015-11-11

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

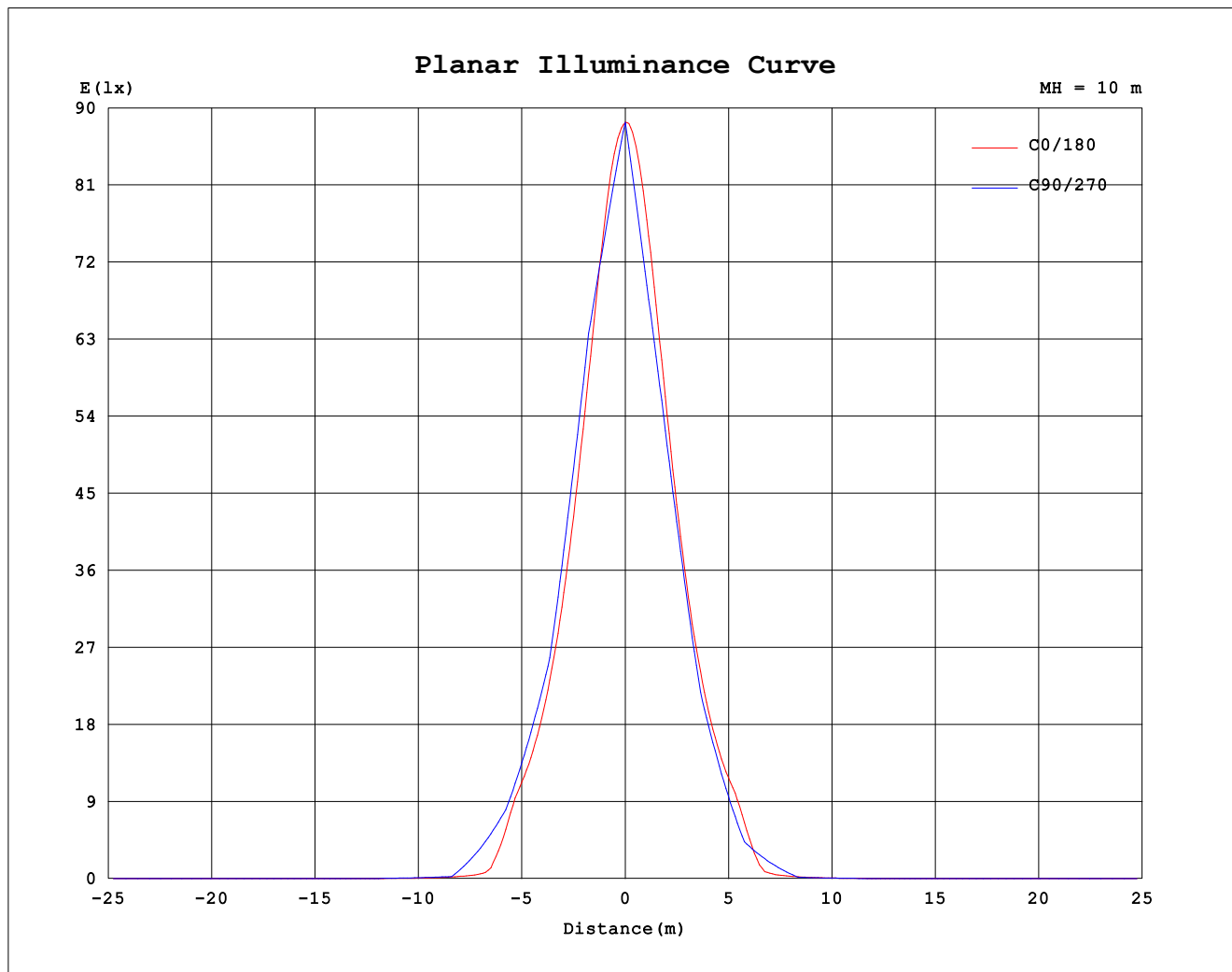
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.284

Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: ZhangZhenNan

Test Date: 2015-11-11

$\gamma$  Range: 0 - 90DEG

$\gamma$  Interval: 0.5DEG

Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.284

Humidity: 65.0%

Test Distance: 7.500m [K=1.0000]

Remarks:







