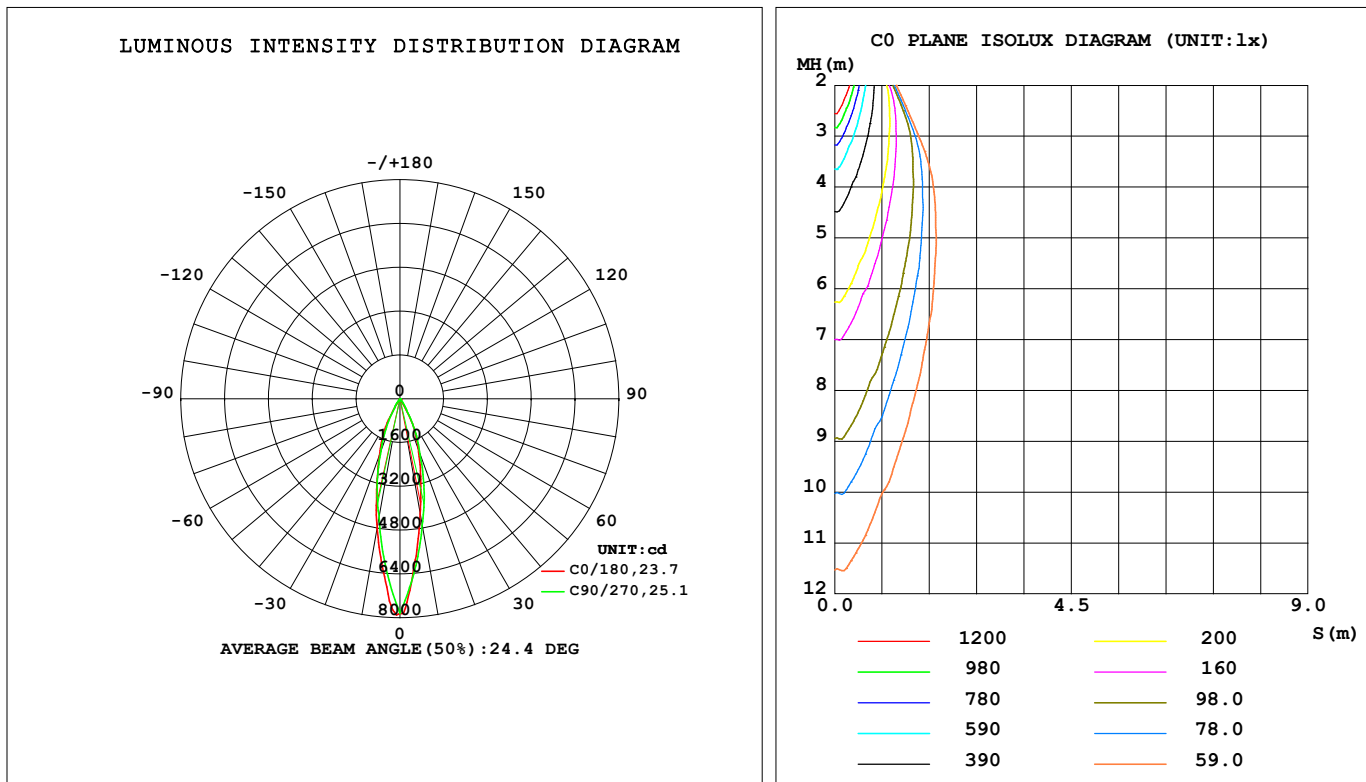


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°	TYPE:CEJ1125	WEIGHT:
SPEC.:30 _i ā	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.1	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA				Eff: 83.59 lm/W
MODEL	700MA 4000K V13	I _{max} (cd)	7901	S/MH (C0/180)		0.43
NOMINAL POWER (W)	24	LOR (%)	100.0	S/MH (C90/270)		0.39
RATED VOLTAGE (V)	220.0	TOTAL FLUX (lm)	2104.2	η UP,DN (C0-180)		0.0,50.8
NOMINAL FLUX (lm)	2104.17	CIE CLASS	DIRECT	η UP,DN (C180-360)		0.0,49.2
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: 5.0DEG

Test Speed: HIGH

Temperature: 25.3DEG

Operators: ZhangZhenNan

Test Date: 2015-11-10

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:

γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	%lum, lamp
5	6045	5930	6271	6218	6529	6132	6125	5829	0- 5	162.2	162.2	7.71,7.71
10	4274	4274	4700	4571	4799	4476	4408	4131	5- 10	367.7	529.8	25.2,25.2
15	2936	3072	3419	3316	3287	3222	3228	2958	10- 15	441.0	970.8	46.1,46.1
20	1986	2062	2137	2215	2202	2188	2049	2017	15- 20	425.0	1396	66.3,66.3
25	1294	1340	1333	1447	1457	1426	1239	1288	20- 25	353.6	1749	83.1,83.1
30	416.3	598.6	528.8	708.1	552.0	663.9	430.1	539.2	25- 30	231.5	1981	94.1,94.1
35	60.55	142.7	281.7	182.0	72.14	160.8	229.1	126.9	30- 35	81.97	2063	98,98
40	29.65	34.45	34.54	33.04	31.03	30.17	28.22	28.60	35- 40	24.89	2088	99.2,99.2
45	14.24	19.48	22.14	17.59	13.85	14.95	17.01	14.66	40- 45	8.758	2097	99.6,99.6
50	7.357	10.43	9.737	7.781	6.233	5.275	5.799	5.845	45- 50	4.513	2101	99.9,99.9
55	0.8265	4.260	5.269	3.328	0.9706	2.050	3.264	1.741	50- 55	1.702	2103	99.9,99.9
60	0.5833	0.7245	0.8002	0.6855	0.6714	0.7120	0.7283	0.5750	55- 60	0.5829	2103	100,100
65	0.3915	0.5113	0.6078	0.4908	0.4441	0.4868	0.5360	0.4008	60- 65	0.2839	2104	100,100
70	0.2432	0.3405	0.4155	0.3379	0.2750	0.3118	0.3436	0.2598	65- 70	0.1997	2104	100,100
75	0.1368	0.2131	0.2881	0.2264	0.1538	0.1883	0.2231	0.1489	70- 75	0.1314	2104	100,100
80	0.0582	0.1229	0.1607	0.1358	0.0649	0.0951	0.1026	0.0803	75- 80	0.0793	2104	100,100
85	0.0018	0.0328	0	0.0351	0.0034	0.0171	0	0.0191	80- 85	0.0323	2104	100,100
90	0	0	0	0	0	0	0	0	85- 90	0.0018	2104	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): 2096.6 lm

%lum = 99.6%

%lamp = 99.6%

Conical surface Flux(120deg): 2103.4 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:2015-11-10

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.284

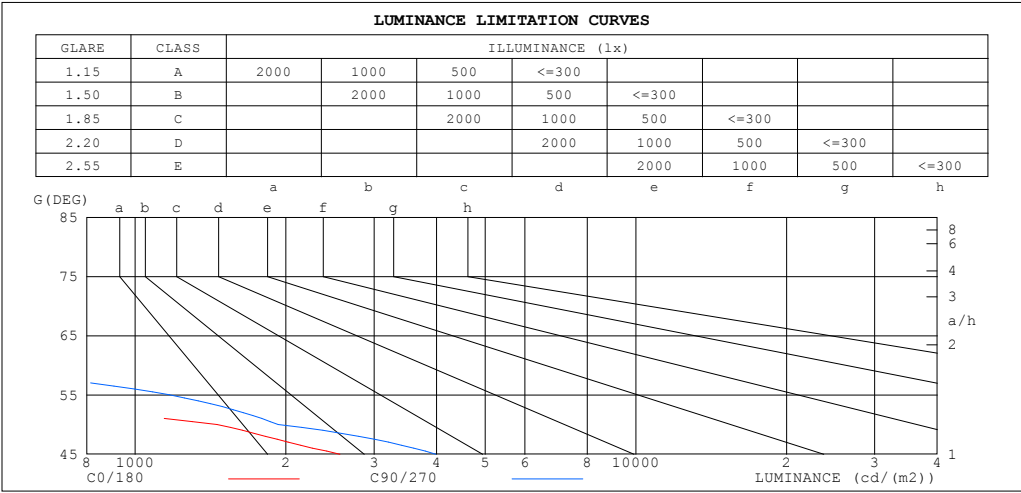
Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

LUMINANCE LIMITATION CURVES

Test:U:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°	TYPE:CEJ1125	WEIGHT:
SPEC.:30 _i ā	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.1	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	3	0
80	43	118
75	67	142
70	91	155
65	118	183
60	149	204
55	184	1170
50	1458	1930
45	2565	3988

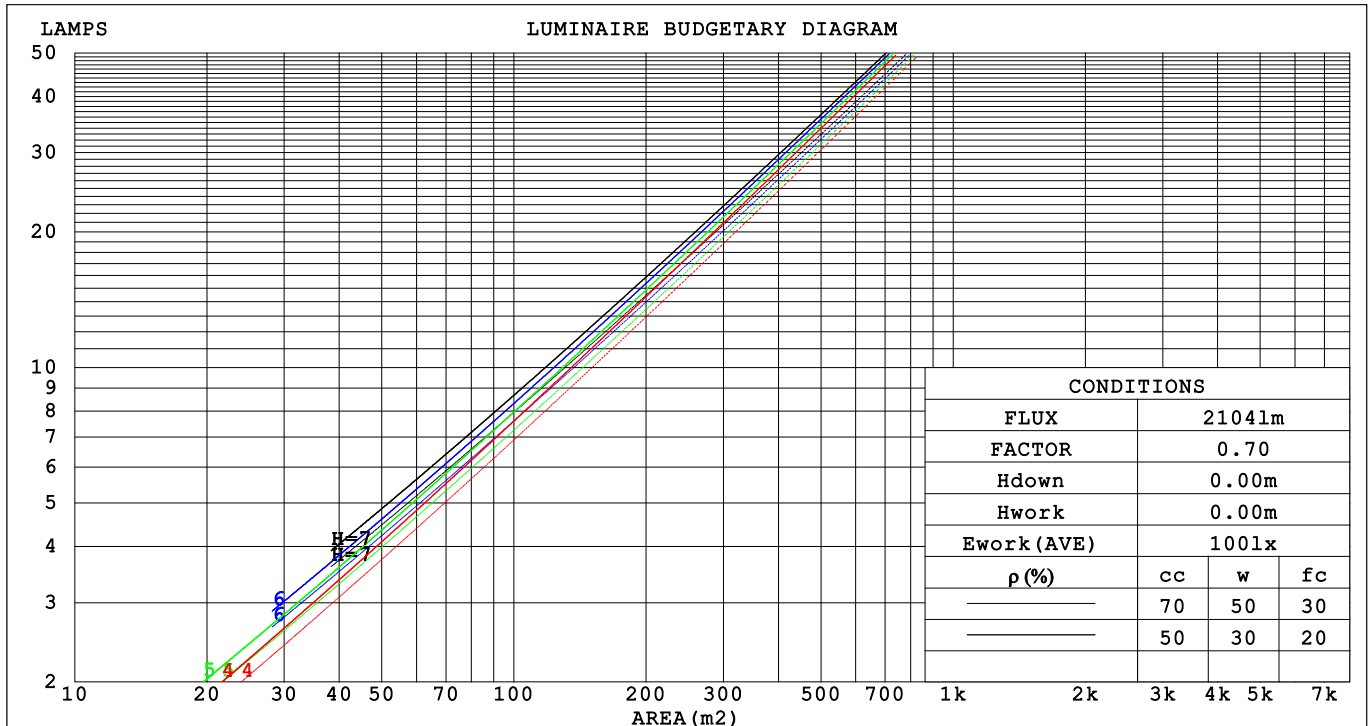
C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZhangZhenNan
Test Date:2015-11-10

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:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°	TYPE:CEJ1125	WEIGHT:
SPEC.:30 _i ā	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.1	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	.00
1.0	1.12	1.10	1.09	1.10	1.08	1.07	1.06	1.05	1.04	1.03	1.01	1.00	.99	.98	.98	.96
2.0	1.07	1.03	1.01	1.05	1.02	.99	1.02	.99	.97	.99	.97	.95	.96	.95	.93	.92
3.0	1.01	.97	.94	1.00	.96	.94	.98	.95	.92	.95	.93	.91	.93	.91	.89	.88
4.0	.97	.92	.89	.96	.92	.89	.94	.90	.88	.92	.89	.87	.90	.88	.86	.84
5.0	.93	.88	.85	.92	.87	.84	.90	.86	.84	.88	.85	.83	.87	.84	.82	.81
6.0	.89	.84	.81	.88	.84	.81	.87	.83	.80	.85	.82	.80	.84	.81	.79	.78
7.0	.85	.81	.77	.85	.80	.77	.83	.80	.77	.82	.79	.76	.81	.78	.76	.75
8.0	.82	.77	.74	.81	.77	.74	.81	.77	.74	.80	.76	.73	.79	.76	.73	.72
9.0	.79	.74	.71	.79	.74	.71	.78	.74	.71	.77	.73	.71	.76	.73	.71	.70
10.0	.76	.72	.69	.76	.72	.69	.75	.71	.68	.74	.71	.68	.74	.71	.68	.67



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:ZhangZhenNan
 Test Date:2015-11-10

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:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm																	
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°									TYPE:CEJ1125			WEIGHT:					
SPEC.:30 _i ã									DIM.:			SERIAL No.:					
MFR.: DARKON									SUR.:D=0.1			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	.147	.083	.026	.140	.080	.025	.128	.073	.023	.116	.067	.021	.106	.061	.020	
2.0	.137	.075	.023	.132	.073	.022	.121	.067	.021	.112	.063	.020	.103	.058	.018	
3.0	.129	.069	.021	.124	.067	.020	.116	.063	.019	.108	.059	.018	.100	.056	.017	
4.0	.122	.063	.019	.118	.062	.018	.110	.059	.017	.104	.056	.017	.097	.053	.016	
5.0	.115	.059	.017	.112	.058	.017	.106	.055	.016	.100	.053	.016	.094	.050	.015	
6.0	.110	.055	.016	.107	.054	.016	.101	.052	.015	.096	.050	.015	.092	.048	.014	
7.0	.105	.052	.015	.102	.051	.015	.097	.049	.014	.093	.048	.014	.089	.046	.014	
8.0	.100	.049	.014	.098	.048	.014	.094	.047	.013	.090	.046	.013	.086	.044	.013	
9.0	.096	.046	.013	.094	.046	.013	.090	.045	.013	.087	.044	.012	.084	.042	.012	
10.0	.092	.044	.012	.091	.044	.012	.087	.043	.012	.084	.042	.012	.081	.041	.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
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	.169	.158	.147	.145	.135	.127	.099	.093	.088	.057	.054	.051	.018	.017	.016	
2.0	.152	.133	.117	.130	.114	.101	.089	.079	.070	.051	.046	.041	.016	.015	.013	
3.0	.137	.113	.094	.118	.098	.082	.081	.068	.057	.047	.040	.034	.015	.013	.011	
4.0	.125	.098	.077	.108	.085	.067	.074	.059	.047	.043	.035	.028	.014	.011	.009	
5.0	.115	.086	.064	.099	.074	.056	.068	.052	.039	.040	.031	.023	.013	.010	.008	
6.0	.107	.076	.054	.092	.066	.047	.063	.046	.033	.037	.027	.020	.012	.009	.007	
7.0	.100	.068	.046	.086	.059	.040	.059	.041	.028	.034	.024	.017	.011	.008	.006	
8.0	.094	.062	.040	.081	.053	.035	.056	.038	.024	.032	.022	.015	.011	.007	.005	
9.0	.088	.056	.034	.076	.049	.030	.053	.034	.021	.031	.020	.013	.010	.007	.004	
10.0	.084	.052	.030	.072	.045	.026	.050	.031	.019	.029	.019	.011	.009	.006	.004	

C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ZhangZhenNan

Test Date:2015-11-10

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:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm											
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°					TYPE:CEJ1125			WEIGHT:			
SPEC.:30ᵢᄁ					DIM.:			SERIAL No.:			
MFR.: DARKON					SUR.:D=0.1			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		6.3	7.0	6.5	7.2	7.3	11.0	11.8	11.3	11.9	12.1
	3H	6.1	6.8	6.4	7.0	7.2	10.9	11.6	11.1	11.8	11.9
	4H	6.1	6.7	6.3	6.9	7.1	10.8	11.5	11.1	11.7	11.9
	6H	6.0	6.6	6.3	6.8	7.1	10.7	11.3	11.0	11.6	11.8
	8H	5.9	6.5	6.2	6.8	7.0	10.7	11.3	11.0	11.5	11.8
	12H	5.9	6.4	6.2	6.7	7.0	10.6	11.2	10.9	11.5	11.7
4H	2H	6.1	6.7	6.3	6.9	7.1	10.8	11.5	11.1	11.7	11.9
	3H	5.9	6.5	6.2	6.7	7.0	10.6	11.2	10.9	11.5	11.7
	4H	5.8	6.3	6.1	6.6	6.9	10.5	11.1	10.9	11.3	11.6
	6H	5.7	6.2	6.1	6.5	6.8	10.4	10.9	10.8	11.2	11.6
	8H	5.6	6.1	6.0	6.4	6.8	10.4	10.8	10.8	11.2	11.5
	12H	5.6	6.0	6.0	6.3	6.7	10.3	10.7	10.7	11.1	11.5
8H	4H	5.6	6.1	6.0	6.4	6.8	10.4	10.8	10.8	11.2	11.5
	6H	5.5	5.9	6.0	6.3	6.7	10.3	10.6	10.7	11.0	11.4
	8H	5.5	5.8	5.9	6.2	6.6	10.2	10.5	10.7	10.9	11.4
	12H	5.4	5.7	5.9	6.1	6.6	10.2	10.4	10.6	10.9	11.3
12H	4H	5.6	6.0	6.0	6.3	6.7	10.3	10.7	10.7	11.1	11.5
	6H	5.5	5.8	5.9	6.2	6.6	10.2	10.5	10.7	10.9	11.4
	8H	5.4	5.7	5.9	6.1	6.6	10.2	10.4	10.6	10.9	11.3
Variations with the observer position at spacings:											
S = 1.0H	+ 2.9 / -14.7					+ 5.4 / -14.7					
1.5H	+ 4.7 / -14.1					+ 8.0 / -18.9					
2.0H	+ 6.3 / - 9.9					+ 6.3 / -10.7					

CIE Pub.117 Corrected 2104 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.6)

C Range: 0 - 360DEG

C Interval: 5.0DEG

Test Speed: HIGH

Temperature:25.3DEG

Operators:ZhangZhenNan

Test Date:2015-11-10

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:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°	TYPE:CEJ1125	WEIGHT:
SPEC.:30 ₁ ā	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.1	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	79
0.80	98	93	90	97	93	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	104	101	107	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:2015-11-10

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.284

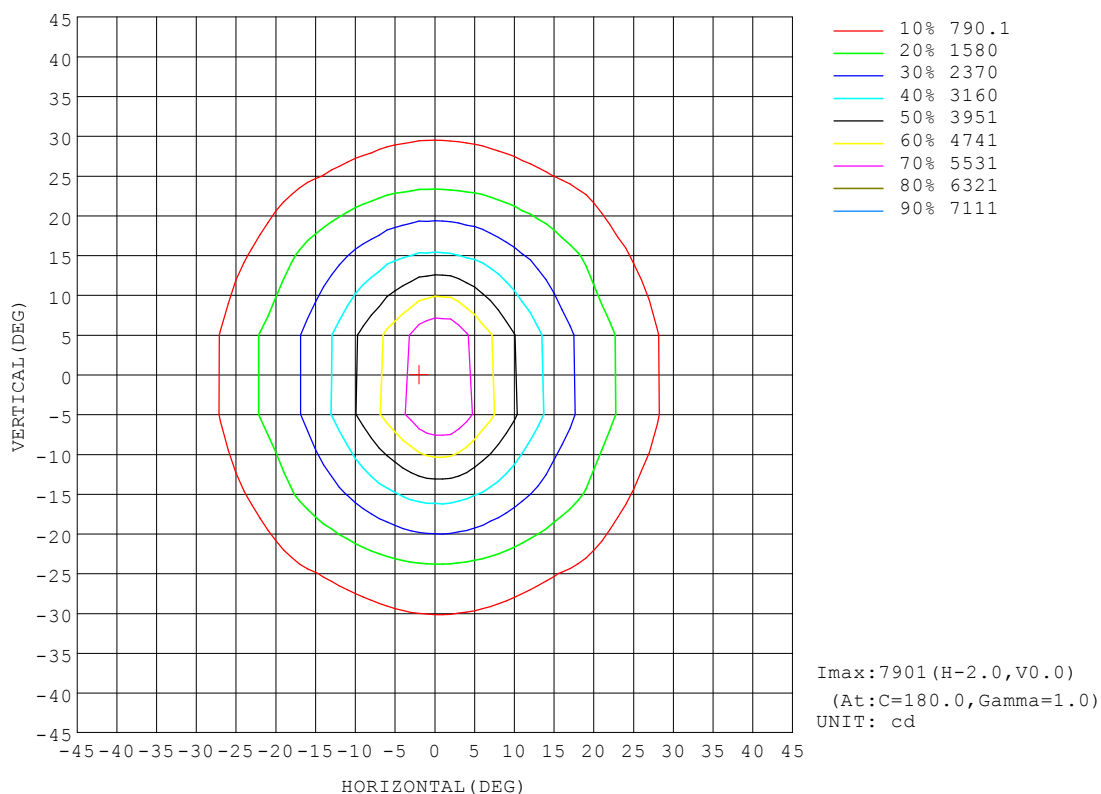
Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

ISOCANDELA DIAGRAM

Test:U:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°	TYPE:CEJ1125	WEIGHT:
SPEC.:30 _i ã	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.1	Shielding Angle:

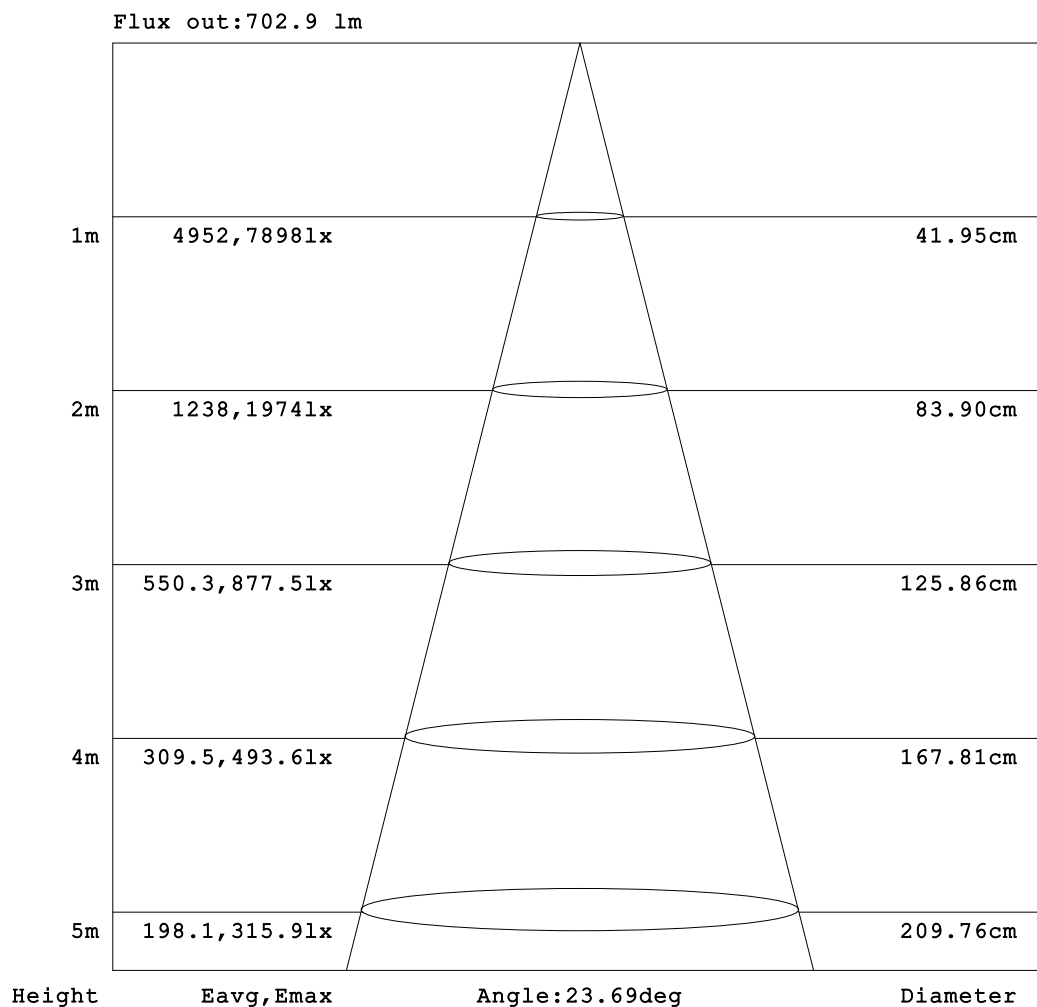


C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:ZhangZhenNan
Test Date:2015-11-10

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:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°	TYPE:CEJ1125	WEIGHT:
SPEC.:30,ā	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.1	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:2015-11-10

γ Range: 0 - 90DEG

γ Interval: 0.5DEG

Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.284

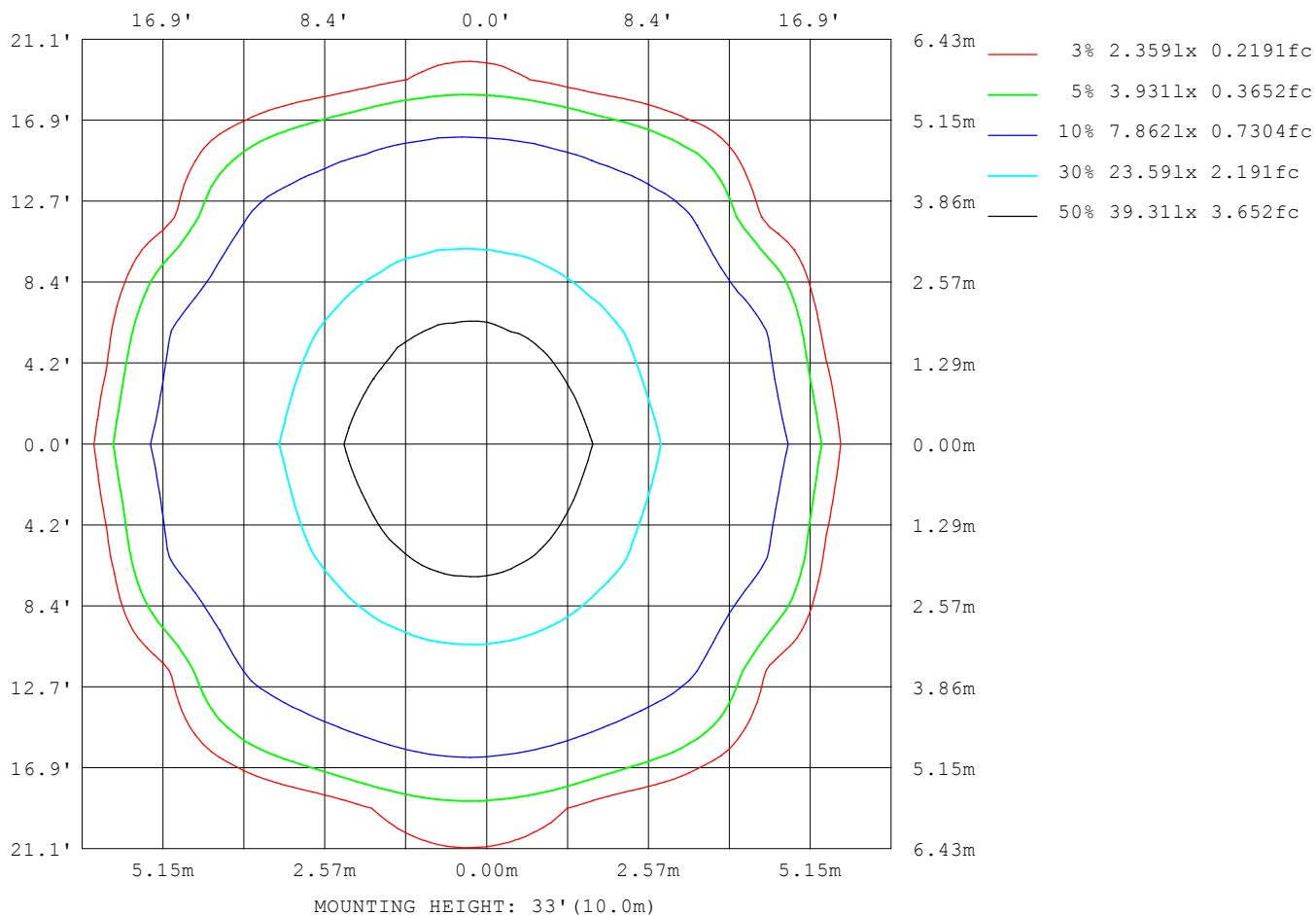
Humidity:65.0%

Test Distance:7.500m [K=1.0000]

Remarks:

ISOLUX DIAGRAM

Test:U:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°	TYPE:CEJ1125	WEIGHT:
SPEC.:30 _i ā	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.1	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:ZhangZhenNan
 Test Date:2015-11-10

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:226.7V I:0.1237A P:25.17W PF:0.8985 Lamp Flux:2104.17x1 lm		
NAME: DEEPER DOWN MAXI LED_WHT_24W_4K_30°	TYPE:CEJ1125	WEIGHT:
SPEC.:30 _i ã	DIM.:	SERIAL No.:
MFR.: DARKON	SUR.:D=0.1	Shielding Angle:

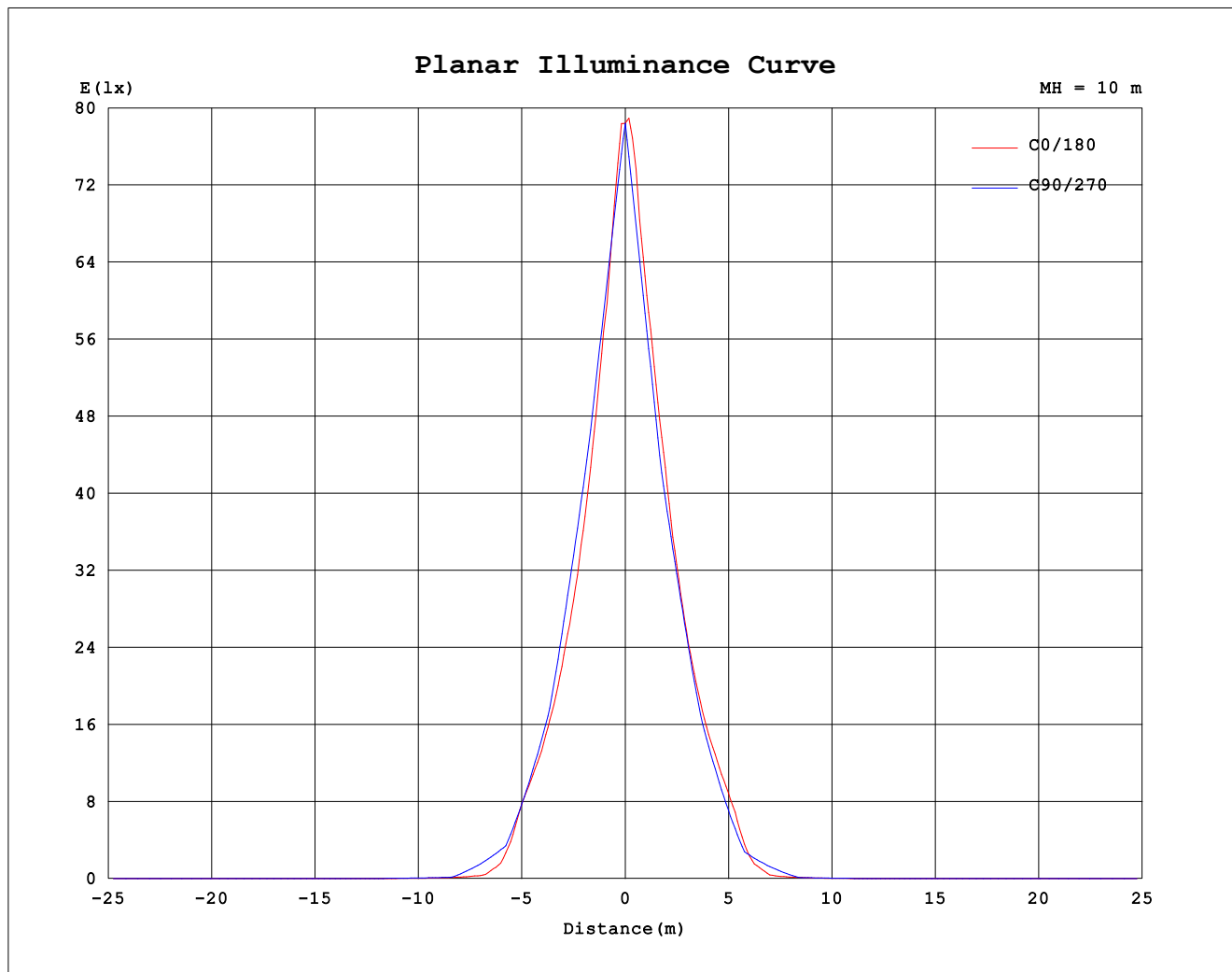
AvgL	cd/m2
L_0~180 (65) av	126
L_0~180 (75) av	72
L_0~180 (85) av	4
L_90~270 (65) av	172
L_90~270 (75) av	126
L_90~270 (85) av	0
L_45 (65) av	142
L_45 (75) av	96
L_45 (85) av	38

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:ZhangZhenNan
 Test Date:2015-11-10

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: 2015-11-10

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:

