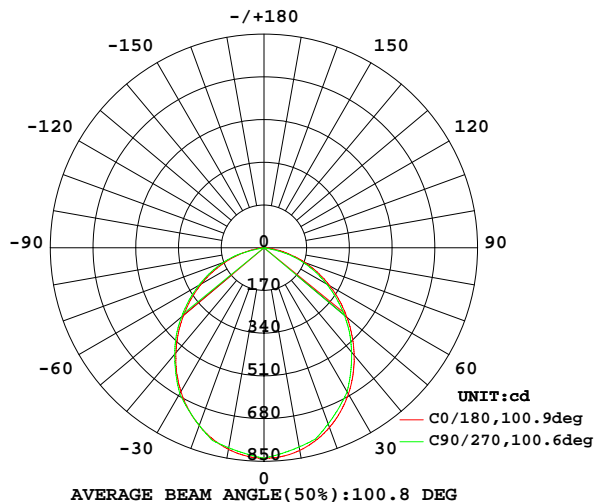


## LUMINAIRE PHOTOMETRIC TEST REPORT

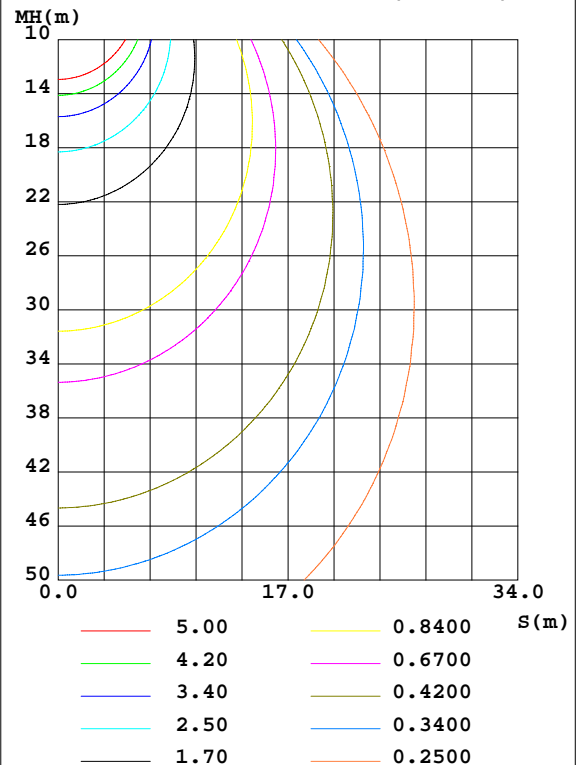
Test:U:220.3V I:0.1140A P:24.50W PF:0.9760 Lamp Flux:2041.07x1 lm		
NAME: 筒灯	TYPE:室内	WEIGHT:0.4
SPEC.:SDDL-24-8	DIM.:	SERIAL No.:
MFR.: Sedna Lighting	SUR.:	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 83.31 lm/W			
MODEL	阿蓝琪2835 10P12S	I <sub>max</sub> (cd)	837.7	S/MH(C0/180)	1.20
NOMINAL POWER(W)	24	LOR(%)	100.0	S/MH(C90/270)	1.18
RATED VOLTAGE(V)	220	TOTAL FLUX(lm)	2041.1	η UP,DN(C0-180)	0.0,50.4
NOMINAL FLUX(lm)	2041.07	CIE CLASS	DIRECT	η UP,DN(C180-360)	0.0,49.6
LAMPS INSIDE	1	η up(%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	220.1	η down(%)	100.0	CIBSE SHR MAX	1.35

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2015-04-29

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: 电源: 金永信  
灯珠参数: 26-281m/颗 单颗0.2W 6000K

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	$\Phi$ lum, lamp
5	831.5	823.9	823.0	825.6	833.2	824.4	821.4	822.7	0- 5	19.84	19.84	0.97,0.97
10	814.5	804.9	808.4	808.4	818.8	806.2	805.1	802.8	5- 10	58.37	78.21	3.83,3.83
15	788.1	781.4	793.7	786.7	794.4	783.3	788.7	778.1	10- 15	94.45	172.7	8.46,8.46
20	753.0	754.1	752.7	761.0	761.3	756.6	746.4	749.9	15- 20	126.6	299.3	14.7,14.7
25	710.4	708.3	711.7	715.8	720.1	710.6	704.0	703.0	20- 25	153.0	452.3	22.2,22.2
30	661.4	657.3	670.6	665.6	672.2	659.6	661.7	651.2	25- 30	173.3	625.6	30.7,30.7
35	606.4	605.1	611.7	613.6	617.4	606.7	601.9	598.4	30- 35	186.8	812.5	39.8,39.8
40	546.2	550.0	552.7	558.5	558.0	550.9	542.2	542.8	35- 40	192.5	1005	49.2,49.2
45	482.6	484.1	493.7	493.3	495.7	485.7	482.4	476.6	40- 45	191.2	1196	58.6,58.6
50	417.8	419.5	428.8	429.4	431.3	421.6	417.3	411.9	45- 50	183.3	1380	67.6,67.6
55	353.2	356.8	363.9	367.4	366.0	359.3	352.1	349.2	50- 55	169.2	1549	75.9,75.9
60	288.4	290.7	299.0	300.6	301.5	292.7	287.0	283.2	55- 60	150.0	1699	83.2,83.2
65	222.9	227.1	235.8	236.1	238.0	228.1	223.7	219.7	60- 65	126.5	1825	89.4,89.4
70	159.8	165.4	172.7	173.6	175.0	165.7	160.4	158.1	65- 70	99.71	1925	94.3,94.3
75	99.13	105.3	109.6	113.4	113.3	105.7	97.15	98.21	70- 75	70.60	1996	97.8,97.8
80	44.08	44.29	0	50.32	57.01	44.37	0	38.81	75- 80	37.32	2033	99.6,99.6
85	9.072	0	0	0	14.76	0	0	0	80- 85	7.651	2041	100,100
90	0.3181	0	0	0	0.6720	0	0	0	85- 90	0.5131	2041	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		

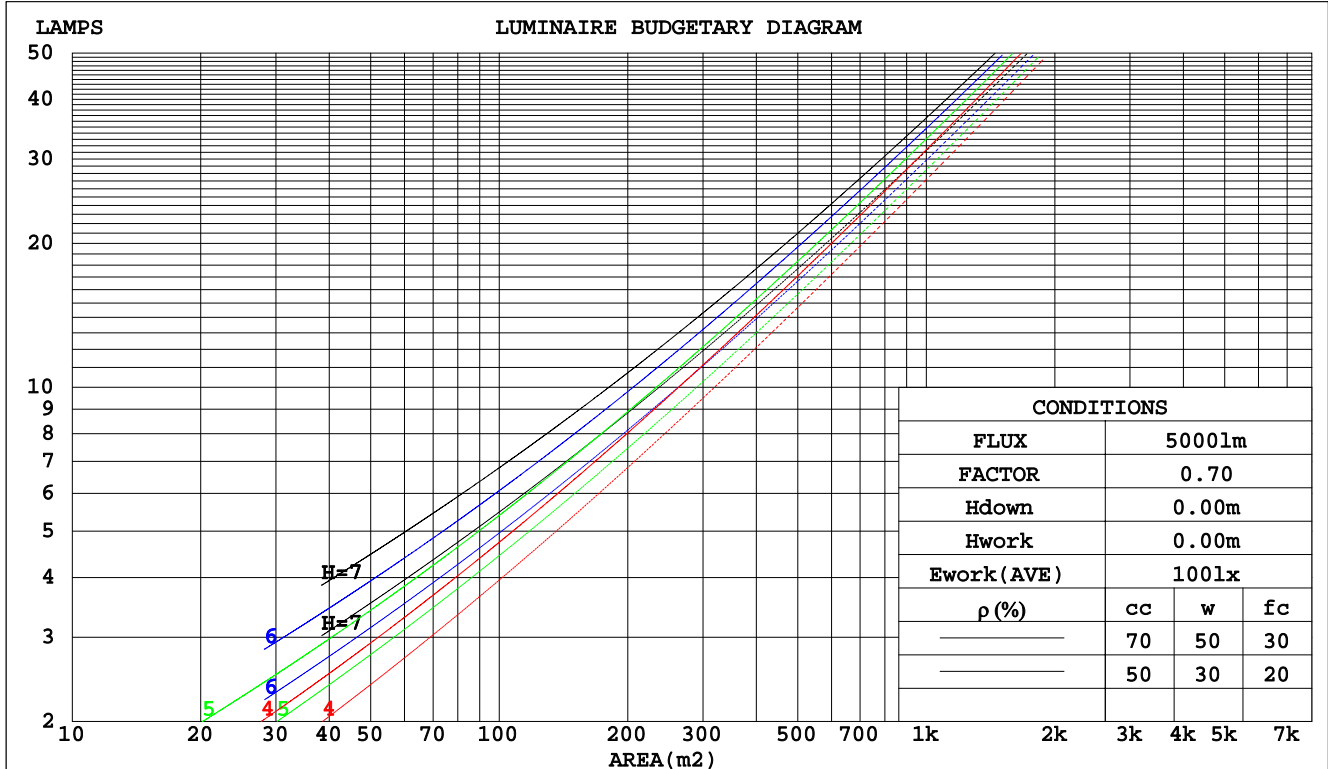
C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2015-04-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks: 电源: 金永信  
 灯珠参数: 26-281m/颗 单颗0.2W 6000K

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:220.3V I:0.1140A P:24.50W PF:0.9760 Lamp Flux:2041.07x1 lm		
NAME: 筒灯	TYPE:室内	WEIGHT:0.4
SPEC.:SDDL-24-8	DIM.:	SERIAL No.:
MFR.: Sedna Lighting	SUR.:	PROTECTION 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	1.05	1.02	.98	1.03	.90	.96	.99	.96	.93	.95	.93	.91	.92	.90	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.78	.75	.73
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.75	.69	.65	.72	.68	.64	.62
4.0	.73	.64	.58	.71	.64	.58	.69	.62	.57	.67	.61	.56	.65	.59	.55	.53
5.0	.65	.57	.50	.64	.56	.50	.62	.55	.49	.60	.54	.49	.58	.53	.48	.46
6.0	.59	.50	.44	.58	.50	.44	.56	.49	.43	.55	.48	.43	.53	.47	.43	.41
7.0	.54	.45	.39	.53	.45	.39	.51	.44	.39	.50	.43	.38	.48	.43	.38	.36
8.0	.49	.41	.35	.48	.40	.35	.47	.40	.35	.46	.39	.34	.45	.39	.34	.32
9.0	.45	.37	.32	.44	.37	.32	.43	.36	.31	.42	.36	.31	.41	.35	.31	.29
10.0	.42	.34	.29	.41	.34	.29	.40	.33	.29	.39	.33	.28	.38	.32	.28	.27



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2015-04-29

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: 电源: 金永信  
灯珠参数: 26-281m/颗 单颗0.2W 6000K

## WEC AND CCEC

Test:U:220.3V I:0.1140A P:24.50W PF:0.9760 Lamp Flux:2041.07x1 lm					
NAME: 筒灯			TYPE:室内		WEIGHT:0.4
SPEC.:SDDL-24-8			DIM.:		SERIAL No.:
MFR.: Sedna Lighting			SUR.:		PROTECTION 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	.280	.159	.050	.273	.156	.050	.260	.149	.048	.248	.143	.046	.237	.137	.044		
2.0	.271	.149	.046	.265	.146	.045	.253	.141	.044	.243	.136	.043	.233	.132	.042		
3.0	.254	.135	.041	.249	.133	.040	.239	.129	.039	.229	.126	.039	.221	.122	.038		
4.0	.237	.123	.036	.232	.122	.036	.223	.118	.035	.215	.115	.035	.207	.113	.034		
5.0	.221	.112	.033	.216	.111	.032	.208	.109	.032	.201	.106	.032	.194	.104	.031		
6.0	.206	.103	.030	.202	.102	.029	.195	.100	.029	.188	.098	.029	.182	.096	.028		
7.0	.192	.095	.027	.189	.094	.027	.183	.092	.027	.177	.091	.026	.171	.089	.026		
8.0	.180	.088	.025	.177	.087	.025	.171	.086	.024	.166	.084	.024	.161	.083	.024		
9.0	.169	.082	.023	.167	.081	.023	.162	.080	.023	.157	.079	.022	.152	.077	.022		
10.0	.160	.077	.021	.157	.076	.021	.153	.075	.021	.148	.074	.021	.144	.072	.021		

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	.178	.156	.137	.153	.134	.118	.104	.092	.081	.060	.053	.047	.019	.017	.015	
2.0	.169	.132	.101	.145	.114	.087	.099	.079	.061	.057	.046	.036	.018	.015	.012	
3.0	.161	.114	.077	.138	.099	.066	.095	.068	.047	.055	.040	.027	.018	.013	.009	
4.0	.154	.101	.060	.132	.087	.052	.091	.061	.037	.053	.036	.022	.017	.012	.007	
5.0	.147	.090	.049	.126	.078	.042	.087	.055	.030	.050	.032	.018	.016	.010	.006	
6.0	.140	.082	.040	.120	.071	.035	.083	.050	.025	.048	.029	.015	.015	.010	.005	
7.0	.133	.075	.034	.114	.065	.030	.079	.045	.021	.046	.027	.013	.015	.009	.004	
8.0	.127	.069	.029	.109	.060	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
9.0	.121	.064	.026	.104	.056	.022	.072	.039	.016	.042	.023	.010	.014	.008	.003	
10.0	.115	.060	.023	.099	.052	.020	.069	.037	.014	.040	.022	.008	.013	.007	.003	

C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2015-04-29

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: 电源: 金永信  
灯珠参数: 26-281m/颗 单颗0.2W 6000K

UGR(Unified Glare Rating) Table

Test:U:220.3V I:0.1140A P:24.50W PF:0.9760 Lamp Flux:2041.07x1 lm											
NAME: 筒灯					TYPE:室内			WEIGHT:0.4			
SPEC.:SDDL-24-8					DIM.:			SERIAL No.:			
MFR.: Sedna Lighting					SUR.:			PROTECTION 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	27.0	28.5	27.3	28.7	28.9	27.2	28.7	27.5	28.9	29.1	
	3H	28.2	29.5	28.5	29.8	30.0	28.5	29.8	28.8	30.1	30.3
	4H	28.6	29.9	28.9	30.1	30.4	28.9	30.2	29.2	30.4	30.7
	6H	28.8	30.0	29.1	30.2	30.5	28.9	30.1	29.3	30.4	30.7
	8H	28.8	29.9	29.1	30.2	30.5	28.9	30.0	29.2	30.3	30.6
	12H	28.7	29.8	29.1	30.1	30.4	28.8	30.0	29.2	30.2	30.5
4H	2H	27.5	28.8	27.9	29.1	29.3	27.7	29.0	28.0	29.2	29.5
	3H	28.9	30.0	29.3	30.3	30.6	29.2	30.3	29.5	30.6	30.9
	4H	29.4	30.4	29.8	30.7	31.1	29.7	30.7	30.1	31.0	31.4
	6H	29.6	30.5	30.0	30.9	31.2	29.8	30.7	30.2	31.0	31.4
	8H	29.7	30.5	30.1	30.9	31.2	29.7	30.5	30.1	30.9	31.3
	12H	29.6	30.4	30.1	30.8	31.2	29.7	30.4	30.1	30.8	31.2
8H	4H	29.6	30.4	30.0	30.8	31.2	29.9	30.7	30.3	31.0	31.4
	6H	29.9	30.6	30.4	31.0	31.4	29.9	30.6	30.4	31.0	31.5
	8H	30.0	30.6	30.4	31.0	31.4	29.9	30.5	30.4	30.9	31.4
	12H	30.0	30.5	30.4	30.9	31.4	29.9	30.4	30.3	30.8	31.3
12H	4H	29.6	30.3	30.0	30.7	31.1	29.8	30.6	30.3	31.0	31.4
	6H	29.9	30.5	30.4	30.9	31.4	29.9	30.5	30.4	31.0	31.4
	8H	30.0	30.5	30.4	30.9	31.4	29.9	30.4	30.4	30.9	31.3
Variations with the observer position at spacings:											
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3					
1.5H	+ 0.2 / - 0.3					+ 0.1 / - 0.3					
2.0H	+ 0.3 / - 0.3					+ 0.4 / - 0.4					

CIE Pub.117 Corrected 2041 lm Total Lamp Luminous Flux.(8log(F/F0) = 2.5)

C Range: 0 - 360DEG  
 C Interval: 5.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2015-04-29

γ Range: 0 - 90DEG  
 γ Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks: 电源: 金永信  
 灯珠参数: 26-281m/颗 单颗0.2W 6000K

## UTILIZATION FACTORS TABLE

Test:U:220.3V I:0.1140A P:24.50W PF:0.9760 Lamp Flux:2041.07x1 lm		
NAME: 筒灯	TYPE:室内	WEIGHT:0.4
SPEC.:SDDL-24-8	DIM.:	SERIAL No.:
MFR.: Sedna Lighting	SUR.:	PROTECTION 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) $k(RI) \times RCR = 5$									
$k = 0.60$	60	49	42	59	49	42	58	48	42	36
0.80	70	59	52	69	59	52	67	58	52	45
1.00	79	68	61	77	68	61	75	69	60	54
1.25	86	76	69	84	75	69	82	74	68	61
1.50	90	81	75	89	80	74	86	79	73	66
2.00	97	89	83	95	88	82	92	86	81	73
2.50	101	94	88	99	92	87	95	90	85	77
3.00	104	98	93	102	96	92	98	93	89	81
4.00	108	102	98	105	101	97	101	97	94	86
5.00	110	106	102	107	104	100	103	100	97	88
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:  
 Test Date:2015-04-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
 Humidity:65.0%  
 Test Distance:8.000m [K=1.0000]  
 Remarks: 电源: 金永信  
 灯珠参数: 26-28lm/颗 单颗0.2W 6000K

## ISOCANDELA DIAGRAM

Test:U:220.3V I:0.1140A P:24.50W PF:0.9760 Lamp Flux:2041.07x1 lm		
NAME: 筒灯	TYPE:室内	WEIGHT:0.4
SPEC.:SDDL-24-8	DIM.:	SERIAL No.:
MFR.: Sedna Lighting	SUR.:	PROTECTION ANGLE:

Conical surface Flux(90deg):

1196.2 lm

%lum = 58.6%

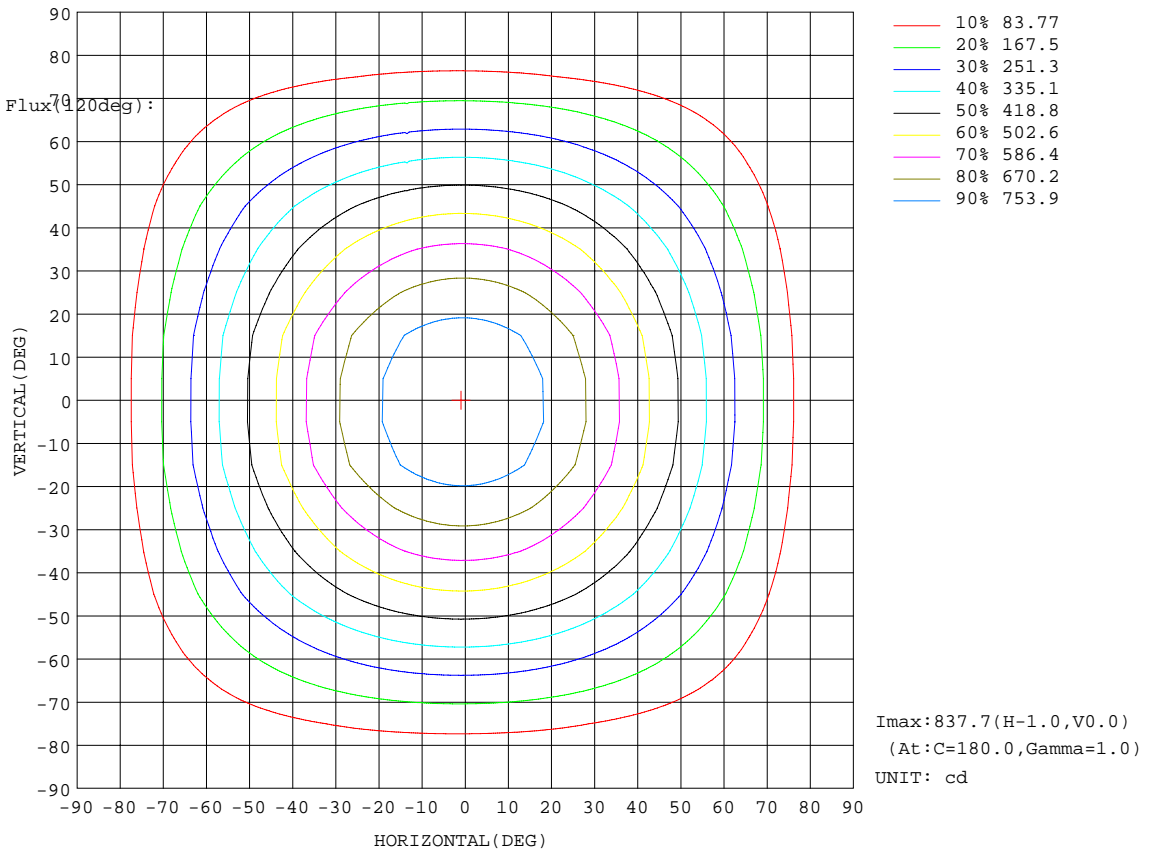
%lamp = 58.6%

Conical surface Flux(70deg):

1698.8 lm

%lum = 83.2%

%lamp = 83.2%



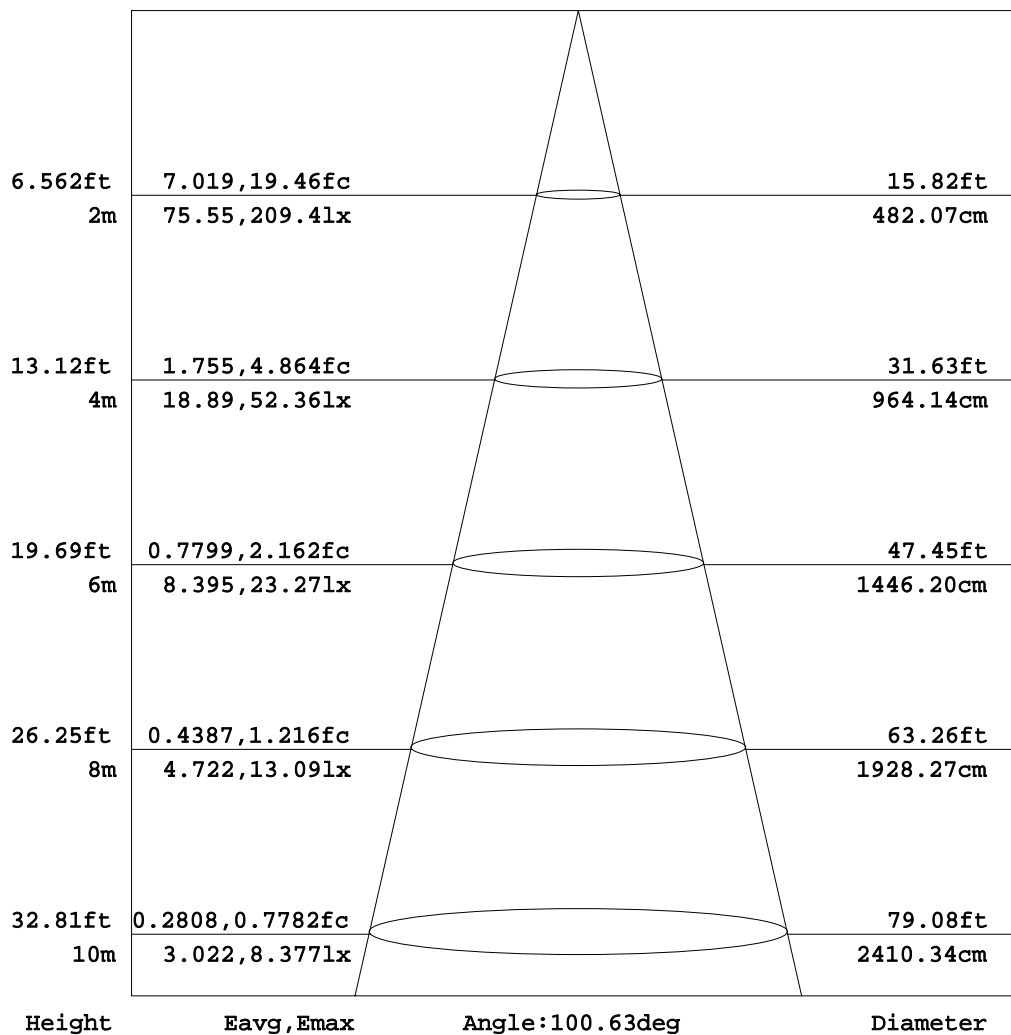
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2015-04-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: 电源: 金永信  
灯珠参数: 26-281m/颗 单颗0.2W 6000K

## AAI Figure

Test:U:220.3V I:0.1140A P:24.50W PF:0.9760 Lamp Flux:2041.07x1 lm		
NAME: 筒灯	TYPE:室内	WEIGHT:0.4
SPEC.:SDDL-24-8	DIM.:	SERIAL No.:
MFR.: Sedna Lighting	SUR.:	PROTECTION ANGLE:

Flux out:1397 lm



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

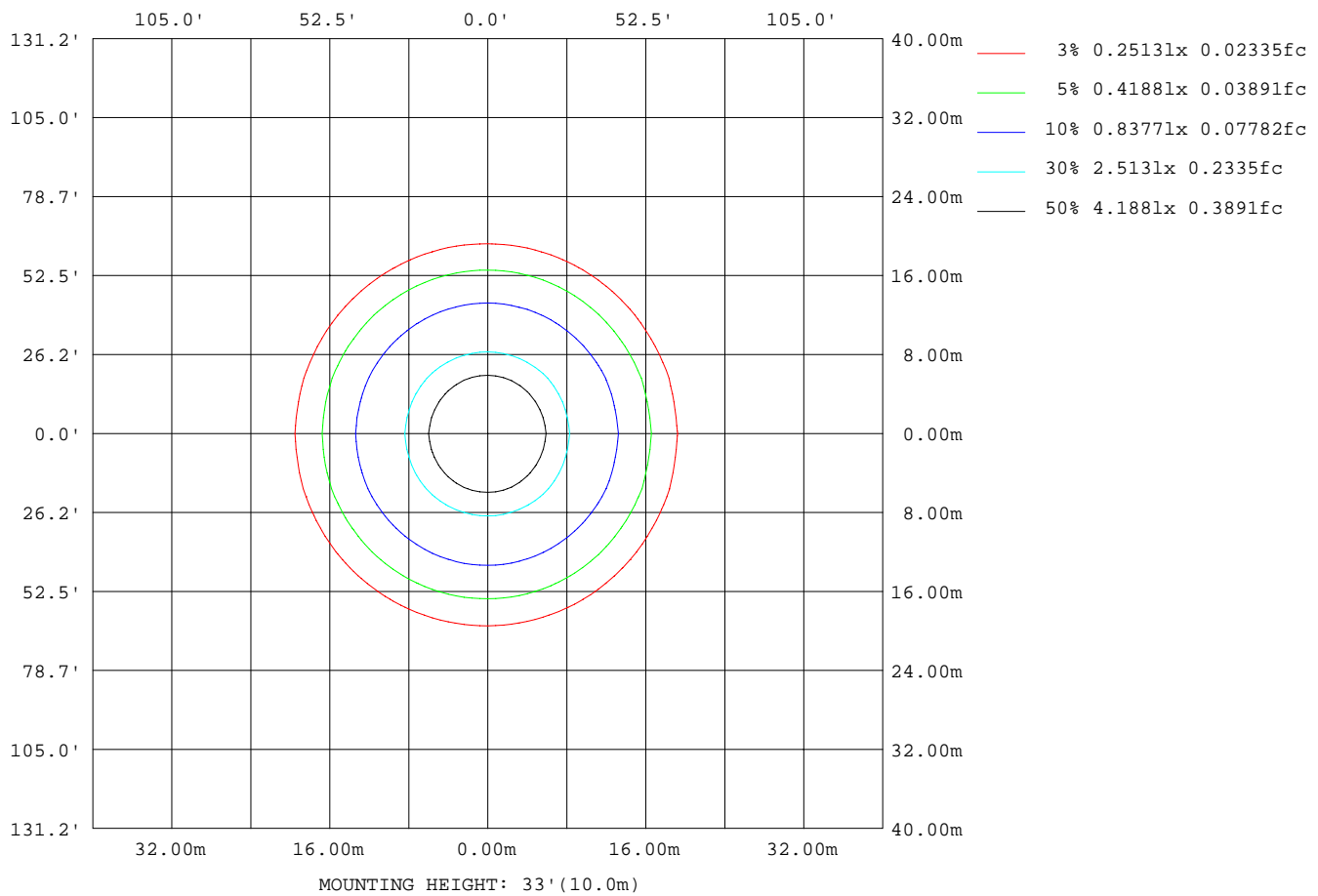
C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2015-04-29

γ Range: 0 - 90DEG  
γ Interval: 0.5DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
Humidity: 65.0%  
Test Distance: 8.000m [K=1.0000]  
Remarks: 电源: 金永信  
灯珠参数: 26-281m/颗 单颗0.2W 6000K



## ISOLUX DIAGRAM

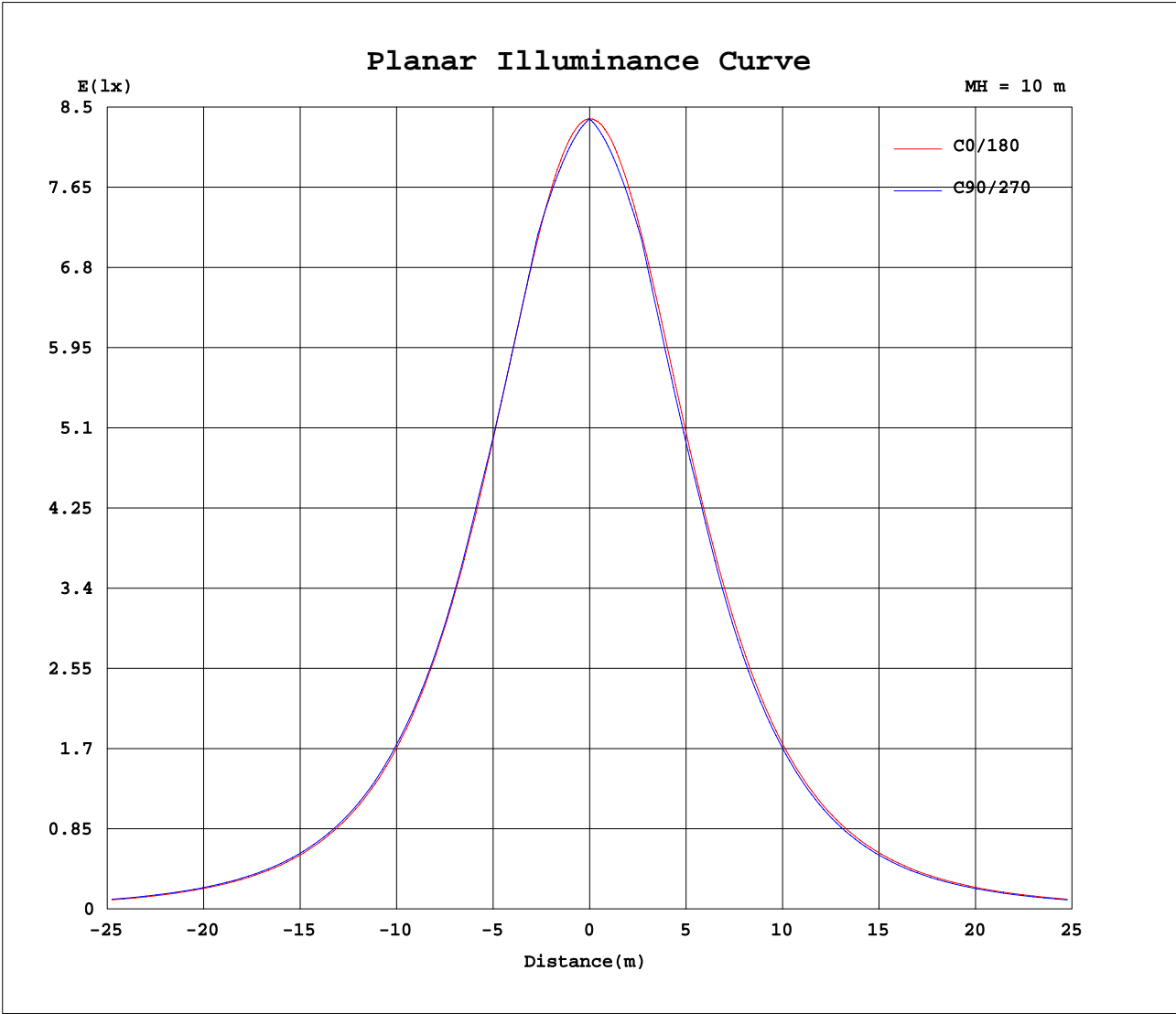
Test:U:220.3V I:0.1140A P:24.50W PF:0.9760 Lamp Flux:2041.07x1 lm		
NAME: 筒灯	TYPE:室内	WEIGHT:0.4
SPEC.:SDDL-24-8	DIM.:	SERIAL No.:
MFR.: Sedna Lighting	SUR.:	PROTECTION ANGLE:



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2015-04-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: 电源: 金永信  
灯珠参数: 26-28lm/颗 单颗0.2W 6000K

Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 5.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2015-04-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 0.5DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.287  
Humidity:65.0%  
Test Distance:8.000m [K=1.0000]  
Remarks: 电源: 金永信  
灯珠参数: 26-28lm/颗 单颗0.2W 6000K







