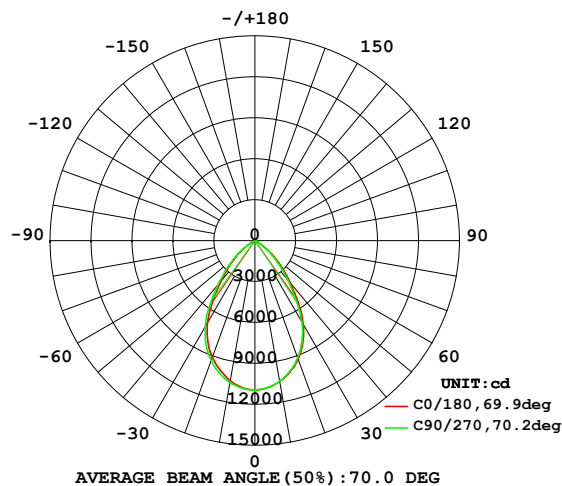


## LUMINAIRE PHOTOMETRIC TEST REPORT

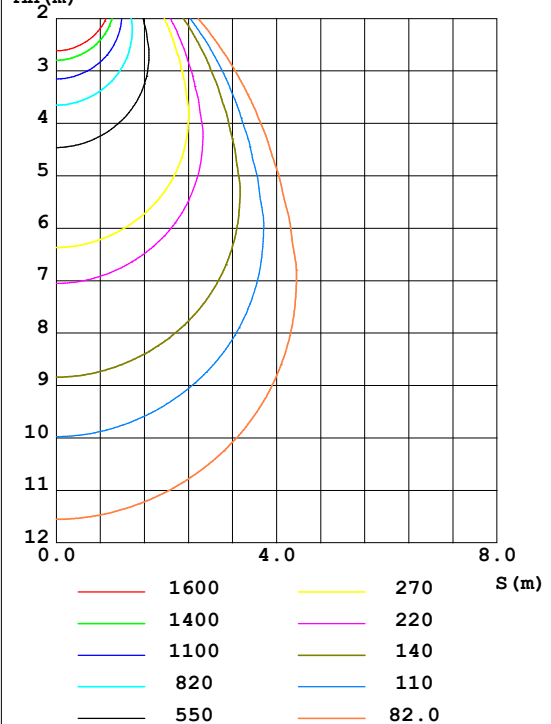
Test:U:277.1V I:0.3761A P:101.5W PF:0.9733 Lamp Flux:14027.2x1 lm		
NAME: LM-100W	TYPE:glass+70°AL cover	WEIGHT:4.675kg
SPEC.:5000k R80 264L	DIM.: D430mm*329mm	SERIAL No.:
MFR.:	SUR.:0.215m*0.215m*3.14	PROTECTION ANGLE:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 138.26 lm/W			
MODEL	SMD3030 (757G P20D41)	I <sub>max</sub> (cd)	10950	S/MH (C0/180)	1.02
NOMINAL POWER (W)	100	LOR (%)	100.0	S/MH (C90/270)	1.05
RATED VOLTAGE (V)	277	TOTAL FLUX (lm)	14027	η UP,DN (C0-180)	0.0, 49.1
NOMINAL FLUX (lm)	14027.2	CIE CLASS	DIRECT	η UP,DN (C180-360)	0.0, 50.9
LAMPS INSIDE	1	η up (%)	0.0	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	277	η down (%)	100.0	CIBSE SHR MAX	1.05

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



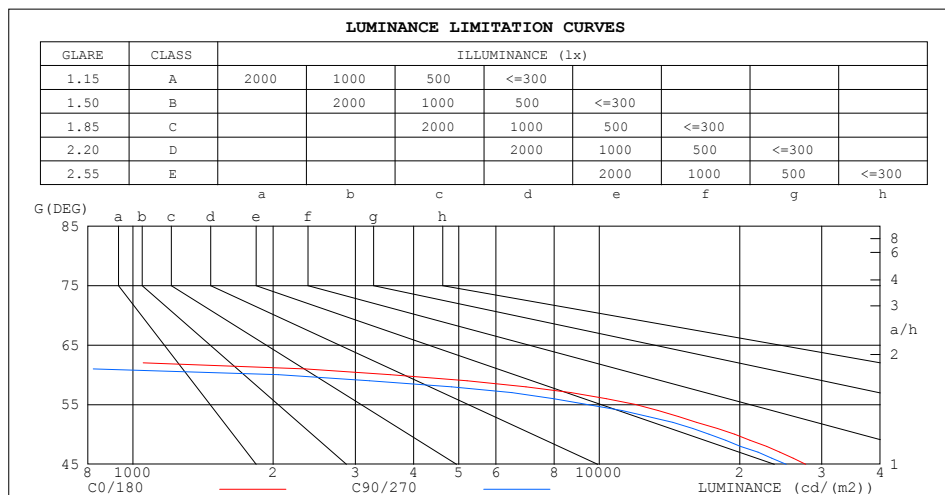
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: DEG  
 Operators: guanlingao  
 Test Date: 2017-12-29

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
 Humidity: 65.0%  
 Test Distance: 9.390m [K=1.0000]  
 Remarks: 0-90°

## ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

### ZONAL FLUX DIAGRAM:

$\gamma$	C0	C45	C90	C135	C180	C225	C270	C315	$\gamma$	$\Phi$ zone	$\Phi$ total	%lum, lamp
10	1049	1040	1047	1049	1044	1051	1056	1051	0- 10	1022	1022	7.29,7.29
20	925.9	908.7	916.3	917.9	911.8	926.3	937.8	927.8	10- 20	2790	3813	27.2,27.2
30	709.9	692.8	689.5	691.6	695.4	709.2	729.5	718.9	20- 30	3772	7585	54.1,54.1
40	403.3	382.4	375.2	377.8	389.0	406.5	419.6	411.3	30- 40	3404	10990	78.3,78.3
50	182.3	172.7	160.8	163.4	177.2	183.7	190.6	188.7	40- 50	2143	13132	93.6,93.6
60	25.92	19.38	14.92	17.11	21.89	27.15	32.15	28.22	50- 60	843.4	13976	99.6,99.6
70	1.007	1.061	0.9858	0.8399	1.084	1.147	1.166	1.022	60- 70	42.54	14018	99.9,99.9
80	0.3513	0.3733	0.3520	0.2965	0.3302	0.3923	0.4130	0.3525	70- 80	6.825	14025	100,100
90	0.0346	0.0333	0.0378	0.0483	0.0398	0.0476	0.0463	0.0437	80- 90	1.984	14027	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:×10cd    MAX (Ii - Iavg)/Iavg (0-135) = 157.1 %									UNIT:lm		



LUMINANCE cd/(m2)		
G( DEG)	C0/180	C90/270
85	142	129
80	139	139
75	161	162
70	203	198
65	287	260
60	3565	2052
55	11960	9400
50	19498	17204
45	27711	25140

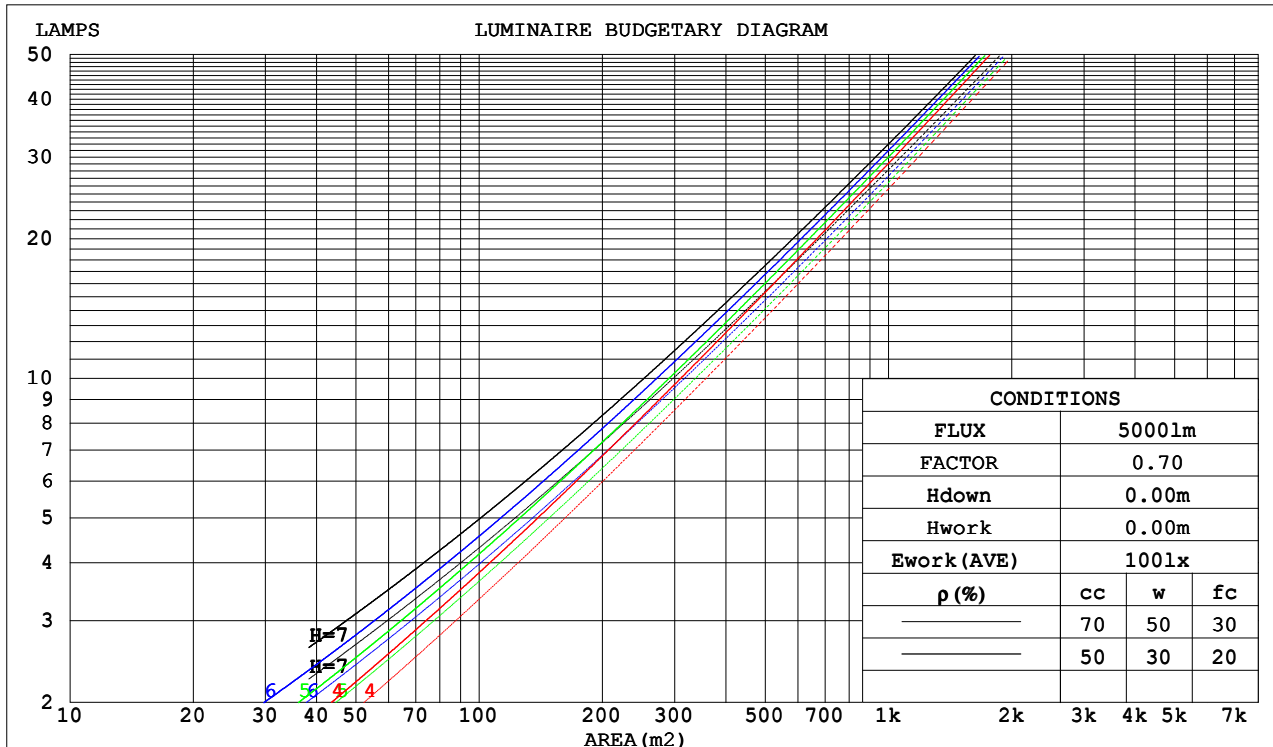
C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: DEG  
 Operators: guanlingao  
 Test Date: 2017-12-29

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
 Humidity: 65.0%  
 Test Distance: 9.390m [K=1.0000]  
 Remarks: 0-90°

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:277.1V I:0.3761A P:101.5W PF:0.9733 Lamp Flux:14027.2x1 lm		
NAME: LM-100W	TYPE:glass+70°AL cover	WEIGHT:4.675kg
SPEC.:5000k R80 264L	DIM.: D430mm*329mm	SERIAL No.:
MFR.:	SUR.:0.215m*0.215m*3.14	PROTECTION ANGLE:

pcc	80%			70%			50%			30%			10%			0
ρw	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						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	1.04	1.08	1.05	1.03	1.03	1.01	.00	.00	.98	.97	.96	.95	.94	.92
2.0	1.01	.96	.92	.99	.95	.91	.96	.92	.89	.93	.90	.87	.90	.87	.85	.84
3.0	.92	.87	.82	.91	.86	.82	.88	.84	.80	.86	.82	.79	.84	.80	.78	.76
4.0	.85	.79	.74	.84	.78	.73	.82	.77	.73	.80	.75	.72	.78	.74	.71	.69
5.0	.78	.72	.67	.77	.71	.67	.76	.70	.66	.74	.69	.65	.72	.68	.65	.63
6.0	.73	.66	.61	.72	.65	.61	.70	.64	.60	.69	.64	.60	.67	.63	.59	.58
7.0	.67	.60	.56	.67	.60	.55	.65	.59	.55	.64	.59	.55	.63	.58	.55	.53
8.0	.63	.56	.51	.62	.56	.51	.61	.55	.51	.60	.54	.51	.59	.54	.50	.49
9.0	.58	.52	.47	.58	.51	.47	.57	.51	.47	.56	.51	.47	.55	.50	.47	.45
10.0	.55	.48	.44	.54	.48	.44	.53	.48	.44	.52	.47	.43	.52	.47	.43	.42



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: DEG  
 Operators: guanlingao  
 Test Date: 2017-12-29

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
 Humidity: 65.0%  
 Test Distance: 9.390m [K=1.0000]  
 Remarks: 0-90°

### WEC AND CCEC

Test:U:277.1V I:0.3761A P:101.5W PF:0.9733 Lamp Flux:14027.2x1 lm		
NAME: LM-100W	TYPE:glass+70°AL cover	WEIGHT:4.675kg
SPEC.:5000k R80 264L	DIM.: D430mm*329mm	SERIAL No.:
MFR.:	SUR.:0.215m*0.215m*3.14	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	.199	.113	.036	.192	.109	.035	.179	.103	.033	.167	.097	.031	.157	.091	.029	
2.0	.194	.106	.033	.188	.103	.032	.177	.098	.031	.167	.094	.029	.158	.089	.028	
3.0	.186	.099	.030	.181	.097	.029	.172	.093	.028	.163	.089	.027	.155	.086	.027	
4.0	.178	.092	.027	.174	.091	.027	.165	.088	.026	.158	.085	.026	.151	.082	.025	
5.0	.170	.087	.025	.166	.085	.025	.159	.083	.024	.152	.080	.024	.146	.078	.023	
6.0	.162	.081	.023	.159	.080	.023	.152	.078	.023	.146	.076	.022	.141	.074	.022	
7.0	.154	.076	.022	.151	.075	.021	.146	.074	.021	.140	.072	.021	.135	.070	.021	
8.0	.147	.072	.020	.145	.071	.020	.139	.070	.020	.135	.068	.020	.130	.067	.019	
9.0	.141	.068	.019	.138	.067	.019	.134	.066	.019	.129	.065	.019	.125	.064	.018	
10.0	.134	.064	.018	.132	.064	.018	.128	.063	.018	.124	.062	.018	.120	.061	.017	

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	.173	.157	.143	.148	.135	.123	.101	.093	.085	.058	.054	.050	.019	.017	.016	
2.0	.159	.132	.110	.136	.114	.095	.093	.079	.066	.054	.046	.039	.017	.015	.013	
3.0	.148	.114	.086	.127	.098	.075	.087	.068	.052	.050	.040	.031	.016	.013	.010	
4.0	.139	.099	.069	.120	.086	.060	.082	.060	.042	.048	.035	.025	.015	.011	.008	
5.0	.132	.088	.056	.113	.076	.049	.078	.053	.035	.045	.031	.020	.015	.010	.007	
6.0	.125	.079	.047	.107	.069	.041	.074	.048	.029	.043	.028	.017	.014	.009	.006	
7.0	.119	.072	.039	.102	.062	.034	.070	.044	.024	.041	.026	.014	.013	.008	.005	
8.0	.113	.066	.034	.097	.057	.029	.067	.040	.021	.039	.024	.012	.013	.008	.004	
9.0	.108	.061	.029	.093	.053	.025	.064	.037	.018	.038	.022	.011	.012	.007	.004	
10.0	.103	.057	.026	.089	.049	.022	.062	.035	.016	.036	.020	.009	.012	.007	.003	

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: DEG  
 Operators: guanlingao  
 Test Date: 2017-12-29

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
 Humidity: 65.0%  
 Test Distance: 9.390m [K=1.0000]  
 Remarks: 0-90°

UGR(Unified Glare Rating) Table

Test:U:277.1V I:0.3761A P:101.5W PF:0.9733 Lamp Flux:14027.2x1 lm											
NAME: LM-100W					TYPE:glass+70°AL cover			WEIGHT:4.675kg			
SPEC.:5000k R80 264L					DIM.: D430mm*329mm			SERIAL No.:			
MFR.:					SUR.:0.215m*0.215m*3.14			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	2H	20.4	21.5	20.6	21.7	21.8	19.9	21.1	20.2	21.2	21.4
	3H	20.2	21.2	20.5	21.4	21.6	19.8	20.8	20.0	21.0	21.2
	4H	20.1	21.0	20.4	21.3	21.5	19.7	20.6	19.9	20.8	21.1
	6H	20.0	20.9	20.3	21.1	21.4	19.6	20.5	19.9	20.7	21.0
	8H	20.0	20.8	20.3	21.1	21.3	19.5	20.4	19.8	20.6	20.9
	12H	19.9	20.7	20.2	21.0	21.3	19.5	20.3	19.8	20.6	20.9
4H	2H	20.1	21.1	20.4	21.3	21.6	19.7	20.7	20.0	20.9	21.1
	3H	20.0	20.8	20.3	21.1	21.3	19.5	20.4	19.9	20.6	20.9
	4H	19.9	20.6	20.2	20.9	21.2	19.5	20.2	19.8	20.5	20.8
	6H	19.8	20.4	20.2	20.8	21.1	19.4	20.0	19.7	20.3	20.7
	8H	19.7	20.3	20.1	20.7	21.1	19.3	19.9	19.7	20.3	20.6
	12H	19.7	20.2	20.1	20.6	21.0	19.3	19.8	19.7	20.2	20.6
8H	4H	19.7	20.3	20.1	20.7	21.1	19.3	19.9	19.7	20.3	20.6
	6H	19.6	20.1	20.1	20.5	20.9	19.2	19.7	19.6	20.1	20.5
	8H	19.6	20.0	20.0	20.4	20.9	19.2	19.6	19.6	20.0	20.5
	12H	19.5	19.9	20.0	20.3	20.8	19.1	19.5	19.6	19.9	20.4
12H	4H	19.7	20.2	20.1	20.6	21.0	19.3	19.8	19.7	20.2	20.6
	6H	19.6	20.0	20.0	20.4	20.9	19.2	19.6	19.6	20.0	20.5
	8H	19.5	19.9	20.0	20.3	20.8	19.1	19.5	19.6	19.9	20.4
Variations with the observer position at spacings:											
S = 1.0H	+ 2.2 / - 5.4					+ 2.3 / - 6.7					
1.5H	+ 2.1 / - 3.5					+ 2.0 / - 3.7					
2.0H	+ 4.7 / -22.6					+ 4.6 / -22.2					

CIE Pub.117 Corrected 14027 lm Total Lamp Luminous Flux.(8log(F/F0) = 9.2)

C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:DEG  
Operators:guanlingao  
Test Date:2017-12-29

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
Humidity:65.0%  
Test Distance:9.390m [K=1.0000]  
Remarks: 0-90°

### UTILIZATION FACTORS TABLE

Test:U:277.1V I:0.3761A P:101.5W PF:0.9733 Lamp Flux:14027.2x1 lm		
NAME: LM-100W	TYPE:glass+70°AL cover	WEIGHT:4.675kg
SPEC.:5000k R80 264L	DIM.: D430mm*329mm	SERIAL No.:
MFR.:	SUR.:0.215m*0.215m*3.14	PROTECTION ANGLE:

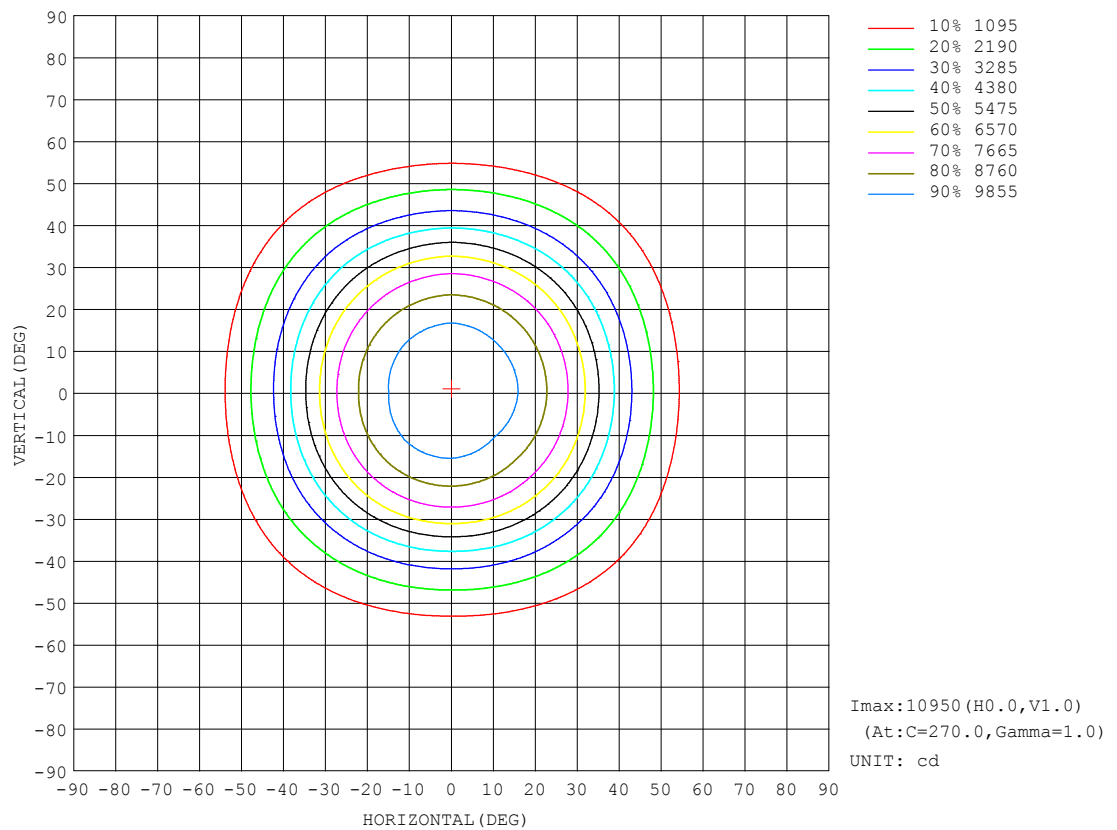
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
$k = 0.60$	77	69	64	77	69	64	76	69	64	60
0.80	87	79	74	86	79	74	84	78	74	69
1.00	93	86	82	92	86	81	91	86	81	76
1.25	99	92	88	97	92	87	95	90	87	82
1.50	102	96	92	101	95	92	98	94	90	85
2.00	106	101	97	105	100	96	102	98	95	89
2.50	108	103	100	106	102	99	103	100	97	91
3.00	110	106	103	108	104	102	105	102	99	93
4.00	112	109	106	110	107	105	106	104	102	95
5.00	114	111	108	111	109	107	107	105	104	96
ROOM INDEX	UF (total)									Direct
According to DIN EN 13032-2 2004			Suspended					SHRNOM = 1.25		

C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: DEG  
 Operators: guanlingao  
 Test Date: 2017-12-29

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
 Humidity: 65.0%  
 Test Distance: 9.390m [K=1.0000]  
 Remarks: 0-90°

## ISOCANDELA DIAGRAM

Test:U:277.1V I:0.3761A P:101.5W PF:0.9733 Lamp Flux:14027.2x1 lm		
NAME: LM-100W	TYPE:glass+70°AL cover	WEIGHT:4.675kg
SPEC.:5000k R80 264L	DIM.: D430mm*329mm	SERIAL No.:
MFR.:	SUR.:0.215m*0.215m*3.14	PROTECTION ANGLE:

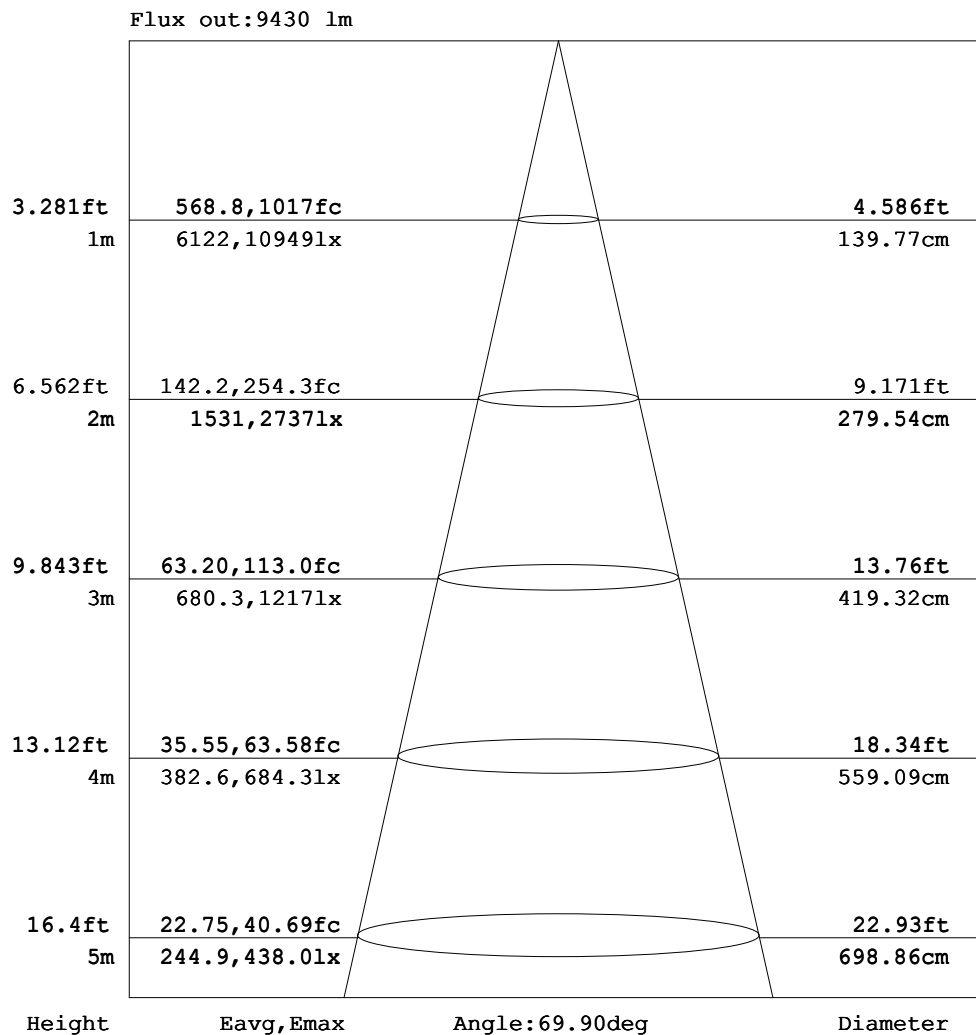


C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature:DEG  
 Operators:guanlingao  
 Test Date:2017-12-29

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
 Humidity:65.0%  
 Test Distance:9.390m [K=1.0000]  
 Remarks: 0-90°

### AAI Figure

Test:U:277.1V I:0.3761A P:101.5W PF:0.9733 Lamp Flux:14027.2x1 lm		
NAME: LM-100W	TYPE:glass+70°AL cover	WEIGHT:4.675kg
SPEC.:5000k R80 264L	DIM.: D430mm*329mm	SERIAL No.:
MFR.:	SUR.:0.215m*0.215m*3.14	PROTECTION ANGLE:



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

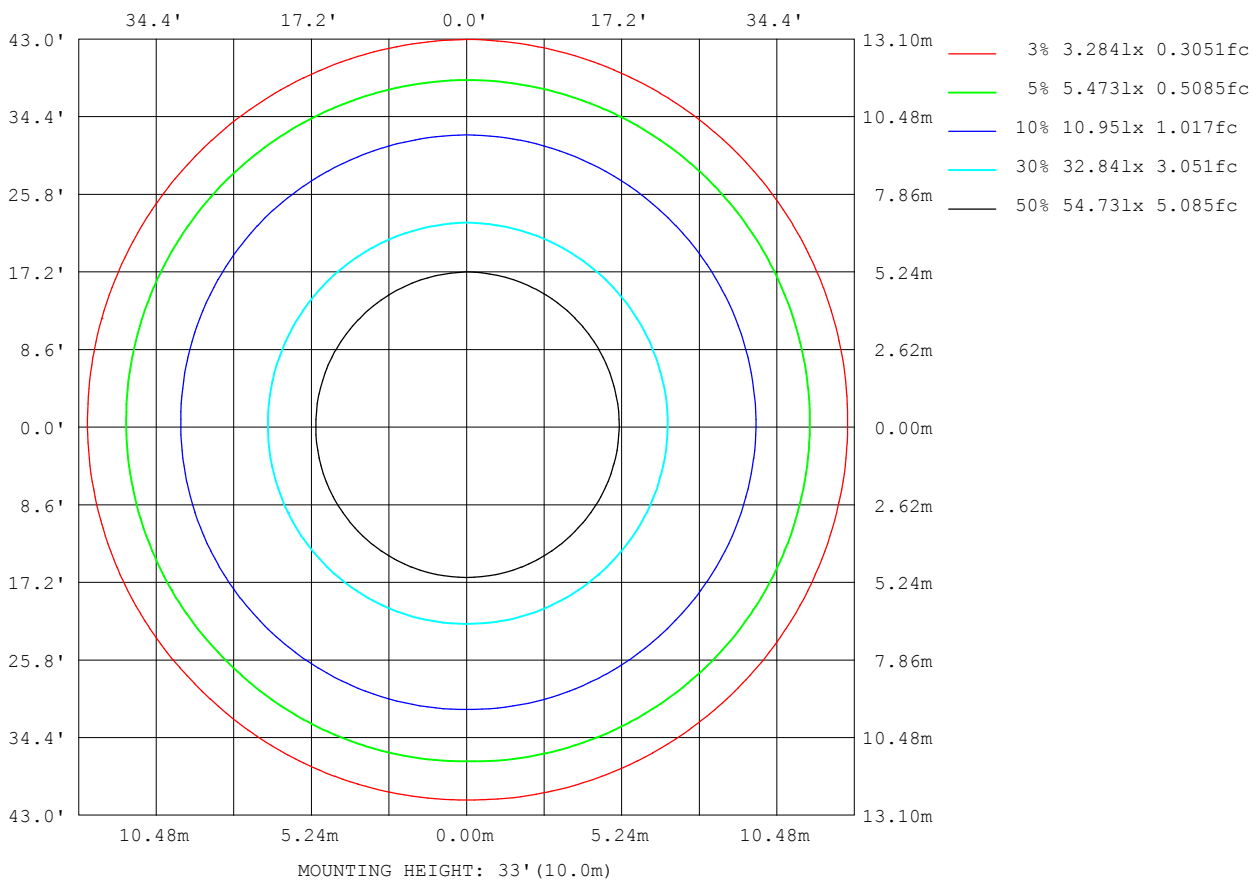
C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature:DEG  
Operators:guanlingao  
Test Date:2017-12-29

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
Humidity:65.0%  
Test Distance:9.390m [K=1.0000]  
Remarks: 0-90°



## ISOLUX DIAGRAM

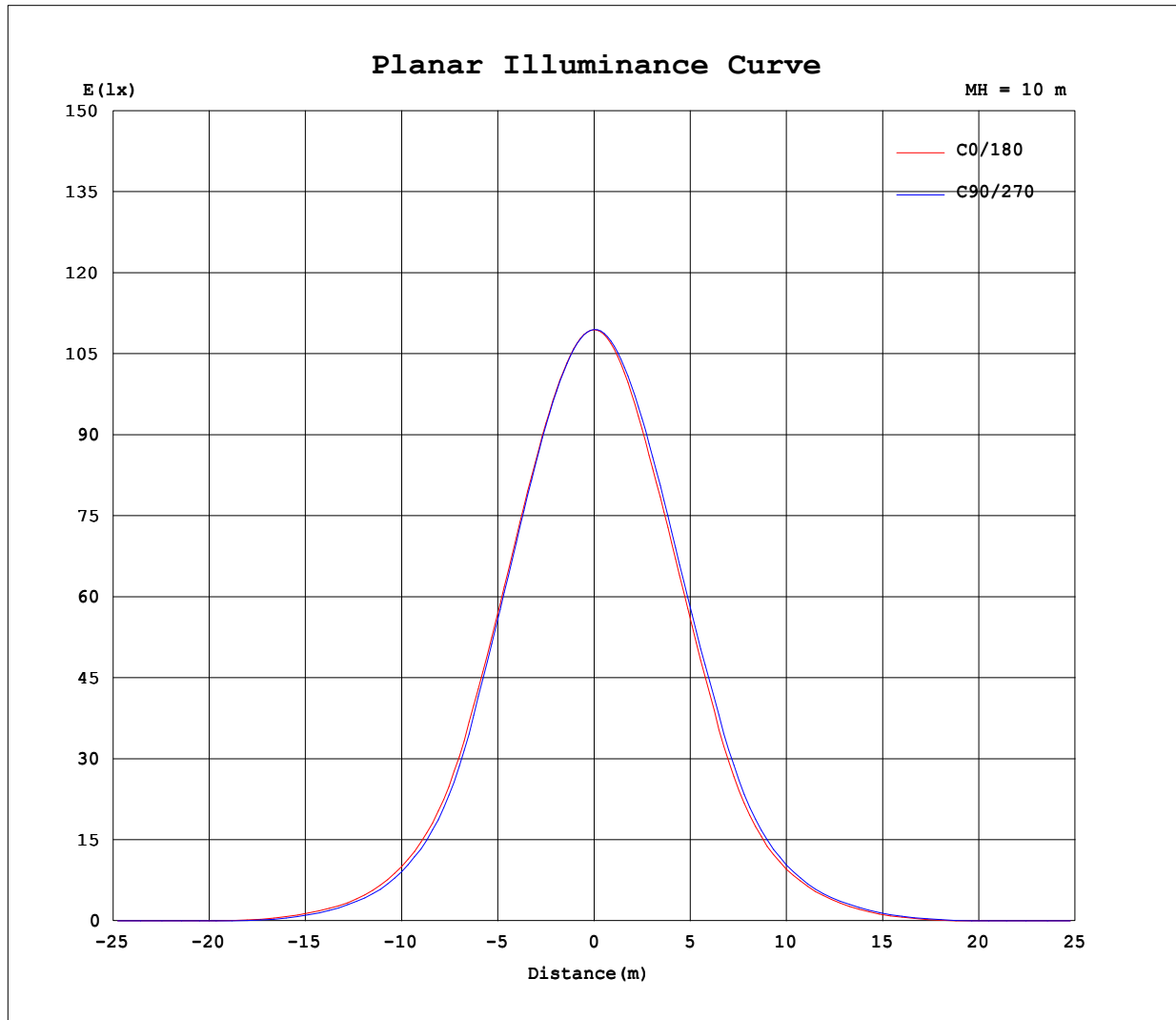
Test:U:277.1V I:0.3761A P:101.5W PF:0.9733 Lamp Flux:14027.2x1 lm		
NAME: LM-100W	TYPE:glass+70°AL cover	WEIGHT:4.675kg
SPEC.:5000k R80 264L	DIM.: D430mm*329mm	SERIAL No.:
MFR.:	SUR.:0.215m*0.215m*3.14	PROTECTION ANGLE:



C Range: 0 - 360DEG  
 C Interval: 45.0DEG  
 Test Speed: HIGH  
 Temperature: DEG  
 Operators: guanlingao  
 Test Date: 2017-12-29

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
 Humidity: 65.0%  
 Test Distance: 9.390m [K=1.0000]  
 Remarks: 0-90°

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 45.0DEG  
Test Speed: HIGH  
Temperature: DEG  
Operators: guanlingao  
Test Date: 2017-12-29

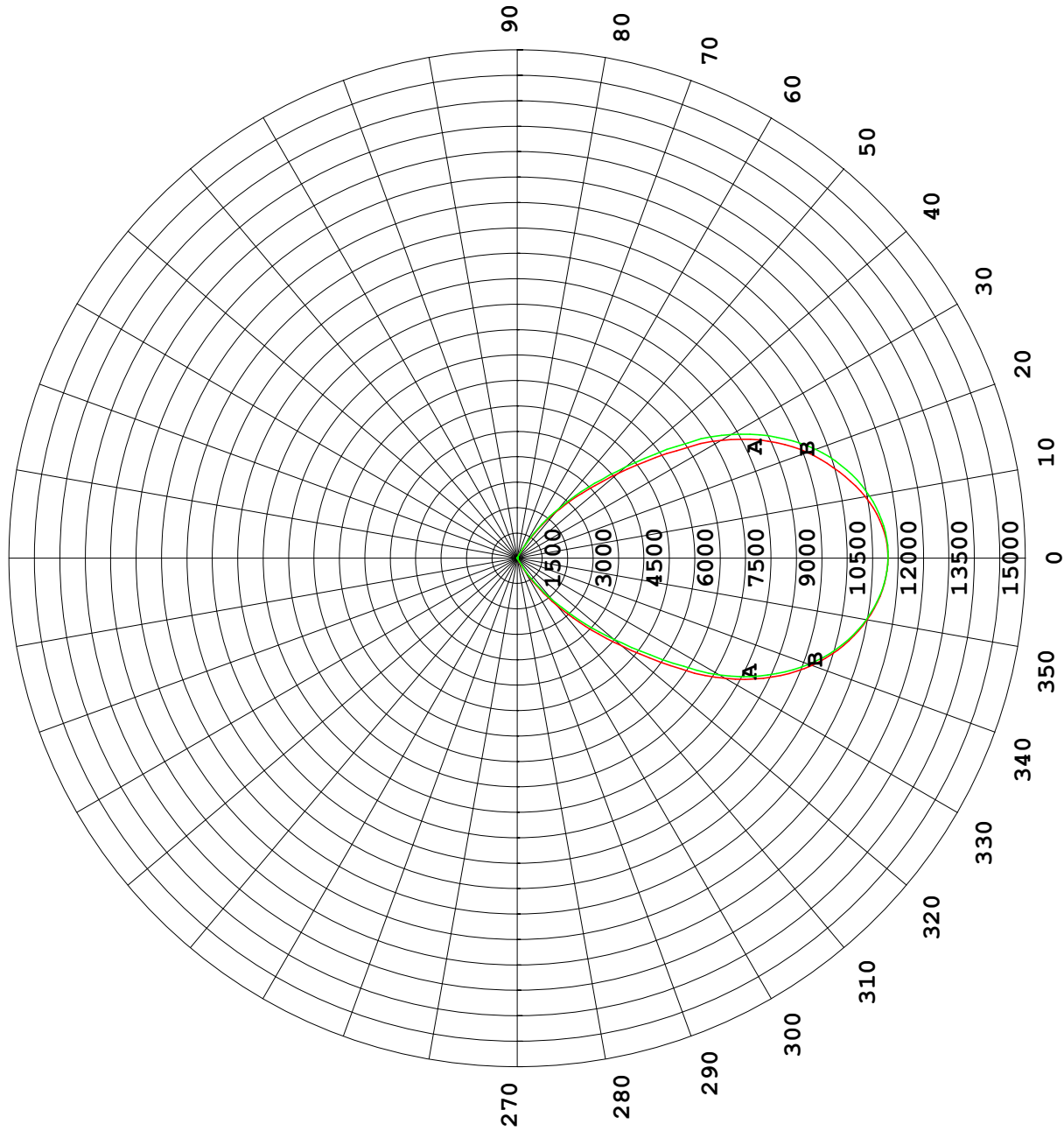
$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.284  
Humidity: 65.0%  
Test Distance: 9.390m [K=1.0000]  
Remarks: 0-90°

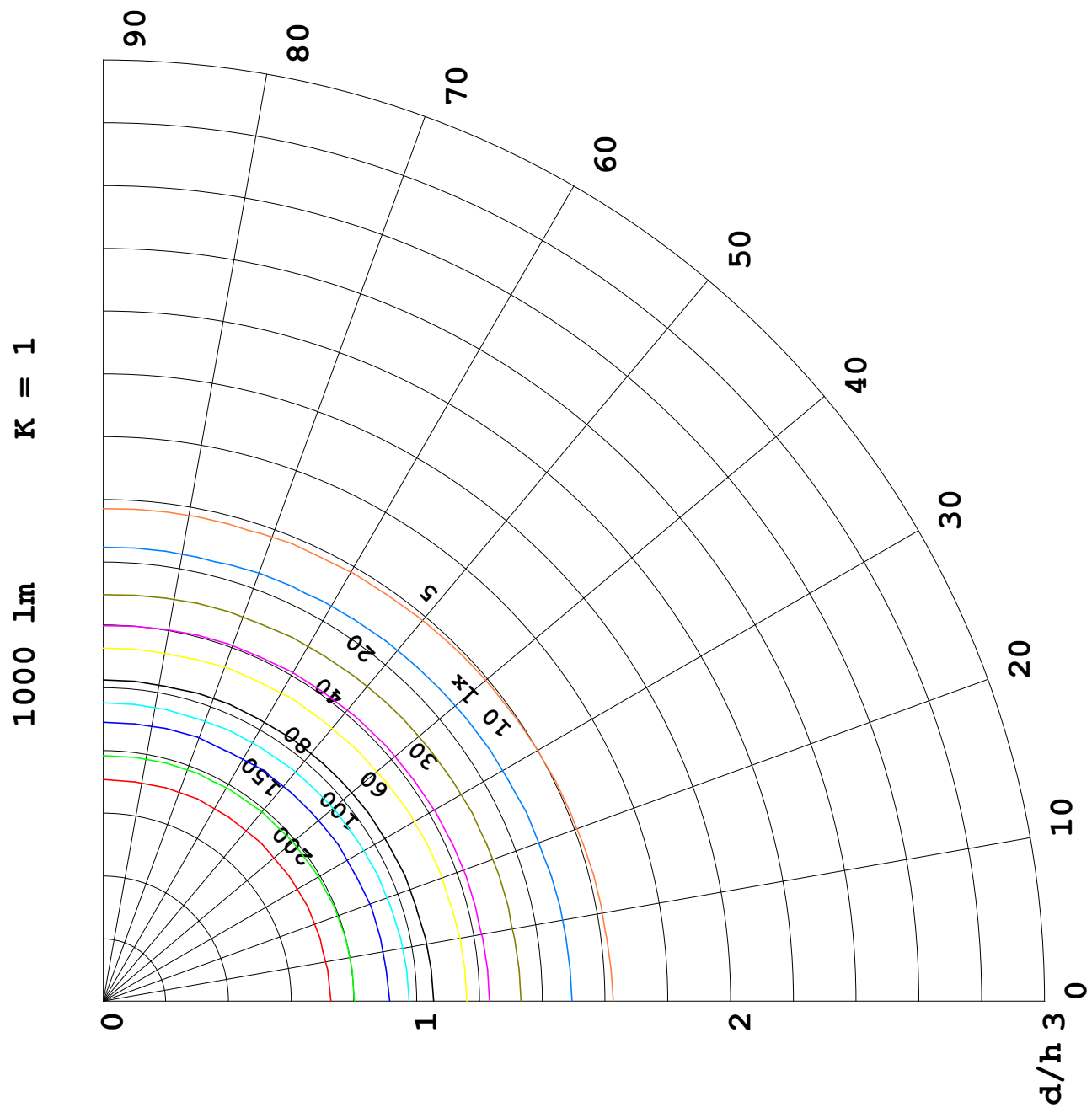
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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_v1 SYSTEM V2.0.284
Humidity:65.0%
Test Distance:9.390m [K=1.0000]
Remarks: 0-90°

```

I (cd)





F = 5000 lm  
K = 0.7  
Hcc = 0.0 m  
Hfc = 0.0 m  
Eave = 100 lx

	Pcc	Pw	Pfc
————	70	50	30
————	50	30	20

