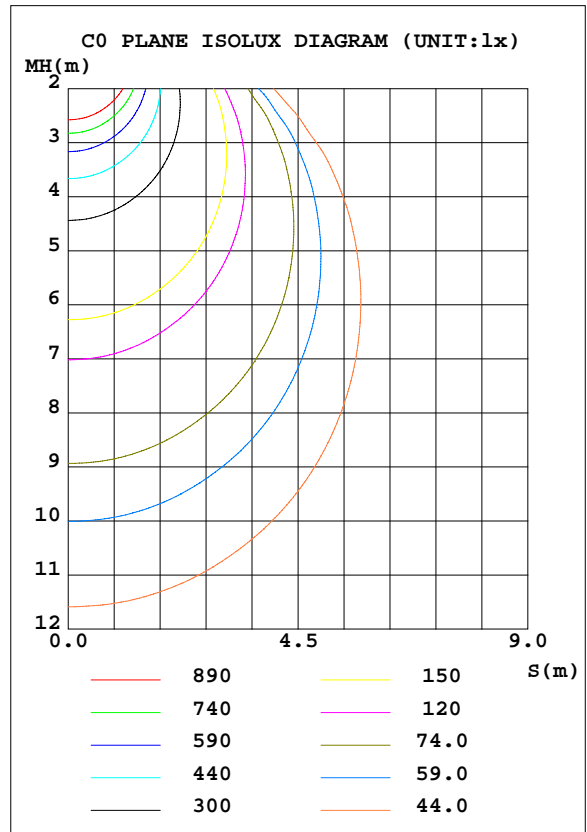
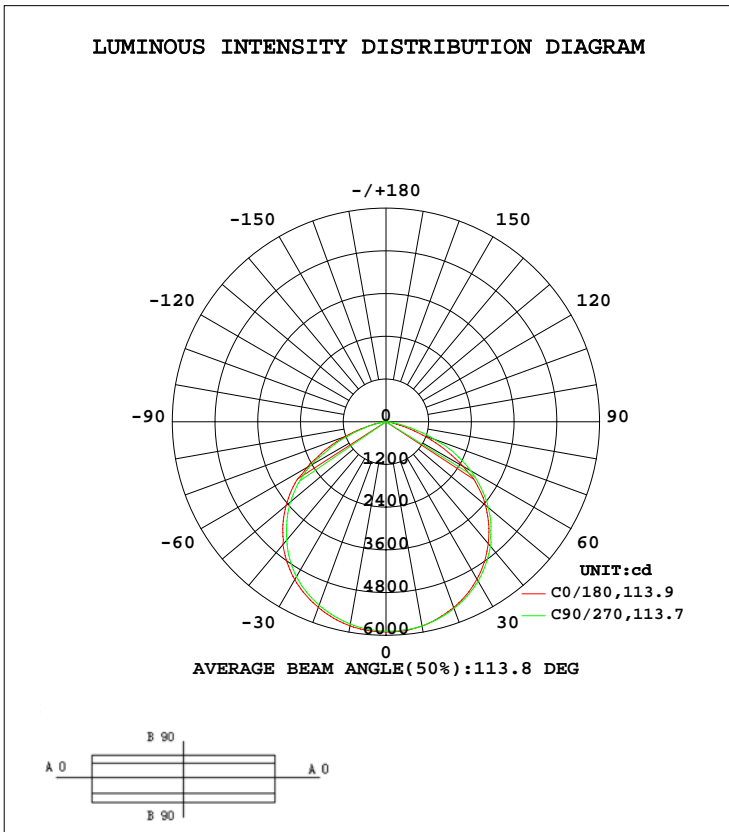


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.: Shada BV.	SUR.:0.135m*0.235m	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 157.26 lm/W			
MODEL	0230092 CREE2835	Imax(cd)	5907	S/MH(C0/180)	1.28
NOMINAL POWER(W)	100	LOR(%)	100.0	S/MH(C90/270)	1.30
RATED VOLTAGE(V)	230	TOTAL FLUX(lm)	16251	η UP, DN(C0-180)	0.3,50.6
NOMINAL FLUX(lm)	16250.9	CIE CLASS	DIRECT	η UP, DN(C180-360)	0.3,48.9
LAMPS INSIDE	1	η up(%)	0.5	CIBSE SHR NOM	1.25
TEST VOLTAGE(V)	230	η down(%)	99.5	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

γ	C0	C90	C180	C270				γ	Φ zone	Φ total	%lum,lamp
10	5826	5826	5821	5771				0- 10	558.9	558.9	3.44,3.44
20	5554	5584	5552	5486				10- 20	1609	2168	13.3,13.3
30	5110	5171	5122	5029				20- 30	2466	4634	28.5,28.5
40	4469	4564	4504	4337				30- 40	3010	7644	47,47
50	3643	3754	3663	3501				40- 50	3138	10782	66.3,66.3
60	2495	2741	2553	2436				50- 60	2799	13581	83.6,83.6
70	1108	1438	1236	1065				60- 70	1865	15446	95,95
80	73.68	307.1	163.2	141.6				70- 80	677.5	16123	99.2,99.2
90	2.546	5.159	2.270	2.778				80- 90	42.40	16166	99.5,99.5
100	5.171	5.374	4.454	5.349				90-100	4.087	16170	99.5,99.5
110	8.964	8.924	8.160	8.938				100-110	7.243	16177	99.5,99.5
120	13.00	12.83	12.24	12.66				110-120	10.60	16188	99.6,99.6
130	17.07	16.80	16.38	16.36				120-130	13.13	16201	99.7,99.7
140	20.72	20.58	20.49	20.01				130-140	14.35	16215	99.8,99.8
150	23.73	23.73	23.84	23.06				140-150	13.83	16229	99.9,99.9
160	26.29	26.44	26.50	25.68				150-160	11.51	16240	99.9,99.9
170	28.35	28.59	28.61	27.93				160-170	7.720	16248	100,100
180	29.43	29.46	29.52	29.42				170-180	2.754	16251	100,100
DEG	LUMINOUS INTENSITY:cd Less than 35% Percent = 10.3 %								UNIT:lm		

Conical surface Flux(90deg): 9222.8 lm

%lum = 56.8%
 %lamp = 56.8%

Conical surface Flux(120deg): 13581 lm

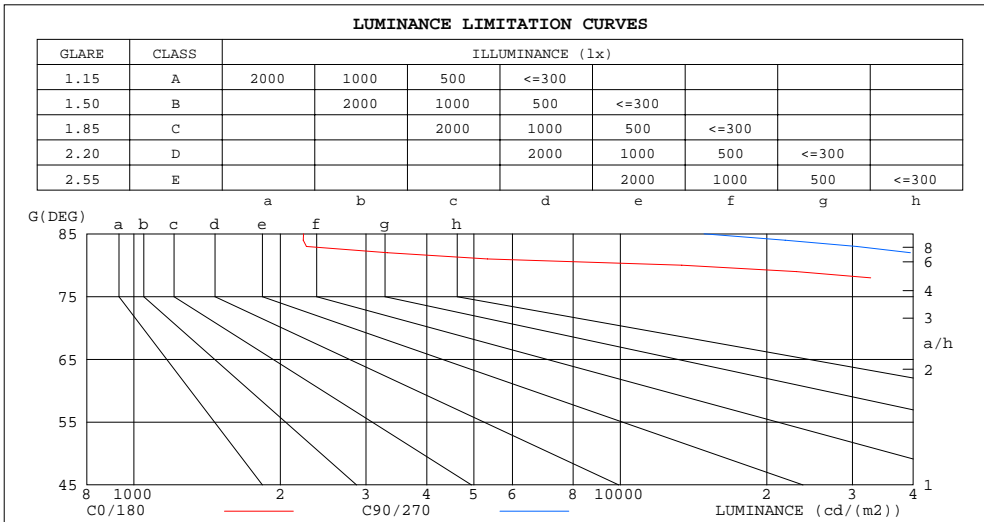
%lum = 83.6%
 %lamp = 83.6%

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	2232	14859
80	13374	55748
75	61136	99522
70	102094	132572
65	133237	161197
60	157282	172801
55	172720	179504
50	178637	184073
45	181938	185879

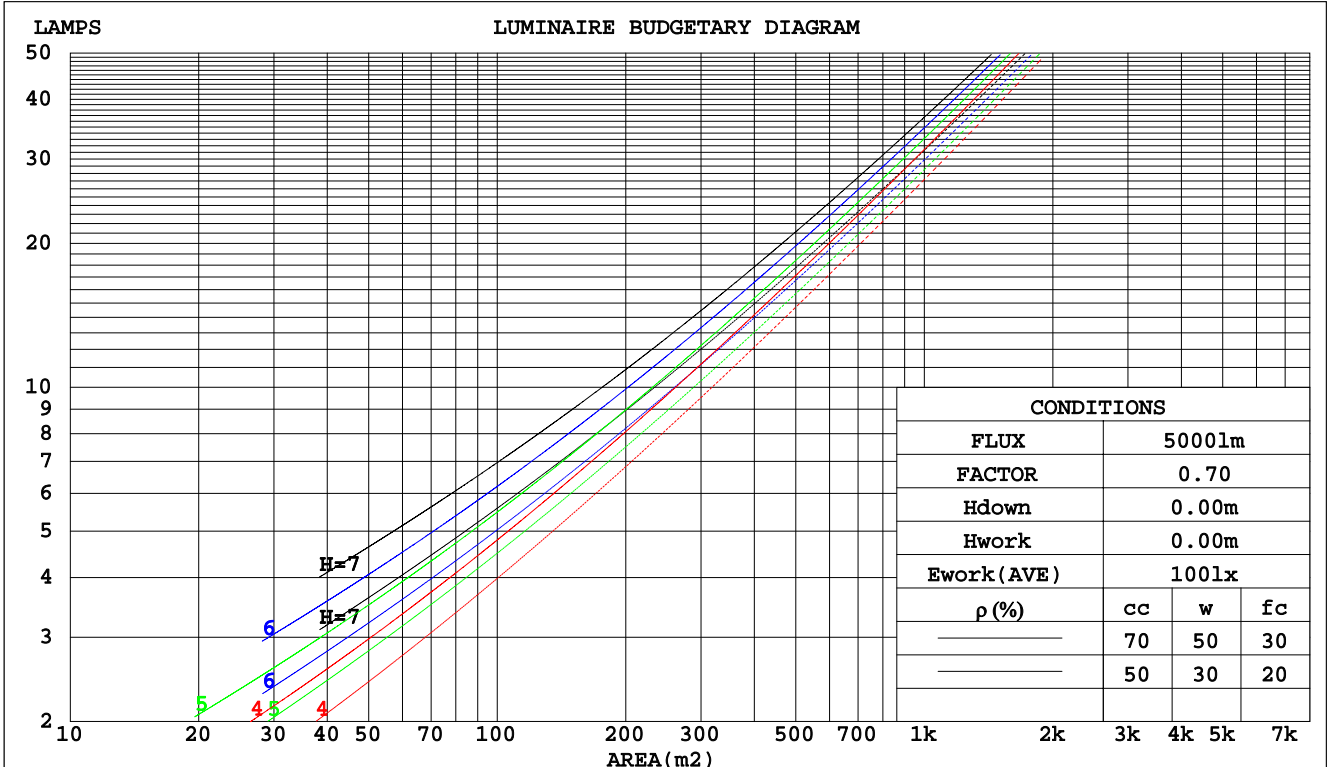
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: DEG
 Operators:
 Test Date: 2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity: 65.0%
 Test Distance: 9.351m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:

pcc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pw																0
pfc																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	.99
1.0	1.05	1.02	.98	1.03	.90	.96	.99	.96	.93	.95	.93	.90	.91	.89	.88	.86
2.0	.93	.86	.81	.91	.85	.80	.87	.82	.78	.84	.80	.76	.81	.77	.74	.72
3.0	.82	.74	.68	.80	.73	.67	.77	.71	.66	.74	.69	.64	.72	.67	.63	.61
4.0	.72	.64	.57	.71	.63	.57	.68	.62	.56	.66	.60	.55	.64	.59	.55	.52
5.0	.65	.56	.49	.63	.55	.49	.61	.54	.49	.59	.53	.48	.57	.52	.47	.45
6.0	.58	.49	.43	.57	.49	.43	.55	.48	.43	.54	.47	.42	.52	.46	.42	.40
7.0	.53	.44	.38	.52	.44	.38	.50	.43	.38	.49	.42	.37	.47	.41	.37	.35
8.0	.48	.40	.34	.47	.39	.34	.46	.39	.34	.45	.38	.33	.44	.38	.33	.31
9.0	.44	.36	.30	.43	.36	.30	.42	.35	.30	.41	.35	.30	.40	.34	.30	.28
10.0	.41	.33	.28	.40	.33	.28	.39	.32	.27	.38	.32	.27	.37	.31	.27	.25



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: DEG
 Operators:
 Test Date: 2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity: 65.0%
 Test Distance: 9.351m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:

ρcc	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						Wall Exitance Coefficients(WEC)									
0.0																
1.0	.278	.158	.050	.271	.154	.049	.257	.148	.047	.245	.141	.045	.234	.135	.044	
2.0	.271	.148	.046	.264	.146	.045	.253	.140	.044	.242	.136	.042	.232	.131	.041	
3.0	.255	.136	.041	.250	.134	.040	.239	.130	.039	.230	.126	.039	.221	.122	.038	
4.0	.239	.124	.036	.234	.122	.036	.224	.119	.036	.216	.116	.035	.208	.113	.034	
5.0	.223	.113	.033	.218	.112	.033	.210	.109	.032	.202	.107	.032	.195	.104	.031	
6.0	.208	.104	.030	.204	.103	.030	.196	.101	.029	.190	.099	.029	.183	.096	.029	
7.0	.194	.096	.027	.191	.095	.027	.184	.093	.027	.178	.091	.027	.172	.089	.026	
8.0	.182	.089	.025	.179	.088	.025	.173	.086	.025	.167	.085	.024	.162	.083	.024	
9.0	.171	.083	.023	.168	.082	.023	.163	.081	.023	.158	.079	.023	.153	.078	.022	
10.0	.161	.077	.021	.159	.077	.021	.154	.075	.021	.149	.074	.021	.145	.073	.021	

ρcc	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						Ceiling Cavity Exitance Coefficients(CCEC)									
0.0	.194	.194	.194	.166	.166	.166	.113	.113	.113	.065	.065	.065	.021	.021	.021	
1.0	.182	.160	.141	.156	.138	.121	.107	.095	.084	.061	.055	.049	.020	.018	.016	
2.0	.173	.136	.105	.149	.117	.090	.102	.081	.063	.059	.047	.037	.019	.015	.012	
3.0	.166	.118	.080	.142	.102	.070	.098	.071	.049	.056	.041	.029	.018	.013	.009	
4.0	.158	.105	.064	.136	.091	.056	.093	.063	.039	.054	.037	.023	.017	.012	.008	
5.0	.151	.094	.052	.130	.082	.046	.089	.057	.032	.052	.033	.019	.017	.011	.006	
6.0	.144	.086	.044	.124	.074	.038	.086	.052	.027	.050	.031	.016	.016	.010	.005	
7.0	.138	.079	.038	.119	.069	.033	.082	.048	.023	.048	.028	.014	.015	.009	.005	
8.0	.132	.073	.033	.113	.064	.029	.078	.045	.021	.046	.026	.012	.015	.009	.004	
9.0	.126	.068	.030	.108	.059	.026	.075	.042	.018	.044	.025	.011	.014	.008	.004	
10.0	.120	.064	.027	.104	.056	.023	.072	.039	.017	.042	.023	.010	.014	.008	.003	

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	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	30.8	32.3	31.1	32.5	32.7	31.1	32.6	31.4	32.8	33.0
3H	31.8	33.1	32.1	33.3	33.6	32.3	33.7	32.7	33.9	34.2
4H	31.9	33.2	32.2	33.4	33.7	32.6	33.9	33.0	34.2	34.4
6H	31.8	33.0	32.2	33.3	33.6	32.7	33.9	33.1	34.2	34.5
8H	31.8	32.9	32.1	33.2	33.5	32.7	33.8	33.0	34.1	34.4
12H	31.7	32.9	32.1	33.2	33.5	32.6	33.8	33.0	34.1	34.4
4H 2H	31.4	32.7	31.7	32.9	33.2	31.6	32.9	31.9	33.1	33.4
3H	32.4	33.5	32.8	33.8	34.1	32.9	34.0	33.3	34.3	34.7
4H	32.6	33.6	33.0	33.9	34.3	33.3	34.3	33.7	34.6	35.0
6H	32.6	33.5	33.0	33.8	34.2	33.4	34.3	33.8	34.7	35.0
8H	32.5	33.4	33.0	33.7	34.1	33.4	34.2	33.8	34.6	35.0
12H	32.5	33.3	32.9	33.6	34.1	33.4	34.1	33.8	34.5	34.9
8H 4H	32.7	33.5	33.1	33.9	34.3	33.3	34.1	33.7	34.5	34.9
6H	32.7	33.4	33.1	33.8	34.2	33.5	34.2	33.9	34.6	35.0
8H	32.6	33.2	33.1	33.7	34.1	33.5	34.1	33.9	34.5	35.0
12H	32.6	33.1	33.1	33.6	34.1	33.5	34.0	33.9	34.4	34.9
12H 4H	32.6	33.4	33.1	33.8	34.2	33.3	34.0	33.7	34.4	34.8
6H	32.7	33.3	33.1	33.7	34.1	33.4	34.0	33.9	34.5	34.9
8H	32.6	33.1	33.1	33.6	34.1	33.5	34.0	33.9	34.4	34.9
Variations with the observer position at spacings:										
S = 1.0H	+ 0.2 / - 0.3					+ 0.2 / - 0.3				
1.5H	+ 0.3 / - 0.6					+ 0.2 / - 0.4				
2.0H	+ 0.5 / - 0.5					+ 0.4 / - 0.4				

CIE Pub.117, 16251 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 9.7)
 Area: 0.031725 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:

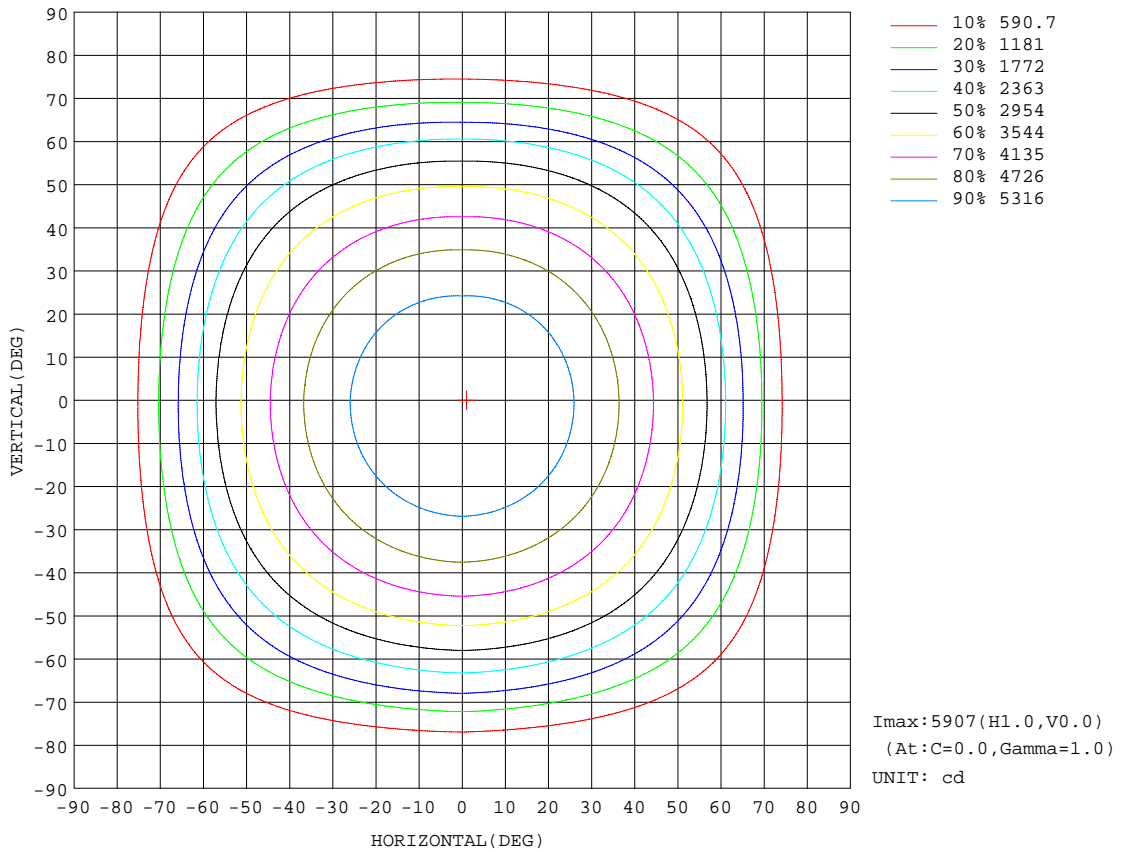
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	58	47	40	58	47	40	57	46	40	34
0.80	69	58	50	68	57	50	66	56	50	43
1.00	78	67	60	77	66	60	74	68	59	52
1.25	85	75	68	84	74	68	81	73	67	60
1.50	90	81	74	88	80	74	85	78	72	65
2.00	97	89	83	95	88	82	91	85	80	73
2.50	100	93	88	98	92	87	95	89	85	77
3.00	104	97	92	102	96	91	98	93	89	81
4.00	107	102	98	105	101	97	101	97	94	85
5.00	110	105	102	107	103	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: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:

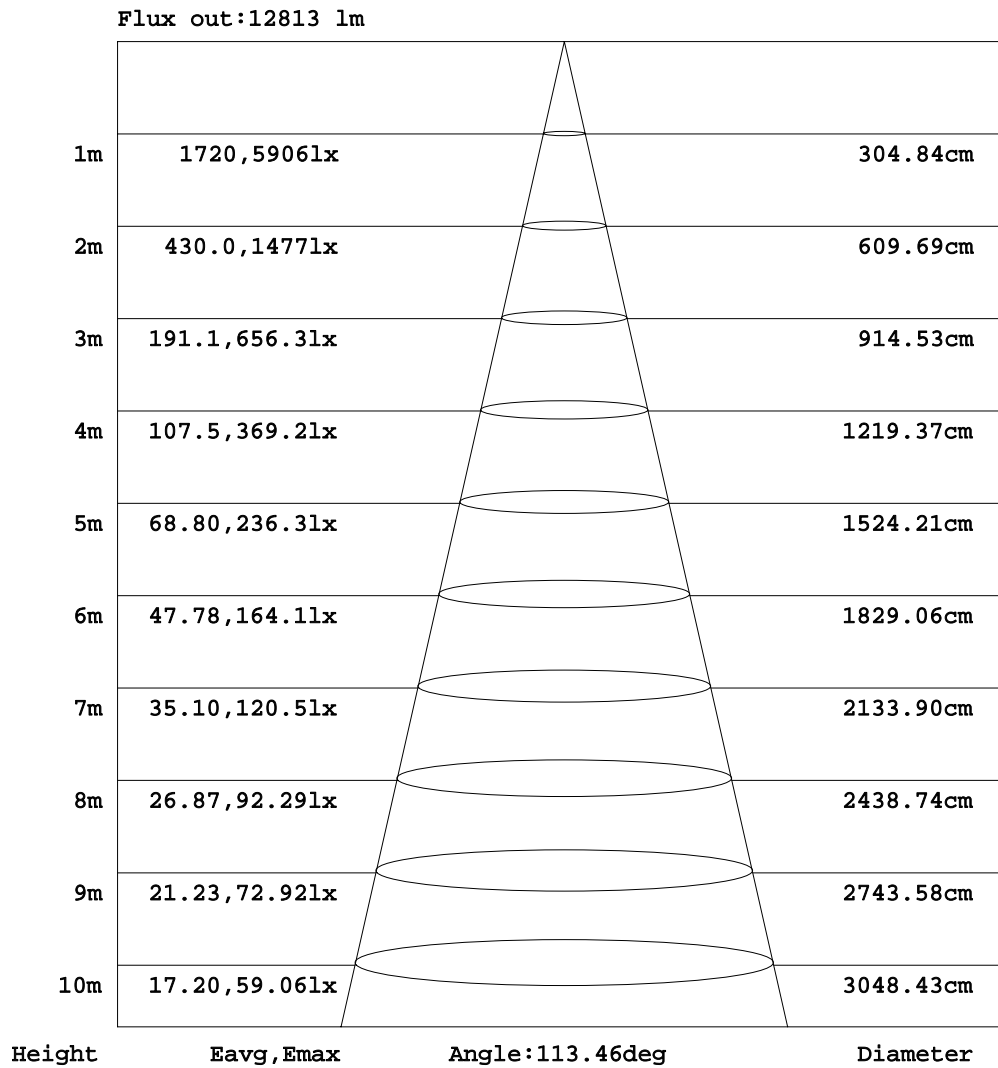


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

AAI Figure

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:



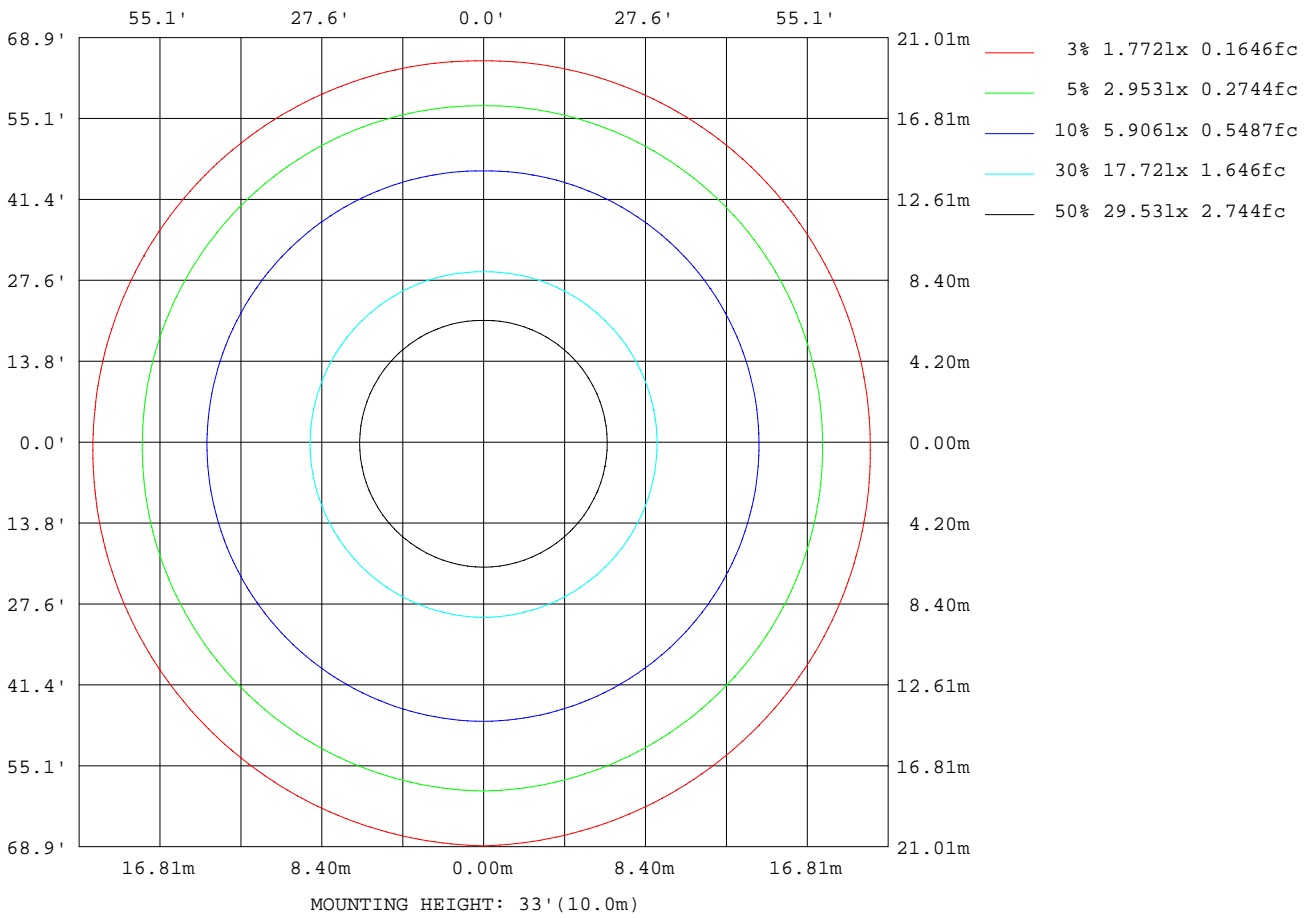
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:

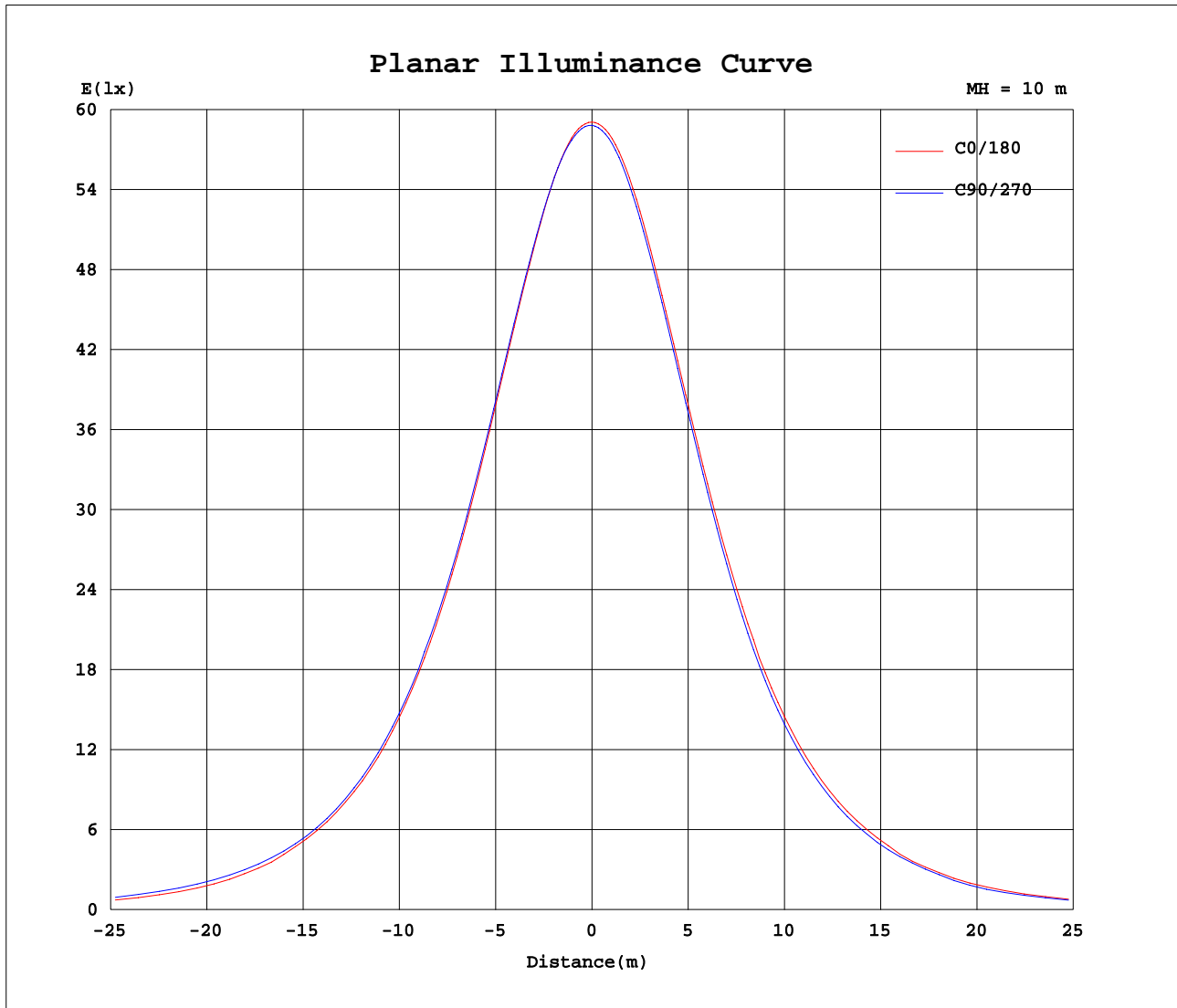
AvgL	cd/m2
L_0~180(65)av	137471
L_0~180(75)av	67644
L_0~180(85)av	2120
L_90~270(65)av	144403
L_90~270(75)av	82514
L_90~270(85)av	10199
L_45(65)av	142068
L_45(75)av	77345
L_45(85)av	7162

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: DEG
 Operators:
 Test Date: 2020-3-11

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity: 65.0%
 Test Distance: 9.351m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:230.06V I:0.4549A P:103.34W PF:0.9875 Freq:49.99Hz Lamp Flux:16250.9x1 lm		
NAME:	TYPE:120D LENS	WEIGHT:3.72KG
SPEC.:4000K RA80 96L	DIM.: 405mm*301mm*63mm	SERIAL No.:
MFR.:	SUR.:0.135m*0.235m	Shielding Angle:

Table--1

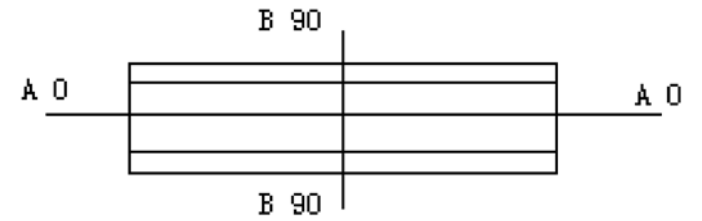
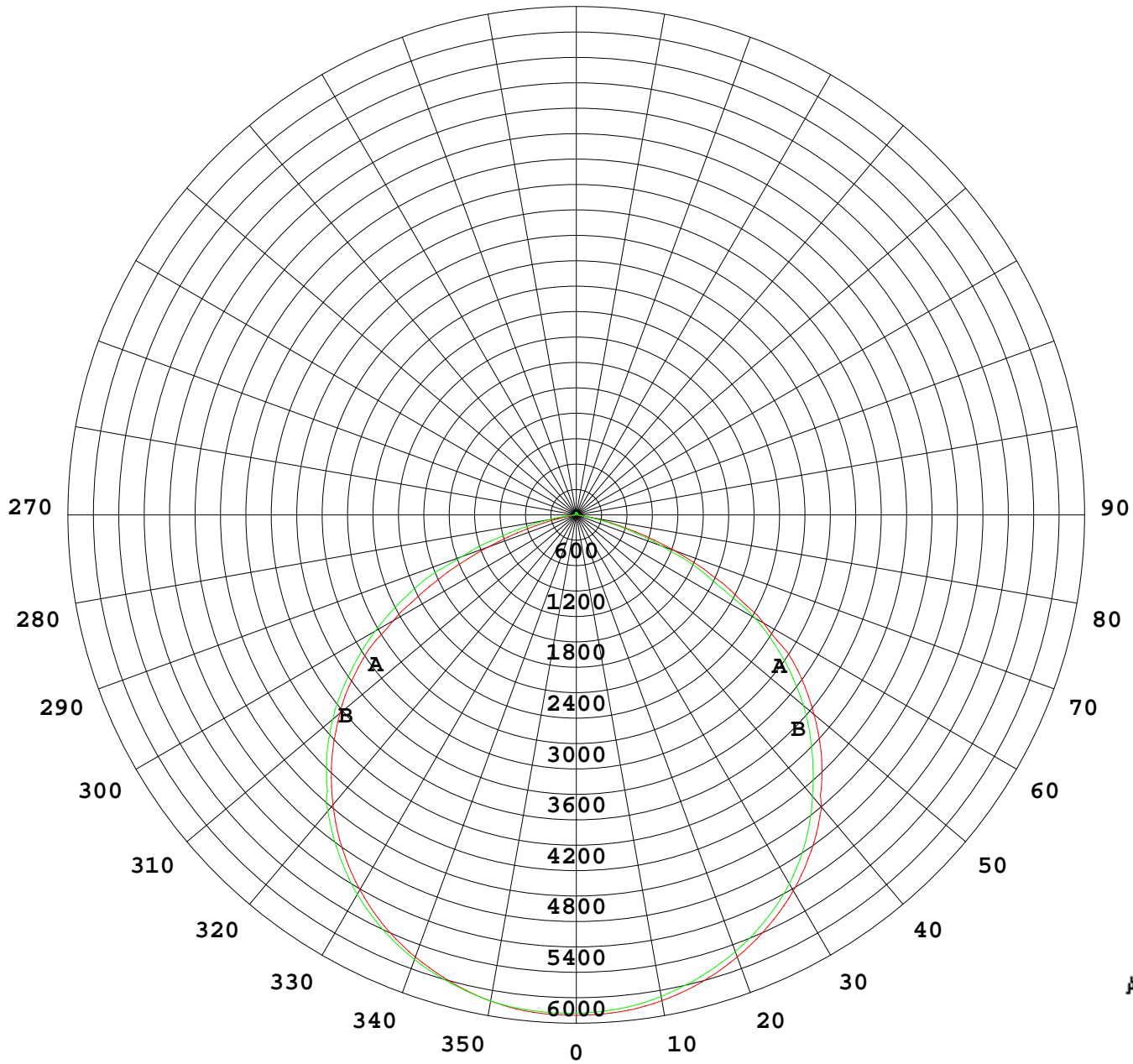
UNIT: cd

C(DEG) γ (DEG)	0	90	180	270															
0	5906	5882	5906	5882															
5	5892	5874	5887	5851															
10	5826	5826	5821	5771															
15	5708	5724	5710	5647															
20	5554	5584	5552	5486															
25	5358	5402	5356	5281															
30	5110	5171	5122	5029															
35	4812	4886	4837	4716															
40	4469	4564	4504	4337															
45	4081	4170	4097	3935															
50	3643	3754	3663	3501															
55	3143	3266	3186	3003															
60	2495	2741	2553	2436															
65	1786	2161	1900	1711															
70	1108	1438	1236	1065															
75	502	817	609	538															
80	73.7	307	163	142															
85	6.17	41.1	5.55	15.3															
90	2.55	5.16	2.27	2.78															
95	3.65	3.97	3.02	3.86															
100	5.17	5.37	4.45	5.35															
105	6.97	7.04	6.20	7.10															
110	8.96	8.92	8.16	8.94															
115	11.0	10.9	10.2	10.8															
120	13.0	12.8	12.2	12.7															
125	15.1	14.8	14.3	14.5															
130	17.1	16.8	16.4	16.4															
135	18.9	18.7	18.5	18.2															
140	20.7	20.6	20.5	20.0															
145	22.3	22.2	22.3	21.6															
150	23.7	23.7	23.8	23.1															
155	25.0	25.2	25.2	24.4															
160	26.3	26.4	26.5	25.7															
165	27.4	27.7	27.6	26.9															
170	28.4	28.6	28.6	27.9															
175	29.0	29.2	29.3	28.9															
180	29.4	29.5	29.5	29.4															

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:DEG
 Operators:
 Test Date:2020-3-11

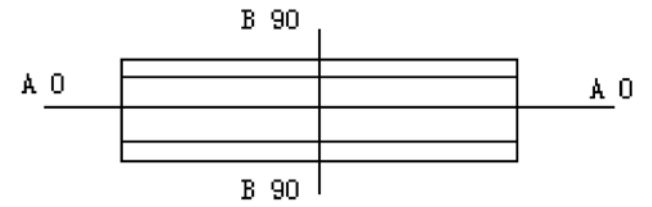
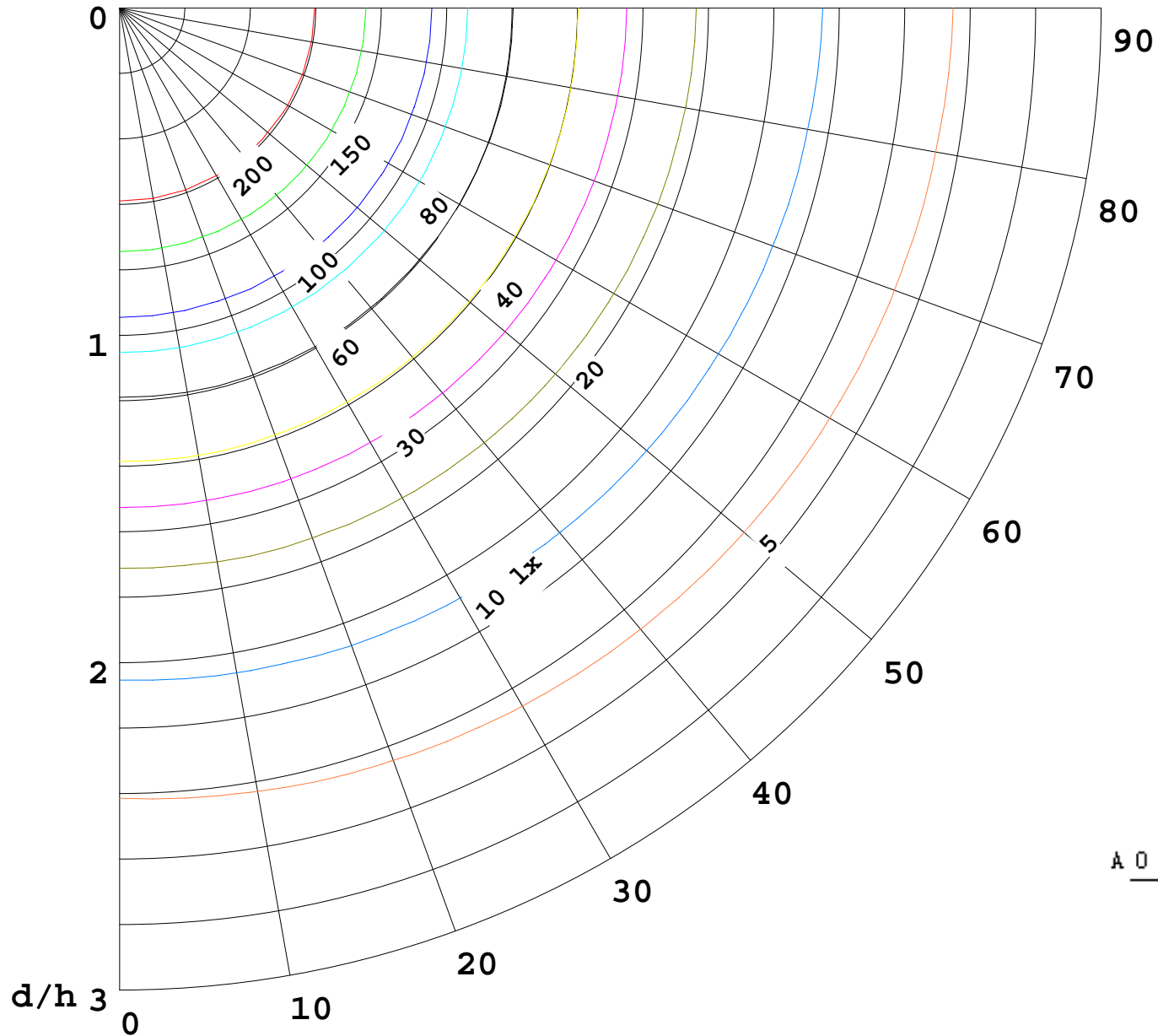
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.416
 Humidity:65.0%
 Test Distance:9.351m [K=1.0000]
 Remarks:

I(cd)



1000 lm

$K = 1$



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

