



IESNA LM-79 TEST REPORT

Applicant's name: BlackJack Lighting LLC

Address: 1547 Barclay Blvd. Buffalo Grove, IL 60089

Brand Name.....: Blackjack Lighting

Report No......: BTR66.181.19.0007.13

Product Name.....: 32" Geodome Pendant - Polished Chrome Exterior/ White Interior or Black Exterior/ White Interior

Model Number: GDM-32P-PW-27U-30K;GDM-32P-BW-27U-30K

Tested by
(printed name and signature): David Zhang 

Title: **Test Engineer**

Approved by
(printed name and signature): Steven Huo 

Title: **Approved Signatory**

Date of issue: Aug 26, 2019

Testing Laboratory Name: BEST Test Service Shenzhen Co., Ltd.
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[Tel:+86-755-28236006](tel:+86-755-28236006), Email: admin@bestcert.cn

Accreditation: DLC/Lighting Facts/UL/ETL/ELI/CEC/EPA/DOE
NVLAP Testing Lab Code: 200770-0

Test specification

Standard: IESNA LM-79

Test procedure/method: IESNA LM-79 Test Procedure

Non-standard test method: No

Test Report Form No.: BEST_ LM-79

TRF originator.....: BEST Test Service Shenzhen Co., Ltd. Mr Tseng

Master TRF: BEST_LM-79.doc

Note:

The laboratory has not been responsible for the sampling stage (e.g. the sample has been provided by the customer), the results relate only to the items tested.

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Description:	
The date of sampling	Aug 13, 2019
The date of receipt of the test sample / requirement /item(s).....	Aug 13, 2019
Test date.....	Aug 13, 2019 to Aug 22, 2019
Description	32" Geodome Pendant - Polished Chrome Exterior/ White Interior or Black Exterior/ White Interior
The condition of the item	N/A
Sampling method.....	Provided by the customer
Sample Quantity	1 unit
SKU.....	N/A
Rating(s) (V; Hz)	AC 120V, 60Hz
Nominal Power.....	23W
Nominal Power Factor	N/A
Nominal Lumen Output.....	1736lm
Nominal CCT	3000K
Nominal CRI(Ra)	90
Number of hours operated prior to measurement.....	0H
Total operating time of the product for measurements including stabilization:	3.5H
Ambient temperature	24.7°C
Orientation (burning position) of SSL product during test	Lighting Surface Down or Base Up
Stabilization time	1.5H
Photometric method	Sphere-spectroradiometer+Goniophotometer
Calibration standard lamp used	DC 24V 100W Omni-Directional Halogen Calibrated by NIM China(Sphere) DC 120V 500W Omni-Directional Halogen Calibrated by NIM China(Goniophotometer)
Correction factors applied	Self absorbing applied
Photometric measurement conditions:	See test method description below

Equipments used	EVERFINE HASS-2000 Sphere System CHROMA 61602 AC Source YOKOGAWA WT 310 Power Meter FLUKE 52II EVERFINE GOR-5000 Goniophotometer CALIFORNIA INSTRUMENT 1501I AC Source YOKOGAWA WT 210 Power Meter FLUKE 233 Temperature Meter
Bandwidth of spectroradiometer	2nm
Statement of uncertainties	3.1%
Deviation	None

Note: These models are all the same except for color. Here we choose GDM-32P-PW-27U-30K to be tested and the other to share the test data.

Photometric and Electrical Measurement

Total light output (luminous flux) for the 25°C ±1°C ambient temperature conditions was measured using a ø2.0m 4π geometry integrating sphere. Temperature was measured at a position inside the sphere. Spectral radiant flux were measured using the photo detector built in the integrating sphere. Each lamp was operated at rated voltage in its designated orientation. Each lamp was in a stable state before measurements are done as below:

- Step 1 Take 3 measurements of the lamp light output at 15 minute interval (total time=30mintues.), the pre-burning time is not included in the formal testing time period.
- Step 2 Calculate the difference in percentage between the maximum measured value and the minimum measured value with the three consecutive measurements.
- Step 3 If the value calculated in Step 2 does not exceed 0.5 percent, the lamp is considered stable.

Luminous flux, chromaticity coordinates, correlated color temperature and color rendering index for each lamp were calculated from the spectral radiant flux measurements taken at 2 nm increment over the range of 380 to 780 nm. The calibration of the sphere photometer-spectrometer system can be traced back to the NIST USA. Lamp efficacy (lumens per watt) for each lamp model was computed based on the luminous flux result revised taking the self-absorbing correction factor into consideration. Electrical measurements including voltage, current, power and power factor were measured using the digital power meter.

The total uncertainty of the light output measurements is estimated, at the 95% confidence level, not to exceed ±3.1% over the wavelength range of 380-780 nm.

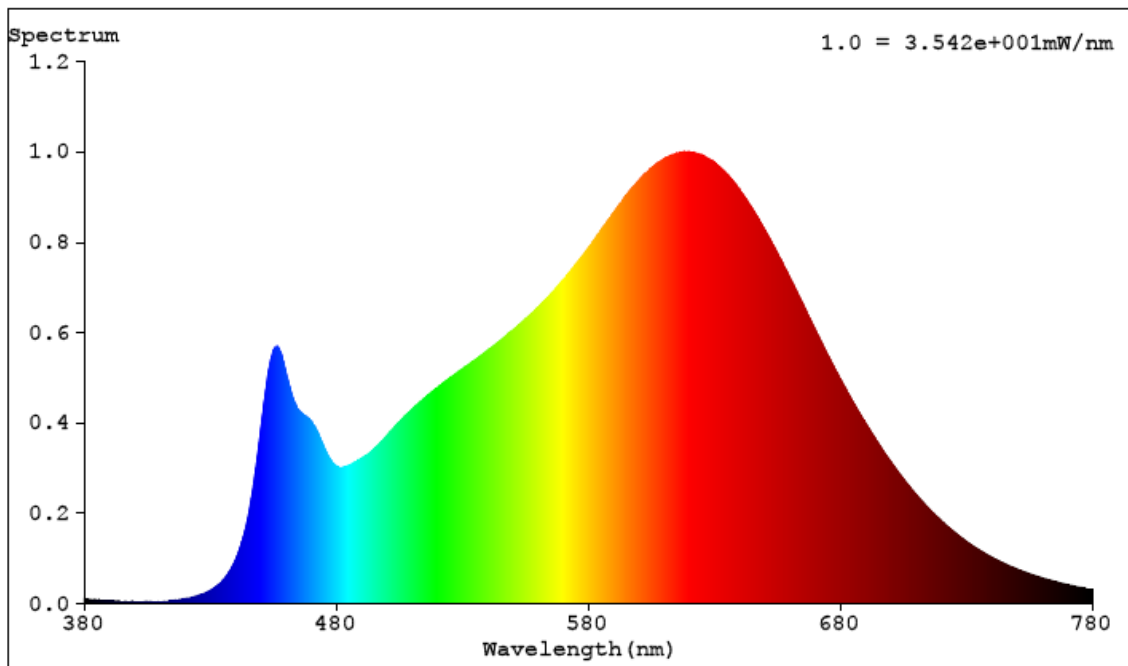
Luminous Intensity

An Everfine GOR-5000 Goniophotometer was used to measure the intensity distribution at each angle, Luminous intensity (cd) was measured within each vertical plane at a 5° vertical angle increment (maximum) from 0° to 360°, measurements were repeated in vertical planes about the lamp (polar) axis in an increments of 22.5° from 0° to 180°, and the intensity data were exported to a file in excel format.

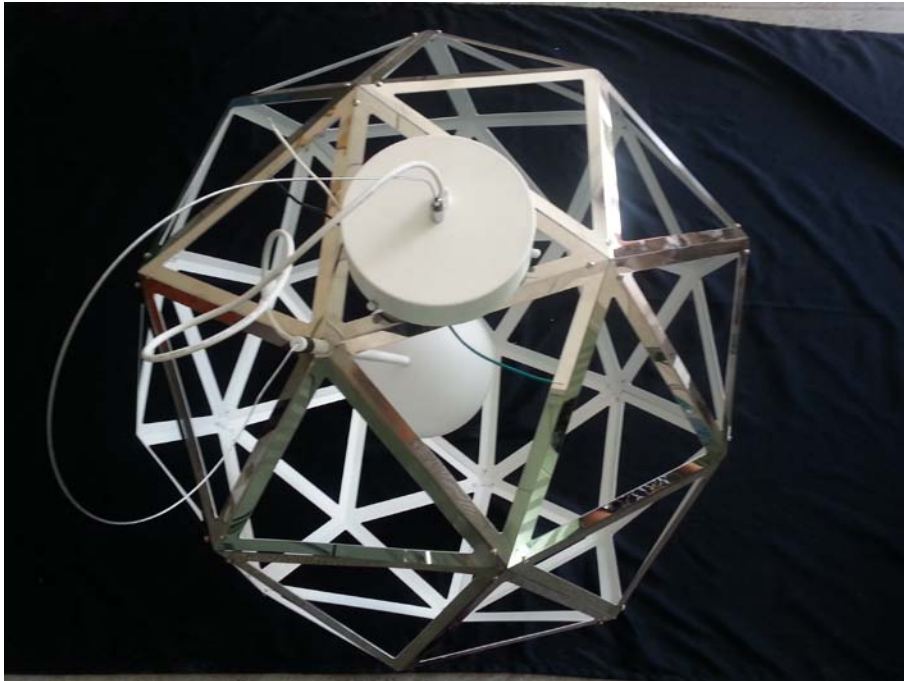
Photometric and Electrical Test Data

Input Voltage (V)	Frequency (Hz)	Input Current (A)	ITHD	Input Power (W)	Power Factor	Lumen Output (Lumens)	Efficiency (Lumen/W)
120	60.0	0.1907	/	22.69	0.9918	1736.97	76.55
CCT (K)	CRI (Ra)	R9	x CIE1931	y CIE1931	u' CIE1976	v' CIE1976	Duv CIE1976
2961	92.5	60	0.4371	0.3997	0.2526	0.5197	-0.0018

Spectral Plots




EUT Photo



Annex

Please see the next page for the luminous intensity test data

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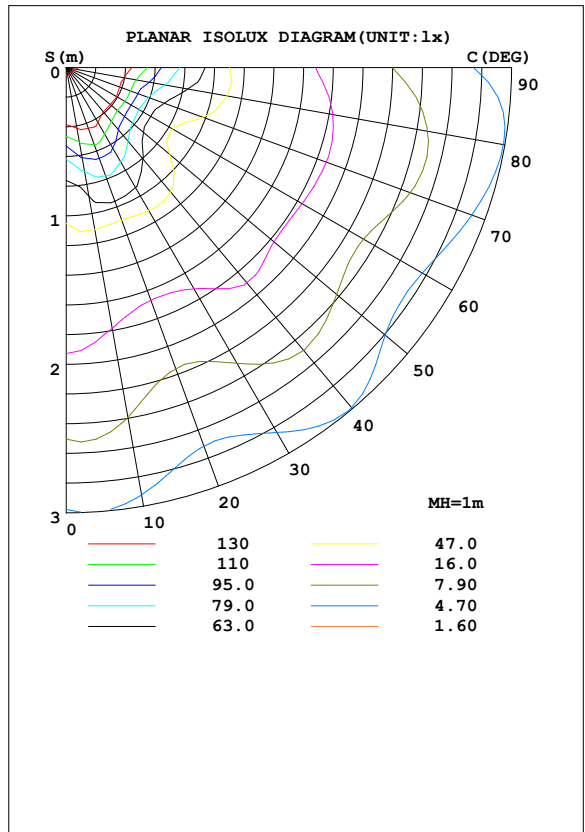
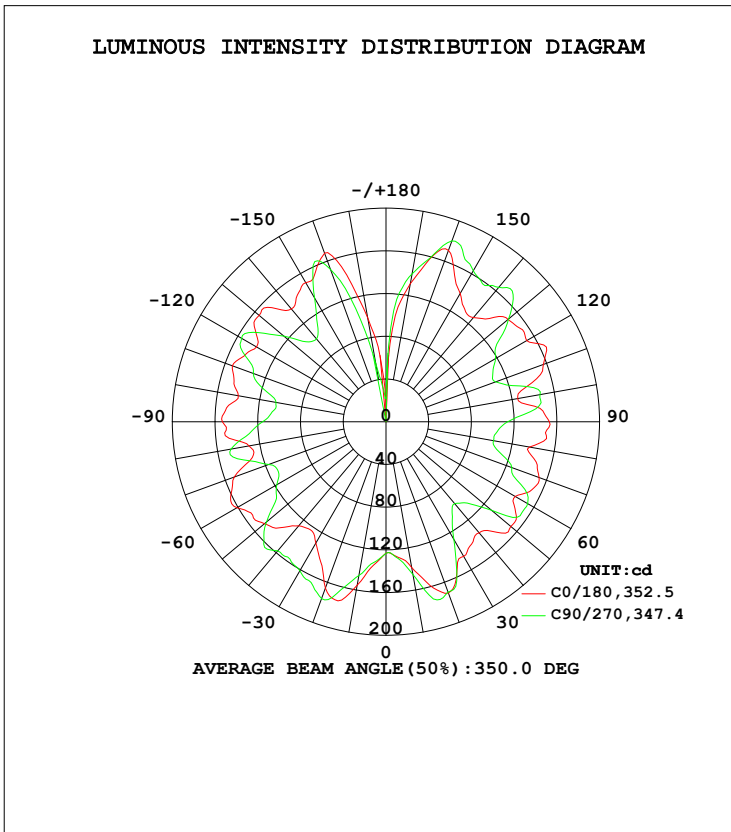


BEST

LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 76.55 lm/W			
MODEL	GDM-32P-PW-27U-30K	I _{max} (cd)	182.1	S/MH (C0/180)	1.67
NOMINAL POWER (W)	23	LOR (%)	100.0	S/MH (C90/270)	1.37
RATED VOLTAGE (V)	120	TOTAL FLUX (lm)	1737.0	η UP, DN (C0-180)	24.6,25.2
NOMINAL FLUX (lm)	1736	CIE CLASS	DIFFUSE	η UP, DN (C180-360)	25.2,25.0
LAMPS INSIDE	1	η up (%)	49.8	CIBSE SHR NOM	1.50
TEST VOLTAGE (V)	120	η down (%)	50.2	CIBSE SHR MAX	1.55



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Mark
 Test Date: 13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 59.2%
 Test Distance: 2.463m [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
10	155.2	153.0	146.2	148.3	138.5	138.4	145.1	145.0	0- 10	12.92	12.92	0.74,0.74
20	165.9	166.1	176.3	167.4	170.6	173.5	169.9	175.9	10- 20	46.75	59.67	3.44,3.44
30	131.3	130.2	161.2	121.9	145.6	154.7	127.3	159.9	20- 30	72.09	131.8	7.59,7.59
40	127.3	121.8	157.8	103.9	135.8	145.6	100.2	153.6	30- 40	83.62	215.4	12.4,12.4
50	148.5	143.2	146.1	135.1	152.6	154.8	129.1	154.2	40- 50	108.1	323.5	18.6,18.6
60	161.2	150.8	118.1	147.2	139.8	131.7	153.2	129.7	50- 60	128.7	452.2	26,26
70	151.1	137.5	117.0	126.1	152.5	134.7	125.3	124.8	60- 70	135.9	588.1	33.9,33.9
80	130.3	126.1	147.3	112.0	136.4	142.3	102.3	148.8	70- 80	137.6	725.7	41.8,41.8
90	153.2	143.4	115.6	131.5	153.0	140.1	113.9	132.2	80- 90	146.0	871.6	50.2,50.2
100	140.4	136.8	104.6	145.3	125.3	116.5	146.5	112.8	90-100	145.0	1017	58.5,58.5
110	153.2	141.2	132.2	118.8	156.8	142.0	109.4	133.5	100-110	138.5	1155	66.5,66.5
120	140.0	138.7	156.1	128.5	152.2	153.8	118.6	151.8	110-120	138.5	1294	74.5,74.5
130	155.1	155.7	124.7	161.2	149.2	137.9	149.9	135.9	120-130	130.1	1424	82,82
140	138.0	136.8	101.3	153.0	127.5	113.1	164.3	108.2	130-140	107.5	1531	88.2,88.2
150	150.5	146.6	133.9	163.5	139.0	130.8	163.4	123.5	140-150	84.21	1615	93,93
160	168.1	146.8	151.5	167.2	170.9	170.0	180.2	166.1	150-160	72.48	1688	97.2,97.2
170	98.87	46.55	55.64	94.62	131.3	141.2	140.6	152.9	160-170	40.89	1729	99.5,99.5
180	13.08	22.93	23.32	17.27	22.19	23.41	25.29	27.20	170-180	8.178	1737	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

Conical surface Flux(90deg): 265.5 lm

%lum = 15.3%

%lamp = 15.3%

Conical surface Flux(120deg): 452.18 lm

%lum = 26.0%

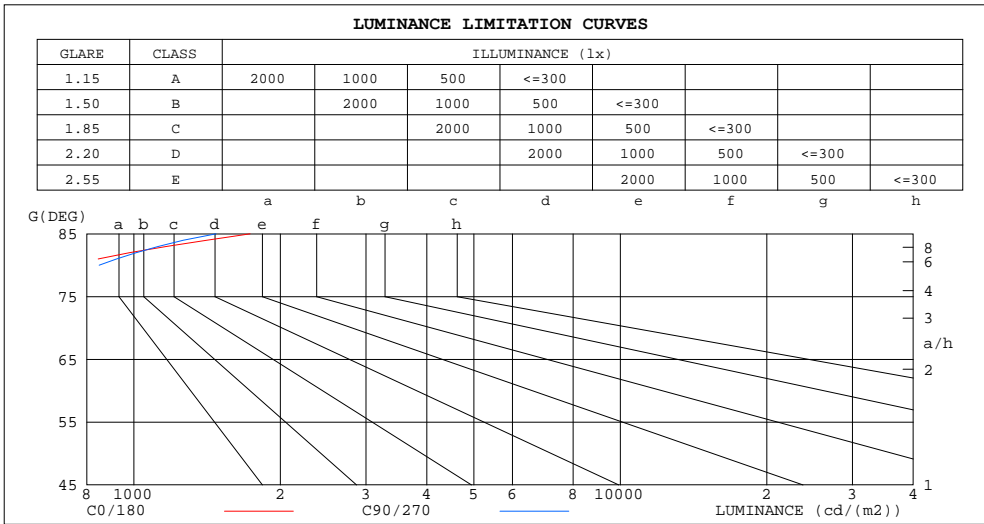
%lamp = 26.0%

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	1734	1475
80	750	849
75	500	534
70	442	342
65	379	263
60	322	236
55	266	218
50	231	227
45	198	229

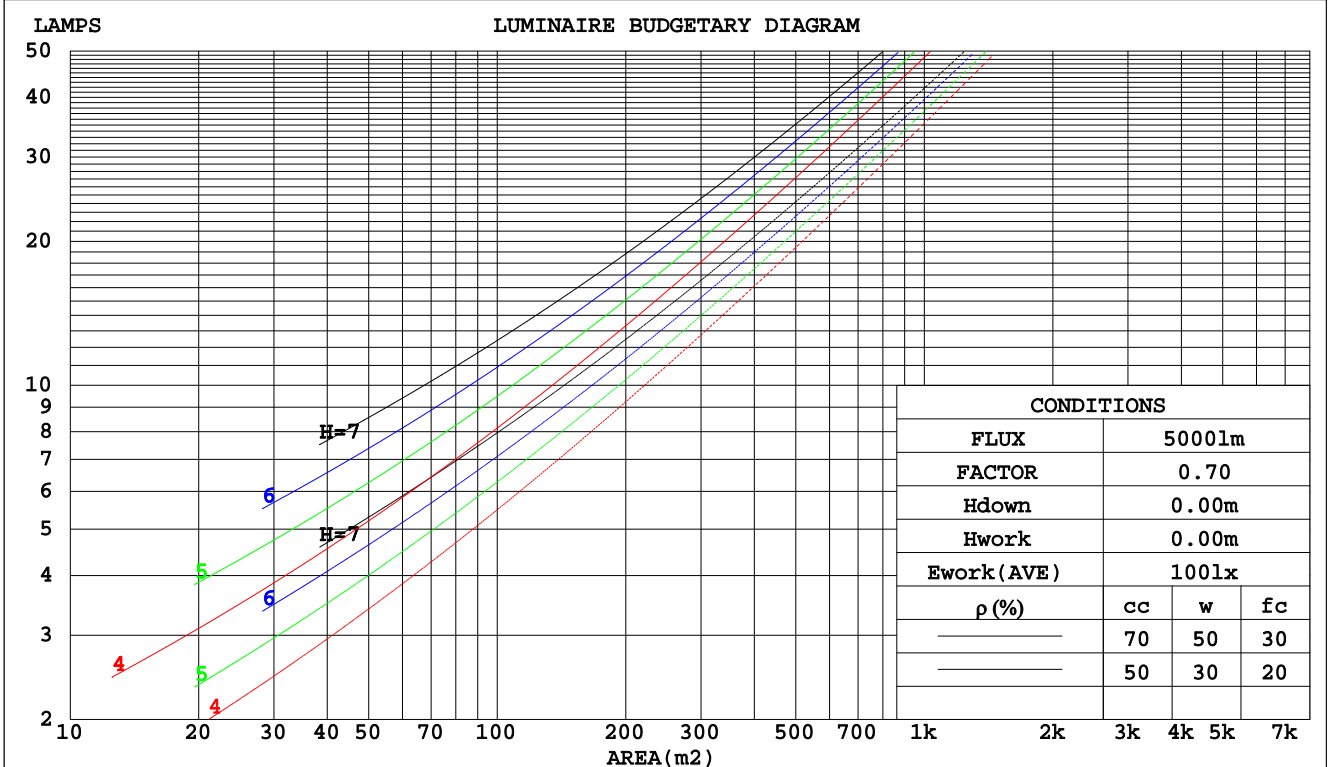
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CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

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NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	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																
pfc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.07	1.07	1.07	.99	.99	.99	.83	.83	.83	.69	.69	.69	.56	.56	.56	.50
1.0	.88	.82	.77	.81	.76	.72	.67	.64	.60	.55	.52	.50	.43	.41	.40	.34
2.0	.75	.67	.60	.68	.62	.56	.57	.52	.47	.46	.42	.39	.36	.33	.31	.26
3.0	.64	.56	.49	.59	.51	.45	.49	.43	.38	.40	.35	.31	.31	.27	.25	.20
4.0	.56	.47	.40	.52	.43	.37	.43	.36	.31	.35	.30	.26	.27	.23	.20	.16
5.0	.50	.41	.34	.46	.37	.31	.38	.31	.26	.31	.26	.22	.24	.20	.17	.14
6.0	.44	.35	.29	.41	.33	.27	.34	.27	.23	.28	.22	.19	.22	.18	.15	.12
7.0	.40	.31	.25	.37	.29	.23	.31	.24	.20	.25	.20	.16	.20	.16	.13	.10
8.0	.36	.28	.22	.33	.26	.20	.28	.22	.17	.23	.18	.14	.18	.14	.11	.09
9.0	.33	.25	.19	.30	.23	.18	.25	.19	.15	.21	.16	.13	.16	.13	.10	.08
10.0	.30	.22	.17	.28	.21	.16	.23	.18	.14	.19	.15	.11	.15	.12	.09	.07



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	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	.389	.221	.070	.367	.209	.066	.325	.186	.060	.286	.165	.053	.251	.145	.047	
2.0	.328	.180	.055	.308	.170	.052	.270	.150	.047	.234	.131	.041	.202	.114	.036	
3.0	.288	.153	.046	.270	.144	.043	.235	.127	.039	.202	.111	.034	.172	.095	.030	
4.0	.258	.134	.039	.241	.126	.037	.209	.111	.033	.179	.096	.029	.151	.082	.025	
5.0	.234	.119	.034	.218	.112	.033	.188	.098	.029	.161	.085	.025	.135	.072	.022	
6.0	.213	.107	.031	.199	.101	.029	.172	.088	.026	.146	.076	.022	.123	.065	.019	
7.0	.197	.097	.028	.183	.091	.026	.158	.080	.023	.134	.069	.020	.112	.058	.017	
8.0	.182	.089	.025	.170	.084	.024	.146	.073	.021	.124	.063	.018	.104	.053	.015	
9.0	.169	.082	.023	.158	.077	.022	.136	.067	.019	.116	.058	.017	.096	.049	.014	
10.0	.158	.076	.021	.148	.071	.020	.127	.062	.018	.108	.054	.015	.090	.045	.013	

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	.570	.570	.570	.487	.487	.487	.333	.333	.333	.191	.191	.191	.061	.061	.061	
1.0	.569	.538	.511	.486	.462	.440	.333	.318	.304	.192	.184	.177	.061	.059	.057	
2.0	.562	.517	.479	.482	.445	.414	.330	.308	.289	.190	.179	.169	.061	.058	.055	
3.0	.555	.502	.459	.476	.433	.398	.327	.301	.279	.189	.176	.165	.061	.057	.054	
4.0	.548	.490	.446	.470	.424	.388	.323	.295	.273	.187	.173	.161	.060	.056	.053	
5.0	.541	.481	.437	.464	.416	.380	.320	.291	.269	.185	.171	.159	.060	.056	.053	
6.0	.534	.474	.431	.459	.410	.375	.317	.287	.265	.184	.169	.158	.059	.055	.052	
7.0	.527	.468	.426	.453	.405	.371	.313	.284	.263	.182	.167	.157	.059	.055	.052	
8.0	.521	.463	.422	.448	.401	.368	.310	.282	.261	.180	.166	.156	.058	.054	.052	
9.0	.515	.458	.420	.444	.398	.366	.307	.279	.260	.179	.165	.155	.058	.054	.051	
10.0	.509	.454	.418	.439	.394	.364	.305	.278	.259	.178	.164	.154	.058	.054	.051	

C Range: 0 - 360DEG
 C Interval: 10.0DEG
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γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm										
NAME: 32"Genodome Pendant					TYPE:GDM-32P-PW-27U-30K			WEIGHT:6.5KH		
SPEC.:					DIM.:			SERIAL No.:		
MFR.: BlackJack Lighting LLC					SUR.:			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	4.5	5.5	5.3	6.4	7.6	4.9	6.0	5.8	6.9	8.0
3H	7.6	8.6	8.5	9.5	10.6	8.0	8.9	8.8	9.8	11.0
4H	9.5	10.4	10.4	11.3	12.5	9.7	10.6	10.6	11.5	12.7
6H	11.6	12.4	12.5	13.4	14.6	11.9	12.7	12.8	13.6	14.8
8H	12.8	13.6	13.7	14.5	15.8	13.0	13.8	13.9	14.8	16.0
12H	14.2	15.0	15.2	16.0	17.2	14.2	15.0	15.2	16.0	17.2
4H 2H	5.6	6.5	6.5	7.4	8.6	5.8	6.7	6.7	7.6	8.8
3H	8.7	9.5	9.6	10.4	11.7	8.8	9.6	9.7	10.5	11.8
4H	10.8	11.5	11.7	12.4	13.7	10.6	11.3	11.6	12.3	13.6
6H	13.1	13.7	14.1	14.7	16.0	12.9	13.6	13.9	14.6	15.8
8H	14.4	15.0	15.4	16.0	17.3	14.3	14.9	15.3	15.9	17.2
12H	15.9	16.5	16.9	17.5	18.8	15.8	16.3	16.7	17.3	18.6
8H 4H	11.3	11.9	12.3	12.9	14.2	11.2	11.8	12.1	12.7	14.0
6H	14.0	14.5	15.0	15.6	16.9	13.6	14.1	14.6	15.1	16.4
8H	15.5	16.0	16.5	17.0	18.3	15.1	15.6	16.1	16.6	17.9
12H	17.2	17.6	18.2	18.6	20.0	16.9	17.3	18.0	18.4	19.7
12H 4H	11.5	12.0	12.4	13.0	14.3	11.4	12.0	12.4	13.0	14.3
6H	14.3	14.7	15.3	15.8	17.1	13.9	14.4	14.9	15.4	16.7
8H	15.9	16.3	16.9	17.3	18.7	15.5	15.9	16.5	16.9	18.3
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.2				
1.5H	+ 0.2 / - 0.3					+ 0.3 / - 0.4				
2.0H	+ 0.3 / - 0.4					+ 0.4 / - 0.6				

CIE Pub.117, 1737 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 1.9)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:

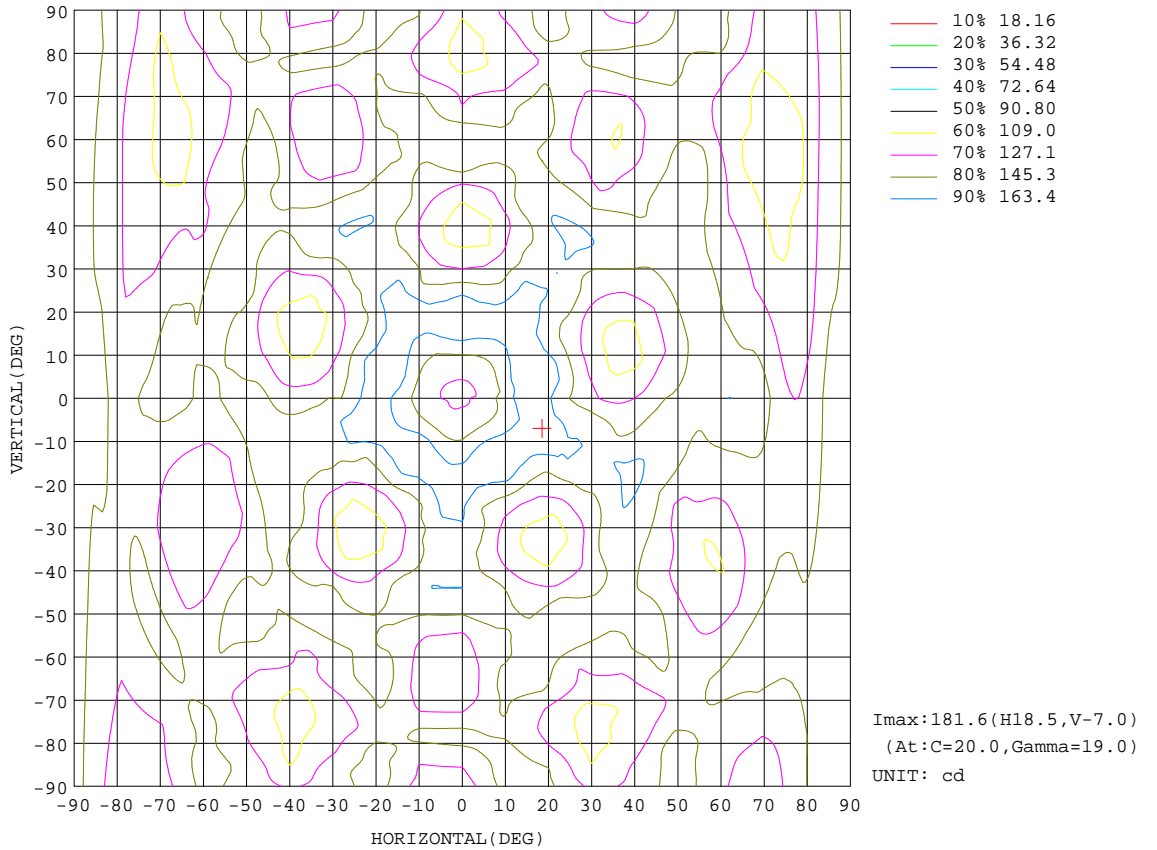
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	38	25	18	35	24	18	32	22	16	9
0.80	46	33	25	43	31	24	38	28	22	12
1.00	53	40	31	50	38	30	43	35	27	15
1.25	60	47	38	56	44	36	48	39	32	18
1.50	66	52	43	61	49	41	52	43	36	20
2.00	73	61	52	68	57	49	58	49	43	24
2.50	78	67	58	72	62	54	61	53	47	27
3.00	82	72	63	76	66	59	64	57	51	29
4.00	87	78	71	80	72	66	68	62	57	33
5.00	90	82	76	83	76	70	70	65	60	35
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:

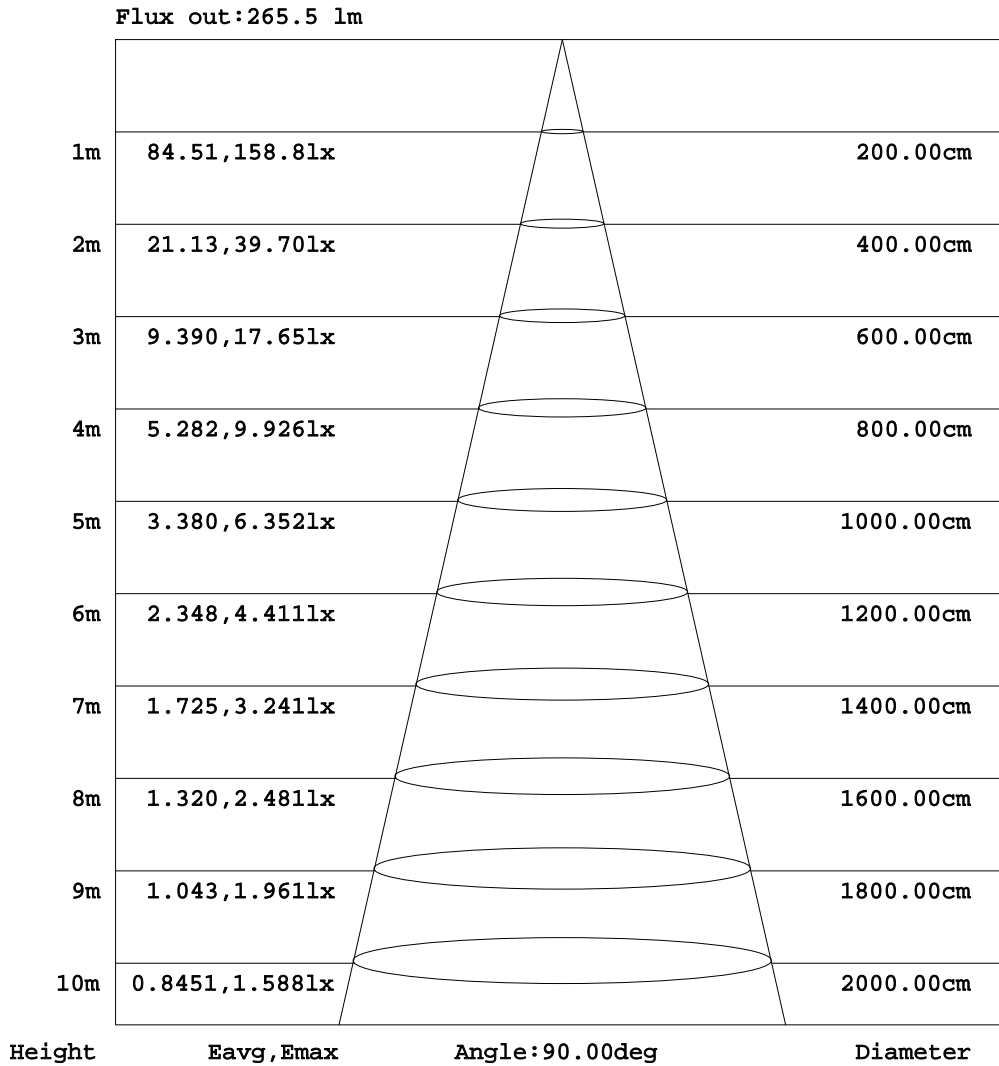


C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

AAI Figure

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:



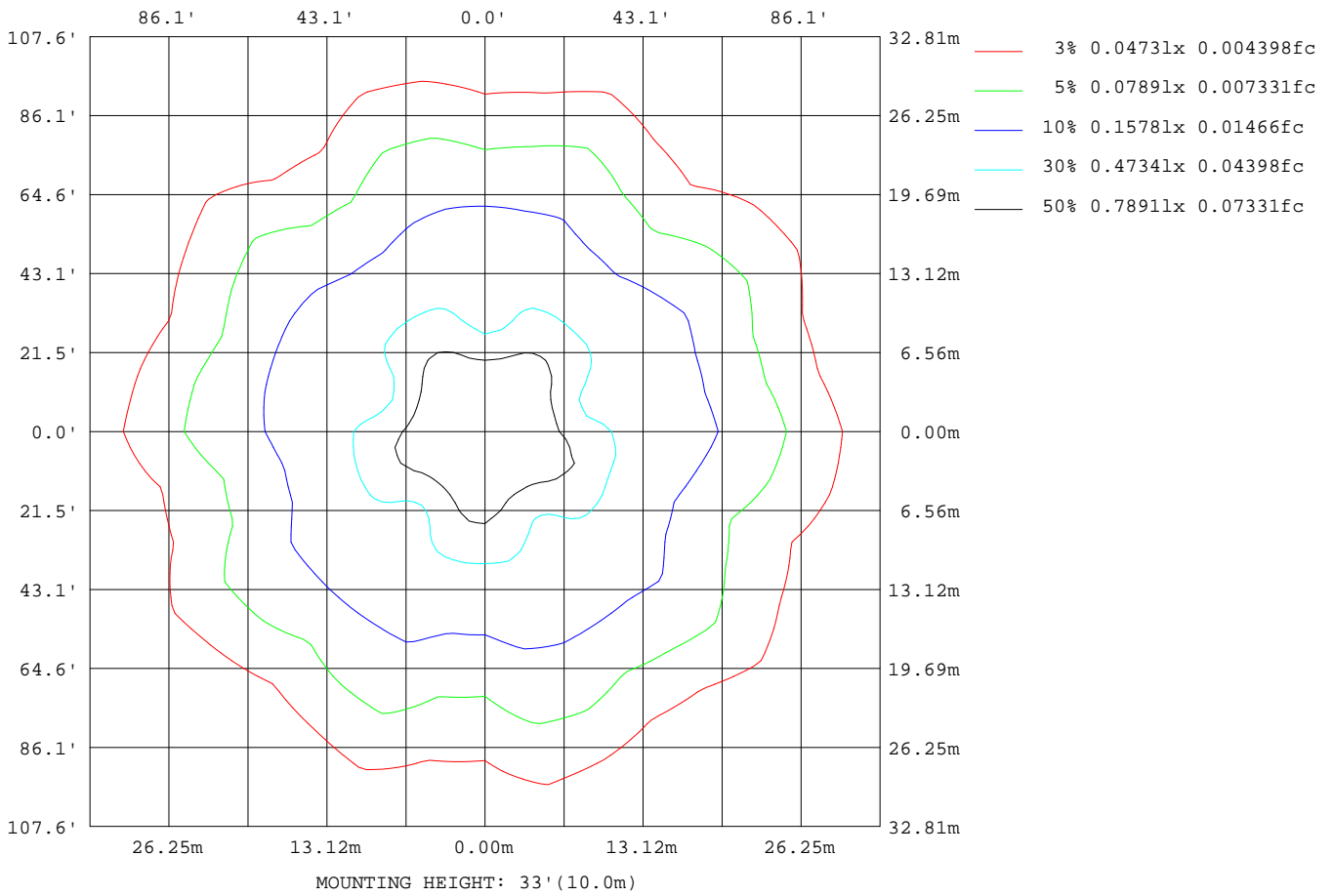
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:

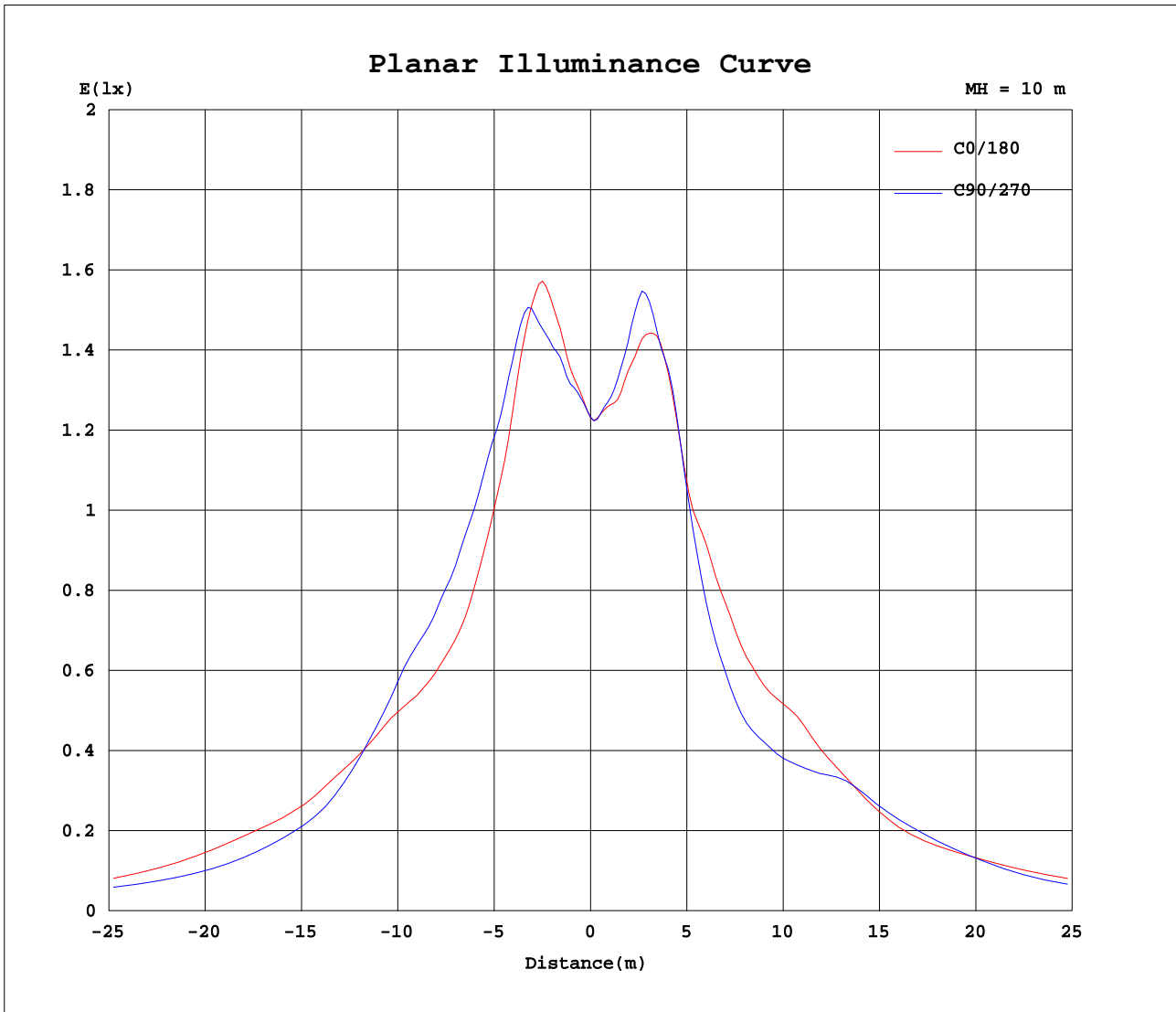
AvgL	cd/m2
L_0~180 (65) av	368
L_0~180 (75) av	531
L_0~180 (85) av	1732
L_90~270 (65) av	297
L_90~270 (75) av	479
L_90~270 (85) av	1338
L_45 (65) av	318
L_45 (75) av	489
L_45 (85) av	1580

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature:25.1DEG
Operators:Mark
Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:59.2%
Test Distance:2.463m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:

Table--1

UNIT: cd

C (DEG) γ (DEG)	0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
0	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123
5	135	134	134	133	133	134	134	133	133	132	131	130	130	131	130	129	129	129	127
10	155	151	149	150	151	155	157	154	150	146	146	146	147	149	148	145	143	142	138
15	174	172	167	170	172	173	173	171	169	163	161	166	170	173	170	165	158	155	158
20	166	168	181	173	166	166	169	166	166	176	178	170	166	168	167	168	174	177	171
25	145	158	167	164	146	143	144	143	148	166	169	150	146	149	147	148	168	170	157
30	131	157	163	160	138	122	118	125	146	161	156	143	127	119	125	140	157	160	146
35	123	148	162	154	133	106	103	113	138	157	156	138	111	102	109	135	156	156	140
40	127	146	166	154	135	109	103	118	138	158	157	137	111	99.3	108	135	154	157	136
45	140	159	164	163	151	123	116	131	155	162	163	153	124	110	123	151	162	163	146
50	149	156	144	154	154	132	143	139	156	146	149	151	133	137	133	152	150	149	153
55	152	139	123	134	150	154	154	152	142	125	128	143	151	150	149	145	129	127	148
60	161	137	115	126	153	148	150	152	142	118	120	145	149	147	148	144	121	119	140
65	160	136	106	124	158	138	129	153	148	111	116	154	143	126	144	154	114	112	151
70	151	138	114	127	150	125	120	142	147	117	121	150	133	117	135	151	118	116	153
75	130	143	139	136	134	111	104	125	143	138	138	140	119	102	120	141	136	136	145
80	130	149	148	146	137	115	102	126	148	147	145	144	121	102	122	143	147	147	136
85	151	148	133	133	157	125	108	143	153	129	127	153	133	105	133	150	127	128	151
90	153	146	113	130	157	130	123	149	152	116	119	155	136	125	138	151	118	116	153
95	150	128	105	118	145	142	147	149	134	107	109	139	145	146	146	137	107	107	145
100	140	122	100	113	130	144	146	146	125	105	109	127	142	147	143	126	107	106	125
105	147	133	113	122	148	128	119	141	147	119	120	149	133	117	135	149	118	118	142
110	153	152	124	139	159	124	108	140	159	132	134	159	130	106	131	159	133	132	157
115	146	154	143	141	161	126	113	138	164	145	142	163	132	110	134	163	142	143	166
120	140	155	155	157	146	131	121	137	154	156	153	153	136	121	136	154	153	154	152
125	149	146	151	143	154	146	137	150	150	146	142	151	151	139	151	150	143	144	153
130	155	136	125	129	152	159	158	158	144	125	124	146	160	161	161	146	124	124	149
135	151	126	105	113	138	157	171	151	129	106	107	130	151	171	152	131	107	107	137
140	138	115	101	103	126	148	162	144	123	101	102	121	145	159	147	124	102	103	128
145	145	116	108	106	127	155	159	155	124	112	112	126	155	160	157	128	114	115	129
150	150	132	127	128	136	157	165	157	137	134	136	138	156	169	158	139	137	138	139
155	156	148	154	155	149	160	175	164	153	162	165	156	164	178	167	156	165	166	152
160	168	160	156	152	147	147	150	147	147	152	159	162	167	167	167	168	169	170	171
165	142	134	123	110	102	99.4	95.9	97.7	102	110	119	125	130	132	140	148	155	157	158
170	98.9	87.6	73.3	60.2	50.7	42.4	38.1	38.9	46.4	55.6	65.4	74.6	81.4	90.0	99.2	109	117	122	131
175	59.2	51.9	44.2	38.9	34.1	28.4	23.8	24.8	27.8	31.5	35.4	39.3	45.5	52.7	60.3	65.1	69.8	74.2	99.8
180	13.1	13.9	18.7	21.7	22.4	23.5	23.9	21.9	22.2	23.3	23.5	20.0	20.0	19.1	15.4	14.8	13.9	12.6	22.2

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:119.98V I:0.1907A P:22.690W PF:0.9918 Freq:60.00Hz Lamp Flux:1736.97x1 lm		
NAME: 32"Genodome Pendant	TYPE:GDM-32P-PW-27U-30K	WEIGHT:6.5KH
SPEC.:	DIM.:	SERIAL No.:
MFR.: BlackJack Lighting LLC	SUR.:	Shielding Angle:

Table--2

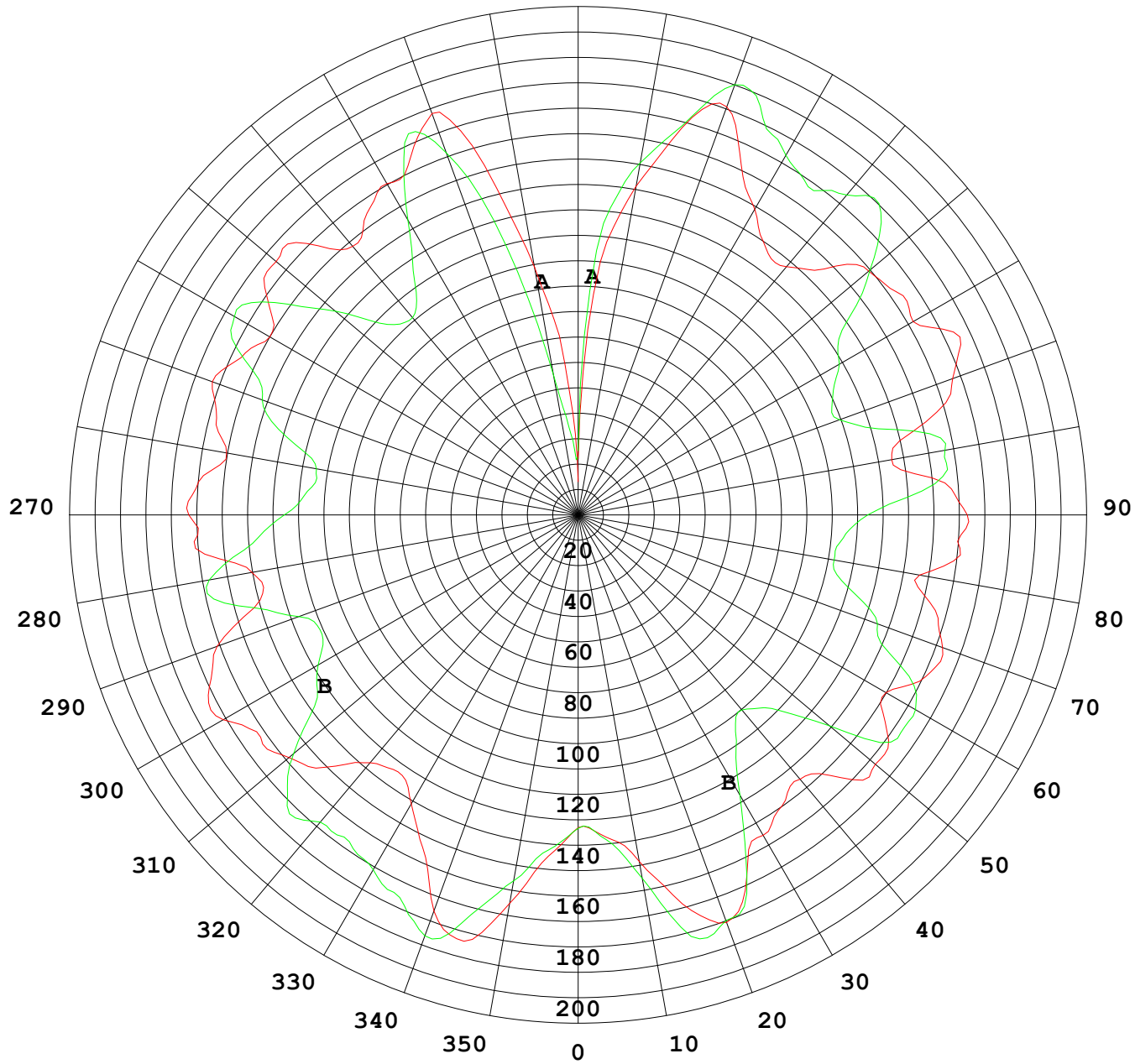
UNIT: cd

C (DEG) γ (DEG)	190	200	210	220	230	240	250	260	270	280	290	300	310	320	330	340	350		
0	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123	123		
5	127	127	127	127	128	128	128	128	128	128	129	129	130	130	131	131	131		
10	140	141	140	139	138	139	141	144	145	145	144	143	144	146	150	151	151		
15	165	168	164	159	155	155	163	169	172	168	165	161	160	167	171	174	173		
20	169	168	168	173	174	175	171	170	170	170	173	178	180	172	170	171	171		
25	155	159	156	156	174	171	156	154	157	153	154	171	173	157	150	153	152		
30	132	129	133	145	164	165	146	131	127	131	144	165	165	155	133	125	126		
35	113	109	112	139	157	160	142	114	109	112	135	157	163	151	121	108	107		
40	110	99.7	109	135	156	158	137	113	100	108	134	153	165	142	124	103	104		
45	121	103	119	146	164	164	148	123	108	119	146	164	170	156	134	116	117		
50	132	125	130	153	157	154	154	136	129	131	155	157	151	157	146	133	133		
55	142	149	142	149	135	133	149	145	153	145	154	138	129	146	154	154	152		
60	152	152	154	141	123	122	141	155	153	152	147	128	119	140	159	153	150		
65	146	138	144	151	115	113	147	152	140	140	158	121	107	136	162	136	134		
70	142	122	138	153	116	112	150	148	125	133	152	124	110	140	154	126	127		
75	123	106	121	145	127	127	147	127	110	117	142	130	130	143	135	110	110		
80	119	99.4	120	136	149	149	141	124	102	115	132	148	149	148	128	107	107		
85	128	104	127	154	134	137	154	133	105	119	154	135	141	148	146	108	108		
90	141	114	138	156	124	122	154	146	114	130	155	131	117	147	151	120	121		
95	144	144	140	150	114	110	143	147	141	134	152	120	107	134	151	134	135		
100	148	147	147	126	107	104	125	148	146	148	131	113	102	123	139	149	149		
105	133	126	134	138	110	111	137	139	130	131	140	116	108	127	146	130	130		
110	132	108	132	155	129	128	158	141	109	125	154	133	120	147	152	114	114		
115	132	109	132	164	135	135	163	136	111	126	163	138	132	152	150	114	115		
120	134	118	134	153	154	154	154	136	119	129	149	152	150	154	141	121	122		
125	144	130	144	153	151	152	152	143	127	138	153	151	154	148	146	130	131		
130	160	153	159	146	130	131	147	159	150	157	152	132	136	136	155	152	152		
135	158	171	157	135	112	114	138	159	168	161	146	120	112	129	156	167	165		
140	149	162	147	125	101	103	125	145	164	151	132	105	101	115	139	159	159		
145	155	157	151	124	107	108	125	151	158	153	129	106	103	113	140	158	158		
150	160	166	154	134	128	127	137	160	163	155	133	123	120	127	147	159	158		
155	167	174	157	149	155	153	149	162	172	160	146	147	147	143	148	169	169		
160	173	178	174	169	171	170	166	171	180	172	166	167	168	164	164	173	178		
165	156	151	156	164	171	173	170	164	159	161	167	170	172	172	169	164	157		
170	132	132	135	140	143	145	145	142	141	141	145	149	153	153	149	141	131		
175	100	104	105	105	105	108	111	113	115	116	116	115	114	113	108	103	97.0		
180	22.4	22.2	23.0	23.7	23.1	22.7	23.1	23.9	25.3	27.0	27.9	27.5	27.1	27.3	27.3	28.0	29.1		

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.1DEG
 Operators:Mark
 Test Date:13 August 2019

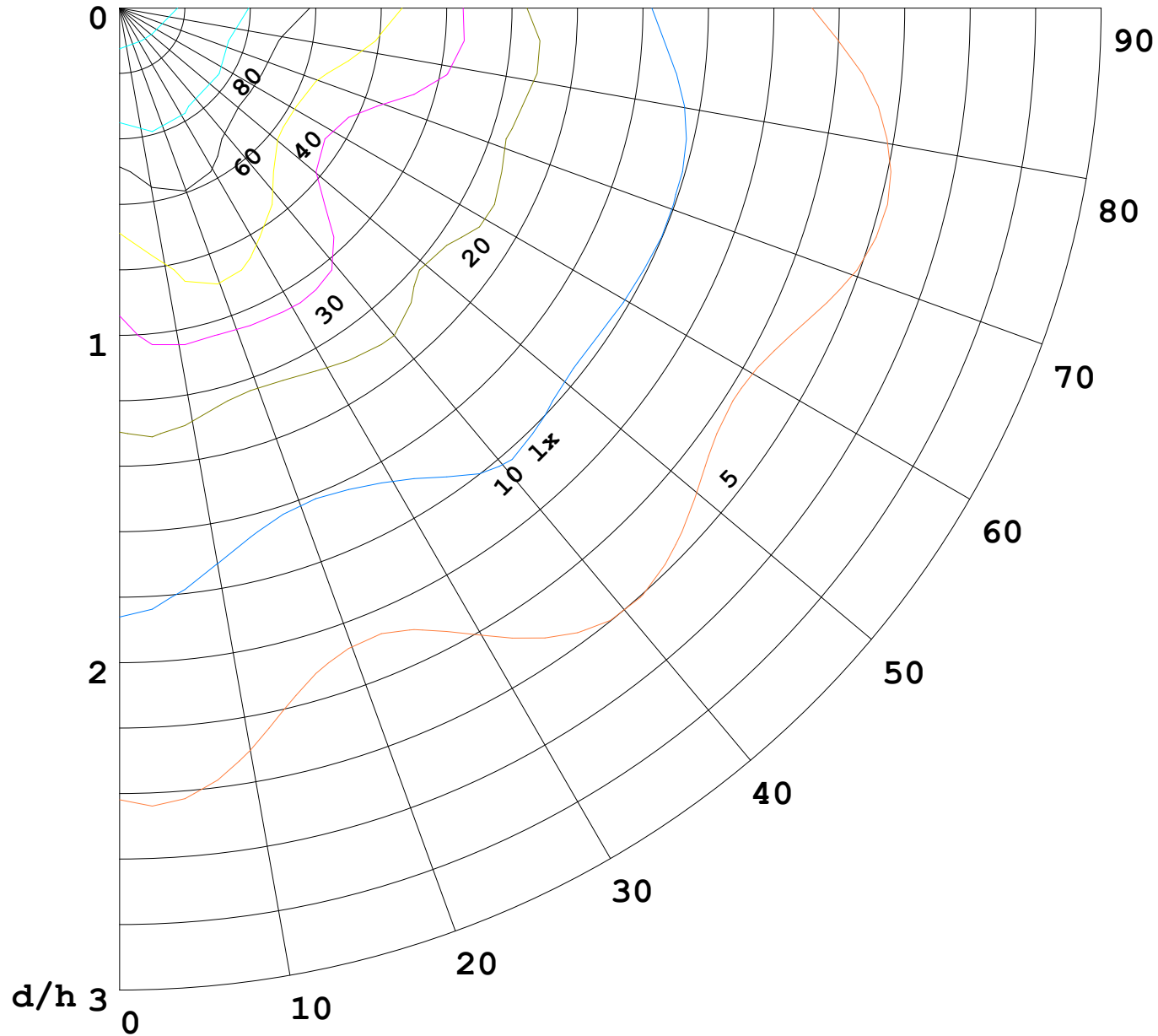
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:59.2%
 Test Distance:2.463m [K=1.0000]
 Remarks:

I (cd)



1000 lm

$\kappa = 1$



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

