



IESNA LM-79 TEST REPORT

Applicant's name	Blackjack Lighting
Address	1553 Barclay Blvd. Buffalo Grove, IL 60089
Brand Name	Blackjack Lighting
Report No.	BTR66.181.17.0031.11
Product Name	Facets 32" Chandelier -Polished Chrome
Model Number	FAC-32C-PC

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	Jun 07, 2018	

Testing Laboratory Name	BEST Test Service Shenzhen Co., Ltd.
Address	1 st Floor, 1 st Building, Weitai Industrial Park, Yingrenshi, Shiyao, Baoan, Shenzhen, China
Accreditation	DLC/Lighting Facts/UL/ETL/ELI/CEC/EPA/DOE NVLAP Testing Lab Code: 200770-0
	Tel:+86-755-28236006 , Email: certification@bestcert.cn

Test specification	
Standard	IESNA LM-79
Test procedure	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

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description:	
Test date	May 29, 2018 to Jun 14, 2018
Sample Quantity	1 unit
SKU.....	N/A
Rating(s) (V; Hz)	120V 60HZ
Nominal Power.....	42W
Nominal Power Factor	N/A
Nominal Lumen Output.....	2600LM
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	1.5 H
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	1.12%
Deviation from standard operating procedures,	None

Photometric and Electrical Measurement

Total light output (luminous flux) for the 25°C ±1°C ambient temperature conditions is measured using a EVERFINE 2.0 m 4 II geometry integrating sphere. Temperature is measured at a position inside the sphere. Spectral radiant flux measurements are made using Integral Sphere to the detector port of the integrating sphere. Each lamp is operated at rated voltage in its designated orientation by a CHROMA 61602 AC SOURCE. Each lamp should be stable before measurements are made as below:

Step 1 Take 3 measurements of the lamp light output at 15 minute interval (total time=30mintues.)This time period is in addition to the recommended pre-burning time.

Step 2 Calculate the percent difference between the maximum measured value and the minimum measured value for 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 are calculated from the spectral radiant flux measurements taken at 2 nm intervals over the range 380 to 780 nm by EVERFINE HASS-2000. The calibration of the sphere photometer-spectrometer system is traceable to the NIM China by a calibrated halogen incandescent lamp. Lamp efficacy (lumens per watts) for each lamp model is computed based on the revised luminous flux result. Electrical measurements including voltage, current, power and power factor are measured using the YOKOGAWA WT310 digital power Meter.

The total uncertainty of the light output measurements is estimated, at the 95% confidence level, not to exceed ±1.12% over the wavelength range 380-780 nm.

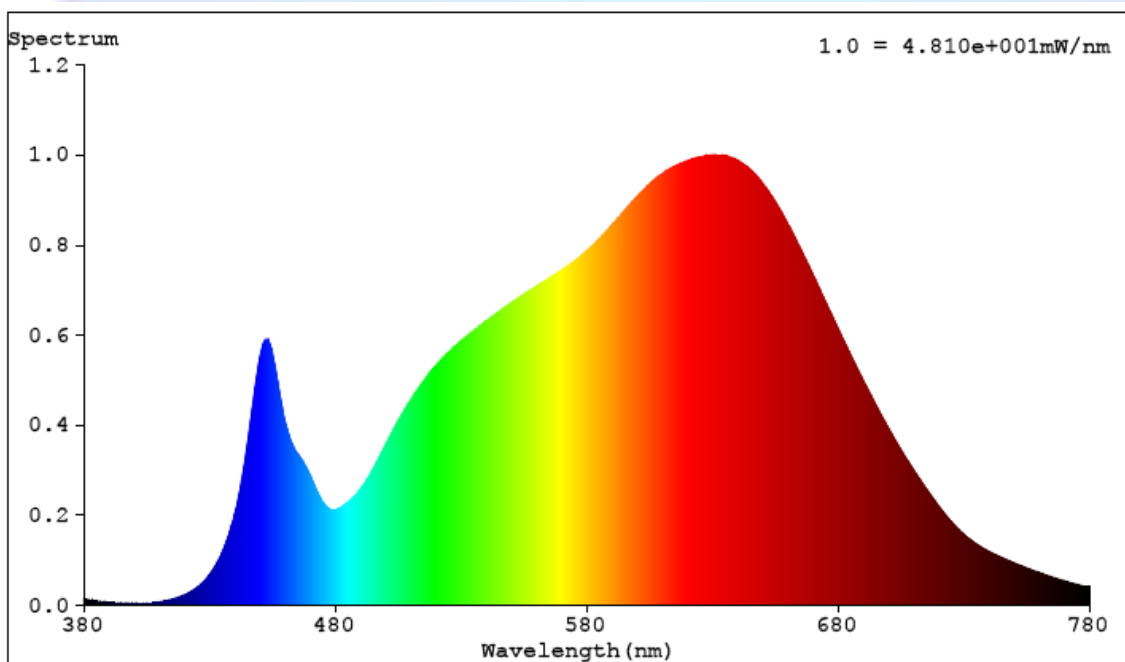
Luminous Intensity

A Everfine GOR-5000 Goniophotometer was used to measure the intensity at each angle of distribution, Luminous intensity (cd) is measured within each vertical plane at a 5° vertical angle increment (maximum) from 0° to 180° Luminous intensity (cd), measurements repeated in vertical planes about the lamp (polar) axis in maximum increments of 22.5° from 0° to 180°, and export the intensity (cd) with excel format. The test distance is 25meters from the Goniophotometer to the detector

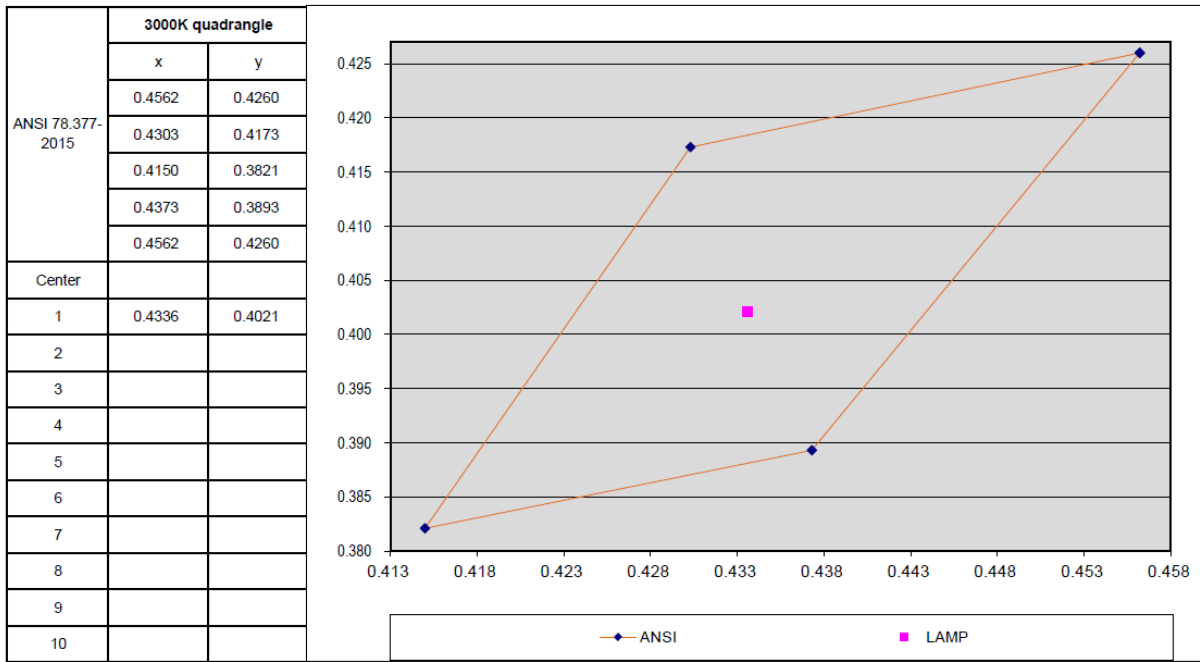
Photometric and Electrical Test Data

Input Voltage (V)	Frequency (Hz)	Input Current (A)	ITHD	Input Power (W)	Power Factor	Lumen Output (Lumens)	Efficiency Lumen/w
120.0	60.0	0.3477	/	41.53	0.9948	2639.26	63.55
CCT (K)	CRI (Ra)	R9	x CIE1931	y CIE1931	u' CIE1976	v' CIE1976	Duv CIE1976
3042	94.0	73	0.4336	0.4021	0.2492	0.5201	-0.0003

Spectrul Plots



7 Step Quadrangle



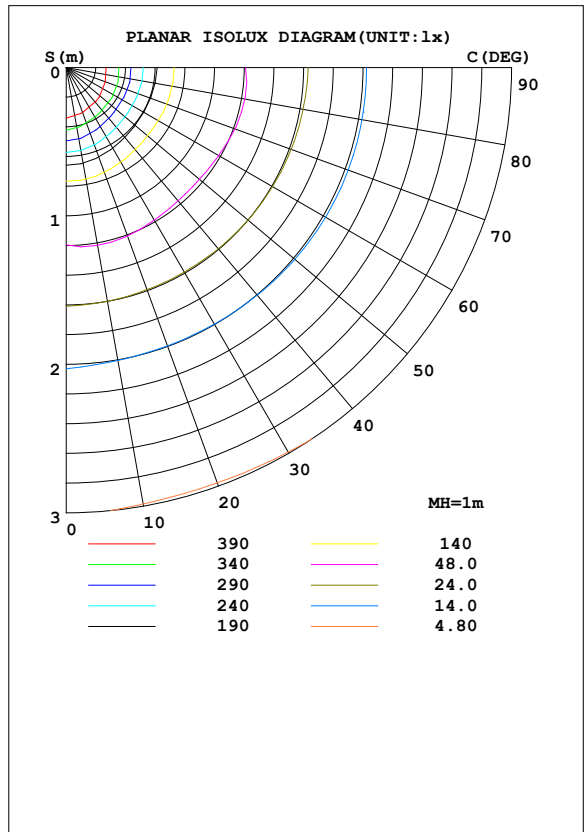
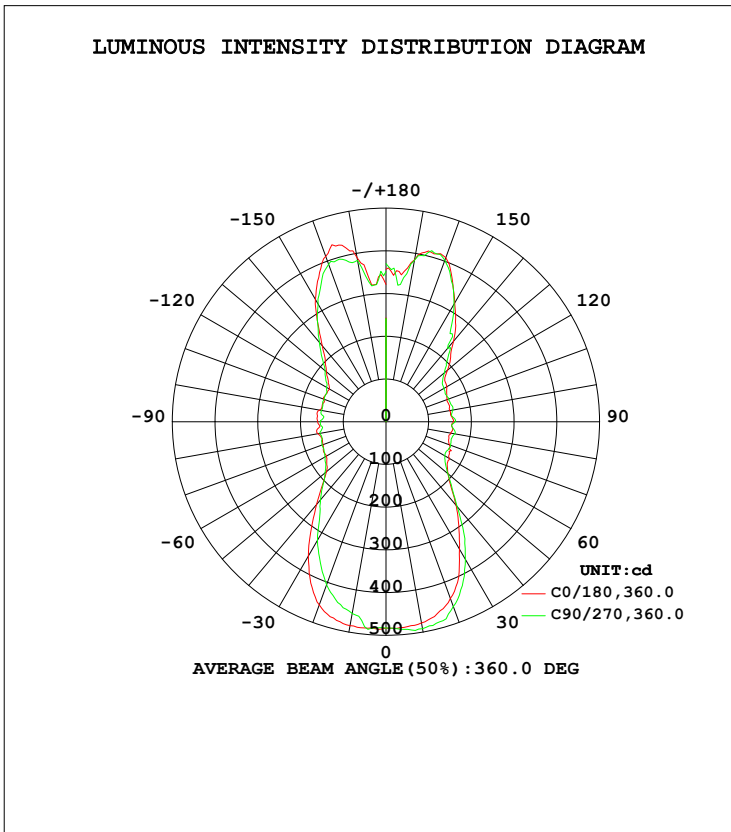
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LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 63.55 lm/W			
MODEL	FAC-32C-PC	I _{max} (cd)	495.6	S/MH (C0/180)	1.09
NOMINAL POWER (W)	42	LOR (%)	100.0	S/MH (C90/270)	1.16
RATED VOLTAGE (V)	120.0	TOTAL FLUX (lm)	2639.3	η UP, DN (C0-180)	24.3,25.2
NOMINAL FLUX (lm)	2639.26	CIE CLASS	DIFFUSE	η UP, DN (C180-360)	24.4,26.0
LAMPS INSIDE	1	η up (%)	48.7	CIBSE SHR NOM	1.00
TEST VOLTAGE (V)	120.0	η down (%)	51.3	CIBSE SHR MAX	1.15



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.6DEG
 Operators: David
 Test Date: 07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 67.1%
 Test Distance: 2.455m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

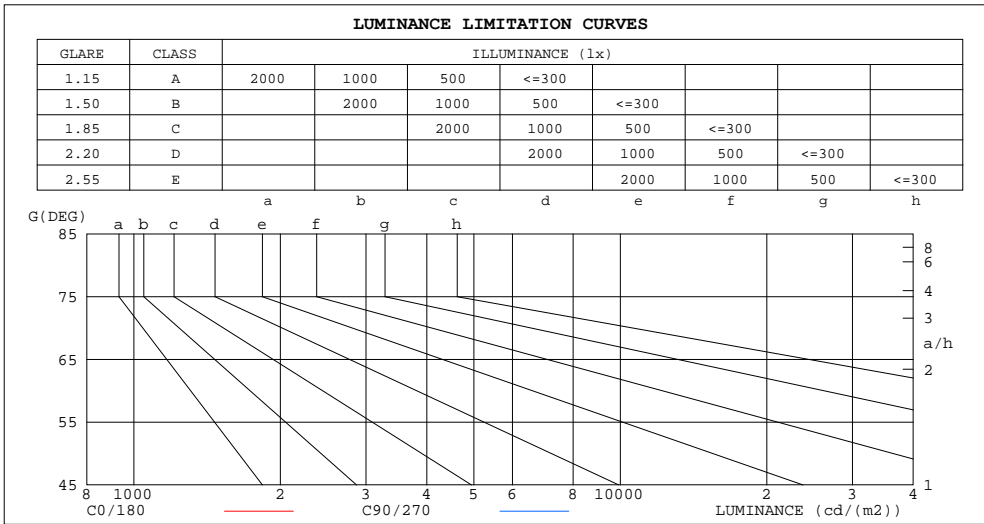
γ	C0	C45	C90	C135	C180	C225	C270	C315	γ	Φ zone	Φ total	#lum,lamp
10	484.8	472.2	455.8	472.0	478.1	486.9	492.0	491.7	0- 10	46.03	46.03	1.74,1.74
20	456.5	418.7	406.4	419.6	440.4	449.6	460.6	460.4	10- 20	131.1	177.1	6.71,6.71
30	363.5	317.9	321.0	321.1	344.2	358.0	371.8	363.5	20- 30	181.3	358.4	13.6,13.6
40	253.2	226.7	238.7	231.1	255.3	256.5	259.1	258.1	30- 40	182.8	541.2	20.5,20.5
50	182.1	172.4	186.6	189.4	189.8	184.4	189.1	190.9	40- 50	164.7	705.9	26.7,26.7
60	161.5	158.8	165.1	175.9	171.6	155.6	159.0	155.8	50- 60	155.3	861.2	32.6,32.6
70	157.3	156.8	159.4	156.7	158.3	149.4	161.0	154.5	60- 70	157.5	1019	38.6,38.6
80	161.7	159.3	157.2	157.7	153.8	152.3	163.9	155.7	70- 80	165.3	1184	44.9,44.9
90	159.8	161.6	154.2	156.6	158.0	147.8	161.8	159.1	80- 90	169.8	1354	51.3,51.3
100	158.1	161.2	153.4	153.5	151.3	147.6	158.6	159.8	90-100	168.9	1523	57.7,57.7
110	155.1	156.5	154.0	152.3	152.0	147.6	156.3	152.6	100-110	163.4	1686	63.9,63.9
120	153.3	156.6	160.9	171.1	164.7	151.6	156.4	152.8	110-120	154.1	1840	69.7,69.7
130	182.4	168.3	186.7	191.1	187.9	175.3	178.6	177.0	120-130	151.9	1992	75.5,75.5
140	232.4	216.5	242.7	236.7	246.2	230.6	224.7	232.6	130-140	158.0	2150	81.5,81.5
150	330.4	307.9	318.1	312.8	321.8	320.0	319.0	330.5	140-150	171.4	2321	88,88
160	412.1	408.0	392.6	399.1	409.0	412.0	402.8	420.9	150-160	168.4	2490	94.3,94.3
170	389.7	365.4	384.0	373.5	385.1	387.8	383.9	383.1	160-170	115.8	2606	98.7,98.7
180	321.6	342.8	351.9	361.9	357.2	395.5	370.1	347.0	170-180	33.57	2639	100,100
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.6DEG
 Operators:David
 Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:67.1%
 Test Distance:2.455m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	Shielding Angle:



LUMINANCE cd/(m2)		
G(DEG)	C0/180	C90/270
85	300422	284423
80	154941	150575
75	99427	99363
70	76547	77545
65	63672	62989
60	53771	54948
55	49159	49965
50	47149	48287
45	49738	48983

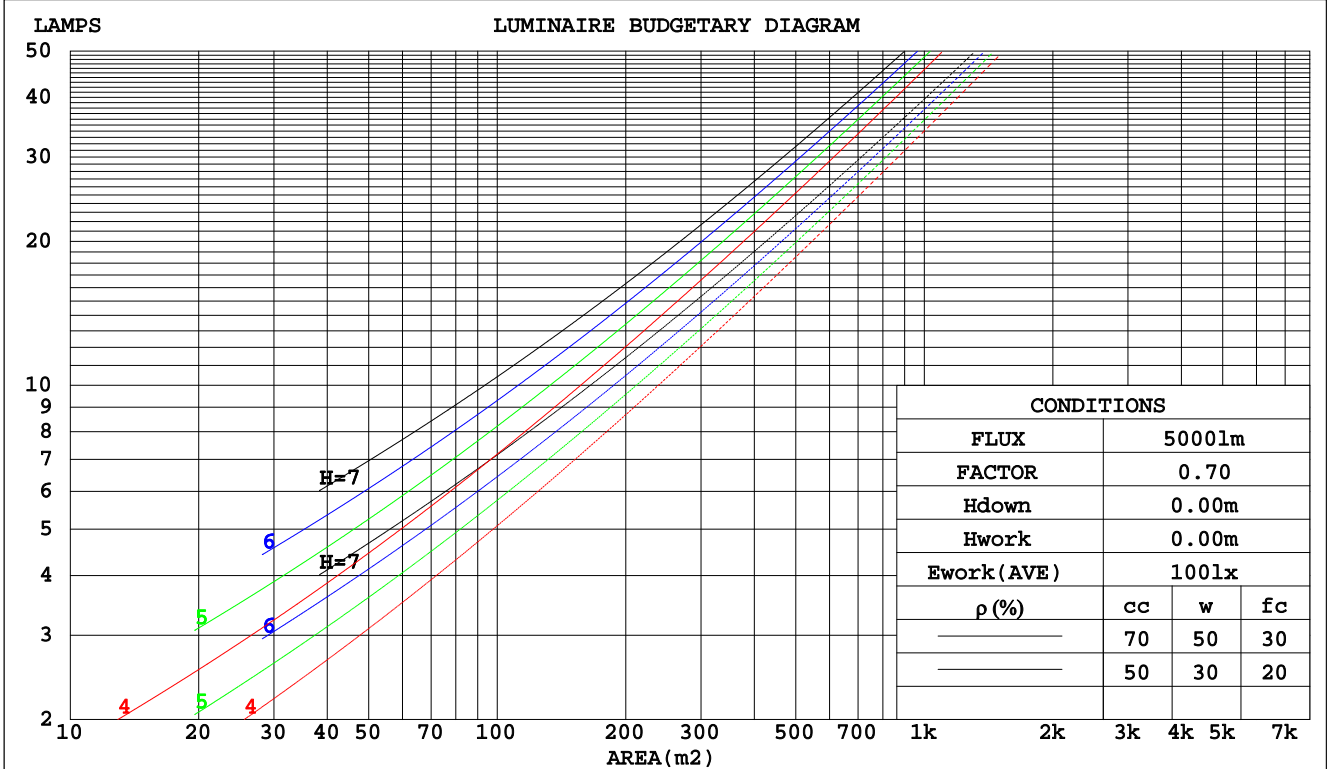
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 Humidity:67.1%
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 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	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	1.07	1.07	1.07	.99	.99	.99	.84	.84	.84	.70	.70	.70	.57	.57	.57	.51
1.0	.90	.85	.81	.83	.79	.75	.70	.67	.64	.58	.55	.53	.47	.45	.43	.38
2.0	.78	.71	.65	.72	.66	.60	.60	.56	.52	.50	.46	.43	.40	.38	.35	.31
3.0	.68	.60	.53	.63	.56	.50	.53	.47	.43	.44	.40	.36	.35	.32	.30	.25
4.0	.60	.52	.45	.56	.48	.42	.47	.41	.36	.39	.35	.31	.32	.28	.25	.22
5.0	.54	.45	.39	.50	.42	.36	.42	.36	.31	.35	.30	.27	.29	.25	.22	.19
6.0	.48	.40	.34	.45	.37	.32	.38	.32	.28	.32	.27	.24	.26	.22	.20	.17
7.0	.44	.35	.30	.41	.33	.28	.35	.29	.24	.29	.24	.21	.24	.20	.18	.15
8.0	.40	.32	.26	.37	.30	.25	.32	.26	.22	.27	.22	.19	.22	.19	.16	.13
9.0	.36	.29	.23	.34	.27	.22	.29	.23	.20	.25	.20	.17	.21	.17	.14	.12
10.0	.33	.26	.21	.31	.24	.20	.27	.21	.18	.23	.19	.15	.19	.16	.13	.11



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.6DEG
 Operators:David
 Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:67.1%
 Test Distance:2.455m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	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	.350	.199	.063	.328	.187	.059	.287	.165	.053	.249	.144	.046	.215	.124	.040	
2.0	.300	.165	.050	.280	.154	.048	.243	.135	.042	.208	.117	.037	.177	.100	.031	
3.0	.267	.142	.042	.248	.133	.040	.214	.116	.035	.183	.100	.031	.153	.085	.026	
4.0	.240	.125	.037	.224	.117	.035	.193	.102	.030	.164	.088	.026	.136	.074	.023	
5.0	.219	.112	.032	.204	.105	.031	.175	.091	.027	.148	.078	.023	.123	.066	.020	
6.0	.202	.101	.029	.188	.095	.027	.161	.083	.024	.136	.071	.021	.113	.059	.018	
7.0	.187	.092	.026	.174	.086	.025	.149	.075	.022	.126	.065	.019	.104	.054	.016	
8.0	.174	.085	.024	.162	.080	.022	.139	.069	.020	.117	.059	.017	.097	.050	.014	
9.0	.162	.078	.022	.151	.074	.021	.130	.064	.018	.110	.055	.016	.091	.046	.013	
10.0	.152	.073	.020	.142	.068	.019	.122	.060	.017	.103	.051	.015	.085	.043	.012	

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	.562	.562	.562	.480	.480	.480	.328	.328	.328	.188	.188	.188	.060	.060	.060	
1.0	.557	.530	.505	.477	.455	.435	.326	.313	.301	.188	.181	.175	.060	.058	.057	
2.0	.550	.509	.474	.471	.438	.409	.323	.303	.286	.186	.176	.167	.060	.057	.055	
3.0	.543	.493	.453	.465	.425	.393	.319	.295	.276	.184	.173	.163	.059	.056	.053	
4.0	.535	.481	.440	.459	.416	.382	.316	.290	.269	.183	.170	.159	.059	.055	.052	
5.0	.528	.472	.431	.453	.408	.375	.312	.285	.264	.181	.167	.157	.058	.055	.052	
6.0	.521	.464	.424	.448	.402	.369	.309	.282	.261	.179	.166	.155	.058	.054	.051	
7.0	.515	.458	.419	.443	.397	.365	.306	.278	.259	.178	.164	.154	.057	.054	.051	
8.0	.508	.453	.415	.438	.393	.362	.303	.276	.257	.176	.163	.153	.057	.053	.051	
9.0	.503	.448	.412	.433	.389	.359	.300	.274	.255	.175	.162	.152	.057	.053	.050	
10.0	.498	.445	.409	.429	.386	.357	.298	.272	.254	.174	.161	.151	.056	.053	.050	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.6DEG
 Operators:David
 Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:67.1%
 Test Distance:2.455m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm										
NAME:			TYPE:FAC-32C-PC				WEIGHT:			
SPEC.:			DIM.:				SERIAL No.:			
MFR.: Blackjack Lighting			SUR.:0				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	22.4	23.4	23.2	24.2	25.3	22.5	23.5	23.3	24.3	25.4
3H	25.2	26.1	26.1	27.0	28.1	25.4	26.3	26.2	27.1	28.3
4H	26.9	27.7	27.8	28.6	29.8	27.0	27.9	27.9	28.8	29.9
6H	28.9	29.7	29.8	30.6	31.8	29.0	29.7	29.9	30.7	31.8
8H	30.1	30.8	31.0	31.8	32.9	30.0	30.8	30.9	31.7	32.9
12H	31.4	32.1	32.3	33.0	34.2	31.2	31.9	32.1	32.9	34.1
4H 2H	23.2	24.1	24.1	25.0	26.1	23.3	24.1	24.2	25.0	26.2
3H	26.2	26.9	27.1	27.9	29.0	26.4	27.1	27.3	28.0	29.2
4H	28.0	28.7	29.0	29.7	30.9	28.2	28.9	29.2	29.8	31.0
6H	30.2	30.8	31.2	31.8	33.0	30.3	30.9	31.3	31.9	33.1
8H	31.5	32.0	32.5	33.0	34.3	31.5	32.0	32.5	33.0	34.3
12H	32.9	33.4	33.9	34.4	35.6	32.7	33.3	33.7	34.2	35.5
8H 4H	28.8	29.3	29.7	30.3	31.6	28.9	29.5	29.9	30.4	31.7
6H	31.2	31.6	32.2	32.6	33.9	31.3	31.8	32.3	32.8	34.0
8H	32.6	33.0	33.6	34.0	35.3	32.6	33.0	33.6	34.0	35.3
12H	34.2	34.5	35.2	35.6	36.9	34.1	34.4	35.1	35.5	36.8
12H 4H	29.0	29.5	30.0	30.5	31.7	29.1	29.6	30.1	30.6	31.9
6H	31.5	31.9	32.5	32.9	34.2	31.6	32.0	32.6	33.0	34.3
8H	33.0	33.4	34.0	34.4	35.7	33.0	33.4	34.0	34.4	35.7
Variations with the observer position at spacings:										
S = 1.0H	+ 0.1 / - 0.1					+ 0.1 / - 0.1				
1.5H	+ 0.2 / - 0.2					+ 0.2 / - 0.3				
2.0H	+ 0.3 / - 0.3					+ 0.3 / - 0.4				

CIE Pub.117, 2639 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 3.4)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.6DEG
 Operators:David
 Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:67.1%
 Test Distance:2.455m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	Shielding Angle:

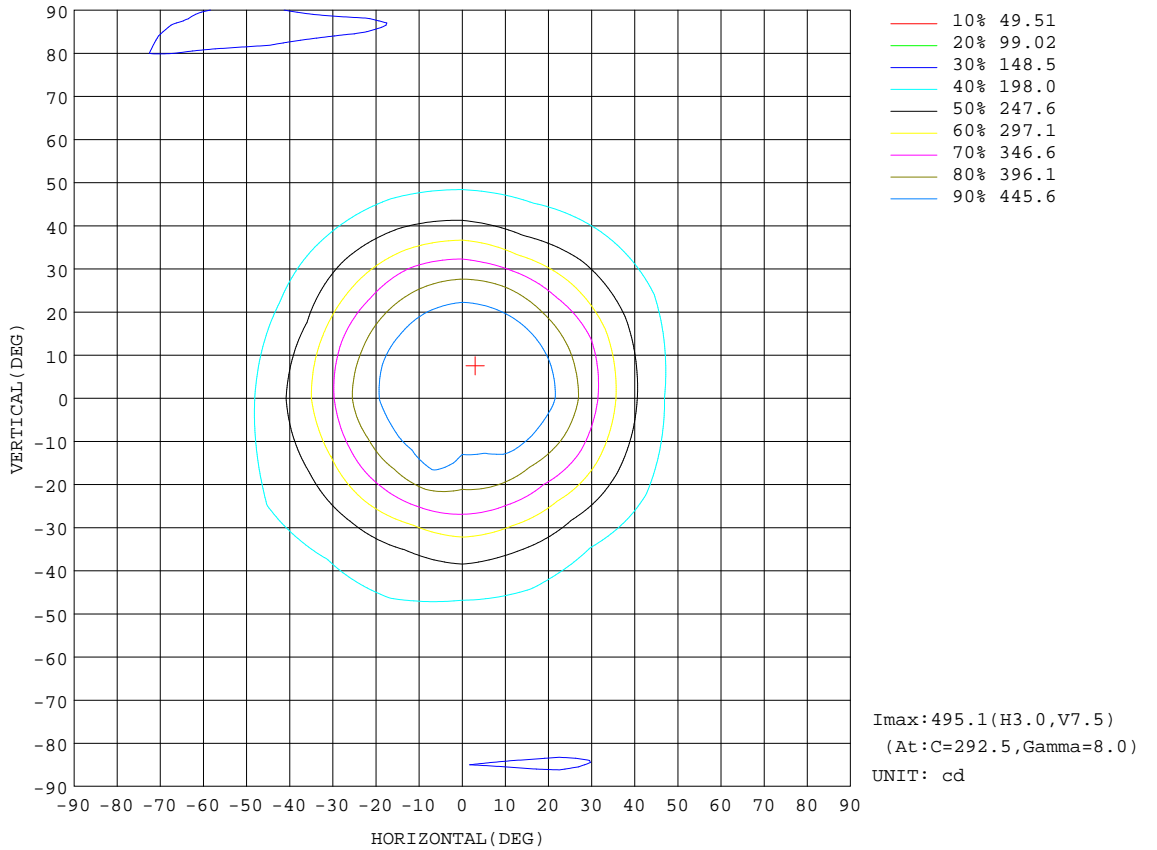
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	43	31	25	41	30	24	37	28	23	15
0.80	51	39	32	48	37	31	43	34	28	19
1.00	58	46	38	55	44	36	48	41	33	22
1.25	65	53	44	61	50	42	53	44	38	25
1.50	70	58	50	65	55	47	56	48	42	27
2.00	77	66	58	71	62	54	61	54	48	30
2.50	81	71	63	75	67	60	65	58	52	32
3.00	85	76	68	79	71	64	67	61	56	35
4.00	90	82	75	83	76	70	71	65	61	37
5.00	93	86	80	86	80	74	73	68	64	39
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.6DEG
 Operators:David
 Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:67.1%
 Test Distance:2.455m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	Shielding Angle:

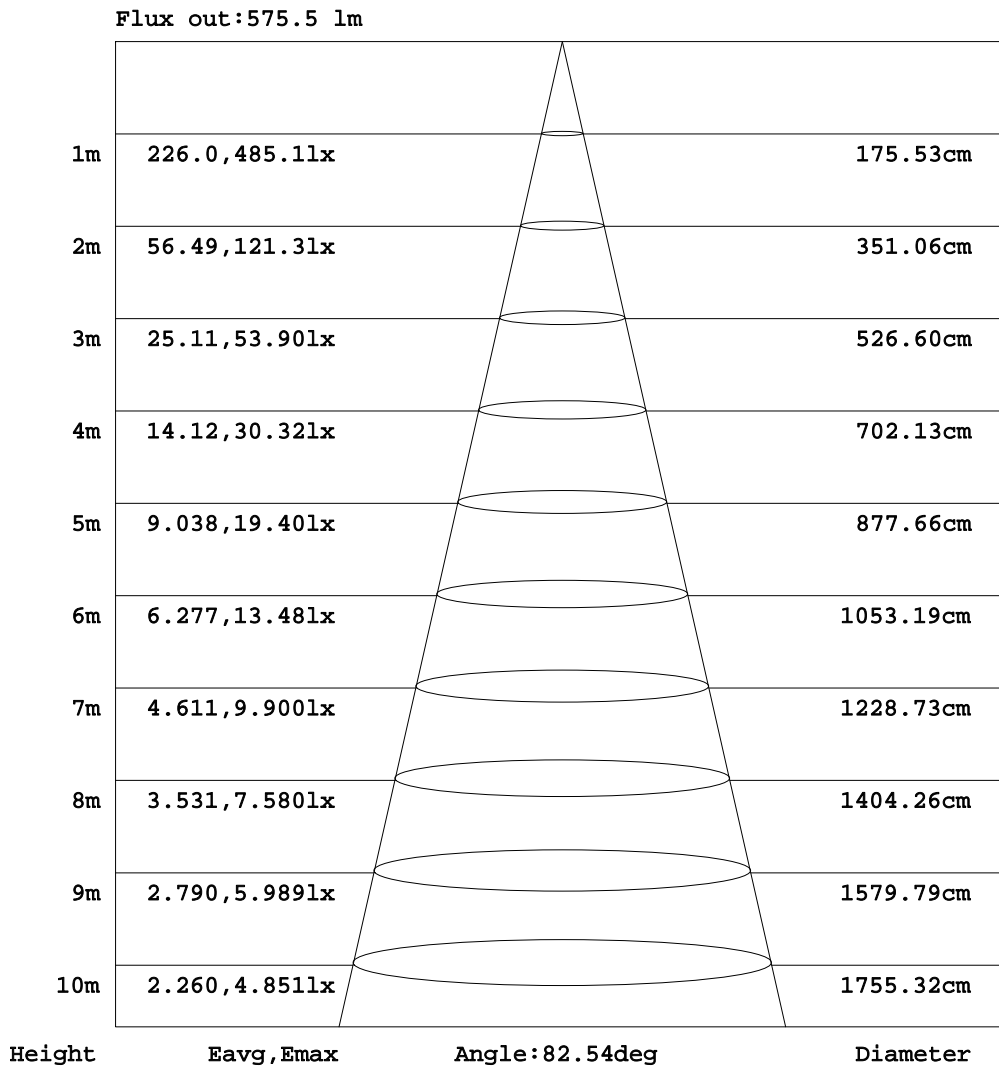


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.6DEG
 Operators: David
 Test Date: 07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 67.1%
 Test Distance: 2.455m [K=1.0000]
 Remarks:

AAI Figure

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	Shielding Angle:



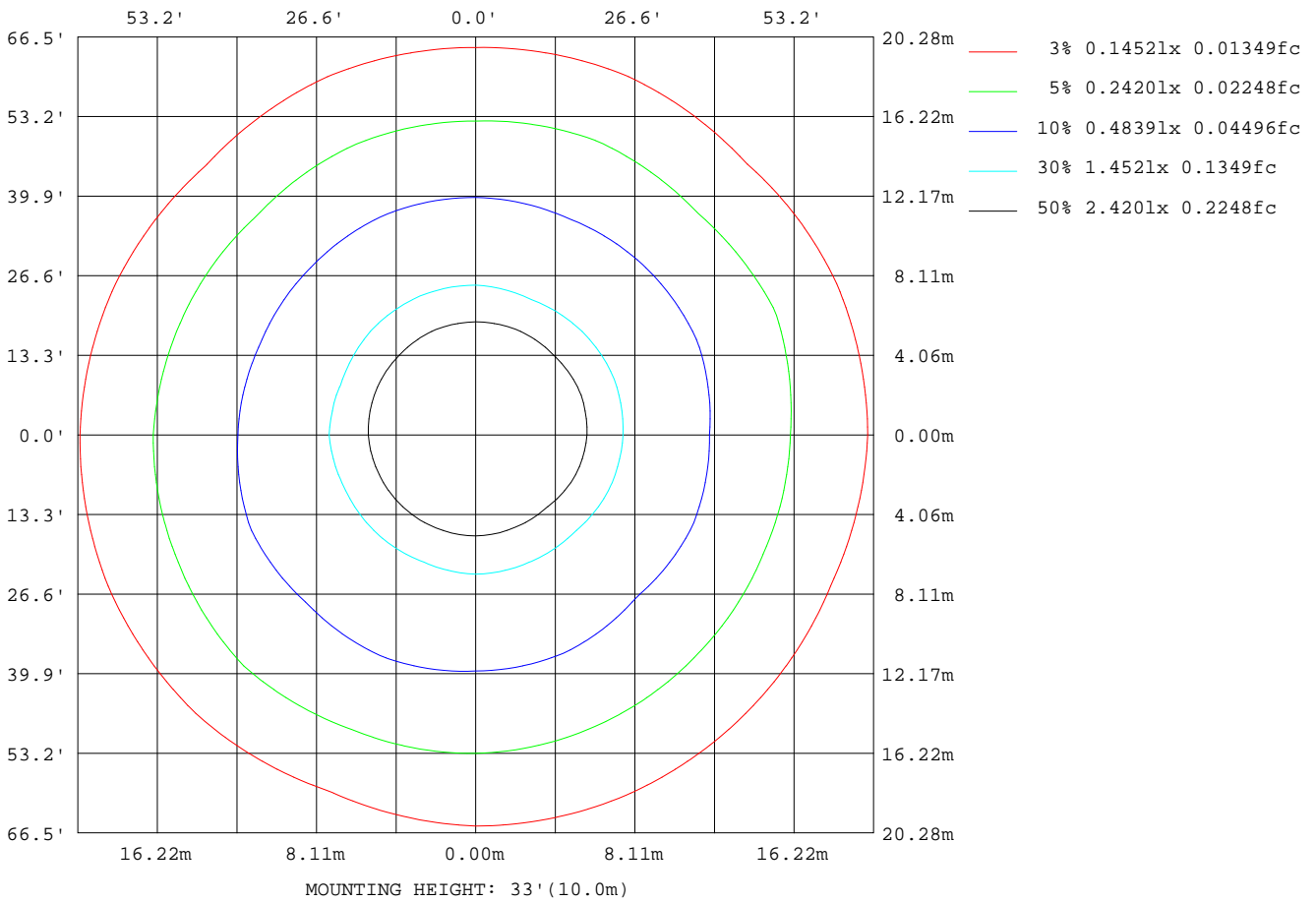
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.6DEG
 Operators:David
 Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:67.1%
 Test Distance:2.455m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.6DEG
 Operators:David
 Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:67.1%
 Test Distance:2.455m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	Shielding Angle:

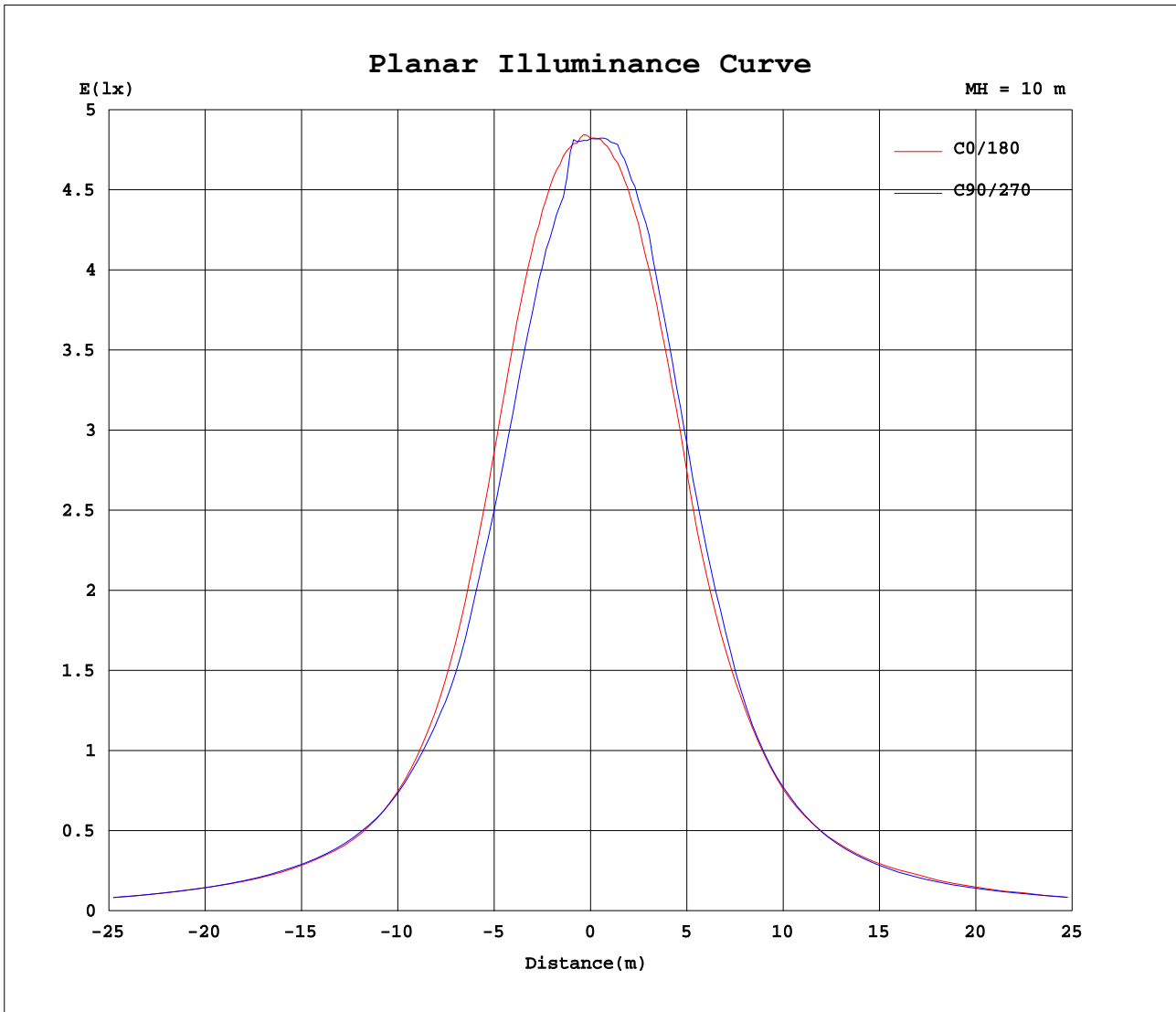
AvgL	cd/m2
L_0~180 (65) av	64059
L_0~180 (75) av	98872
L_0~180 (85) av	299386
L_90~270 (65) av	62841
L_90~270 (75) av	100633
L_90~270 (85) av	292038
L_45 (65) av	61113
L_45 (75) av	100395
L_45 (85) av	293346

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.6DEG
Operators:David
Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:67.1%
Test Distance:2.455m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.6DEG
Operators:David
Test Date:07 June 2018

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity:67.1%
Test Distance:2.455m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:120.00V I:0.3477A P:41.533W PF:0.9948 Freq:60.00Hz Lamp Flux:2639.26x1 lm		
NAME:	TYPE:FAC-32C-PC	WEIGHT:
SPEC.:	DIM.:	SERIAL No.:
MFR.: Blackjack Lighting	SUR.:0	Shielding Angle:

Table--1

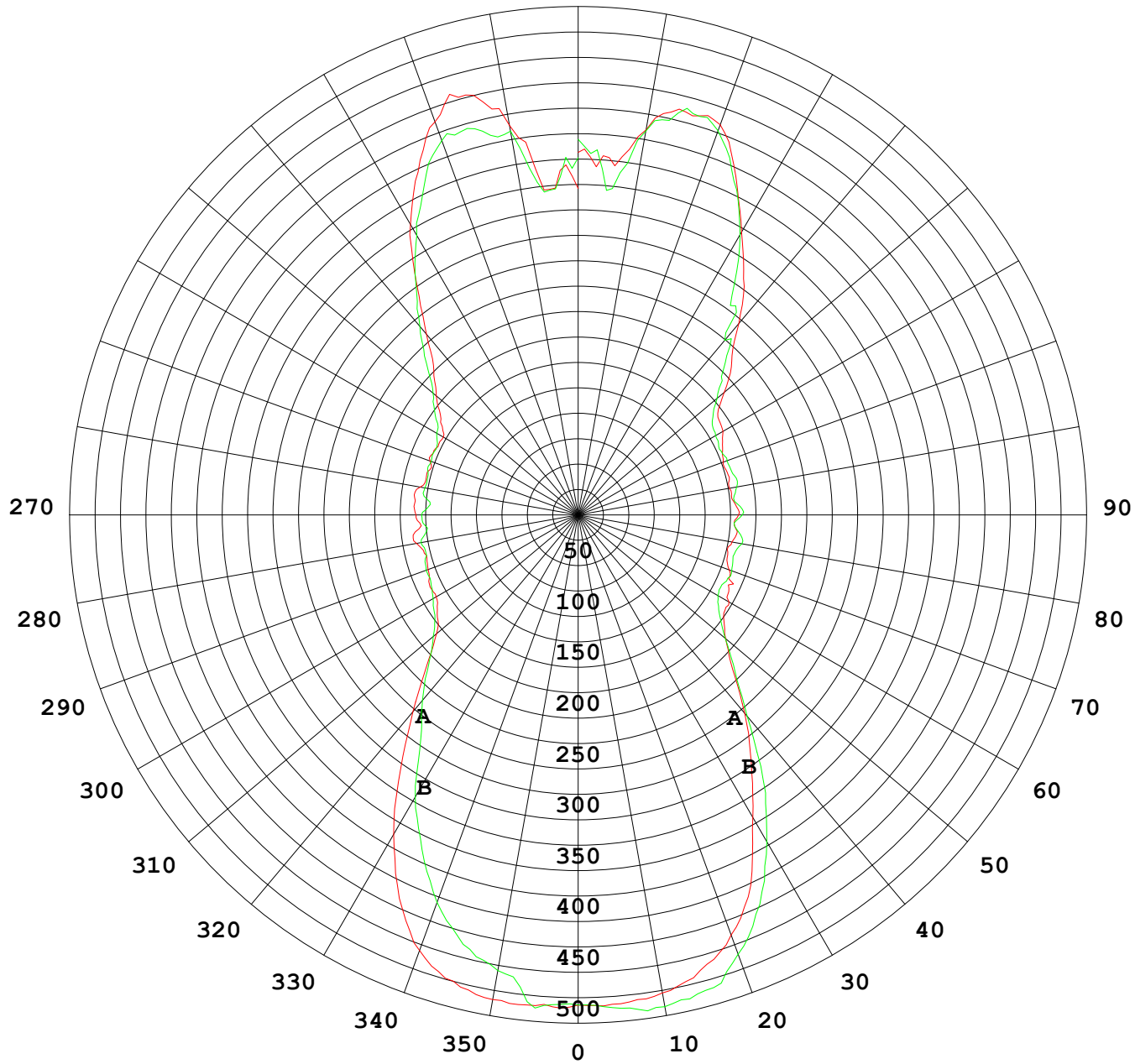
UNIT: cd

C (DEG) \ γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483	483			
5	485	482	480	482	488	481	480	480	483	482	485	484	488	489	488	485			
10	485	477	472	458	456	484	472	474	478	481	487	487	492	491	492	488			
15	475	463	455	440	438	464	455	460	465	468	473	478	485	483	484	481			
20	457	435	419	411	406	427	420	427	440	445	450	456	461	462	460	461			
25	417	393	368	363	364	370	375	384	402	402	407	415	424	418	418	417			
30	363	344	318	313	321	312	321	329	344	352	358	369	372	371	364	369			
35	304	288	268	266	270	264	271	279	297	299	304	315	318	301	308	313			
40	253	242	227	229	239	233	231	240	255	244	257	262	259	247	258	262			
45	211	209	195	203	208	213	206	215	215	208	216	219	219	210	219	223			
50	182	184	172	184	187	194	189	199	190	182	184	190	189	185	191	195			
55	169	164	163	169	172	180	183	185	175	169	164	169	170	172	171	179			
60	162	157	159	161	165	164	176	171	172	161	156	160	159	165	156	172			
65	162	153	158	160	160	152	159	166	163	160	150	157	159	157	153	155			
70	157	150	157	161	159	150	157	165	158	156	149	156	161	156	154	156			
75	155	153	158	158	155	158	159	158	152	154	151	160	158	156	156	161			
80	162	152	159	157	157	164	158	159	154	159	152	155	164	154	156	158			
85	157	149	153	146	149	161	157	158	156	151	146	149	156	157	158	159			
90	160	155	162	150	154	165	157	157	158	149	148	152	162	157	159	160			
95	161	148	156	149	147	161	155	156	154	151	143	146	155	156	156	157			
100	158	152	161	157	153	157	154	151	151	159	148	151	159	154	160	154			
105	154	153	159	155	153	154	151	151	153	160	157	156	158	156	152	159			
110	155	149	157	156	154	153	152	153	152	157	148	158	156	156	153	152			
115	155	151	150	160	154	156	154	157	157	159	151	157	153	156	154	151			
120	153	156	157	165	161	160	171	164	165	162	152	157	156	161	153	152			
125	165	163	161	172	172	182	182	184	168	167	157	161	161	171	163	170			
130	182	172	168	180	187	198	191	198	188	178	175	180	179	182	177	183			
135	201	194	183	193	211	216	207	216	214	201	199	200	202	202	199	205			
140	232	232	216	223	243	239	237	242	246	244	231	231	225	229	233	232			
145	277	282	257	263	279	275	271	279	284	270	272	270	264	267	274	277			
150	330	336	308	304	318	322	313	321	322	324	320	319	319	316	330	332			
155	373	375	366	346	359	365	357	365	368	370	365	370	363	381	366	384			
160	412	418	408	387	393	403	399	405	409	408	412	409	403	422	421	428			
165	428	419	397	384	394	404	409	405	411	414	416	429	415	426	415	431			
170	390	374	365	368	384	372	373	388	385	389	388	384	384	390	383	407			
175	322	317	324	321	321	325	353	343	353	352	341	324	321	353	308	323			
180	322	360	343	355	352	379	362	342	357	358	396	343	370	350	347	331			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.6DEG
 Operators:David
 Test Date:07 June 2018

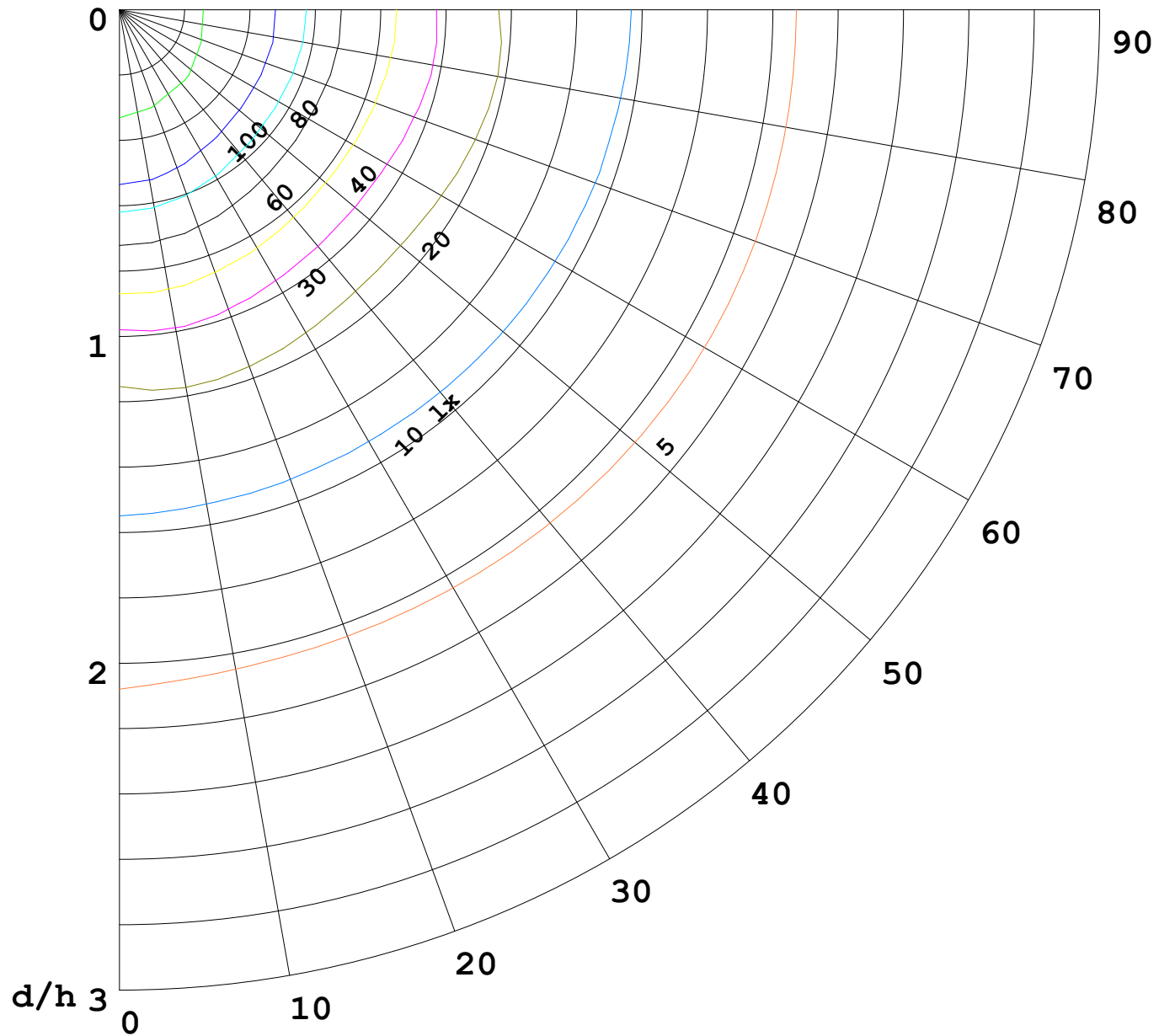
γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:67.1%
 Test Distance:2.455m [K=1.0000]
 Remarks:

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

