

IES Report

ZipTwo® | 707 | Square 3572, Single Side Diffuse | 90 CRI | SO

707-Z2-4-48-XX-XX-X-0-Z-SO-359-HA-X-BL-0

	2700K	3000K	3500K	4000K
Efficacy - Lumens per Watt	92	95	97	98
Total Lumens, 4' rail length (1219mm)	2392	2468	2518	2543
Lumens per foot (305mm)	598	617	630	636
Input Power (W), 4' rail length (1219mm)	26.2	26.2	26.2	26.2
Watts per foot (305mm)	6.6	6.6	6.6	6.6
CRI	95	95	95	95

Due to the large number of options in Vode's product offering, most Vode IES reports are factored reports prepared from source reports. Source reports are the IES test reports prepared for Vode by an NVLAP accredited photometric test laboratory. Factored reports are based on data from the Vode source reports.

If the data above is in black, it is directly from a Vode source report. If it is in grey, it is factored from Vode source reports. Reference details on Vode source reports can be found on the [IES File Finder](#) page on [vode.com](#).



8165 E Kaiser Blvd.
Anaheim, CA 92808
www.lightlaboratory.com

Report No: L082011205



Report No: L082011205

Issue Date: 9/2/2020

Report Prepared For: Vode Lighting
21684 8th Street East, Suite 700, Sonoma, CA 95476

Model Number: 707-Z2-48-Z-SO-359-HA-BL

Test: Photometric/Colorimetric/Electrical Test

Standards Used: Appropriate part or all test guidelines were used for test performed:

IESNA LM79: 2008 Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products

ANSI NEMA ANSLG C78.377: 2008 Specification of the Chromaticity of Solid State Lighting Products

ANSI C82.77:2002: Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

Description of Sample: Client submitted the sample. Received in working and undamaged condition. No modifications were necessary.

Special Test Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 8/21/20

Date of Tests: 8/21/20 - 9/2/20

Seasoning of Sample: No seasoning was performed in accordance with IESNA LM-79.

Equipment List

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	--
Yokogawa Digital Power Meter	WT210	MT-EL06-S4	1/9/21
BK PRECISION	1747	PS-DC04	1/10/21
Fluke Digital Thermometer	52K/J	MT-TP05	1/10/21
LLI Type C Goniophotometer System	RMG-C-MKII	CD-LL04-GC	--
LLI 2M Sphere	2MR97	CD-SN03-S2	--
LLI Spectroradiometer	SPR-3000	MT-SC01-S2	Before Use

General Information

Manufacturer:	Vode Lighting
Model Number:	707-Z2-48-Z-SO-359-HA-BL
Driver Model Number:	MEAN WELL HLG-40H-36A

Test Summary

Total Lumens:	2518.22
Efficacy:	96.27
Color Redering Index:	94.9
Correlated Color Temperature:	3366
Input Voltage (VAC/60Hz):	120.02
Input Current (Amp):	0.2195
Input Power (W):	26.16
Input Power Factor:	0.9930
Current ATHD (%):	9.0%

Test Condition

Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:45
Total Operating Time (Hours):	2:20

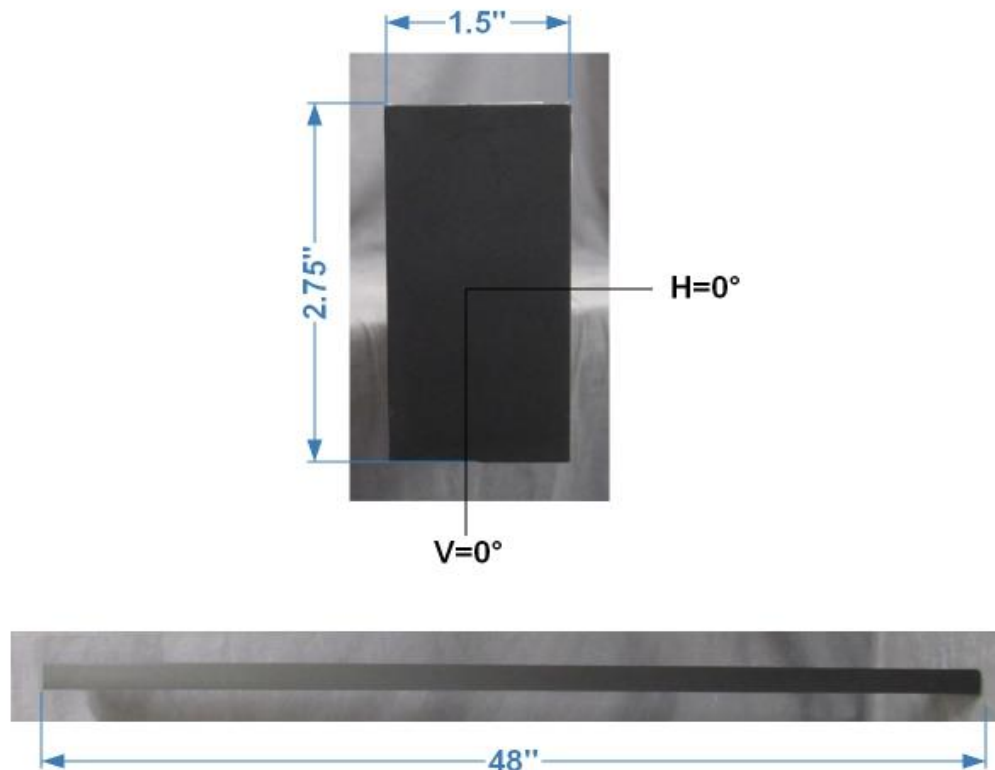
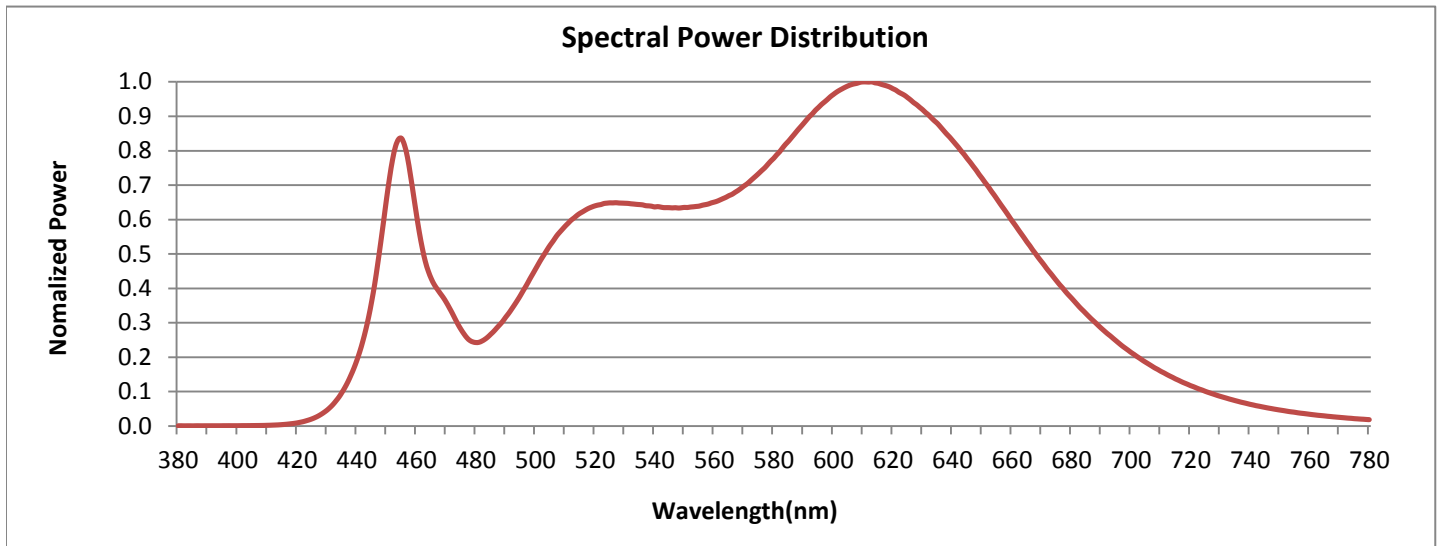


FIG. 1 LUMINAIRE

Colorimetry Test Results

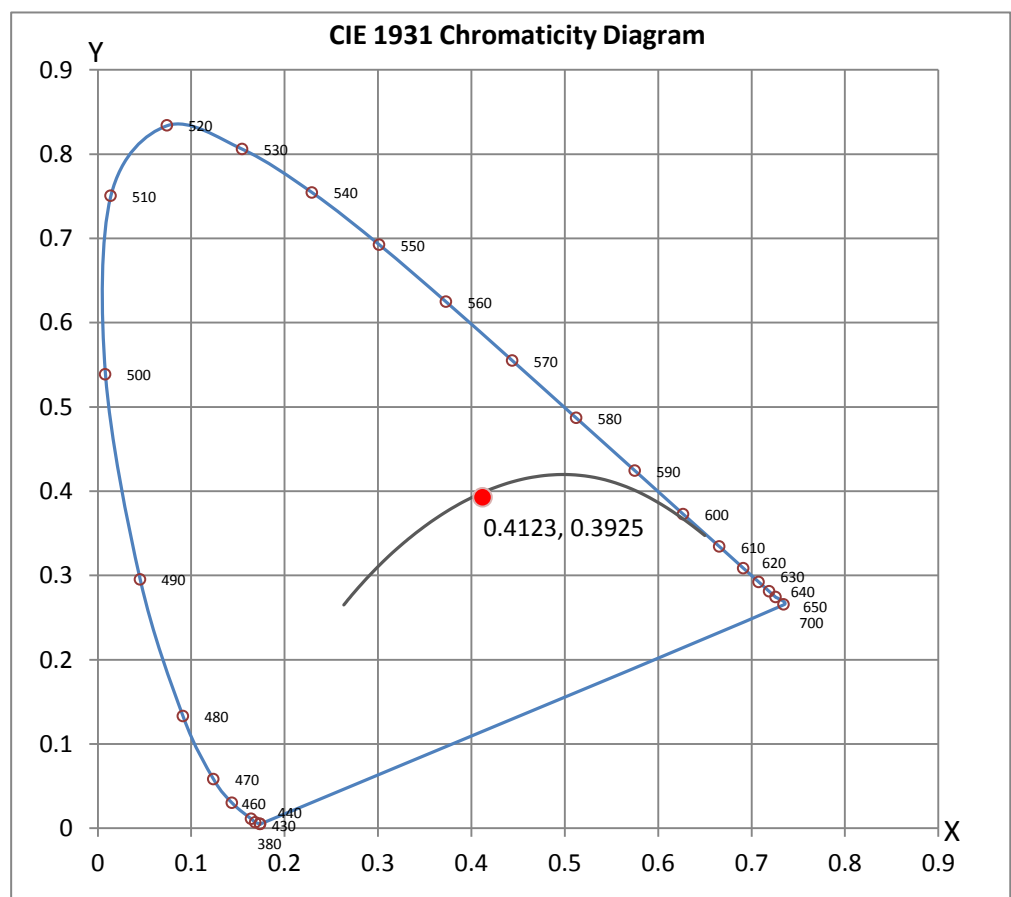


CRI & CCT

x	0.4123
y	0.3925
u'	0.2395
v'	0.5130
CRI	94.90
CCT	3366
Duv	-0.00070

R Values

R1	96.88
R2	98.93
R3	98.65
R4	97.99
R5	97.28
R6	95.96
R7	91.46
R8	82.41
R9	60.00
R10	97.43
R11	96.21
R12	79.18
R13	98.32
R14	99.38
R15	91.11





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Test Methods

Photometric Measurements - Goniophotometer

A Custom Light Laboratory Type C Rotating Mirror Goniophotometer was used to measure candelas(intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Spectral Measurements - Integrating Sphere

A Sensing Spectroradiometer SPR-3000, in conjunction with Light Laboratory 2 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature(CCT) and the color rendering index(CRI) for each sample.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Disclaimers:

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of Federal Government.

Report Prepared by : Keyur Patel

Test Report Reviewed by:

Steve Kang
Quality Assurance

**Attached are photometric data reports. Total number of pages: 13*

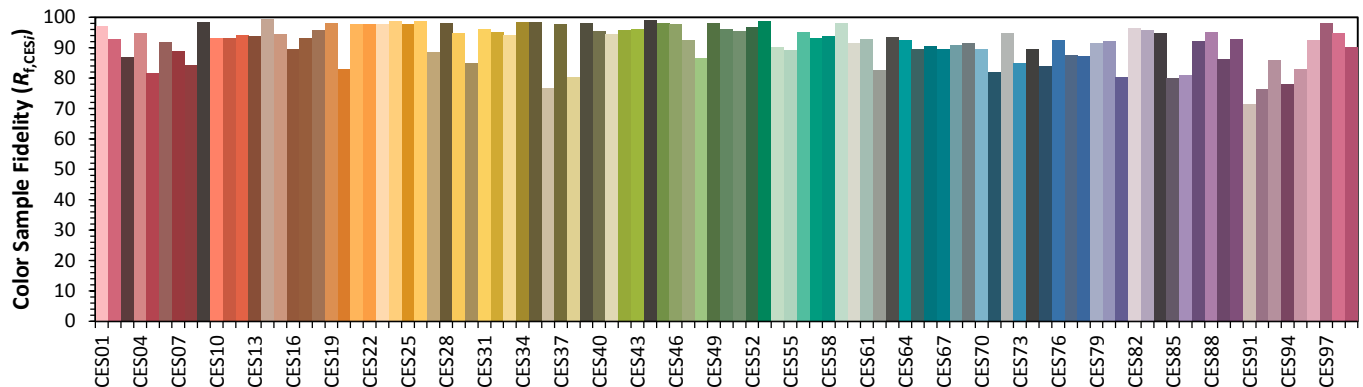
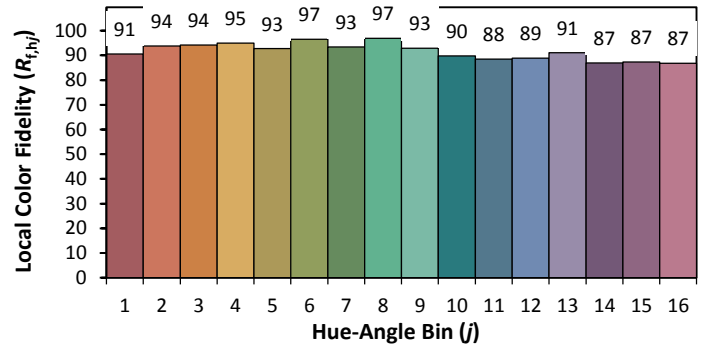
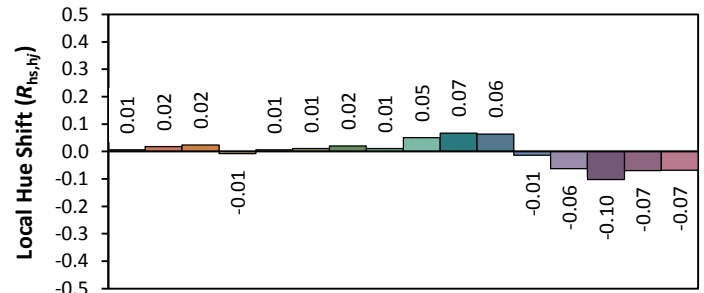
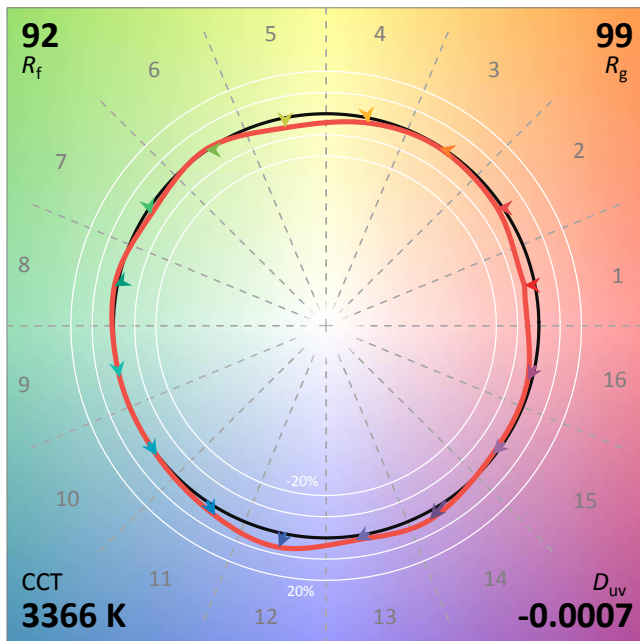
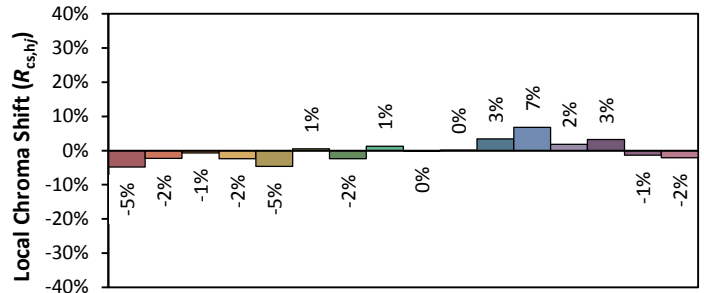
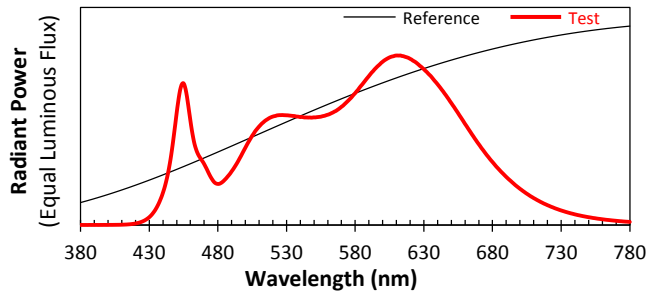
ANSI/IES TM-30-18 Color Rendition Report

Source: LED Luminaire

Manufacturer: Vode Lighting

Date: 9/2/2020

Model: 707-Z2-48-Z-SO-359-HA-BL



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x **0.4123**
 y **0.3925**
 u' **0.2395**
 v' **0.5130**

CIE 13.3-1995
(CRI)

R_a 95
 R_g 60



8165 E. Kaiser Blvd. Anaheim, CA 92808
www.lightlaboratory.com

Photometric Test Report

IES INDOOR REPORT

PHOTOMETRIC FILENAME : L082011205.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L082011205
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)
[ISSUE DATE] 9/2/2020
[MANUFAC] Vode Lighting
[LUMCAT] 707-Z2-48-Z-SO-359-HA-BL
[LUMINAIRE] ZipTwo LED, 48", 3500K, 90 CRI, zipper board, square 3572,
[MORE] single side diffuse black lens, standard output
[BALLASTCAT] MEAN WELL HLG-40H-36A(700mA)
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[INPUT] 120.02VAC, 26.16W
[TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2518
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	96
Total Luminaire Watts	26.16
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Vertical Rectangle
Luminous Length (0-180)	0.00 ft
Luminous Width (90-270)	3.99 ft
Luminous Height	0.22 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	37	39
55	0	39	34
65	0	42	29
75	0	44	37
85	0	47	35

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L082011205.IES

CANDELA TABULATION

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63
5	1.01	1.01	1.01	1.09	1.09	1.09	1.09	1.26	1.26	1.26
10	0.67	0.67	0.67	0.67	0.67	0.67	0.75	0.84	0.84	0.84
15	0.67	0.67	0.67	0.67	0.67	0.75	0.84	0.84	0.84	0.84
20	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
25	1.01	1.01	1.09	1.09	1.09	1.09	1.01	1.01	0.92	0.92
30	1.34	1.34	1.26	1.26	1.26	1.26	1.26	1.09	1.09	1.09
35	1.51	1.51	1.51	1.51	1.51	1.43	1.43	1.34	1.26	1.17
40	1.84	1.84	1.84	1.76	1.76	1.76	1.59	1.51	1.43	1.34
45	2.01	2.10	2.10	2.01	1.93	1.93	1.84	1.76	1.68	1.51
50	2.35	2.35	2.35	2.26	2.18	2.10	2.10	1.93	1.84	1.68
55	2.52	2.52	2.52	2.52	2.43	2.35	2.26	2.10	2.01	1.84
60	2.68	2.68	2.68	2.68	2.60	2.60	2.43	2.26	2.18	2.01
65	3.02	2.93	2.85	2.85	2.77	2.77	2.60	2.43	2.35	2.18
70	3.19	3.10	3.10	3.02	2.93	2.93	2.77	2.60	2.52	2.35
75	3.19	3.27	3.19	3.19	3.10	3.02	2.93	2.77	2.60	2.43
80	3.35	3.35	3.35	3.35	3.27	3.10	3.02	2.85	2.68	2.52
85	3.52	3.52	3.52	3.44	3.44	3.27	3.10	3.02	2.85	2.68
90	3.69	3.69	3.60	3.52	3.44	3.44	3.27	3.10	2.85	2.68
95	3.69	3.69	3.69	3.60	3.52	3.44	3.27	3.10	2.93	2.68
100	3.86	3.77	3.77	3.69	3.60	3.44	3.35	3.19	3.02	2.85
105	3.86	3.86	3.86	3.77	3.60	3.60	3.44	3.27	3.02	2.85
110	3.86	3.86	3.86	3.77	3.77	3.60	3.44	3.35	3.19	2.93
115	3.86	3.86	3.86	3.77	3.77	3.60	3.44	3.35	3.19	2.93
120	3.86	3.86	3.86	3.77	3.60	3.60	3.44	3.35	3.10	2.85
125	3.86	3.86	3.77	3.77	3.60	3.52	3.44	3.27	3.10	2.93
130	3.69	3.69	3.60	3.60	3.52	3.44	3.27	3.27	3.02	2.85
135	3.52	3.52	3.52	3.44	3.44	3.27	3.19	3.10	3.10	2.93
140	3.35	3.35	3.35	3.27	3.27	3.10	3.10	3.10	3.10	2.93
145	3.19	3.19	3.10	3.10	3.02	3.02	3.10	3.10	3.10	3.02
150	3.02	2.93	2.93	2.77	2.85	2.93	3.10	3.19	3.10	3.02
155	2.68	2.68	2.52	2.60	2.77	2.93	3.02	3.10	3.10	2.93
160	2.35	2.35	2.26	2.35	2.60	2.85	2.93	2.93	2.85	2.85
165	2.18	1.93	2.01	2.18	2.52	2.60	2.68	2.93	3.19	3.35
170	2.52	2.68	2.77	3.19	3.44	3.52	3.60	3.77	3.94	3.86
175	2.52	2.77	3.19	3.44	3.52	3.52	3.60	3.69	3.69	3.69
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles **Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
0	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63
5	1.34	1.43	1.43	1.43	1.51	1.59	1.68	2.10	2.68	4.02
10	1.01	1.01	1.17	1.26	1.34	1.43	1.51	1.59	2.60	6.62
15	0.84	0.84	0.92	1.01	1.17	1.34	1.43	1.59	2.52	10.90
20	0.84	0.92	0.92	0.92	1.01	1.17	1.34	1.59	2.52	16.09
25	0.92	0.92	0.92	0.92	0.92	1.09	1.26	1.51	2.43	21.21
30	1.01	0.92	0.92	0.92	0.92	1.01	1.17	1.43	2.35	25.23
35	1.17	1.09	1.01	0.92	0.92	0.92	1.17	1.43	2.52	29.84
40	1.26	1.17	1.09	1.01	0.92	0.92	1.09	1.43	2.43	34.03
45	1.34	1.34	1.17	1.09	1.01	0.92	1.09	1.34	2.26	39.15
50	1.51	1.34	1.34	1.17	1.01	1.01	0.92	1.34	2.26	42.67
55	1.68	1.51	1.34	1.17	1.17	1.01	0.92	1.17	2.26	45.77
60	1.84	1.68	1.51	1.34	1.17	1.01	0.92	1.17	2.26	48.45

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L082011205.IES

CANDELA TABULATION - (Cont.)

65	2.01	1.84	1.59	1.34	1.17	1.01	1.01	1.01	2.18	50.63
70	2.18	1.84	1.68	1.51	1.34	1.17	1.01	0.92	2.01	50.63
75	2.18	2.01	1.76	1.51	1.34	1.17	1.01	0.92	2.93	57.84
80	2.35	2.10	1.84	1.59	1.34	1.17	1.01	0.92	2.85	58.68
85	2.35	2.10	1.93	1.59	1.43	1.17	1.01	0.92	2.85	59.26
90	2.43	2.26	1.93	1.59	1.43	1.26	1.09	0.92	2.52	67.23
95	2.52	2.26	1.93	1.76	1.43	1.26	1.09	1.01	2.52	66.47
100	2.60	2.26	2.10	1.76	1.59	1.34	1.17	1.01	2.26	59.26
105	2.60	2.43	2.10	1.84	1.59	1.43	1.17	1.01	2.10	57.84
110	2.68	2.43	2.10	1.93	1.59	1.43	1.26	1.09	1.93	48.70
115	2.68	2.43	2.18	1.93	1.76	1.51	1.34	1.26	2.52	42.58
120	2.68	2.52	2.18	2.01	1.84	1.51	1.34	1.51	2.43	35.63
125	2.77	2.43	2.26	2.10	1.84	1.68	1.43	1.68	2.43	29.42
130	2.68	2.52	2.35	2.18	2.01	1.68	1.59	1.84	2.52	25.23
135	2.85	2.60	2.35	2.18	2.01	1.76	1.93	1.93	2.60	21.12
140	2.85	2.68	2.52	2.26	2.10	1.93	2.18	2.01	2.68	18.53
145	2.93	2.77	2.52	2.26	2.10	2.43	2.26	2.18	2.77	16.43
150	2.85	2.68	2.60	2.35	2.60	2.77	2.43	2.43	3.02	15.01
155	2.77	2.68	2.60	2.85	3.02	2.85	2.68	2.68	3.44	13.58
160	2.77	3.10	3.35	3.35	3.19	2.93	2.93	2.93	3.77	12.07
165	3.60	3.69	3.69	3.44	3.27	3.19	3.19	3.19	4.19	10.48
170	3.94	3.77	3.60	3.52	3.52	3.44	3.52	3.60	4.69	8.97
175	3.60	3.52	3.52	3.52	3.52	3.60	3.60	3.60	4.78	7.13
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles	Horizontal Angles									
	100	105	110	115	120	125	130	135	140	145
0	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63
5	6.04	9.14	12.83	16.85	20.79	24.64	28.17	31.60	34.62	37.39
10	15.01	24.48	34.20	43.59	52.81	61.44	70.25	77.96	85.17	91.96
15	25.57	40.66	55.99	71.17	85.67	99.75	113.67	126.91	138.81	150.13
20	36.21	56.50	77.71	98.75	119.11	138.90	158.68	177.54	194.64	210.90
25	46.36	72.09	98.83	125.15	152.31	178.80	203.69	228.59	251.22	272.68
30	56.25	87.09	119.79	151.97	186.01	217.94	249.13	280.14	308.47	334.79
35	64.46	101.51	139.74	177.37	218.11	256.00	293.22	331.52	364.05	395.65
40	77.79	114.84	158.43	201.60	248.37	292.13	335.13	376.71	417.19	454.16
45	81.90	128.42	175.36	223.89	276.20	325.32	372.43	420.80	465.39	508.39
50	88.94	139.57	190.62	243.68	301.10	344.85	407.05	460.36	509.48	556.84
55	95.06	149.21	203.94	262.87	321.30	377.71	435.30	494.73	547.46	598.76
60	100.17	155.49	217.27	277.79	339.32	399.34	460.19	522.64	578.89	633.21
65	104.45	161.86	224.31	289.45	345.44	418.20	481.40	544.61	602.95	659.44
70	107.55	166.73	231.10	295.98	353.65	430.44	495.32	560.11	619.80	679.06
75	108.05	170.08	235.88	301.85	365.98	438.32	504.03	571.43	631.45	687.44
80	109.47	172.01	238.40	304.95	375.28	441.84	507.81	575.03	635.05	690.63
85	110.06	174.61	239.07	305.54	375.53	441.84	506.97	571.68	630.94	687.69
90	111.57	174.10	237.56	303.44	364.89	438.07	502.11	565.48	623.65	679.23
95	110.48	172.01	234.62	301.26	353.91	428.93	493.47	555.17	611.83	665.90
100	108.30	168.49	231.69	294.56	347.87	418.62	481.23	540.92	595.49	647.71
105	105.79	162.28	223.14	286.01	343.18	405.63	465.73	523.23	575.45	625.33
110	102.43	157.00	215.34	273.52	335.63	391.54	447.37	502.36	551.73	599.43
115	98.41	150.63	206.04	261.28	320.29	373.19	425.91	477.80	526.00	569.50
120	87.60	142.75	195.39	247.37	302.77	345.52	401.85	451.98	495.90	536.47
125	79.97	130.51	178.21	227.00	279.89	329.26	375.28	420.55	461.45	500.35
130	66.22	112.24	159.10	202.18	249.04	293.72	333.62	384.08	425.41	461.37
135	54.49	94.55	138.14	178.63	218.19	258.18	297.32	334.46	376.37	416.27

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L082011205.IES

CANDELA TABULATION - (Cont.)

140	43.25	80.64	116.01	154.99	190.70	223.73	256.75	292.13	319.96	358.77
145	34.96	63.87	98.83	127.08	161.45	196.74	223.31	248.87	276.03	304.28
150	30.26	51.05	78.29	103.44	131.35	162.62	192.46	214.09	231.86	251.64
155	26.32	42.75	62.28	84.08	106.79	126.24	150.46	176.37	193.38	207.88
160	22.63	35.79	49.62	64.21	81.23	97.91	113.75	129.09	146.27	159.27
165	18.61	27.49	38.64	48.53	59.52	69.74	80.56	90.45	100.42	112.41
170	14.42	20.03	26.82	34.28	41.07	47.03	52.89	58.34	62.70	67.06
175	9.81	12.83	16.01	19.28	22.72	26.24	29.26	31.85	33.95	35.88
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Vert.
Angles**

Horizontal Angles

	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
0	3.63	3.63	3.63	3.63	3.63	3.63	3.63
5	39.82	42.00	43.67	45.01	46.02	46.52	46.61
10	97.99	102.94	107.30	110.65	113.00	114.34	114.84
15	160.10	168.65	175.95	181.65	185.59	187.93	188.77
20	225.49	237.89	248.62	256.92	262.62	266.31	267.40
25	292.21	308.72	322.64	333.87	340.91	345.44	347.03
30	358.60	379.39	396.91	411.24	421.13	427.75	429.68
35	424.32	449.47	471.34	488.78	501.18	509.06	511.66
40	487.61	517.53	543.01	562.88	577.38	586.69	589.62
45	547.12	580.48	609.57	632.20	648.71	659.36	662.71
50	600.01	636.90	669.08	694.48	712.76	724.16	727.76
55	645.36	685.18	720.22	747.71	767.33	779.40	783.59
60	682.16	724.32	761.29	790.55	811.17	823.82	828.52
65	710.24	754.17	791.30	822.65	844.03	857.10	861.21
70	729.27	773.86	811.50	842.60	864.23	878.31	882.67
75	738.32	784.59	822.31	853.25	874.96	888.79	893.23
80	741.17	787.02	825.50	854.92	876.38	890.21	894.24
85	738.91	782.33	819.80	849.05	869.76	883.34	887.36
90	728.93	771.35	808.06	836.48	857.35	870.01	874.29
95	713.93	755.17	790.80	818.79	838.66	850.81	854.84
100	694.23	733.80	768.08	795.41	814.35	825.92	829.86
105	670.09	707.89	740.00	766.91	785.10	796.25	800.18
110	642.09	677.97	708.23	733.21	751.15	761.88	765.48
115	609.99	643.94	672.52	695.82	712.42	722.98	726.25
120	573.02	605.88	633.54	654.58	670.17	680.07	683.17
125	534.88	564.39	589.95	609.40	623.65	632.87	635.55
130	493.14	519.79	543.01	560.95	574.36	582.41	584.92
135	448.29	472.52	493.64	510.32	521.55	528.85	531.11
140	394.81	422.89	441.42	456.17	466.48	472.60	474.95
145	332.61	362.71	387.35	400.09	409.06	414.51	416.27
150	274.61	298.16	324.57	342.59	350.22	354.91	356.42
155	219.95	237.22	256.50	281.48	292.63	296.65	297.91
160	168.99	176.87	190.70	208.14	230.01	234.46	235.55
165	119.79	124.14	126.41	135.80	149.63	165.13	165.80
170	71.67	74.52	74.60	74.44	80.97	97.07	104.61
175	36.97	37.39	37.13	34.20	31.18	31.60	45.77
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : L082011205.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	19.11	N.A.	0.80
0-30	68.37	N.A.	2.70
0-40	164.57	N.A.	6.50
0-60	522.65	N.A.	20.80
0-80	1052.89	N.A.	41.80
0-90	1341.34	N.A.	53.30
10-90	1339.3	N.A.	53.20
20-40	145.45	N.A.	5.80
20-50	297.11	N.A.	11.80
40-70	609.16	N.A.	24.20
60-80	530.23	N.A.	21.10
70-80	279.16	N.A.	11.10
80-90	288.46	N.A.	11.50
90-110	534.49	N.A.	21.20
90-120	752.67	N.A.	29.90
90-130	925.19	N.A.	36.70
90-150	1123.24	N.A.	44.60
90-180	1176.88	N.A.	46.70
110-180	642.39	N.A.	25.50
0-180	2518.22	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	2.04
10-20	17.08
20-30	49.25
30-40	96.20
40-50	151.65
50-60	206.43
60-70	251.07
70-80	279.16
80-90	288.46
90-100	279.50
100-110	254.99
110-120	218.18
120-130	172.52
130-140	122.33
140-150	75.72
150-160	38.60
160-170	13.30
170-180	1.74

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59	53
1	93	86	79	74	85	79	73	68	66	61	58	54	51	48	43	40	38	33
2	82	71	63	56	75	65	58	51	54	48	43	44	39	35	34	31	27	23
3	73	61	51	43	67	56	47	40	46	39	33	37	31	27	28	24	21	16
4	66	53	43	35	60	48	39	32	39	32	27	32	26	21	24	20	16	12
5	60	46	36	29	54	42	33	26	35	27	22	28	22	17	21	17	13	10
6	55	41	31	24	50	37	28	22	31	24	18	24	19	14	19	14	11	8
7	50	36	27	20	46	33	25	19	27	20	15	22	16	12	17	12	9	6
8	47	33	24	18	42	30	22	16	25	18	13	20	14	10	15	11	8	5
9	43	29	21	15	39	27	19	14	22	16	11	18	13	9	14	10	7	4
10	40	27	19	13	37	25	17	12	20	14	10	16	11	8	13	9	6	4

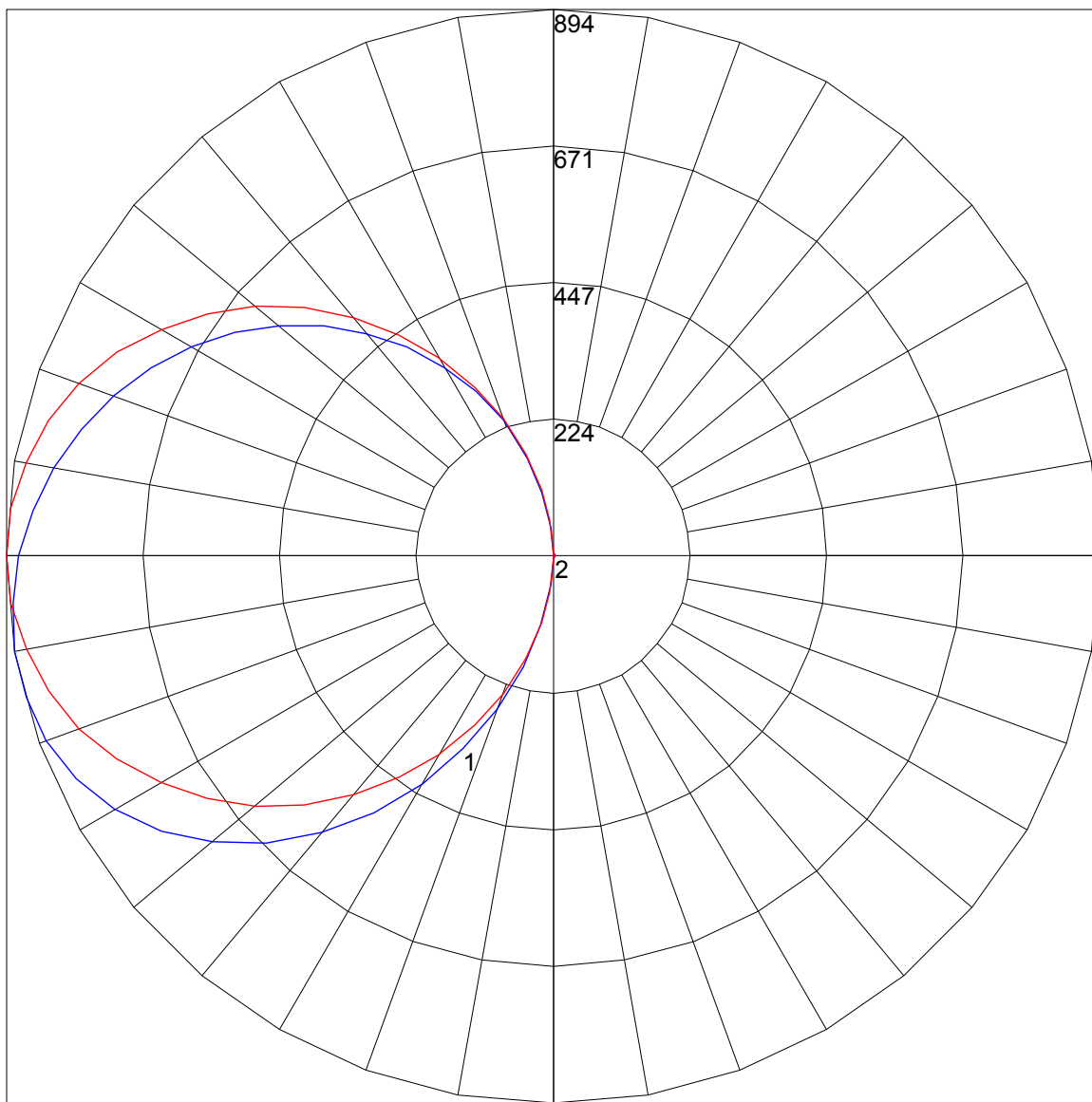
IES INDOOR REPORT
PHOTOMETRIC FILENAME : L082011205.IES

UGR TABLE - CORRECTED

Reflectances											
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30	
Walls	50	30	50	30	30	50	30	50	30	30	
Floor Cavity	20	20	20	20	20	20	20	20	20	20	
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	3.2	3.2	3.2	3.2	3.2	9.3	10.4	10.2	11.4	12.6
	3H	3.2	3.2	3.2	3.2	3.2	10.5	11.5	11.4	12.4	13.7
	4H	3.2	3.2	3.2	3.2	3.2	10.8	11.8	11.7	12.7	14.0
	6H	3.2	3.2	3.2	3.2	3.2	11.1	12.0	12.0	12.9	14.2
	8H	3.2	3.2	3.2	3.2	3.2	11.1	12.0	12.1	13.0	14.2
	12H	3.2	3.2	3.2	3.2	3.2	11.2	12.0	12.1	13.0	14.2
4H	2H	3.2	3.2	3.2	3.2	3.2	14.5	15.4	15.4	16.4	17.6
	3H	3.2	3.2	3.2	3.2	3.2	16.0	16.9	16.9	17.8	19.1
	4H	3.2	3.2	3.2	3.2	3.2	16.6	17.4	17.5	18.4	19.6
	6H	3.2	3.2	3.2	3.2	3.2	17.0	17.7	17.9	18.7	20.0
	8H	3.2	3.2	3.2	3.2	3.2	17.1	17.7	18.0	18.7	20.0
	12H	3.2	3.2	3.2	3.2	3.2	17.1	17.7	18.1	18.7	20.0
8H	4H	3.2	3.2	3.2	3.2	3.2	19.7	20.4	20.6	21.4	22.6
	6H	3.2	3.2	3.2	3.2	3.2	20.4	21.0	21.4	22.0	23.3
	8H	3.2	3.2	3.2	3.2	3.2	20.7	21.2	21.7	22.2	23.5
	12H	3.2	3.2	3.2	3.2	3.2	20.8	21.3	21.8	22.3	23.7
12H	4H	3.2	3.2	3.2	3.2	3.2	20.6	21.2	21.6	22.2	23.5
	6H	3.2	3.2	3.2	3.2	3.2	21.6	22.1	22.6	23.1	24.5
	8H	3.2	3.2	3.2	3.2	3.2	22.0	22.5	23.0	23.5	24.8

Maximum UGR = 24.8

POLAR GRAPH



Maximum Candela = 894.24 Located At Horizontal Angle = 180, Vertical Angle = 80

1 - Vertical Plane Through Horizontal Angles (180 - 0) (Through Max. Cd.)

2 - Horizontal Cone Through Vertical Angle (80) (Through Max. Cd.)