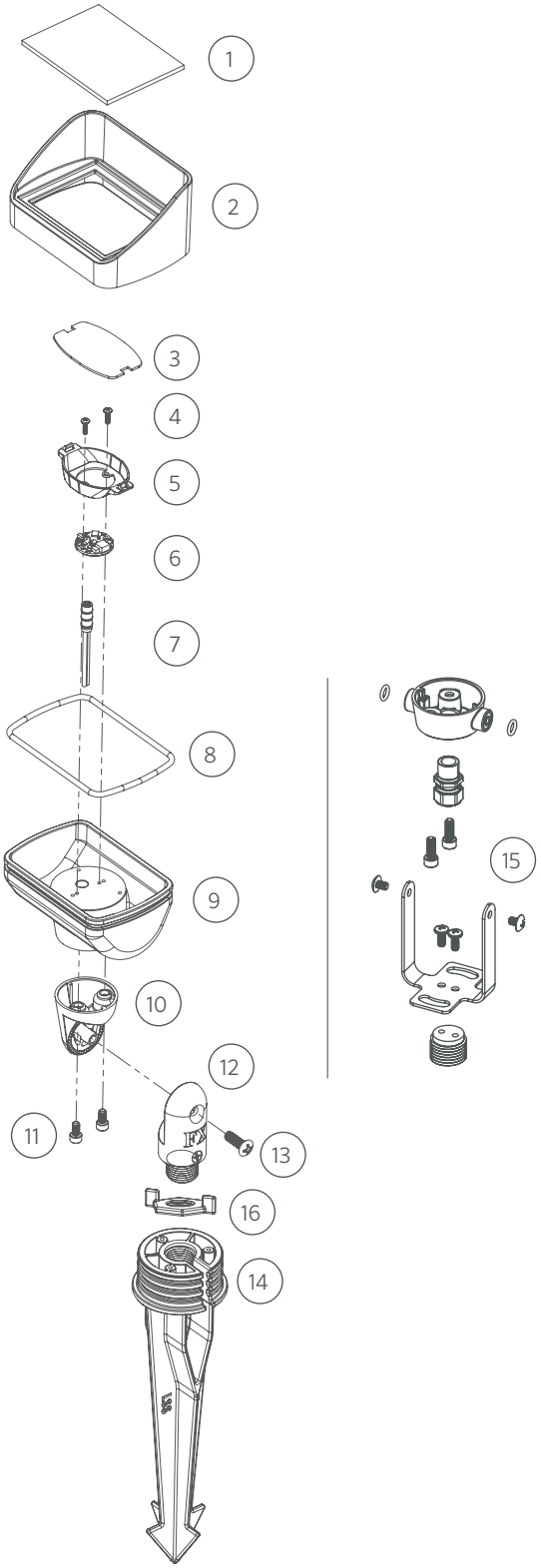
Replacement Parts

ITEM	DESCRIPTION	PART #
1	Lens	†
2	Shroud	†
1-2, 8	Lens Cap Assembly	LCLCXX*
3	Diffuser Lens	See LED Chart
4	Screw	See LED Chart
5	Reflector	See LED Chart
6	LED Board	See LED Chart
7	Socket, 10' (3 m)	†
8	O-Ring	250028620000
9	Body	†
10	Knuckle Base	†
11	Screw, #10-24 x ⅜"	250013940000
12	Knuckle	†
13	Screw, ¼"-20 x ¾"	250010290000
12-13	Knuckle Assembly	KFM050XX*
14	Large Slot Spike	250015840000
15	Bracket Mount Assembly	BM050XX**
16	Lock Ring (Order in Qty 25)	250030410000SP

**XX = Finish code*
***XX = Finish code, powder-coat finish options only*
† = This part is not serviceable. Contact Customer Support or a local distributor to order a complete product.



2nd Gen LED Chart

DESCRIPTION	PART #
LED Replacement Kits (Board, Reflector, Screws, Beam Angle Lenses)	
1 LED Up Light Kit (2700K)	KIT1LEDRDW
3 LED Up Light Kit (2700K)	KIT3LEDRDW
6 LED Up Light Kit (2700K)	KIT6LEDRDW
9 LED Up Light Kit (2700K)	KIT9LEDRDW
ZD 1 LED Up Light Kit (2700K)	KITZD1LEDRDW
ZD 3 LED Up Light Kit (2700K)	KITZD3LEDRDW
ZD 6 LED Up Light Kit (2700K)	KITZD6LEDRDW
ZD 9 LED Up Light Kit (2700K)	KITZD9LEDRDW
ZDC 3 LED Kit, Medium, PB	ZDCKITM
ZDC 3 LED Kit, Large, LC	ZDCKITL
Reflectors	
1 LED Reflector, White, PB/LC	763000
3 LED Reflector, White, PB/LC	763100
6 LED/9 LED Reflector, White, LC	250016450000
Diffusers	
1/3 LED Diffuser Lens, PB/LC	250034830000
6/9 LED Diffuser Lens, LC	250034840000
Screws	
1 LED/3 LED Screw, #4-40 x ⅜" (Qty Req: 2)	762400
6 LED/9 LED Screw, #4-40 x 7⁄16" (Qty Req: 3)	250014550000

1st Gen LED Chart

DESCRIPTION	PART #
LED Replacement Kits (Board, Color Filters, Reflector, Screws)	
1 LED Up Light Kit (3900K)	1LEDULKIT
1 LED Up Light Kit (3900K)	3LEDULKIT
1 LED Up Light Kit (3900K)	6LEDULKIT
1 LED Up Light Kit (3900K)	9LEDULKIT
ZD 1 LED Up Light Kit (3900K)	ZD1LEDULKIT
ZD 3 LED Up Light Kit (3900K)	ZD3LEDULKIT
ZD 3 LED T Up Light Kit (TURTLE)	ZD3LEDTKIT
ZD 6 LED Up Light Kit (3900K)	ZD6LEDULKIT
ZD 9 LED Up Light Kit (3900K)	ZD9LEDULKIT
ZDC LED Up Light Kit (3900K)	ZDCKITL
For Rectangular Lenses and Optics	
Reflectors	
1 LED Reflector, White, PB/LC	763000
3 LED Reflector, White, PB/LC	763100
6 LED/9 LED Reflector, White, LC	250016450000
Diffusers	
1/3 LED Diffuser Lens, PB/LC	250019260000
6/9 LED Diffuser Lens, LC	250019270000
For Round Lenses and Filters	
Reflectors	
ZDC 3 LED Reflector, Medium, PB	250022050000
ZDC 3 LED Reflector, Large, LC	250020690000
Diffusers	
ZDC 3 LED Diffuser, Medium, PB	3LEDWFLENS
ZDC 3 LED Diffuser, Large, LC	9LEDWFLENS
Color Filter Lenses	
1 LED/3 LED Color Filter, Amber	763200
1 LED/3 LED Color Filter, Blue	763201
1 LED/3 LED Color Filter, Green	763202
6 LED/9 LED Color Filter, Amber	250016560000
6 LED/9 LED Color Filter, Blue	250016560001
6 LED/9 LED Color Filter, Green	250016560002
Screws	
1 LED/3 LED Screw, #4-40 x ⅜" (Qty Req: 2)	762400
6 LED/9 LED Screw, #4-40 x 7⁄16" (Qty Req: 3)	250014550000

LIGHT LABORATORY INC.
8165 E Kaiser Blvd. Anaheim, CA 92808
p. 714.282.2270
f. 714.676.5558

Report No: L101410406
Date: 11/13/2014

NVLAP LAB CODE 200927-0

Report No: **L101410406**

Report Prepared For: Hunter Industries
1775 Diamond Street, San Marcos, CA. 92078

Model Number: **LCZDC3LEDWI**

Test: Electrical and Photometric tests

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. Catalog number is LCZDC3LEDWI . Received in working and undamaged condition. No modifications were necessary.

Testing Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 11/17/14

Date of Tests: 11/11/14 - 11/13/14

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-S1	01/04/15
Xitron Power Analysis System	2503AH	MT-EL01	01/09/15
BK Precision DC Power Supply	1747	PSDC-04	01/08/15
Fluke Digital Thermometer	52k/J	MT-TP02-GC	01/04/15
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

*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

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Test Summary	
Manufacturer:	Hunter Industries
Model Number:	LCZDC3LEDWI
Driver Model Number:	N/A
Total Lumens:	192.35
Input Voltage (VAC/60Hz):	12.00
Input Current (Amp):	0.47
Input Power (W):	5.24
Input Power Factor:	0.93
Current ATHD @ 120V(%):	41%
Current ATHD @ 277V(%):	N/A
Efficacy:	37
Color Rendering Index (CRI):	82
Correlated Color Temperature (K):	3945
Chromaticity Coordinate x:	0.3834
Chromaticity Coordinate y:	0.3798
Ambient Temperature (°F):	77.0
Stabilization Time (Hours):	0:45
Total Operating Time (Hours):	2:05
Off State Power(W):	0.00

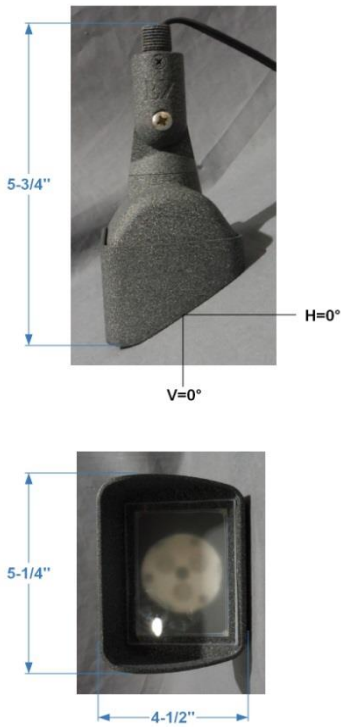


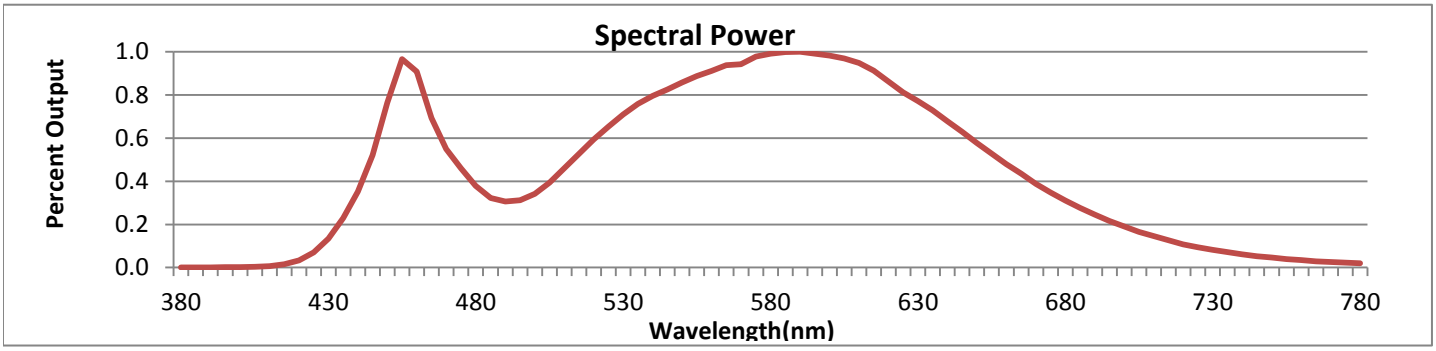
FIG. 1 LUMINAIRE

*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

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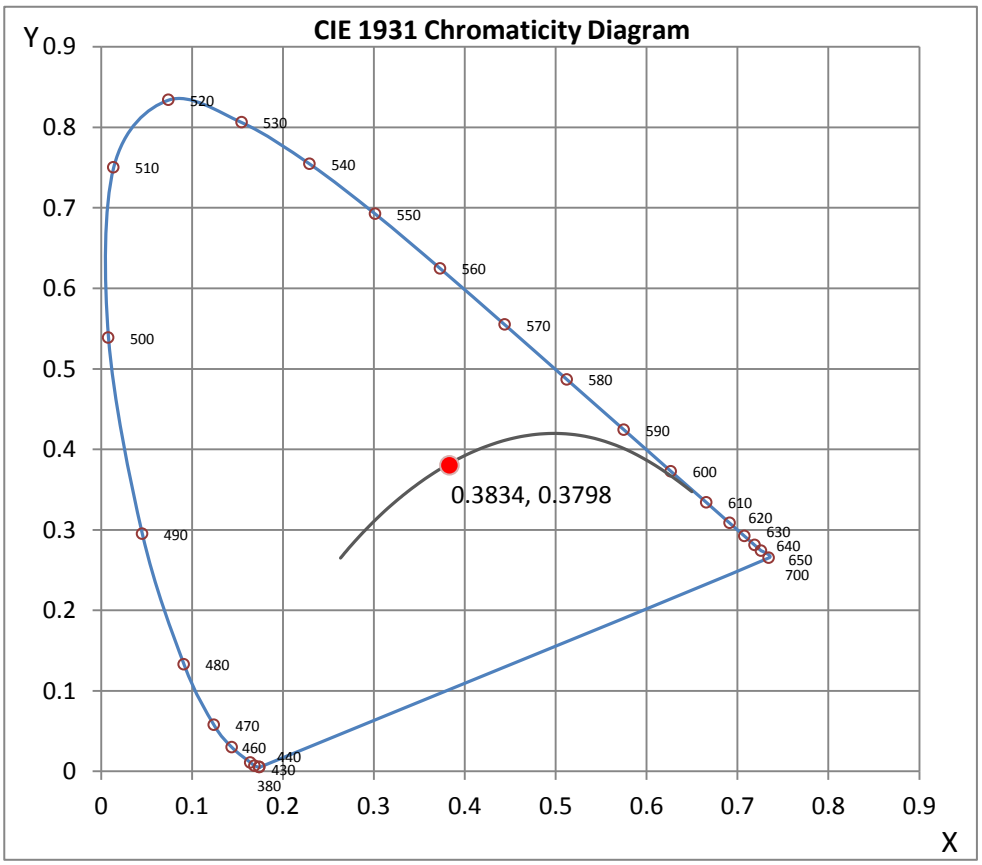
Wavelength	W/m²nm	440	0.3527	510	0.4599	580	0.9918	650	0.5784	720	0.1080
380	0.0011	450	0.7640	520	0.5936	590	1.0000	660	0.4800	730	0.0820
390	0.0012	460	0.9084	530	0.7099	600	0.9829	670	0.3881	740	0.0615
400	0.0021	470	0.5495	540	0.7954	610	0.9480	680	0.3103	750	0.0458
410	0.0067	480	0.3783	550	0.8576	620	0.8623	690	0.2446	760	0.0339
420	0.0337	490	0.3058	560	0.9110	630	0.7725	700	0.1898	770	0.0257
430	0.1343	500	0.3417	570	0.9433	640	0.6783	710	0.1458	780	0.0194

CRI & CCT

x	0.3834
y	0.3798
u'	0.2258
v'	0.5034
CRI	81.90
CCT	3945
Duv	0.00057

R Values

R1	80.33
R2	89.05
R3	93.34
R4	77.93
R5	78.42
R6	82.51
R7	87.01
R8	66.69
R9	15.48
R10	71.13
R11	73.27
R12	55.54
R13	82.52
R14	95.79



*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

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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 Released by:

Jeff Ahn
Engineering Manager

Test Report Reviewed by:

Steve Kang
Quality Assurance

**Attached are photometric data reports. Total number of pages: 8*

*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

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Photometric Test Report

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L101410406.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L101410406
[TESTLAB] LIGHT LABORATORY, INC.
[ISSUEDATE] 11/13/2014
[MANUFAC] HUNTER INDUSTRIES
[LUMCAT] LCZDC3LEDWI
[LUMINAIRE] 4-1/"L. X 5-1/4"W. X 5-3/4"H. LED FIXTURE
[MORE] DIFFUSED LENS
[BALLASTCAT] N.A.
[BALLAST] N.A.
[LAMPPOSITION] 0,0
[LAMPCAT] N/A
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[_INPUT] 12VAC, 5.24W
[_TEST PROCEDURE] IESNA:LM-79-08

Note: Candela values converted from Type-C to Type-B

CHARACTERISTICS

NEMA Type	6 H x 6 V
Maximum Candela	192.94
Maximum Candela Angle	0H -1V
Horizontal Beam Angle (50%)	51.8
Vertical Beam Angle (50%)	51.2
Horizontal Field Angle (10%)	108.4
Vertical Field Angle (10%)	100.3
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Beam Lumens	85
Beam Efficiency	N.A.
Field Lumens	172
Field Efficiency	N.A.
Spill Lumens	19
Luminaire Lumens	192.35
Total Efficiency	N.A.
Total Luminaire Watts	5.24
Ballast Factor	1.00

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IES FLOOD REPORT
PHOTOMETRIC FILENAME : L101410406.IES

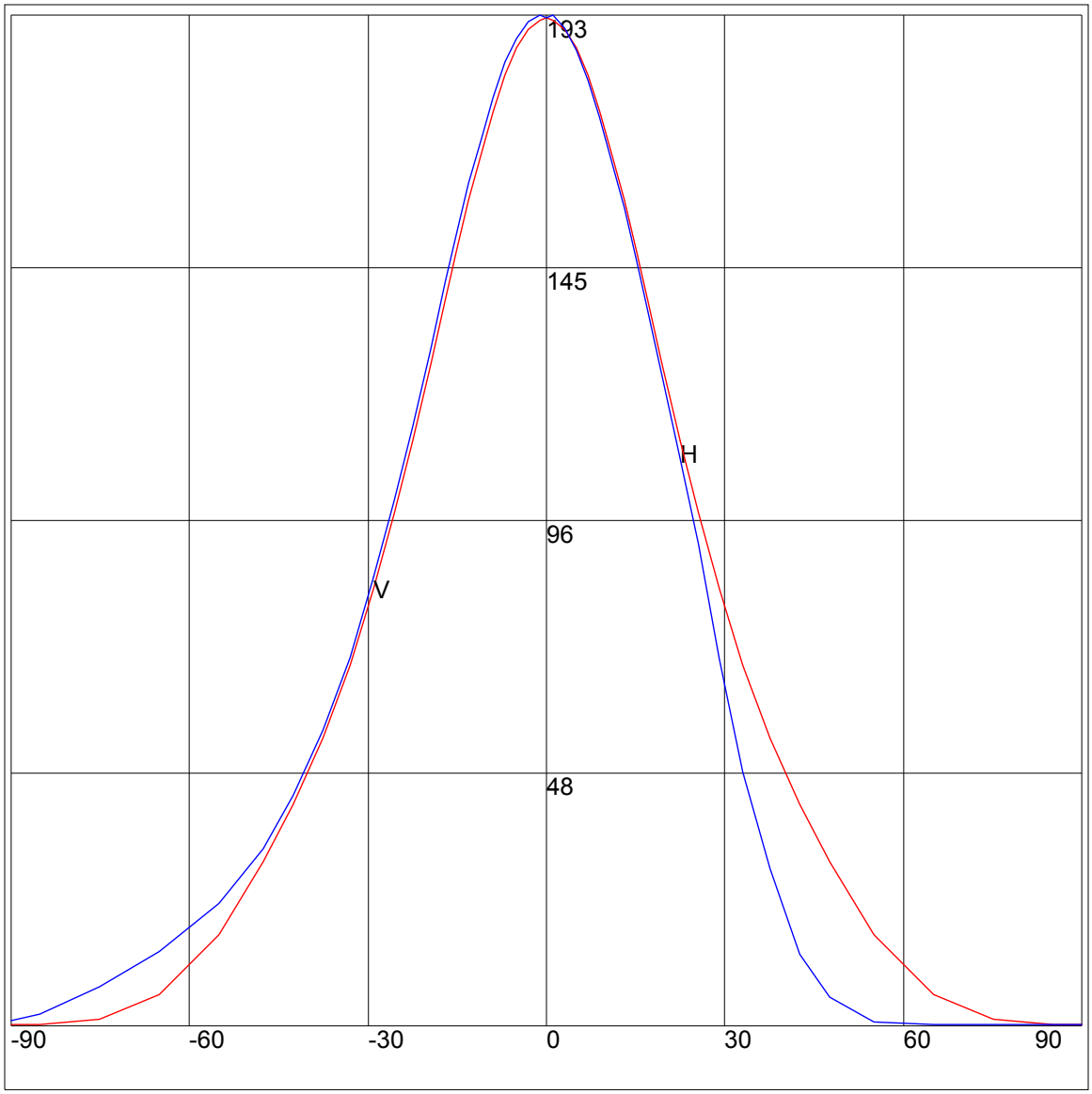
AXIAL CANDELA

DEG.	HOR.	DEG.	VERT.
90	.31	90	.34
85	.36	85	.34
75	1.37	75	.34
65	6.07	65	.34
55	17.62	55	.96
47.5	31.42	47.5	5.53
42.5	42.33	42.5	13.66
37.5	55.08	37.5	30.17
33	68.83	33	48.46
29	83.69	29	70.29
25.5	98.03	25.5	92.08
22.5	111.59	22.5	108.31
19.5	126.4	19.5	124.1
17	138.63	17	136.63
15	148.23	15	146.37
13	157.65	13	156.05
11	166.48	11	165.18
9	174.56	9	173.42
7	181.53	7	180.42
5	186.7	5	186.28
3	190.25	3	190.54
1	191.98	1	192.87
0	192.47	0	192.47
-1	191.98	-1	192.94
-3	190.25	-3	191.74
-5	186.7	-5	188.52
-7	181.53	-7	183.88
-9	174.56	-9	177.36
-11	166.48	-11	169.33
-13	157.65	-13	160.89
-15	148.23	-15	151.35
-17	138.63	-17	141.94
-19.5	126.4	-19.5	129.25
-22.5	111.59	-22.5	114.35
-25.5	98.03	-25.5	100.59
-29	83.69	-29	85.73
-33	68.83	-33	70.53
-37.5	55.08	-37.5	56.56
-42.5	42.33	-42.5	44.17
-47.5	31.42	-47.5	33.94
-55	17.62	-55	23.44
-65	6.07	-65	14.21
-75	1.37	-75	7.48
-85	.36	-85	2.44
-90	.31	-90	1.1

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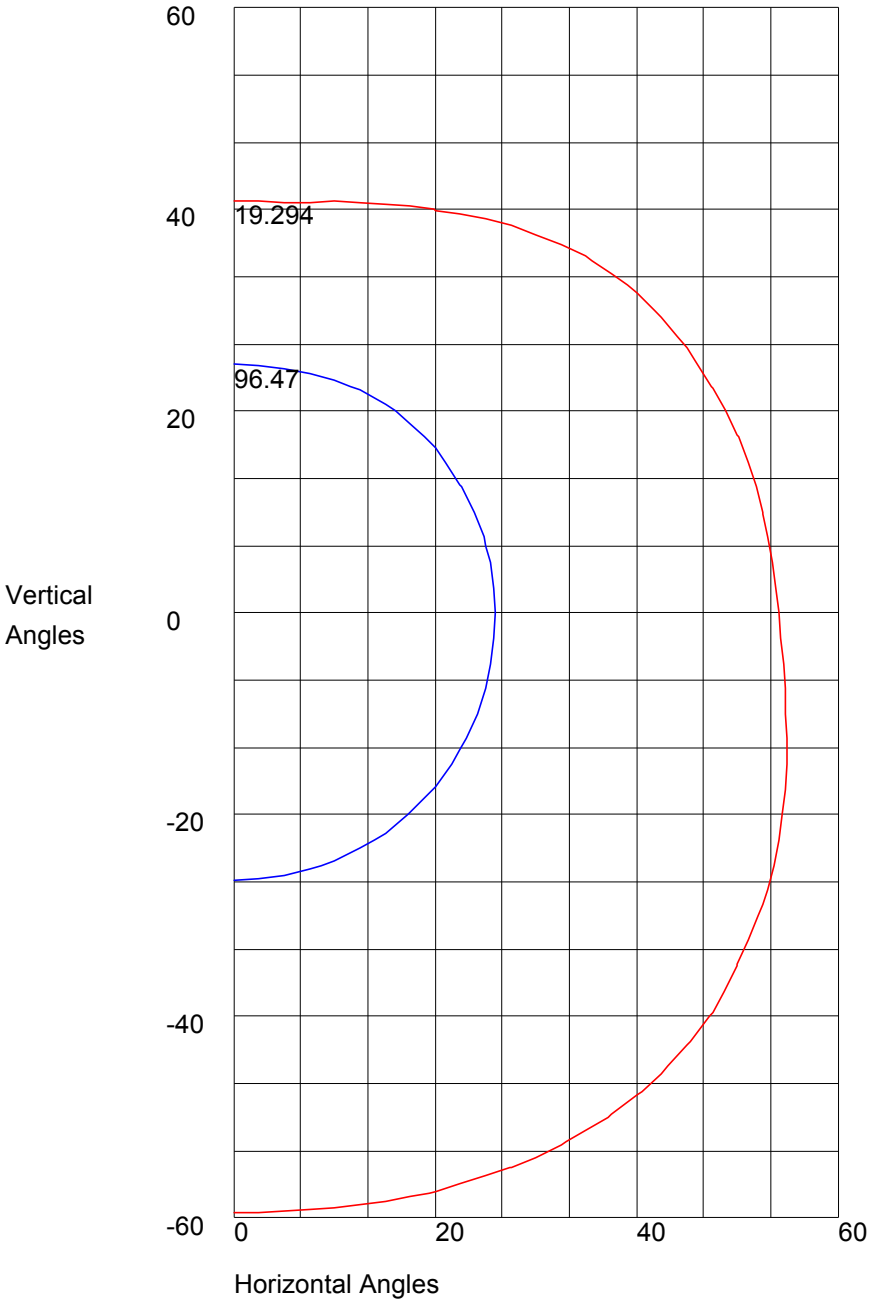
AXIAL CANDELA DISPLAY



Maximum Candela = 192.94 Located At Horizontal Angle = 0, Vertical Angle =-1
H - Horizontal Axial Candela
V - Vertical Axial Candela

IES FLOOD REPORT
PHOTOMETRIC FILENAME : L101410406.IES

ISOCANDELA CURVES



Maximum Candela = 192.94 Located At Horizontal Angle = 0, Vertical Angle =-1
50% Maximum Candela = 96.47
10% Maximum Candela = 19.294

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