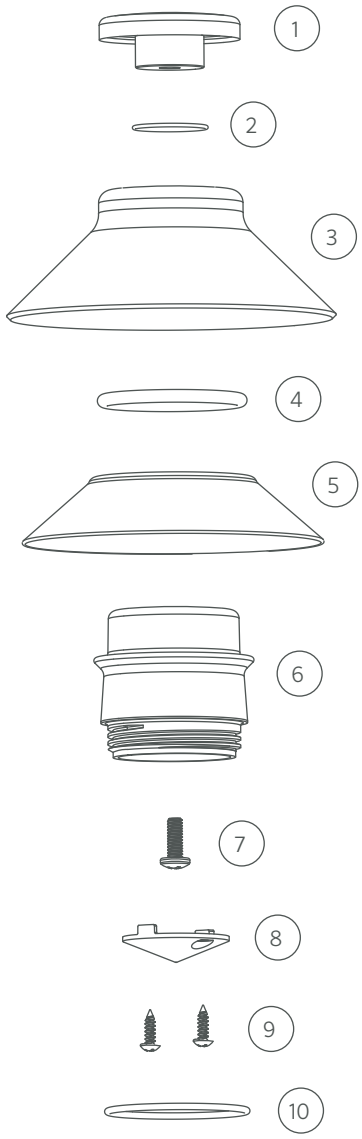
## Replacement Parts

| ITEM | DESCRIPTION | PART # |
|---|---|---|
| 1 | Cap, Brass | 2500118000XX* |
| 2 | O-Ring for Cap | 250010280001 |
| 3 | Top | † |
| 4 | O-Ring for Top | 250010280010 |
| 5 | Reflector | 756200 |
| 6 | Lens | 753000 |
| 7 | Screw, #8-32 x 7/16" | 750103 |
| 8 | Reflector | † |
| 9 | Screw, #4 x 3/8" | † |
| 8-9 | Petite Cone Kit | PCONEKIT |
| 10 | O-Ring for Lens | 250010280033 |

** XX = Finish code*
*† = This part is not serviceable. Contact Customer Support or a local distributor to order a replacement product.*

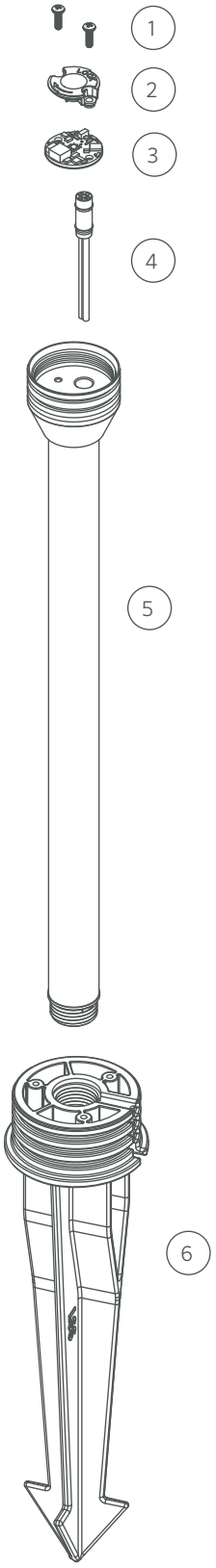


# **DESIGNER** | RISER ASSEMBLY | PETITE (P)

## Replacement Parts

| ITEM | DESCRIPTION | PART # |
|---|---|---|
| 1 | Screw | See LED Chart |
| 2 | Reflector | See LED Chart |
| 3 | LED Board | See LED Chart |
| 4 | Socket, 10' (3 m) | 752601 |
| 5 | Riser Assembly | † |
| 6 | Large Slot Spike | 250015840000 |

*† This part is not serviceable. Contact Customer Support or a local distributor to order a new product.*




## 1st Gen LED Chart

| DESCRIPTION | PART # |
|---|---|
| **LED Replacement Kits** (Board, Color Filters, Reflector, Screws) | |
| 1 LED Up Light Kit (3900K) | 1LED-UL-KIT |
| ZD 1 LED Up Light Kit (3900K) | ZD-1LED-UL-KIT |
| **Reflectors** | |
| 1 LED Reflector | 770000 |
| **Screws** | |
| 1 LED/3 LED Screw, #4-40 x ⅜" (Qty Req: 2) | 762400 |
| **Color Filter Lenses Only** | |
| 1 LED Color Filter, Amber | 770100 |
| 1 LED Color Filter, Blue | 770101 |
| 1 LED Color Filter, Green | 770102 |
| **Optics Kits** (Color Filters, Reflector, Screws) | |
| 1 LED Optics Kit | 1LED-OPTICS-KIT |

## 2nd Gen LED Chart

| DESCRIPTION | PART # |
|---|---|
| **LED Replacement Kits** (Board, Reflector, Screws, Beam Angle Lenses) | |
| 1 LED Up Light Kit (2700K) | KIT-1LED-RD-W |
| ZD 1 LED Up Light Kit (2700K) | KIT-ZD-1LED-RD-W |
| **Reflectors** | |
| 1 LED Reflector | 770000 |
| **Screws** | |
| 1 LED/3 LED Screw, #4-40 x ⅜" (Qty Req: 2) | 762400 |

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NVLAP TESTING
NVLAP LAB CODE 200927-0

**Report No:** L022211210 **Issue Date: 2/23/2022**

**Report Prepared For:** FX Luminaire / Lumascape
1940 Diamond Street, San Marcos, CA, 92078

**Model Number:** HCLEDTA-CU+P-1LED-12RA-CU / aDUK10-1LED-12RA-CU

**Test:** Photometric/Colorimetric/Electrical Test

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

*IESNA LM79: 2019* Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products

*ANSI NEMA ANSLG C78.377: 2017* Specification of the Chromaticity of Solid State Lighting Products

*ANSI C82.77-10:2014:* 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.

**Date of Tests:** 2/22/22

**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 | 4/7/23 |
| HP Power Supply | 6032A | PS-DC05-S2 | -- |
| Fluke Digital Thermometer | 52K/J | MT-TP05 | 3/17/23 |
| 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 |

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NVLAP TESTING
NVLAP LAB CODE 200927-0

| General Information | |
|---|---|
| **Manufacturer:** | FX Luminaire / Lumascape |
| **Model Number:** | HCLEDTA-CU+P-1LED-12RA-CU / aDUK10-1LED-12RA-CU |
| **Driver Model Number:** | N/A |

| Test Summary | |
|---|---|
| **Total Lumens:** | 50.80 |
| **Efficacy:** | 28.32 |
| **Color Redering Index:** | 85.6 |
| **Correlated Color Temperature:** | 2571 |
| **Input Voltage (VDC):** | 12.00 |
| **Input Current (Amp):** | 0.1766 |
| **Input Power (W):** | 1.79 |
| **Input Power Factor:** | 0.8465 |
| **Current ATHD (%):** | 50.6% |

| Test Condition | |
|---|---|
| **Ambient Temperature (°C):** | 25.0 |
| **Stabilization Time (Hours):** | 0:40 |
| **Total Operating Time (Hours):** | 1:00 |

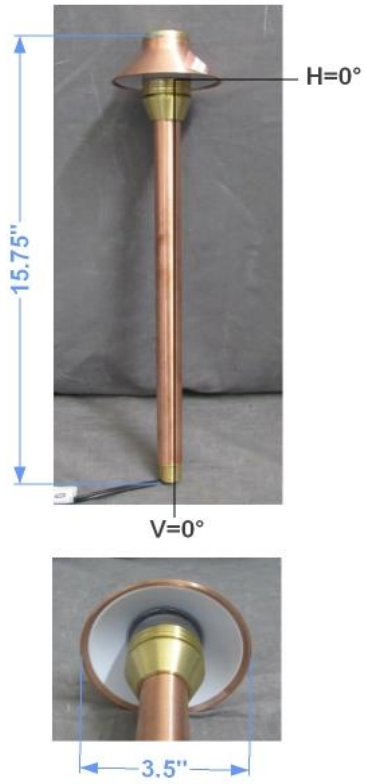


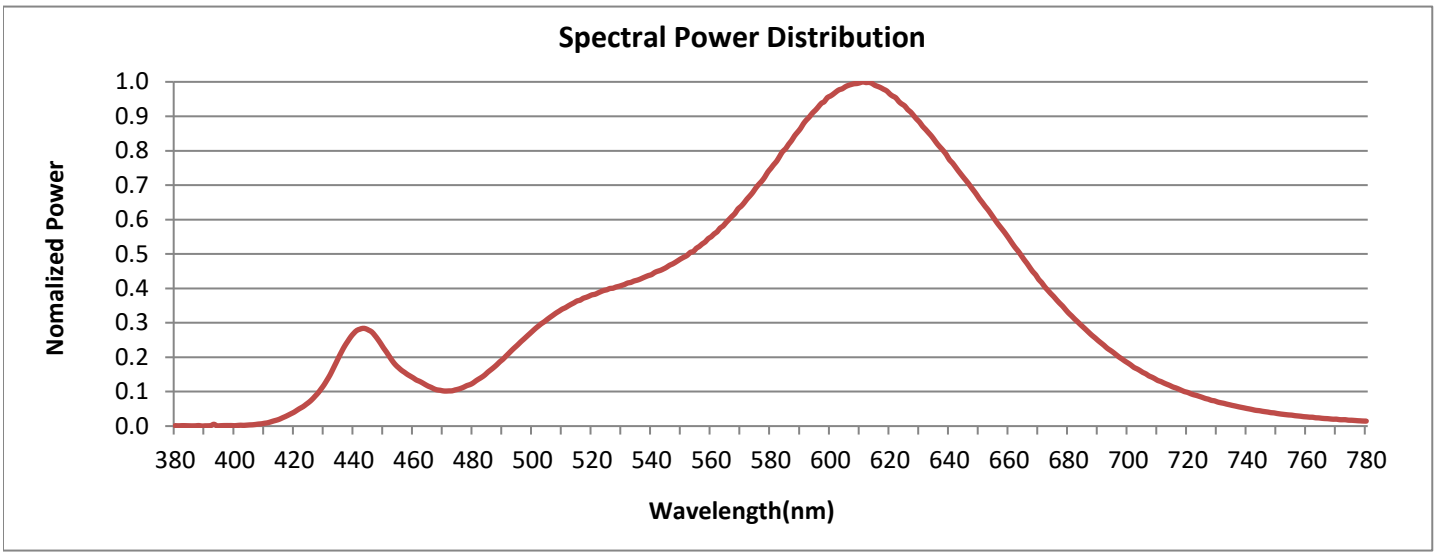

FIG. 1 LUMINAIRE

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Report No: L022211210

NVLAP TESTING
NVLAP LAB CODE 200927-0

## Colorimetry Test Results

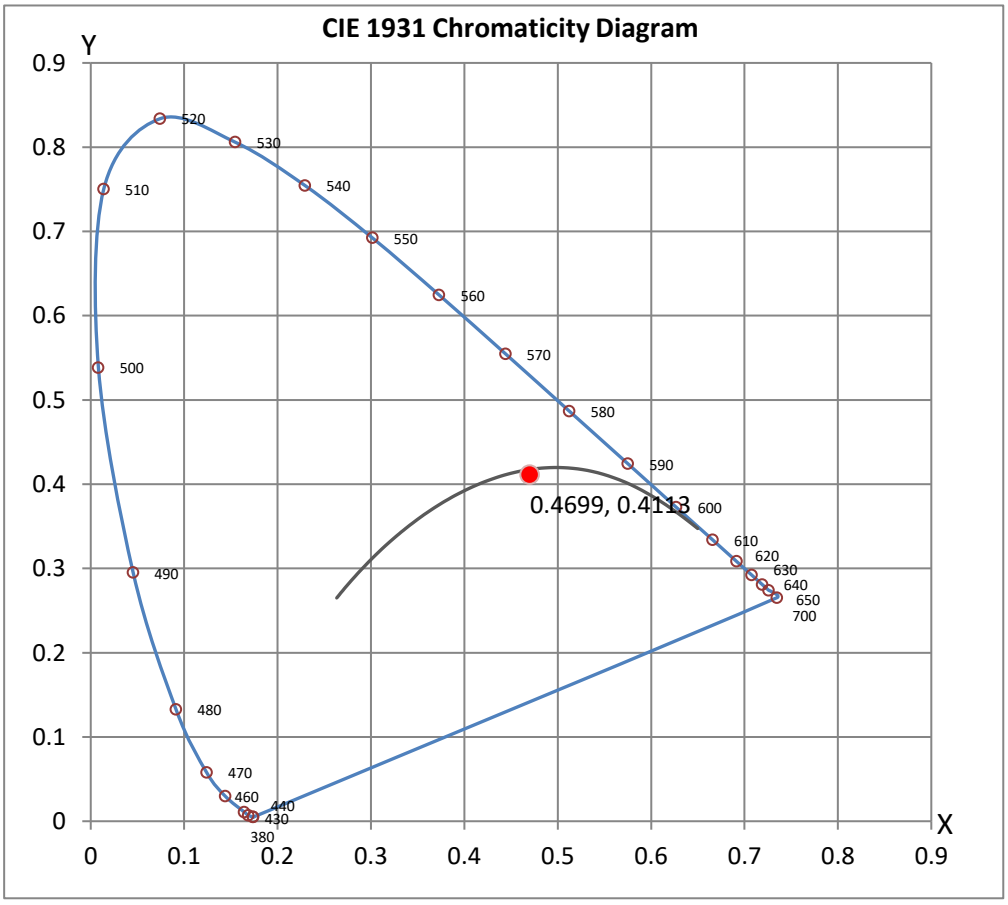



**CRI & CCT**

| | |
|---|---|
| x | 0.4699 |
| y | 0.4113 |
| u' | 0.2687 |
| v' | 0.5291 |
| CRI | 85.60 |
| CCT | 2571 |
| Duv | -0.00045 |

**R Values**

| | |
|---|---|
| R1 | 84.46 |
| R2 | 92.91 |
| R3 | 96.48 |
| R4 | 86.15 |
| R5 | 86.09 |
| R6 | 94.74 |
| R7 | 82.81 |
| R8 | 61.12 |
| R9 | 17.85 |
| R10 | 85.40 |
| R11 | 88.61 |
| R12 | 87.19 |
| R13 | 86.44 |
| R14 | 98.74 |
| R15 | 75.95 |



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NVLAP TESTING
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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:

The results related only to the samples as received and tested. This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government.

Report Prepared by : Kunjan Modi

Test Report Reviewed by:

Steve Kang
Quality Assurance

**Attached are photometric data reports.*

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www.lightlaboratory.com

# Photometric Test Report

**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : L022211210.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST] L022211210
[TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)
[ISSUEDATE] 2/23/2022
[MANUFAC] FX Luminaire / Lumascape
[LUMCAT] HCLEDTA-CU+P-1LED-12RA-CU / aDUK10-1LED-12RA-CU
[LUMINAIRE] Lumiled, 1LED, 2700K, 12"
[BALLASTCAT] N/A
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[INPUT] 12VAC
[TEST PROCEDURE] IESNA:LM-79-08

**CHARACTERISTICS**

| | |
|---|---|
| IES Classification | Type V |
| Longitudinal Classification | Short |
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 51 |
| Downward Total Efficiency | N.A. (absolute) |
| Total Luminaire Efficiency | N.A. (absolute) |
| Luminaire Efficacy Rating (LER) | 28 |
| Total Luminaire Watts | 1.79 |
| Ballast Factor | 1.00 |
| Upward Waste Light Ratio | 0.00 |
| Maximum Candela | 17 |
| Maximum Candela Angle | 0H 60V |
| Maximum Candela (<90 Degrees Vertical) | 17 |
| Maximum Candela Angle (<90 Degrees Vertical) | 0H 60V |
| Maximum Candela At 90 Degrees Vertical | 0 (0.0% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | 2 (3.9% Luminaire Lumens) |
| Cutoff Classification (deprecated) | N.A. (absolute) |

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Calculations based on published IES Methods and recommendations, values rounded for display purposes.
Results derived from content of manufacturers photometric file.

**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : L022211210.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

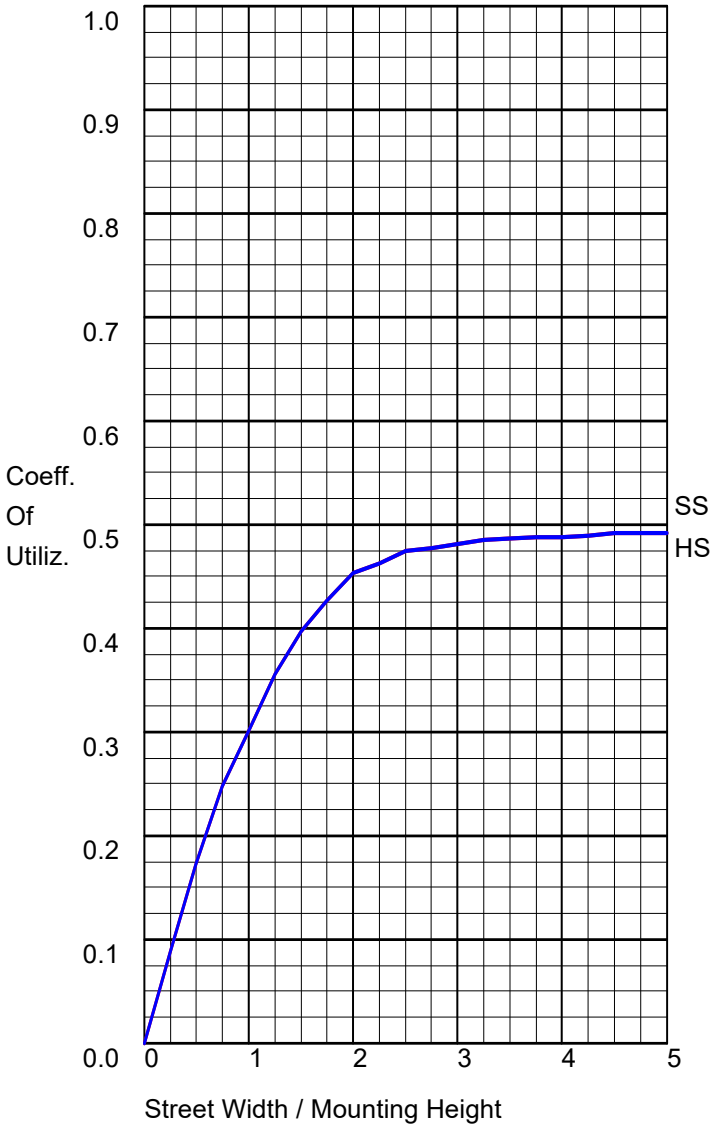
| | Lumens | % Lamp | % Luminaire |
|---|---|---|---|
| FL - Front-Low (0-30) | 3.7 | N.A. | 7.2 |
| FM - Front-Medium (30-60) | 13.6 | N.A. | 26.8 |
| FH - Front-High (60-80) | 7.6 | N.A. | 15.0 |
| FVH - Front-Very High (80-90) | 0.5 | N.A. | 1.1 |
| BL - Back-Low (0-30) | 3.7 | N.A. | 7.2 |
| BM - Back-Medium (30-60) | 13.6 | N.A. | 26.8 |
| BH - Back-High (60-80) | 7.6 | N.A. | 15.0 |
| BVH - Back-Very High (80-90) | 0.5 | N.A. | 1.1 |
| UL - Uplight-Low (90-100) | 0.0 | N.A. | 0.0 |
| UH - Uplight-High (100-180) | 0.0 | N.A. | 0.0 |
| Total | 50.8 | N.A. | 100.0 |
| BUG Rating | B0-U0-G0 | | |

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**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : L022211210.IES**

**COEFFICIENTS OF UTILIZATION**



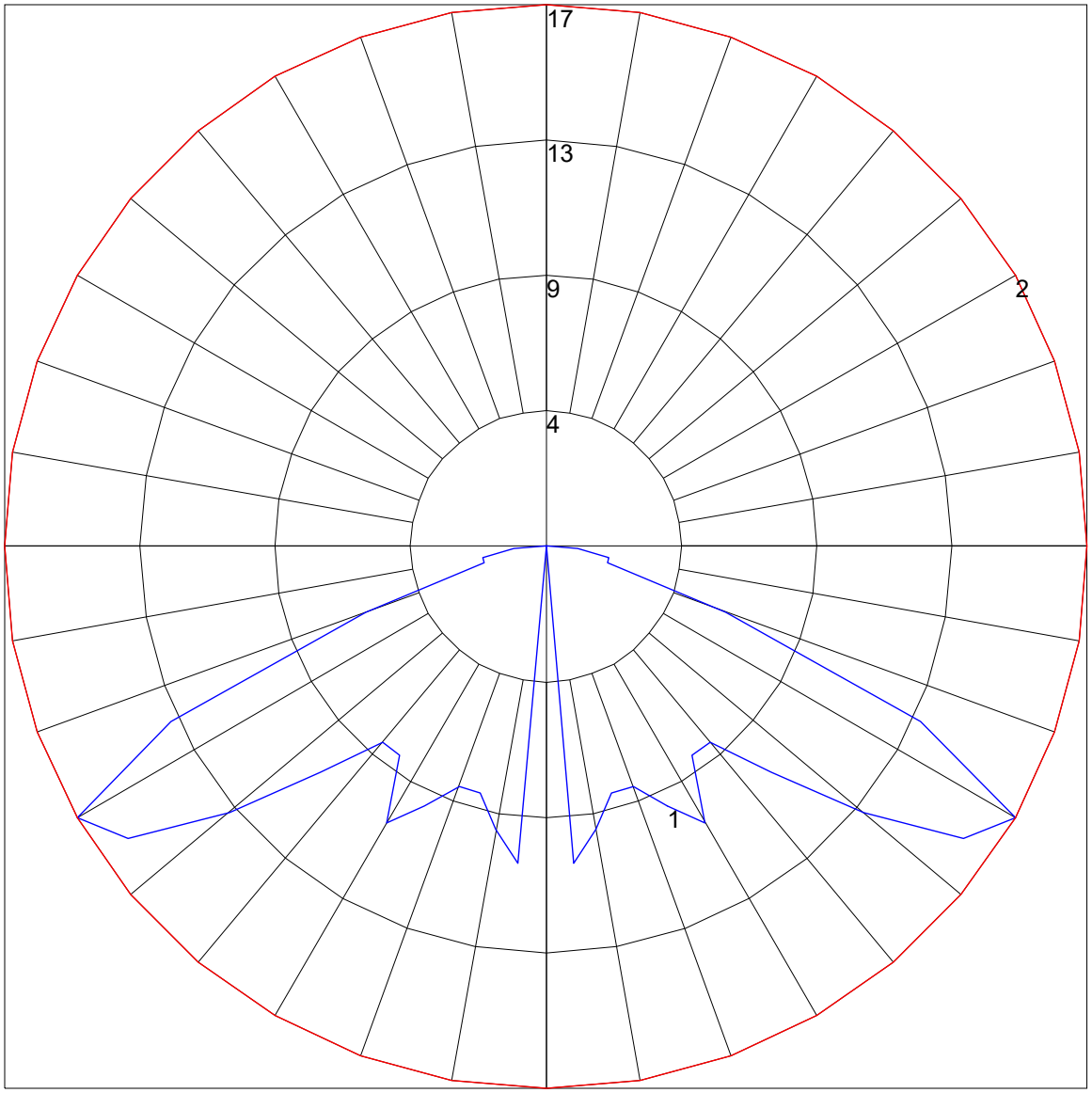

**FLUX DISTRIBUTION**

| | Lumens | Percent Of Luminaire |
|---|---|---|
| Downward Street Side | 25.5 | 50.0 |
| Downward House Side | 25.5 | 50.0 |
| Downward Total | 51.0 | 100.2 |
| Upward Street Side | 0.0 | 0.0 |
| Upward House Side | 0.0 | 0.0 |
| Upward Total | 0.0 | 0.0 |
| Total Flux | 51.0 | 100.2 |

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**IES ROAD REPORT**
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**POLAR GRAPH**

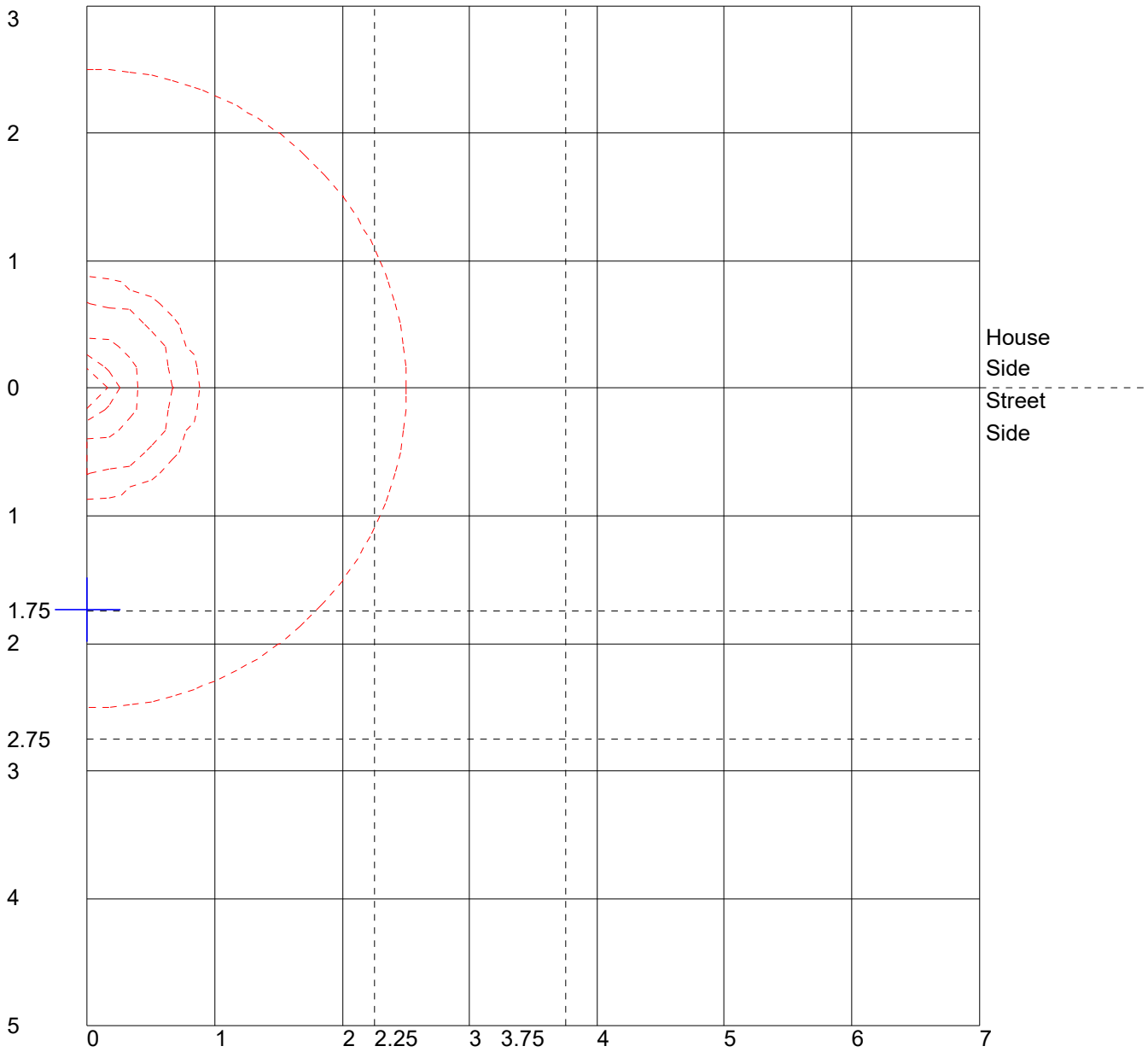



Maximum Candela = 17  Located At Horizontal Angle = 0, Vertical Angle = 60
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
# 2 - Horizontal Cone Through Vertical Angle (60) (Through Max. Cd.)

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**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : L022211210.IES**

**ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE**

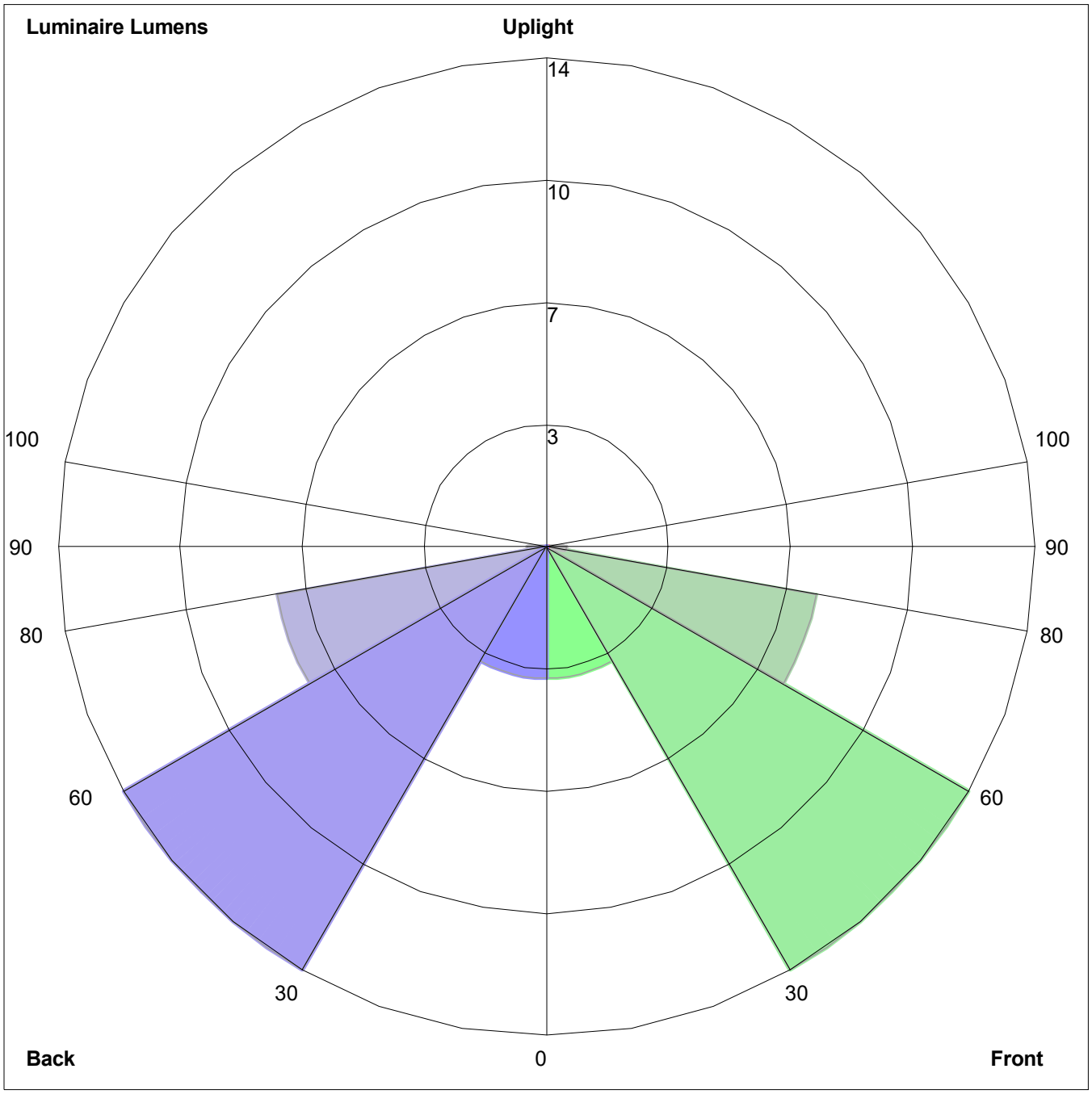



Distance In Units Of Mounting Height
Values Based On 10 Foot Mounting Height
1/2 Maximum Candela Trace Shown As Dashed Curve
(+) = Maximum Candela Point

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**IES ROAD REPORT**
**PHOTOMETRIC FILENAME : L022211210.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH**




Luminaire Lumens:
Front: Low=3.7, Medium=13.6, High=7.6, Very High=0.5
Back: Low=3.7, Medium=13.6, High=7.6, Very High=0.5
Uplight: Low=0.0, High=0.0

BUG Rating : B0-U0-G0

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