# **Photometric** Report

EXTERIOR DOT-HP PRO DOME – GREEN

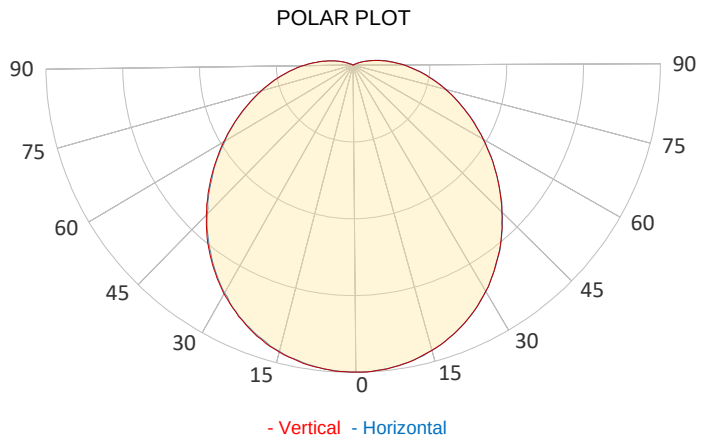
*LM-79-08 Compliant*

## GENERAL SPECIFICATIONS

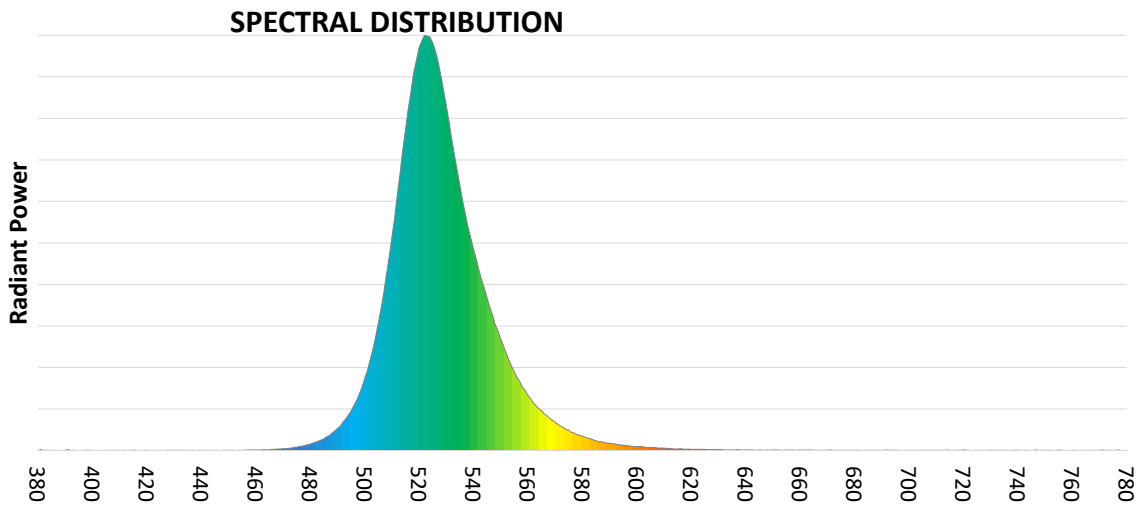
| | |
|---|---|
| Total Fixture Output: | 170 lm |
| Efficacy: | 30.9 lm/W |
| Lens Option: | Dome |
| Beam Angle (50%): | 120˚ |
| Field Angle (10%): | 190˚ |
| CRI: | N/A |
| Color Temperature: | N/A |



## SAMPLE MEASUREMENT




| | |
|---|---|
| Catalog Number: | MAR-90581010 |
| Measured Output: | 170 lm |
| Measured Peak: | 48.8 cd |
| Consumed Power: | 5.5 W |
| Efficacy: | 30.9 lm/W |
| Beam Angle (50%): | 118.1˚ |
| Field Angle (10%): | 195.6˚ |
| Measurement Condition: | |
| Ambient Temperature: | 25˚ +/- 5˚ C |
| AC Supply: | 230V/50Hz |
| Fan Mode: | No Fan |
| Fixture Warm-up Time: | 60 minutes |

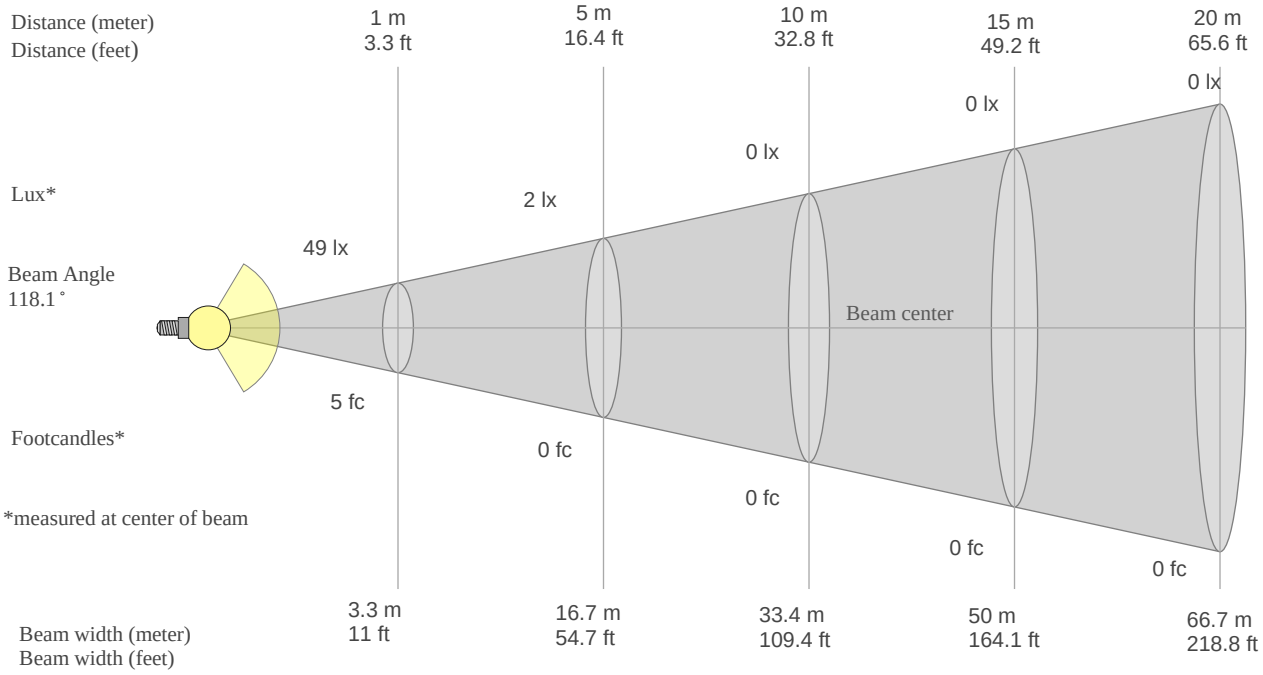



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## BEAM DETAILS



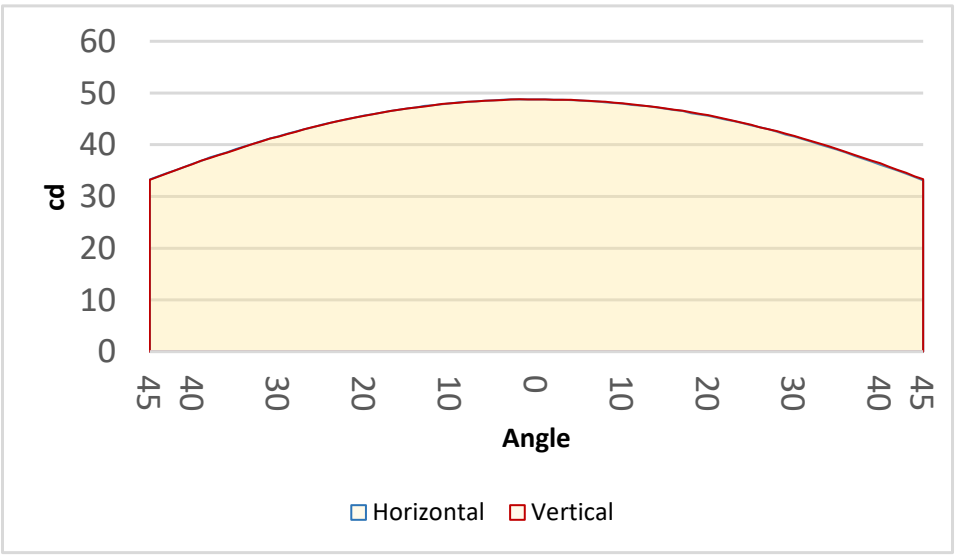

Beam width: = 3.3 * distance

Illuminance: = 49 / (distance$^2$)

*distance in [m] for illuminance in [lux]  distance in [ft] for illuminance in [fc]*

### BEAM ILLUMINANCE FROM 1-20M

| 1m | 2m | 3m | 4m | 5m | 6m | 7m | 8m | 9m | 10m | 11m | 12m | 13m | 14m | 15m | 16m | 17m | 18m | 19m | 20m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.3ft | 6.6ft | 9.8ft | 13.1ft | 16.4ft | 19.7ft | 23ft | 26.2ft | 29.5ft | 32.8ft | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| 49lx | 12lx | 5lx | 3lx | 2lx | 1lx | 1lx | 1lx | 1lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| 4.5fc | 1.1fc | 0.5fc | 0.3fc | 0.2fc | 0.1fc | 0.1fc | 0.1fc | 0.1fc | 0fc | 0fc | 0fc | 0fc | 0fc | 0fc | 0fc | 0fc | 0fc | 0fc | 0fc |




| BEAM ANGLE H 50% | FIELD ANGLE 10% |
|---|---|
| 118.1 ˚ | 195.6 ˚ |

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## TEST INFORMATION

| | |
|---|---|
| Test date: | From October 14, 2024, to October 16, 2024 |
| Date of receipt samples: | August 14, 2024 |
| Quantity of receipt samples: | 1 unit per model |

## EQUIPMENT LIST

| ID | Instrument | Model | Cal. date | Next cal. Date |
|---|---|---|---|---|
| AC Power Meter | EF-I-0287 | PF9811 | 2024.03.08 | 2025.03.07 |
| AC Power Meter | EF-I-1002 | PF2010 | 2024.03.08 | 2025.03.07 |
| Photometric colorimetric electric system (2-meter sphere) | EF-I-900 | HASS 2000 | Before used | Before used |
| 21V/3.9289A standard lamp | EF-I-963 | D204 | 2024.03.22 | 2025.03.21 |
| Goniophotometer | EF-I-902 | GO-R5000 | 2024.03.08 | 2025.03.07 |
| Wireless temperature transmitter | EF-I-958 | DWRP-B (0) | 2024.03.08 | 2025.03.07 |

## REFERENCE STANDARDS OR METHODS

| | |
|---|---|
| ANSI/NEMA/ ANSLG C78.377-2017 | Specifications for the Chromaticity of Solid-State Lighting Products |
| ANSI C82.77-2002 | Harmonic Emission Limits Related Power Quality Requirements for Lighting Equipment |
| CIE Pub. No. 13.3-1995 | Method of Measuring and Specifying Color Rendering of Light Sources |
| CIE Pub. No. 15:2004 | Colorimetry |
| IES LM-79-08 | Electrical and Photometric Measurements of Solid-State Lighting Products |


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## TEST CONDUCTED AND METHOD

**Ambient Condition**

The ambient temperature in which measurements are being taken was maintained at 25± 2 ℃, the air flow around the sample(s) being tested did not affect the performance.

**Power Supply Characteristics**

The AC power supply had a sinusoidal voltage wave shape at the prescribed frequency (60 Hz) such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item.

The voltage of AC power supply (RMS voltage) applied to the device under test was regulated to within 0.2 percent under load.

**Seasoning and Stabilization**

No seasoning was performed in accordance with IESNA LM-79-08. And before the measurement, the sample was stabilized until the light output and power variations were less than 0.5% in 30 minutes intervals (3 readings, 15 minutes apart).

**Electrical Instrumentation**

The calibration uncertainties of the instruments for AC voltage and current were less than 0.2 percent, and the calibration uncertainty of the AC power meter was less than 0.5 percent (9% confidence interval, k=2).

**Color Measurement Method**

Spectral radiant flux was measured by a sphere (2 meter)-spectroradiometer system, and the color characteristics (Color rendering index, correlated color temperature, chromaticity coordinate) were calculated from these by software automatically.

10 samples were measured as customer required.

**Total Luminous Flux Measurement Method**

Total luminous flux was measured by both sphere-spectroradiometer system and goniophotometer.

Spectral radiant flux was measured by a sphere (2 meter)-spectroradiometer system, and the total luminous flux was calculated from these by software automatically.

Light intensity distribution was measured by a type C goniophotometer (with mirror) which can keep the sample in burn position when the tests conduct, and the total luminous flux was calculated from the intensity data by software automatically.

1 sample was measured by sphere method, and 1 sample was measured by goniophotometer method.

Correction factor (self-absorption) has been considered when doing measurement.

**Luminous Intensity Distribution Measurement Method**

Light intensity distribution was measured by a type C goniophotometer (with mirror) which can keep the sample in burn position when the tests conduct, and the kinds of graph were generated by software automatically.

1 sample was measured as customer required.

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