

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P157286

Luminaire Tested: **VTS-F09-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157286
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VTS-F09-LED-E1-5MQ-7050
Description: VENTUS LED SITE LUMINAIRE
(9) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (63) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

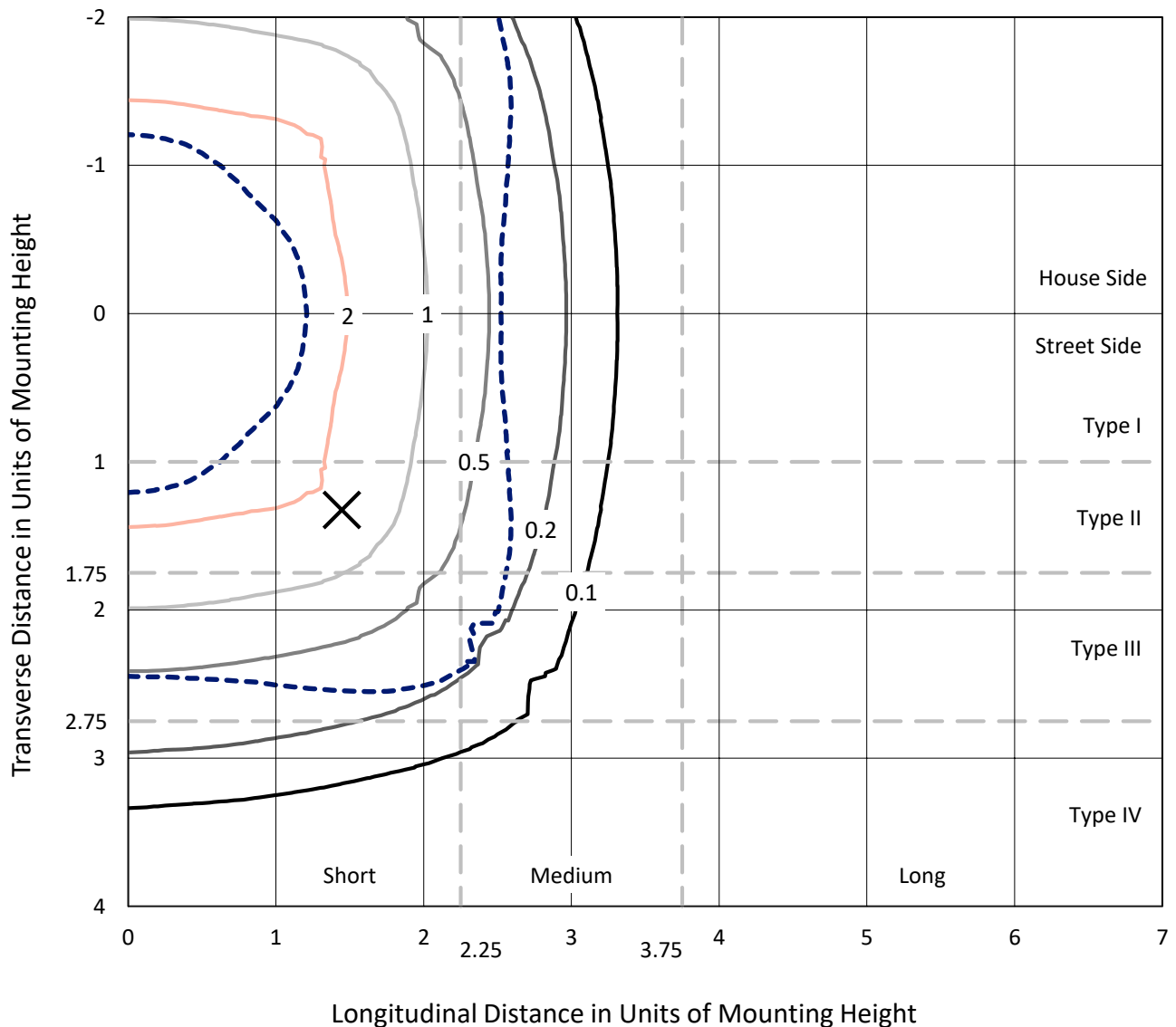
Lumens per Lamp: N/A
Luminaire Lumens: 24387.1 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 234.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

REPORT NUMBER: P157286
 CATALOG NUMBER: VTS-F09-LED-E1-5MQ-7050

Iso-Footcandle Lines of Horizontal Illumination

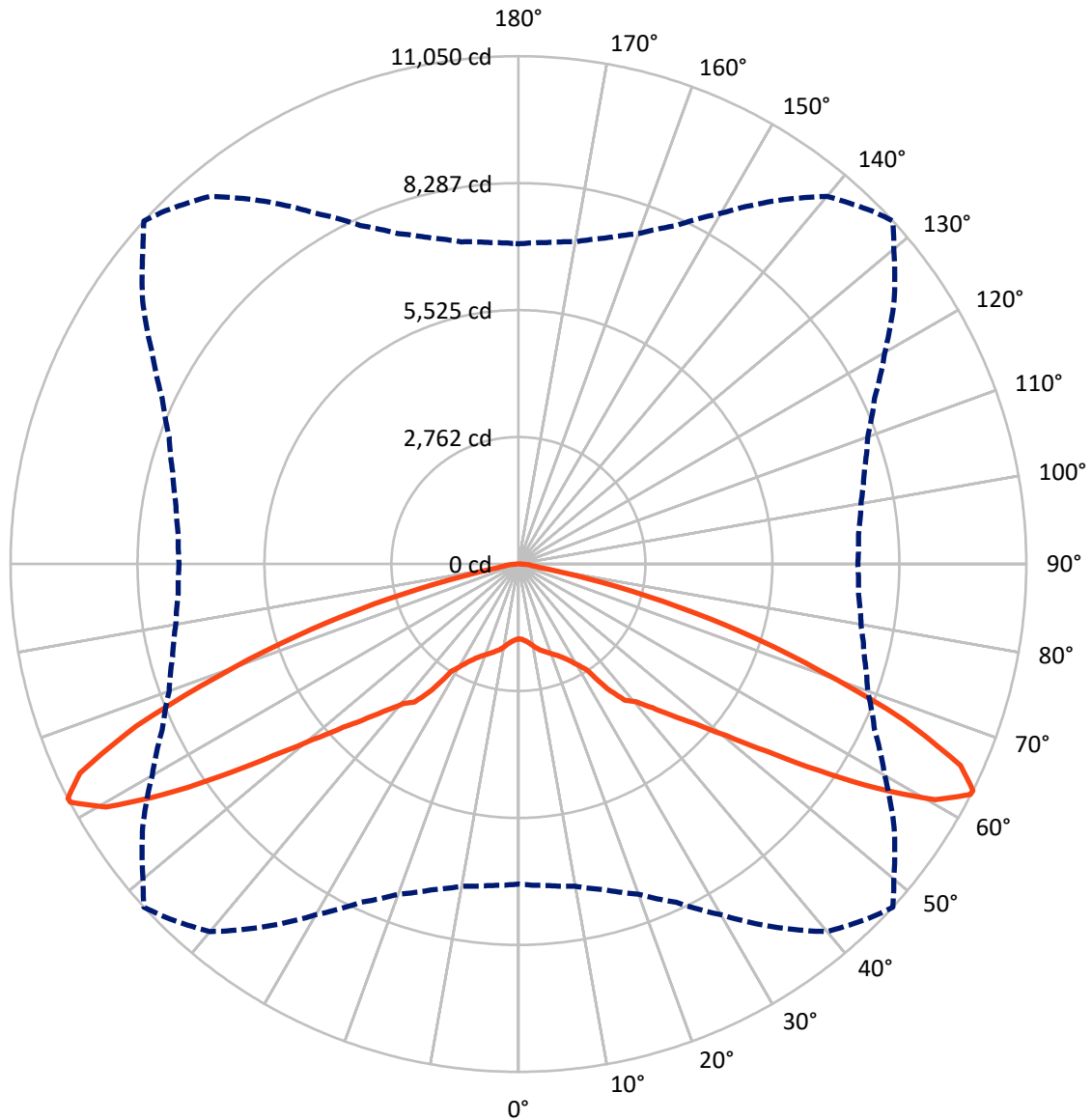
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P157286
CATALOG NUMBER: VTS-F09-LED-E1-5MQ-7050

Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

REPORT NUMBER: P157286

CATALOG NUMBER: VTS-F09-LED-E1-5MQ-7050

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 12193.5 | 0.0 | 12193.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 12193.5 | 0.0 | 12193.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 24387.1 | 0.0 | 24387.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 163.5 | 0.7 |
| 10°-20° | 555.7 | 2.3 |
| 20°-30° | 1063.0 | 4.4 |
| 30°-40° | 2033.4 | 8.3 |
| 40°-50° | 3518.5 | 14.4 |
| 50°-60° | 6319.0 | 25.9 |
| 60°-70° | 7684.0 | 31.5 |
| 70°-80° | 2775.1 | 11.4 |
| 80°-90° | 274.8 | 1.1 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 24387.1 | 100.0 |
| 0°-180° | 24387.1 | 100.0 |



REPORT NUMBER: P157286

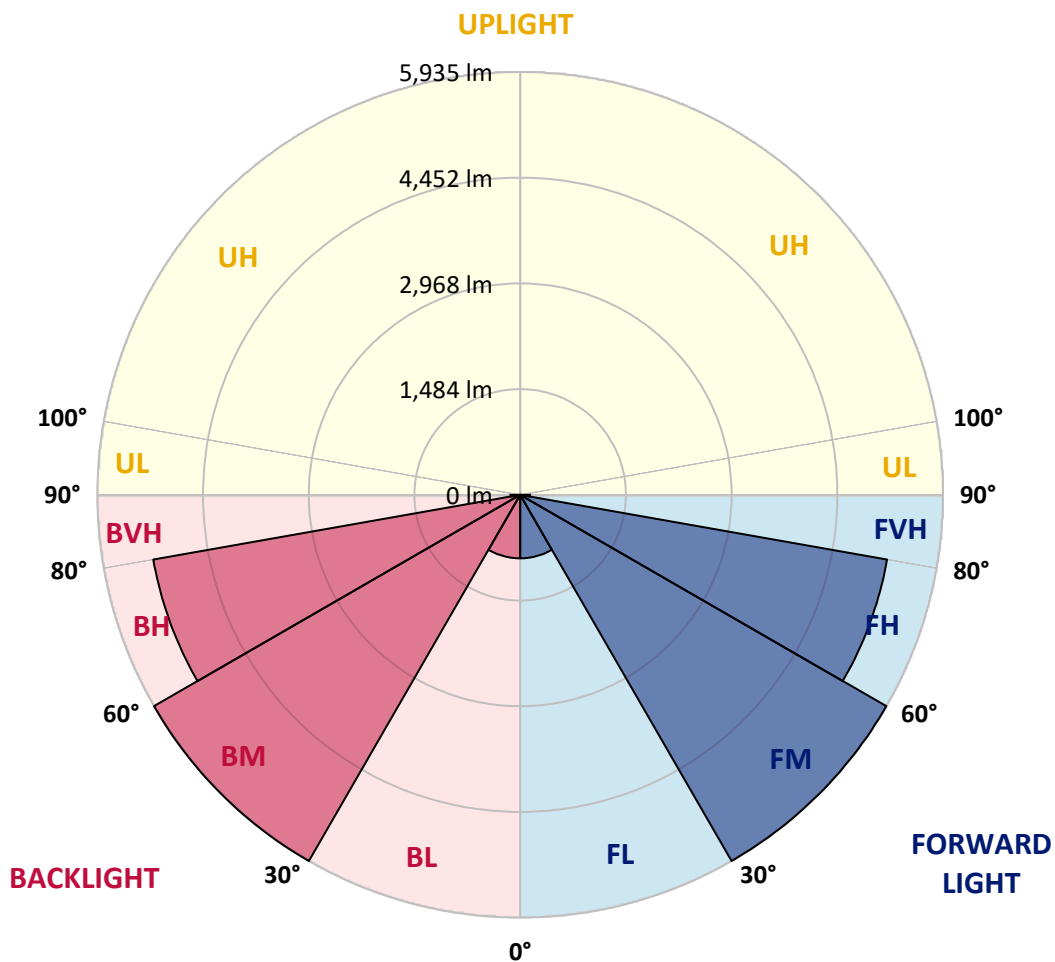
CATALOG NUMBER: VTS-F09-LED-E1-5MQ-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 891.1 | 3.7 | | | |
| FM | (30°-60°) | 5935.5 | 24.3 | | | |
| FH | (60°-80°) | 5229.5 | 21.4 | | | G3/7500 |
| FVH | (80°-90°) | 137.4 | 0.6 | | | G2/225 |
| BL | (0°-30°) | 891.1 | 3.7 | B2/1000 | | |
| BM | (30°-60°) | 5935.5 | 24.3 | B4/8500 | | |
| BH | (60°-80°) | 5229.5 | 21.4 | B5 | | G3/7500 |
| BVH | (80°-90°) | 137.4 | 0.6 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





REPORT NUMBER: P157286
 CATALOG NUMBER: VTS-F09-LED-E1-5MQ-7050

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 47.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 |
| 2.5° | 1639.1 | 1636.0 | 1637.6 | 1639.1 | 1637.6 | 1636.0 | 1636.0 | 1636.0 | 1639.1 | 1636.0 | 1643.7 |
| 5° | 1671.1 | 1668.1 | 1669.6 | 1669.6 | 1669.6 | 1666.5 | 1666.5 | 1666.5 | 1665.0 | 1666.5 | 1683.3 |
| 7.5° | 1732.1 | 1727.5 | 1726.0 | 1729.1 | 1726.0 | 1724.5 | 1723.0 | 1723.0 | 1719.9 | 1719.9 | 1741.2 |
| 10° | 1805.3 | 1799.2 | 1802.2 | 1803.8 | 1799.2 | 1796.1 | 1796.1 | 1796.1 | 1791.6 | 1790.0 | 1817.5 |
| 12.5° | 1886.1 | 1883.0 | 1883.0 | 1880.0 | 1878.5 | 1875.4 | 1873.9 | 1875.4 | 1869.3 | 1869.3 | 1896.8 |
| 15° | 1963.9 | 1957.8 | 1959.3 | 1954.7 | 1951.7 | 1948.6 | 1947.1 | 1945.6 | 1942.5 | 1942.5 | 1959.3 |
| 17.5° | 2035.5 | 2030.9 | 2029.4 | 2024.8 | 2020.3 | 2015.7 | 2012.7 | 2011.1 | 2006.6 | 2006.6 | 2021.8 |
| 20° | 2110.2 | 2105.7 | 2102.6 | 2095.0 | 2087.4 | 2082.8 | 2076.7 | 2073.6 | 2067.5 | 2069.1 | 2085.8 |
| 22.5° | 2195.6 | 2188.0 | 2181.9 | 2175.8 | 2162.1 | 2152.9 | 2145.3 | 2139.2 | 2136.2 | 2136.2 | 2159.0 |
| 25° | 2310.0 | 2305.4 | 2296.3 | 2276.4 | 2259.7 | 2245.9 | 2233.7 | 2227.6 | 2221.5 | 2218.5 | 2253.6 |
| 27.5° | 2450.3 | 2445.7 | 2433.5 | 2413.7 | 2390.8 | 2367.9 | 2354.2 | 2343.5 | 2335.9 | 2331.3 | 2381.6 |
| 30° | 2636.3 | 2628.6 | 2618.0 | 2586.0 | 2566.1 | 2531.1 | 2515.8 | 2500.6 | 2483.8 | 2488.4 | 2547.8 |
| 32.5° | 3000.7 | 2990.0 | 2956.5 | 2921.4 | 2860.4 | 2813.1 | 2764.3 | 2727.8 | 2692.7 | 2688.1 | 2752.1 |
| 35° | 3331.5 | 3327.0 | 3320.9 | 3296.5 | 3273.6 | 3244.6 | 3221.8 | 3183.6 | 3151.6 | 3144.0 | 3323.9 |
| 37.5° | 3509.9 | 3520.6 | 3511.5 | 3508.4 | 3508.4 | 3522.1 | 3564.8 | 3607.5 | 3638.0 | 3656.3 | 3756.9 |
| 40° | 3782.9 | 3782.9 | 3772.2 | 3766.1 | 3753.9 | 3772.2 | 3790.5 | 3822.5 | 3836.2 | 3837.8 | 3939.9 |
| 42.5° | 4092.4 | 4093.9 | 4083.2 | 4064.9 | 4058.8 | 4075.6 | 4100.0 | 4130.5 | 4148.8 | 4153.4 | 4272.3 |
| 45° | 4437.0 | 4432.4 | 4423.3 | 4417.2 | 4421.7 | 4437.0 | 4466.0 | 4525.4 | 4552.9 | 4574.2 | 4703.8 |
| 47.5° | 4810.5 | 4841.0 | 4815.1 | 4819.7 | 4819.7 | 4867.0 | 4932.5 | 4981.3 | 5025.5 | 5066.7 | 5203.9 |
| 50° | 5300.0 | 5304.6 | 5309.1 | 5322.9 | 5332.0 | 5394.5 | 5476.9 | 5534.8 | 5598.8 | 5652.2 | 5876.3 |
| 52.5° | 5954.1 | 5944.9 | 5967.8 | 5983.1 | 6034.9 | 6068.4 | 6205.7 | 6278.9 | 6367.3 | 6435.9 | 6763.7 |
| 55° | 6736.3 | 6731.7 | 6765.3 | 6777.5 | 6846.1 | 6928.4 | 7080.9 | 7241.0 | 7391.9 | 7475.8 | 7924.1 |
| 57.5° | 7297.4 | 7309.6 | 7367.5 | 7448.3 | 7582.5 | 7757.9 | 7985.0 | 8338.8 | 8625.4 | 8716.9 | 9210.9 |
| 60° | 7420.9 | 7460.5 | 7547.4 | 7709.1 | 7939.3 | 8265.6 | 8712.3 | 9253.6 | 9778.1 | 9953.5 | 10417.0 |
| 62.5° | 7074.8 | 7120.5 | 7248.6 | 7442.2 | 7742.6 | 8226.0 | 8870.9 | 9634.8 | 10413.9 | 10804.3 | 11037.6 |
| 63° | 6965.0 | 7021.4 | 7117.5 | 7341.6 | 7646.6 | 8123.8 | 8809.9 | 9633.3 | 10441.4 | 10866.8 | 11049.8 |
| 65° | 6449.6 | 6460.3 | 6603.6 | 6827.8 | 7170.8 | 7666.4 | 8358.6 | 9310.0 | 10206.6 | 10697.5 | 10571.0 |
| 67.5° | 5550.0 | 5594.3 | 5714.7 | 5940.4 | 6274.3 | 6789.6 | 7541.3 | 8421.1 | 9209.4 | 9601.3 | 9035.6 |
| 70° | 4484.2 | 4481.2 | 4630.6 | 4812.1 | 5106.3 | 5559.2 | 6217.9 | 7012.3 | 7637.4 | 7922.5 | 6975.7 |
| 72.5° | 3203.5 | 3124.2 | 3234.0 | 3435.2 | 3676.1 | 4037.5 | 4559.0 | 5176.5 | 5736.1 | 5983.1 | 5100.2 |
| 75° | 1459.2 | 1437.8 | 1535.4 | 1735.1 | 1979.1 | 2300.8 | 2729.3 | 3262.9 | 3799.6 | 4089.3 | 3249.2 |
| 77.5° | 491.0 | 497.1 | 535.2 | 606.8 | 738.0 | 899.6 | 1166.4 | 1508.0 | 1942.5 | 2229.2 | 1524.7 |
| 80° | 329.3 | 338.5 | 350.7 | 361.4 | 376.6 | 401.0 | 458.9 | 547.4 | 681.6 | 824.9 | 481.8 |
| 82.5° | 269.9 | 280.6 | 308.0 | 320.2 | 329.3 | 337.0 | 341.5 | 347.6 | 347.6 | 350.7 | 304.9 |
| 85° | 193.6 | 211.9 | 248.5 | 271.4 | 280.6 | 286.7 | 294.3 | 303.4 | 289.7 | 277.5 | 236.3 |
| 87.5° | 67.1 | 91.5 | 134.2 | 147.9 | 158.6 | 160.1 | 170.8 | 189.1 | 179.9 | 146.4 | 71.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P157286

CATALOG NUMBER: VTS-F09-LED-E1-5MQ-7050

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 | 1628.4 |
| 2.5° | 1636.0 | 1634.5 | 1636.0 | 1637.6 | 1637.6 | 1637.6 | 1639.1 | 1640.6 | 1640.6 |
| 5° | 1666.5 | 1668.1 | 1666.5 | 1668.1 | 1668.1 | 1669.6 | 1669.6 | 1672.6 | 1672.6 |
| 7.5° | 1718.4 | 1721.4 | 1719.9 | 1723.0 | 1723.0 | 1726.0 | 1724.5 | 1729.1 | 1729.1 |
| 10° | 1788.5 | 1791.6 | 1794.6 | 1796.1 | 1794.6 | 1797.7 | 1800.7 | 1802.2 | 1800.7 |
| 12.5° | 1867.8 | 1869.3 | 1867.8 | 1870.9 | 1870.9 | 1873.9 | 1873.9 | 1878.5 | 1878.5 |
| 15° | 1941.0 | 1939.5 | 1937.9 | 1942.5 | 1945.6 | 1947.1 | 1950.1 | 1954.7 | 1950.1 |
| 17.5° | 2006.6 | 2008.1 | 2005.0 | 2009.6 | 2015.7 | 2020.3 | 2023.3 | 2029.4 | 2027.9 |
| 20° | 2072.1 | 2069.1 | 2072.1 | 2079.7 | 2085.8 | 2091.9 | 2098.0 | 2107.2 | 2105.7 |
| 22.5° | 2136.2 | 2139.2 | 2146.8 | 2152.9 | 2163.6 | 2172.7 | 2180.4 | 2192.6 | 2197.1 |
| 25° | 2226.1 | 2226.1 | 2238.3 | 2245.9 | 2261.2 | 2273.4 | 2290.2 | 2303.9 | 2311.5 |
| 27.5° | 2340.5 | 2340.5 | 2354.2 | 2371.0 | 2393.8 | 2415.2 | 2433.5 | 2451.8 | 2448.7 |
| 30° | 2496.0 | 2503.6 | 2515.8 | 2537.2 | 2567.7 | 2593.6 | 2618.0 | 2636.3 | 2637.8 |
| 32.5° | 2700.3 | 2709.5 | 2746.0 | 2800.9 | 2865.0 | 2913.8 | 2950.4 | 2994.6 | 3000.7 |
| 35° | 3163.8 | 3186.7 | 3234.0 | 3278.2 | 3304.1 | 3333.1 | 3351.4 | 3352.9 | 3355.9 |
| 37.5° | 3651.7 | 3612.1 | 3575.5 | 3542.0 | 3526.7 | 3523.7 | 3523.7 | 3529.8 | 3532.8 |
| 40° | 3830.1 | 3810.3 | 3793.5 | 3772.2 | 3778.3 | 3776.8 | 3787.4 | 3796.6 | 3802.7 |
| 42.5° | 4135.1 | 4119.8 | 4104.6 | 4077.1 | 4092.4 | 4087.8 | 4103.1 | 4116.8 | 4124.4 |
| 45° | 4560.5 | 4513.2 | 4479.7 | 4435.5 | 4450.7 | 4441.6 | 4441.6 | 4458.3 | 4461.4 |
| 47.5° | 5030.1 | 4975.2 | 4906.6 | 4851.7 | 4833.4 | 4816.6 | 4831.9 | 4831.9 | 4815.1 |
| 50° | 5592.7 | 5527.2 | 5446.4 | 5357.9 | 5327.4 | 5310.7 | 5316.8 | 5324.4 | 5277.1 |
| 52.5° | 6356.6 | 6283.4 | 6169.1 | 6034.9 | 6005.9 | 5992.2 | 5989.2 | 5978.5 | 5966.3 |
| 55° | 7391.9 | 7254.7 | 7114.4 | 6937.5 | 6884.2 | 6868.9 | 6870.5 | 6858.3 | 6887.2 |
| 57.5° | 8613.2 | 8412.0 | 8088.7 | 7873.7 | 7745.7 | 7696.9 | 7652.7 | 7634.4 | 7635.9 |
| 60° | 9822.4 | 9412.2 | 8928.9 | 8553.8 | 8285.4 | 8114.6 | 7980.5 | 7905.8 | 7884.4 |
| 62.5° | 10601.5 | 9956.5 | 9230.8 | 8622.4 | 8181.7 | 7899.7 | 7687.7 | 7553.5 | 7510.9 |
| 63° | 10662.5 | 9979.4 | 9203.3 | 8550.7 | 8087.2 | 7791.4 | 7568.8 | 7430.0 | 7384.3 |
| 65° | 10529.8 | 9749.2 | 8845.0 | 8067.4 | 7559.6 | 7231.8 | 6990.9 | 6859.8 | 6824.7 |
| 67.5° | 9499.1 | 8849.6 | 7928.6 | 7125.1 | 6612.8 | 6280.4 | 6004.4 | 5879.4 | 5839.7 |
| 70° | 7727.4 | 7282.1 | 6527.4 | 5841.3 | 5364.0 | 5043.8 | 4764.8 | 4661.1 | 4659.6 |
| 72.5° | 5728.4 | 5150.6 | 4700.8 | 4197.6 | 3781.3 | 3526.7 | 3284.3 | 3168.4 | 3110.5 |
| 75° | 3789.0 | 3169.9 | 2666.8 | 2242.9 | 1828.2 | 1599.4 | 1326.5 | 1209.1 | 1140.5 |
| 77.5° | 1909.0 | 1415.0 | 1013.9 | 702.9 | 545.9 | 448.3 | 410.2 | 390.3 | 388.8 |
| 80° | 635.8 | 477.2 | 410.2 | 384.2 | 376.6 | 378.1 | 373.6 | 365.9 | 356.8 |
| 82.5° | 352.2 | 370.5 | 373.6 | 362.9 | 362.9 | 356.8 | 350.7 | 321.7 | 306.5 |
| 85° | 301.9 | 332.4 | 335.4 | 329.3 | 327.8 | 318.7 | 308.0 | 268.4 | 245.5 |
| 87.5° | 189.1 | 218.0 | 213.5 | 190.6 | 210.4 | 196.7 | 186.0 | 120.5 | 88.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)