

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: P165452

Luminaire Tested: **VTS-F12-LED-E1-SL4-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165452
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VTS-F12-LED-E1-SL4-HSS
Description: VENTUS LED SITE LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (84) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19916.5 lumens
Efficiency: N/A
Efficacy: 65.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G4

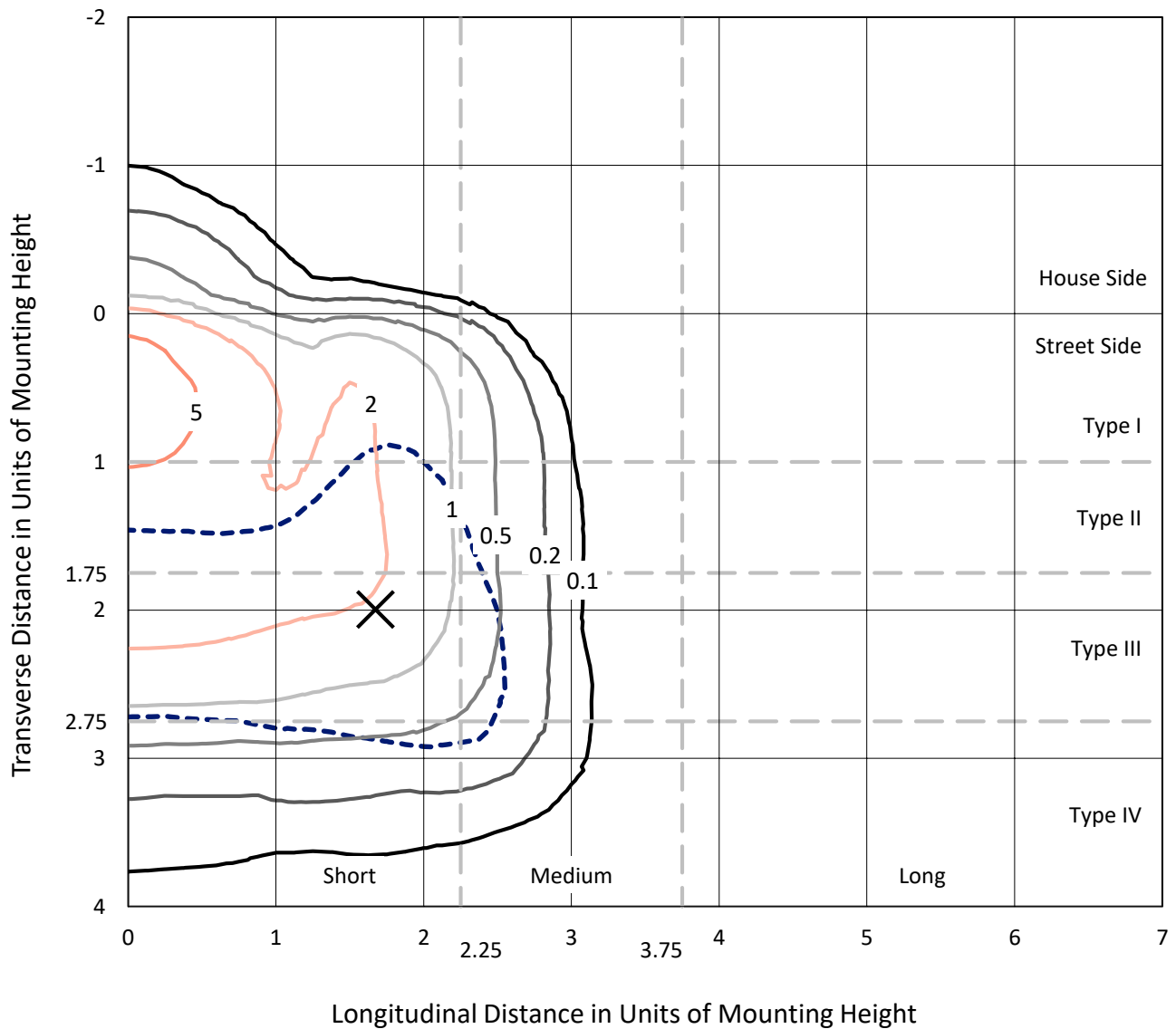
Input Watts (W): 306.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

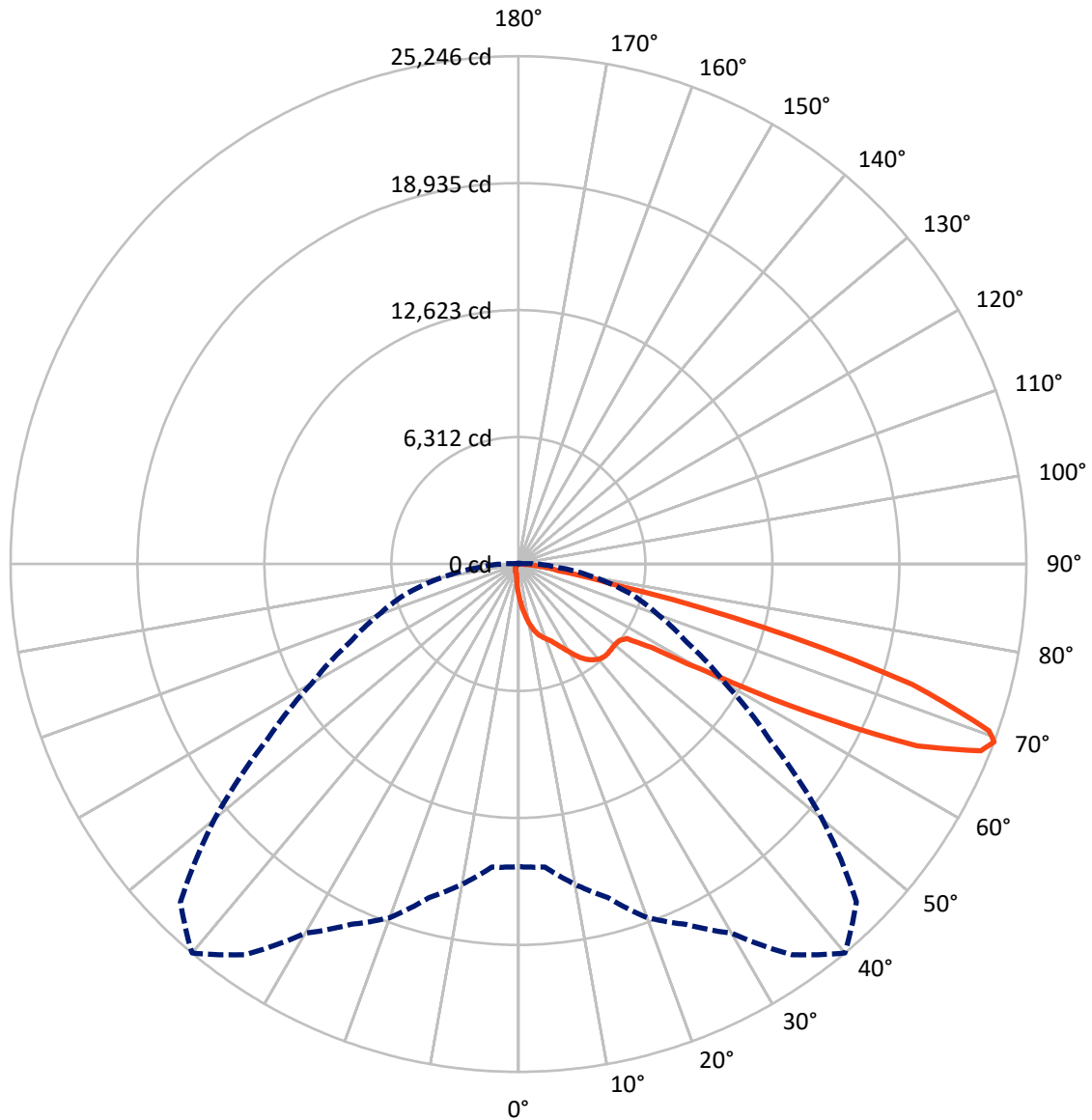


Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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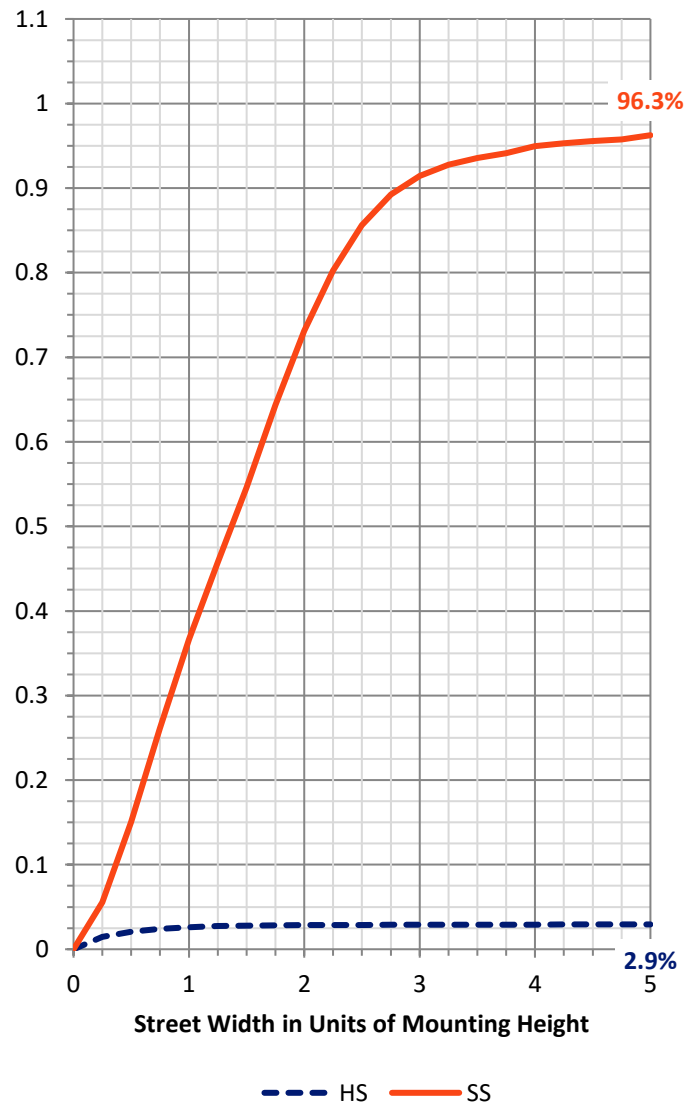
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 593.1 | 0.0 | 593.1 |
| | % Fixture | 3.0 | 0.0 | 3.0 |
| Street Side | Lumens | 19323.4 | 0.0 | 19323.4 |
| | % Fixture | 97.0 | 0.0 | 97.0 |
| Total | Lumens | 19916.5 | 0.0 | 19916.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 154.6 | 0.8 |
| 10°-20° | 533.0 | 2.7 |
| 20°-30° | 1020.1 | 5.1 |
| 30°-40° | 1696.5 | 8.5 |
| 40°-50° | 2295.7 | 11.5 |
| 50°-60° | 3590.2 | 18.0 |
| 60°-70° | 7381.4 | 37.1 |
| 70°-80° | 2970.2 | 14.9 |
| 80°-90° | 274.7 | 1.4 |
| 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° | 19916.5 | 100.0 |
| 0°-180° | 19916.5 | 100.0 |



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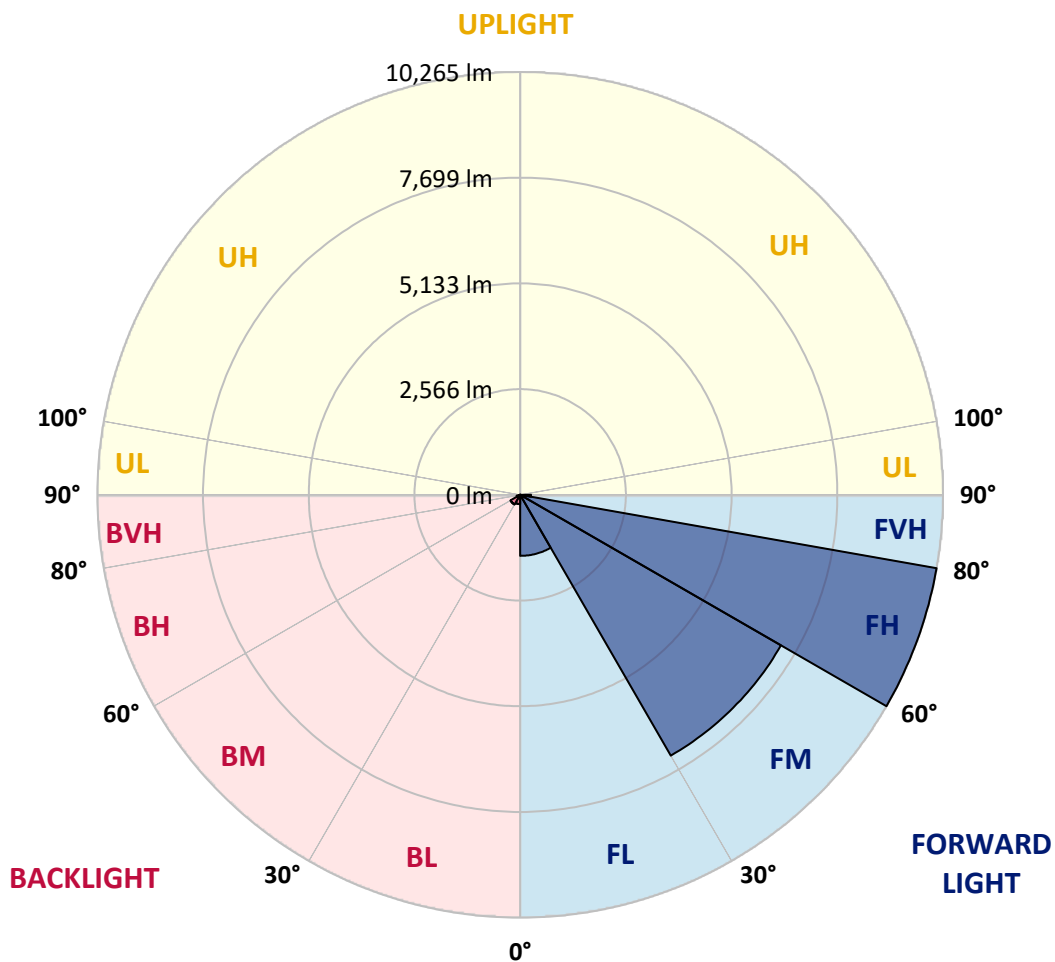
CATALOG NUMBER: VTS-F12-LED-E1-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1482.2 | 7.4 | | | |
| FM (30°-60°) | 7311.7 | 36.7 | | | |
| FH (60°-80°) | 10265.1 | 51.5 | | | G4/12000 |
| FVH (80°-90°) | 264.5 | 1.3 | | | G3/500 |
| BL (0°-30°) | 225.6 | 1.1 | B1/500 | | |
| BM (30°-60°) | 270.8 | 1.4 | B1/1000 | | |
| BH (60°-80°) | 86.5 | 0.4 | B0/110 | | G0/110 |
| BVH (80°-90°) | 10.2 | 0.1 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 |
| 2.5° | 2006.6 | 1983.6 | 1957.5 | 1957.5 | 1925.0 | 1925.0 | 1905.4 | 1853.3 | 1846.7 | 1817.2 | 1787.9 |
| 5° | 2561.2 | 2541.6 | 2509.1 | 2479.5 | 2453.6 | 2407.8 | 2375.1 | 2313.1 | 2244.8 | 2179.4 | 2120.7 |
| 7.5° | 3102.9 | 3092.9 | 3034.3 | 3024.4 | 2982.0 | 2907.1 | 2841.7 | 2750.4 | 2632.9 | 2541.6 | 2434.0 |
| 10° | 3605.3 | 3582.3 | 3569.2 | 3513.8 | 3451.9 | 3370.3 | 3269.1 | 3158.3 | 3021.2 | 2877.6 | 2724.2 |
| 12.5° | 4003.3 | 3990.3 | 3931.4 | 3908.6 | 3843.4 | 3761.8 | 3634.6 | 3491.0 | 3354.1 | 3168.0 | 2988.5 |
| 15° | 4300.1 | 4277.3 | 4238.1 | 4202.3 | 4124.0 | 4052.3 | 3934.8 | 3778.1 | 3611.8 | 3409.6 | 3194.2 |
| 17.5° | 4548.2 | 4505.8 | 4495.9 | 4440.4 | 4359.0 | 4274.0 | 4143.6 | 4000.0 | 3804.2 | 3601.9 | 3367.0 |
| 20° | 4880.8 | 4822.2 | 4802.6 | 4720.9 | 4626.4 | 4509.0 | 4359.0 | 4179.5 | 3973.8 | 3752.1 | 3510.6 |
| 22.5° | 5272.3 | 5229.9 | 5187.5 | 5115.8 | 4995.2 | 4828.7 | 4610.2 | 4414.4 | 4153.3 | 3908.6 | 3647.7 |
| 25° | 5827.1 | 5791.2 | 5722.7 | 5624.8 | 5474.6 | 5275.7 | 5011.4 | 4724.3 | 4417.6 | 4104.4 | 3797.7 |
| 27.5° | 6365.4 | 6332.7 | 6283.8 | 6208.9 | 6039.1 | 5820.5 | 5494.2 | 5128.9 | 4740.6 | 4362.1 | 4022.7 |
| 30° | 6871.2 | 6841.7 | 6792.7 | 6717.9 | 6567.7 | 6352.3 | 5983.6 | 5592.1 | 5109.3 | 4668.8 | 4261.1 |
| 32.5° | 7416.1 | 7406.1 | 7350.7 | 7243.1 | 7112.5 | 6822.3 | 6420.9 | 6000.0 | 5510.7 | 5001.7 | 4525.2 |
| 35° | 8032.6 | 7957.5 | 7905.4 | 7797.6 | 7575.9 | 7265.9 | 6796.1 | 6336.1 | 5820.5 | 5298.5 | 4766.7 |
| 37.5° | 8554.7 | 8483.0 | 8417.6 | 8280.7 | 8009.8 | 7615.0 | 7083.2 | 6577.4 | 6045.6 | 5513.8 | 4972.2 |
| 40° | 8936.3 | 8900.4 | 8822.2 | 8642.7 | 8339.3 | 7869.6 | 7295.2 | 6743.8 | 6208.9 | 5673.7 | 5138.6 |
| 42.5° | 9220.2 | 9164.7 | 9076.7 | 8890.7 | 8531.9 | 7996.8 | 7380.0 | 6812.4 | 6283.8 | 5771.6 | 5246.4 |
| 45° | 9324.6 | 9279.0 | 9197.4 | 8995.1 | 8606.8 | 8032.6 | 7376.8 | 6792.7 | 6287.1 | 5800.9 | 5318.1 |
| 47.5° | 9262.6 | 9217.0 | 9145.1 | 8955.9 | 8574.3 | 7990.2 | 7318.2 | 6737.3 | 6254.4 | 5810.8 | 5383.3 |
| 50° | 9057.1 | 9031.0 | 8975.5 | 8815.6 | 8473.1 | 7908.6 | 7265.9 | 6708.0 | 6247.9 | 5859.8 | 5474.6 |
| 52.5° | 9037.5 | 9021.3 | 8952.7 | 8792.8 | 8443.7 | 7882.4 | 7259.3 | 6724.4 | 6303.4 | 5921.8 | 5540.0 |
| 55° | 11043.9 | 10812.3 | 10293.6 | 9853.2 | 9128.9 | 8267.6 | 7588.8 | 6988.5 | 6538.4 | 6166.5 | 5898.8 |
| 57.5° | 15696.5 | 15350.8 | 14668.9 | 13830.4 | 12166.3 | 10531.8 | 9223.6 | 8277.3 | 7810.7 | 7641.1 | 7742.2 |
| 60° | 17875.9 | 17814.1 | 17706.3 | 17308.3 | 16456.7 | 15050.6 | 13484.5 | 11791.3 | 11112.5 | 11053.8 | 11259.3 |
| 62.5° | 18910.3 | 18871.1 | 18903.8 | 18854.9 | 18590.6 | 18179.4 | 17729.1 | 16998.4 | 16326.2 | 15892.3 | 14972.2 |
| 65° | 19386.6 | 19412.8 | 19598.6 | 19745.4 | 19778.1 | 19885.7 | 20215.4 | 21125.6 | 21791.1 | 20672.1 | 18117.4 |
| 67.5° | 18176.1 | 18329.4 | 18757.0 | 19291.9 | 19918.4 | 20525.3 | 21504.0 | 23422.5 | 24789.5 | 23474.8 | 19846.7 |
| 69° | 15047.3 | 15122.4 | 16166.3 | 17174.6 | 18704.7 | 19775.0 | 21194.1 | 23709.5 | 25246.4 | 23761.8 | 19709.6 |
| 70° | 11846.5 | 11915.1 | 13034.3 | 14404.6 | 16991.9 | 18368.7 | 20225.1 | 23223.5 | 24818.8 | 23380.1 | 19004.8 |
| 72.5° | 5344.3 | 5246.4 | 5641.0 | 6375.1 | 9187.5 | 11373.6 | 14619.9 | 18815.6 | 20476.3 | 18730.8 | 14218.5 |
| 75° | 3732.5 | 3690.1 | 3732.5 | 3735.7 | 4172.9 | 5383.3 | 6792.7 | 10198.9 | 12613.3 | 10884.2 | 6792.7 |
| 77.5° | 2890.7 | 2861.3 | 2832.0 | 2799.3 | 2851.6 | 3194.2 | 3331.1 | 3618.2 | 4698.2 | 4443.8 | 2590.5 |
| 80° | 2287.2 | 2261.0 | 2332.7 | 2310.0 | 2310.0 | 2349.2 | 2323.0 | 2215.2 | 2013.0 | 1866.1 | 1670.4 |
| 82.5° | 1063.5 | 1070.1 | 1070.1 | 1161.4 | 1399.8 | 1634.5 | 1709.6 | 1602.0 | 1422.5 | 1210.4 | 975.6 |
| 85° | 101.0 | 114.1 | 192.6 | 297.0 | 590.6 | 665.5 | 668.9 | 554.6 | 554.6 | 437.3 | 352.3 |
| 87.5° | 0.0 | 3.2 | 3.2 | 3.2 | 29.3 | 81.6 | 68.6 | 19.6 | 9.7 | 9.7 | 16.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 |
| 2.5° | 1735.8 | 1725.9 | 1686.8 | 1647.6 | 1611.8 | 1572.5 | 1536.7 | 1500.8 | 1461.6 | 1432.3 | 1396.4 |
| 5° | 2029.4 | 1957.5 | 1876.1 | 1797.8 | 1719.3 | 1637.9 | 1553.1 | 1478.0 | 1399.8 | 1327.8 | 1259.3 |
| 7.5° | 2326.2 | 2185.9 | 2075.0 | 1934.7 | 1807.5 | 1680.3 | 1562.8 | 1442.2 | 1331.2 | 1226.8 | 1128.9 |
| 10° | 2577.4 | 2407.8 | 2234.9 | 2055.6 | 1872.7 | 1703.1 | 1540.0 | 1396.4 | 1249.6 | 1122.4 | 1001.7 |
| 12.5° | 2783.1 | 2567.7 | 2355.7 | 2130.4 | 1925.0 | 1709.6 | 1507.3 | 1334.4 | 1161.4 | 1018.0 | 893.9 |
| 15° | 2968.9 | 2721.1 | 2466.5 | 2205.5 | 1944.6 | 1699.9 | 1474.7 | 1259.3 | 1083.2 | 920.1 | 779.8 |
| 17.5° | 3119.1 | 2835.2 | 2548.1 | 2254.5 | 1973.9 | 1686.8 | 1432.3 | 1207.2 | 1001.7 | 831.9 | 695.0 |
| 20° | 3249.7 | 2952.7 | 2642.8 | 2313.1 | 1993.5 | 1683.5 | 1396.4 | 1142.0 | 929.8 | 750.5 | 616.6 |
| 22.5° | 3370.3 | 3073.3 | 2740.7 | 2388.2 | 2022.9 | 1680.3 | 1363.7 | 1093.1 | 867.8 | 688.5 | 554.6 |
| 25° | 3507.4 | 3194.2 | 2845.1 | 2466.5 | 2075.0 | 1693.4 | 1344.3 | 1053.8 | 812.3 | 629.6 | 505.6 |
| 27.5° | 3660.8 | 3331.1 | 2968.9 | 2564.3 | 2143.5 | 1719.3 | 1337.7 | 1011.4 | 763.4 | 574.2 | 466.6 |
| 30° | 3875.9 | 3494.3 | 3092.9 | 2662.2 | 2205.5 | 1748.9 | 1331.2 | 985.3 | 714.4 | 531.8 | 427.4 |
| 32.5° | 4065.3 | 3654.2 | 3230.0 | 2763.5 | 2274.1 | 1778.2 | 1327.8 | 949.4 | 668.9 | 489.4 | 398.0 |
| 35° | 4264.3 | 3801.0 | 3347.5 | 2861.3 | 2332.7 | 1810.7 | 1324.7 | 923.3 | 626.5 | 447.0 | 368.7 |
| 37.5° | 4437.2 | 3924.9 | 3438.9 | 2946.1 | 2398.1 | 1840.2 | 1327.8 | 900.5 | 587.2 | 411.1 | 342.6 |
| 40° | 4584.0 | 4052.3 | 3539.9 | 3024.4 | 2466.5 | 1885.8 | 1331.2 | 877.7 | 548.2 | 378.4 | 319.8 |
| 42.5° | 4714.6 | 4172.9 | 3647.7 | 3112.6 | 2544.9 | 1938.1 | 1350.8 | 858.1 | 515.5 | 349.1 | 297.0 |
| 45° | 4815.7 | 4283.9 | 3765.0 | 3236.6 | 2672.1 | 2022.9 | 1386.7 | 845.0 | 482.8 | 322.9 | 277.4 |
| 47.5° | 4920.1 | 4446.9 | 3964.1 | 3432.3 | 2858.2 | 2156.6 | 1448.7 | 841.8 | 456.7 | 303.3 | 260.9 |
| 50° | 5063.7 | 4610.2 | 4140.2 | 3631.3 | 3027.8 | 2293.7 | 1523.6 | 845.0 | 424.2 | 283.9 | 244.7 |
| 52.5° | 5168.1 | 4776.4 | 4368.7 | 3977.2 | 3432.3 | 2711.2 | 1814.0 | 903.7 | 407.7 | 267.5 | 225.1 |
| 55° | 5784.7 | 5716.1 | 5725.8 | 5791.2 | 5370.4 | 4613.4 | 3034.3 | 1305.1 | 479.7 | 303.3 | 221.9 |
| 57.5° | 8156.6 | 8398.0 | 8538.2 | 8535.1 | 7840.0 | 6502.5 | 4075.1 | 1676.9 | 535.1 | 352.3 | 264.3 |
| 60° | 11275.7 | 11093.1 | 10835.3 | 10198.9 | 9275.7 | 7422.6 | 4557.9 | 1804.3 | 463.2 | 280.5 | 241.5 |
| 62.5° | 14032.7 | 12962.4 | 12013.0 | 10982.1 | 9771.6 | 7742.2 | 4655.8 | 1794.4 | 404.6 | 212.0 | 169.6 |
| 65° | 15752.0 | 13827.0 | 12293.7 | 11001.5 | 9575.8 | 7474.7 | 4404.5 | 1647.6 | 342.6 | 173.0 | 140.3 |
| 67.5° | 16163.1 | 13360.4 | 11190.9 | 9543.1 | 7999.9 | 5817.4 | 3233.2 | 1239.9 | 267.5 | 143.6 | 124.0 |
| 69° | 15265.8 | 11876.1 | 9272.5 | 7403.0 | 5820.5 | 3859.7 | 2000.1 | 783.0 | 205.5 | 130.6 | 114.1 |
| 70° | 14042.4 | 10329.5 | 7553.0 | 5941.2 | 4310.0 | 2711.2 | 1399.8 | 551.4 | 166.4 | 120.7 | 104.4 |
| 72.5° | 9034.3 | 5425.7 | 3712.9 | 2584.0 | 1778.2 | 1080.0 | 548.2 | 248.1 | 127.2 | 101.0 | 84.8 |
| 75° | 3504.1 | 2006.6 | 1455.2 | 1105.9 | 864.6 | 600.3 | 332.9 | 159.9 | 107.6 | 84.8 | 65.2 |
| 77.5° | 1725.9 | 1321.3 | 1080.0 | 740.6 | 430.7 | 267.5 | 179.5 | 124.0 | 88.2 | 62.0 | 42.4 |
| 80° | 1363.7 | 907.0 | 541.7 | 336.0 | 254.4 | 192.6 | 137.1 | 101.0 | 65.2 | 39.2 | 29.3 |
| 82.5° | 698.2 | 381.8 | 280.5 | 228.4 | 189.2 | 150.2 | 111.0 | 71.7 | 42.4 | 26.2 | 22.8 |
| 85° | 218.5 | 159.9 | 143.6 | 140.3 | 130.6 | 107.6 | 78.3 | 45.8 | 26.2 | 16.2 | 16.2 |
| 87.5° | 16.2 | 22.8 | 29.3 | 22.8 | 26.2 | 22.8 | 29.3 | 19.6 | 13.1 | 13.1 | 9.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: VTS-F12-LED-E1-SL4-HSS

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 | 1504.2 |
| 2.5° | 1370.2 | 1331.2 | 1295.3 | 1272.4 | 1230.0 | 1213.7 | 1197.5 | 1190.9 | 1161.4 | 1168.0 | 1142.0 |
| 5° | 1197.5 | 1128.9 | 1076.6 | 1024.5 | 975.6 | 939.7 | 910.2 | 874.3 | 845.0 | 831.9 | 805.8 |
| 7.5° | 1040.8 | 952.8 | 884.2 | 828.8 | 769.9 | 724.3 | 685.1 | 659.0 | 633.0 | 606.9 | 593.8 |
| 10° | 903.7 | 809.1 | 730.9 | 675.4 | 619.9 | 580.7 | 551.4 | 531.8 | 515.5 | 505.6 | 502.4 |
| 12.5° | 776.5 | 685.1 | 613.4 | 564.5 | 522.1 | 502.4 | 489.4 | 479.7 | 476.3 | 473.1 | 473.1 |
| 15° | 678.6 | 587.2 | 531.8 | 495.9 | 476.3 | 466.6 | 463.2 | 456.7 | 450.3 | 447.0 | 447.0 |
| 17.5° | 587.2 | 518.7 | 479.7 | 460.0 | 450.3 | 443.8 | 437.3 | 430.7 | 424.2 | 420.8 | 420.8 |
| 20° | 525.2 | 469.8 | 450.3 | 437.3 | 427.4 | 420.8 | 411.1 | 404.6 | 401.4 | 398.0 | 394.9 |
| 22.5° | 476.3 | 440.4 | 427.4 | 417.6 | 404.6 | 394.9 | 388.3 | 381.8 | 375.3 | 371.9 | 368.7 |
| 25° | 440.4 | 417.6 | 407.7 | 394.9 | 381.8 | 371.9 | 362.2 | 352.3 | 345.9 | 342.6 | 336.0 |
| 27.5° | 414.3 | 398.0 | 385.0 | 368.7 | 355.6 | 345.9 | 336.0 | 326.3 | 319.8 | 313.2 | 309.9 |
| 30° | 391.5 | 375.3 | 358.8 | 345.9 | 329.5 | 319.8 | 306.7 | 297.0 | 293.6 | 287.1 | 280.5 |
| 32.5° | 368.7 | 352.3 | 336.0 | 319.8 | 303.3 | 290.5 | 283.9 | 270.8 | 264.3 | 260.9 | 254.4 |
| 35° | 342.6 | 326.3 | 306.7 | 293.6 | 277.4 | 264.3 | 254.4 | 244.7 | 238.1 | 231.6 | 228.4 |
| 37.5° | 319.8 | 300.2 | 280.5 | 264.3 | 251.2 | 238.1 | 228.4 | 218.5 | 212.0 | 205.5 | 202.3 |
| 40° | 293.6 | 274.0 | 254.4 | 238.1 | 225.1 | 215.4 | 205.5 | 195.7 | 189.2 | 186.0 | 186.0 |
| 42.5° | 270.8 | 248.1 | 228.4 | 215.4 | 205.5 | 192.6 | 182.7 | 173.0 | 169.6 | 166.4 | 169.6 |
| 45° | 248.1 | 225.1 | 208.8 | 195.7 | 186.0 | 173.0 | 163.1 | 156.5 | 153.3 | 156.5 | 159.9 |
| 47.5° | 228.4 | 205.5 | 189.2 | 179.5 | 169.6 | 159.9 | 150.2 | 143.6 | 143.6 | 150.2 | 156.5 |
| 50° | 208.8 | 186.0 | 173.0 | 166.4 | 156.5 | 146.8 | 133.7 | 130.6 | 133.7 | 140.3 | 146.8 |
| 52.5° | 189.2 | 163.1 | 153.3 | 150.2 | 140.3 | 130.6 | 120.7 | 117.5 | 120.7 | 127.2 | 124.0 |
| 55° | 169.6 | 143.6 | 140.3 | 137.1 | 127.2 | 114.1 | 104.4 | 104.4 | 104.4 | 101.0 | 94.7 |
| 57.5° | 163.1 | 127.2 | 124.0 | 120.7 | 111.0 | 97.9 | 91.3 | 84.8 | 81.6 | 71.7 | 68.6 |
| 60° | 169.6 | 114.1 | 114.1 | 107.6 | 97.9 | 84.8 | 75.1 | 65.2 | 58.6 | 52.1 | 52.1 |
| 62.5° | 137.1 | 104.4 | 101.0 | 94.7 | 81.6 | 68.6 | 58.6 | 48.9 | 45.8 | 42.4 | 42.4 |
| 65° | 111.0 | 94.7 | 88.2 | 78.3 | 68.6 | 55.5 | 45.8 | 39.2 | 35.9 | 35.9 | 39.2 |
| 67.5° | 101.0 | 84.8 | 75.1 | 65.2 | 55.5 | 42.4 | 35.9 | 32.7 | 32.7 | 35.9 | 35.9 |
| 69° | 94.7 | 78.3 | 68.6 | 58.6 | 48.9 | 39.2 | 32.7 | 32.7 | 32.7 | 32.7 | 35.9 |
| 70° | 88.2 | 75.1 | 65.2 | 55.5 | 42.4 | 32.7 | 29.3 | 29.3 | 32.7 | 32.7 | 35.9 |
| 72.5° | 68.6 | 58.6 | 55.5 | 45.8 | 32.7 | 29.3 | 26.2 | 29.3 | 29.3 | 32.7 | 32.7 |
| 75° | 52.1 | 42.4 | 42.4 | 35.9 | 26.2 | 22.8 | 22.8 | 26.2 | 26.2 | 29.3 | 29.3 |
| 77.5° | 35.9 | 29.3 | 29.3 | 26.2 | 22.8 | 19.6 | 19.6 | 22.8 | 26.2 | 26.2 | 29.3 |
| 80° | 26.2 | 22.8 | 19.6 | 22.8 | 19.6 | 16.2 | 19.6 | 22.8 | 22.8 | 26.2 | 26.2 |
| 82.5° | 19.6 | 19.6 | 19.6 | 19.6 | 16.2 | 16.2 | 19.6 | 19.6 | 22.8 | 26.2 | 26.2 |
| 85° | 16.2 | 16.2 | 16.2 | 16.2 | 16.2 | 16.2 | 16.2 | 19.6 | 19.6 | 22.8 | 22.8 |
| 87.5° | 9.7 | 9.7 | 9.7 | 13.1 | 13.1 | 16.2 | 16.2 | 16.2 | 16.2 | 19.6 | 19.6 |
| 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: P165452

CATALOG NUMBER: VTS-F12-LED-E1-SL4-HSS

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|
| 0° | 1504.2 | 1504.2 | 1504.2 | 1504.2 |
| 2.5° | 1135.5 | 1132.1 | 1119.0 | 1122.4 |
| 5° | 796.1 | 776.5 | 789.5 | 786.4 |
| 7.5° | 584.1 | 580.7 | 577.5 | 584.1 |
| 10° | 499.3 | 499.3 | 495.9 | 499.3 |
| 12.5° | 469.8 | 469.8 | 469.8 | 469.8 |
| 15° | 447.0 | 447.0 | 443.8 | 443.8 |
| 17.5° | 420.8 | 420.8 | 420.8 | 417.6 |
| 20° | 394.9 | 391.5 | 391.5 | 391.5 |
| 22.5° | 365.3 | 362.2 | 362.2 | 362.2 |
| 25° | 336.0 | 332.9 | 332.9 | 332.9 |
| 27.5° | 306.7 | 303.3 | 300.2 | 300.2 |
| 30° | 277.4 | 274.0 | 270.8 | 270.8 |
| 32.5° | 248.1 | 244.7 | 241.5 | 241.5 |
| 35° | 221.9 | 221.9 | 218.5 | 215.4 |
| 37.5° | 199.1 | 199.1 | 199.1 | 199.1 |
| 40° | 182.7 | 186.0 | 186.0 | 186.0 |
| 42.5° | 173.0 | 176.1 | 179.5 | 182.7 |
| 45° | 166.4 | 173.0 | 176.1 | 176.1 |
| 47.5° | 163.1 | 166.4 | 169.6 | 169.6 |
| 50° | 150.2 | 146.8 | 146.8 | 146.8 |
| 52.5° | 120.7 | 114.1 | 111.0 | 107.6 |
| 55° | 88.2 | 84.8 | 78.3 | 78.3 |
| 57.5° | 62.0 | 62.0 | 58.6 | 58.6 |
| 60° | 48.9 | 48.9 | 45.8 | 48.9 |
| 62.5° | 42.4 | 42.4 | 42.4 | 42.4 |
| 65° | 39.2 | 39.2 | 39.2 | 39.2 |
| 67.5° | 39.2 | 39.2 | 39.2 | 39.2 |
| 69° | 35.9 | 35.9 | 35.9 | 35.9 |
| 70° | 35.9 | 35.9 | 35.9 | 35.9 |
| 72.5° | 32.7 | 32.7 | 32.7 | 32.7 |
| 75° | 29.3 | 32.7 | 32.7 | 32.7 |
| 77.5° | 29.3 | 29.3 | 29.3 | 29.3 |
| 80° | 26.2 | 26.2 | 29.3 | 29.3 |
| 82.5° | 26.2 | 26.2 | 26.2 | 26.2 |
| 85° | 22.8 | 22.8 | 26.2 | 26.2 |
| 87.5° | 19.6 | 19.6 | 22.8 | 22.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)