

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: INVUE

Report Number: P367577

Luminaire Tested: **MSA-SA2D-740-U-SLL-HSS**

Issue Date: 12/2/2019

Test Information

Test Method: LM-79-08
Report Number: P367577
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-25)
Test Lab: INNOVATION CENTER
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA2D-740-U-SLL-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (2) LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT ELIMINATOR LEFT OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9839 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

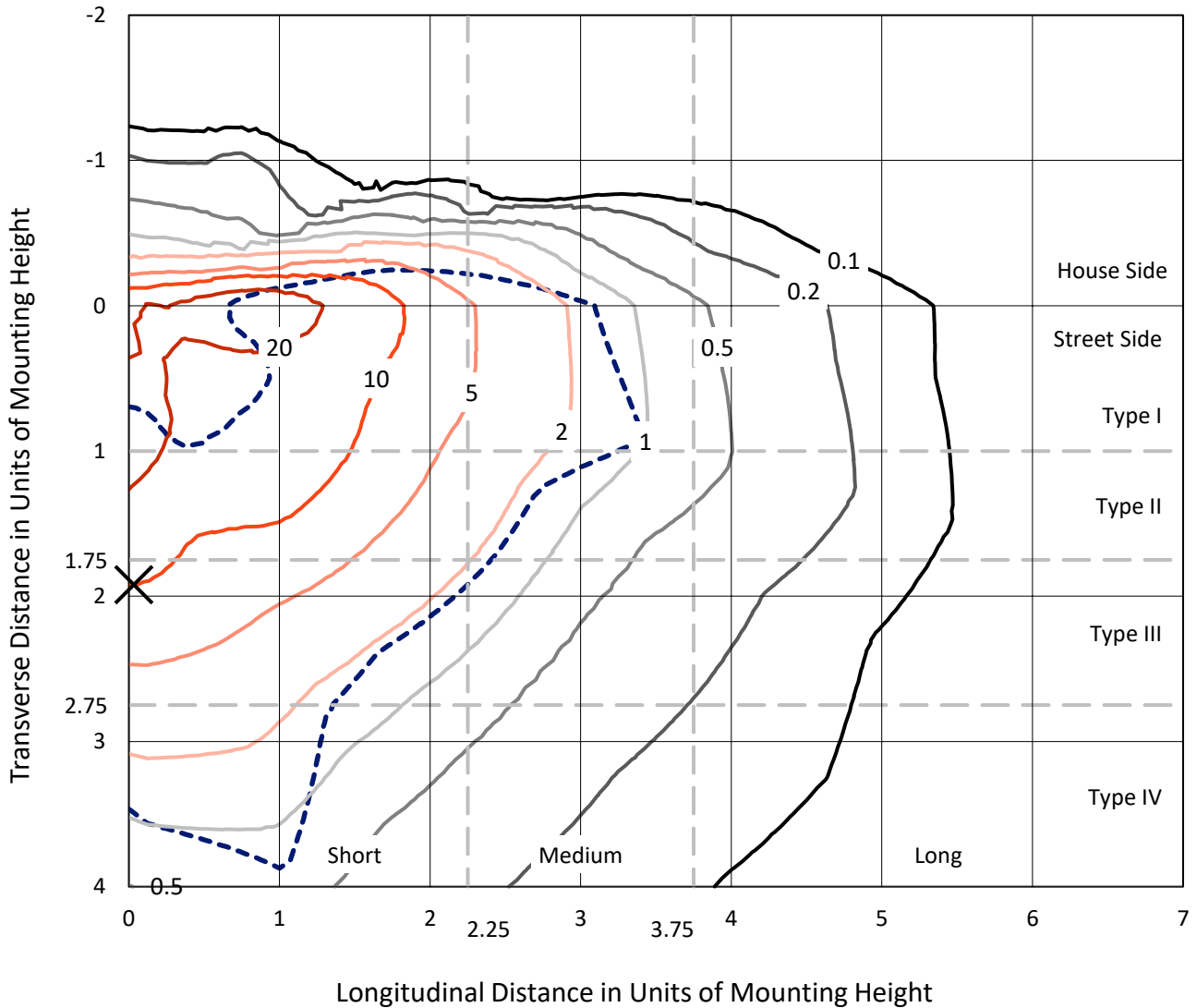
Input Watts (W): 129
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P367577
 CATALOG NUMBER: MSA-SA2D-740-U-SLL-HSS

Iso-Footcandle Lines of Horizontal Illumination

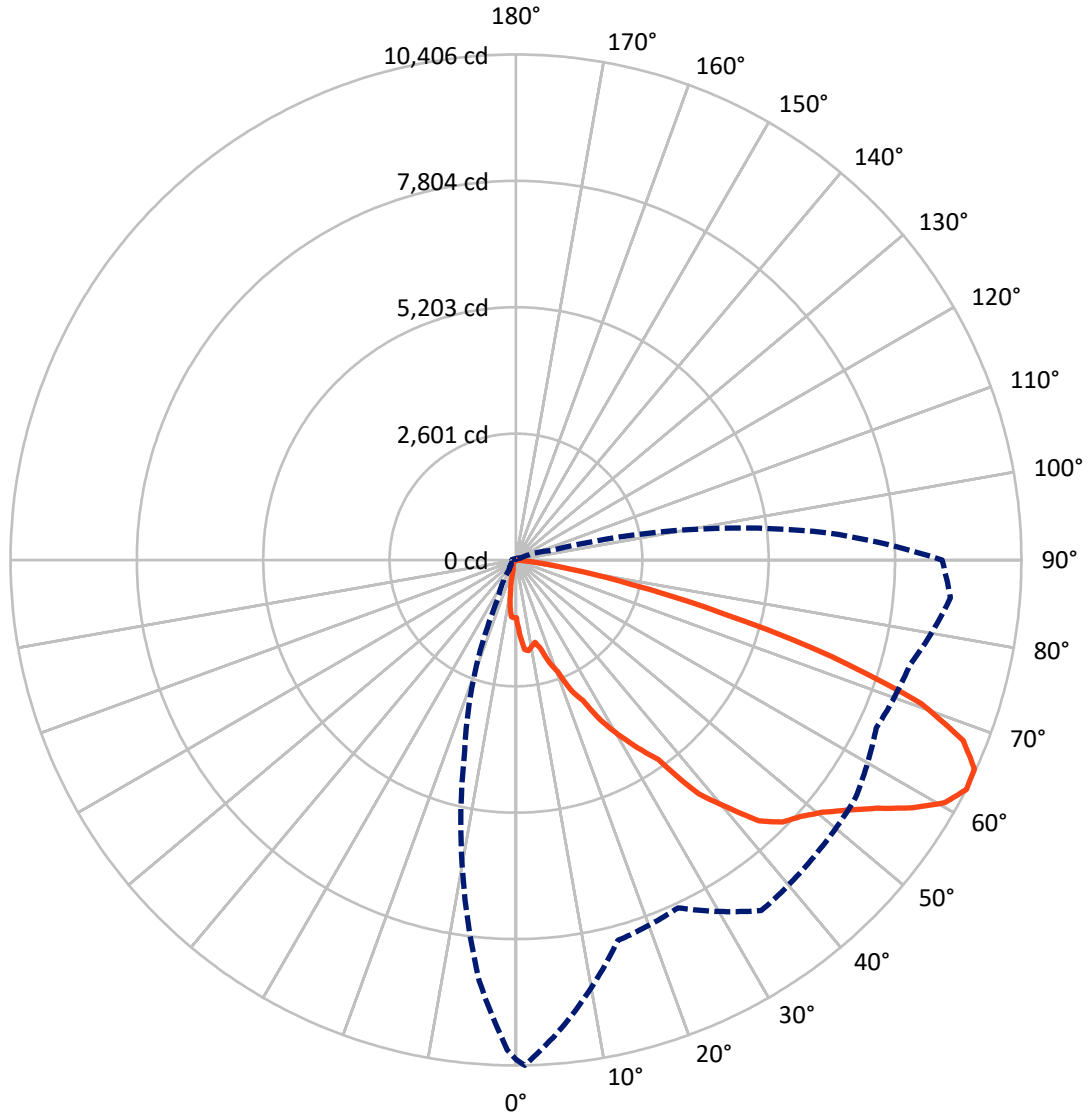
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 31.6 fc
 Type IV - Short - N/A

REPORT NUMBER: P367577
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Luminous Intensity Polar Plot



— Vertical Plane Through 1-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1125.1 | 0.0 | 1125.1 |
| | % Fixture | 11.4 | 0.0 | 11.4 |
| Street Side | Lumens | 8713.9 | 0.0 | 8713.9 |
| | % Fixture | 88.6 | 0.0 | 88.6 |
| Total | Lumens | 9839.0 | 0.0 | 9839.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 132.4 | 1.3 |
| 10°-20° | 345.9 | 3.5 |
| 20°-30° | 559.1 | 5.7 |
| 30°-40° | 936.6 | 9.5 |
| 40°-50° | 1531.5 | 15.6 |
| 50°-60° | 2267.0 | 23.0 |
| 60°-70° | 2602.7 | 26.5 |
| 70°-80° | 1287.0 | 13.1 |
| 80°-90° | 176.7 | 1.8 |
| 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° | 9839.0 | 100.0 |
| 0°-180° | 9839.0 | 100.0 |

Coefficient of Utilization



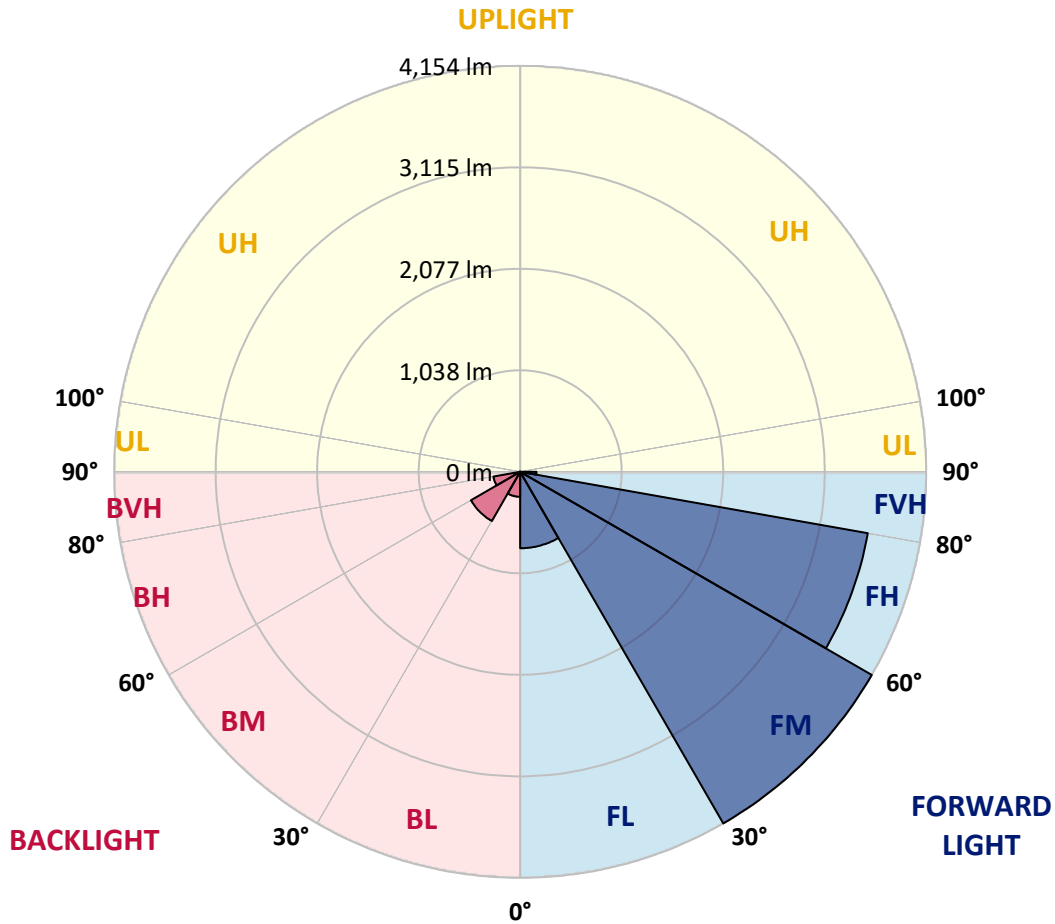
REPORT NUMBER: P367577
 CATALOG NUMBER: MSA-SA2D-740-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 781.5 | 7.9 | | | |
| FM (30°-60°) | 4154.0 | 42.2 | | | |
| FH (60°-80°) | 3611.5 | 36.7 | | | G2/5000 |
| FVH (80°-90°) | 166.9 | 1.7 | | | G2/225 |
| BL (0°-30°) | 256.0 | 2.6 | B1/500 | | |
| BM (30°-60°) | 581.2 | 5.9 | B1/1000 | | |
| BH (60°-80°) | 278.2 | 2.8 | B1/500 | | G1/500 |
| BVH (80°-90°) | 9.8 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Short





REPORT NUMBER: P367577

CATALOG NUMBER: MSA-SA2D-740-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 1° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|----------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 0° | 1185.3 | <i>1185.3</i> | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 |
| 2.5° | 1528.4 | <i>1535.7</i> | 1501.5 | 1497.0 | 1417.4 | 1516.6 | 1519.4 | 1531.2 | 1458.3 | 1317.0 | 1514.4 |
| 5° | 1828.9 | <i>1849.1</i> | 1822.8 | 1939.9 | 1973.6 | 2045.9 | 1913.0 | 2031.9 | 1981.4 | 1995.4 | 2024.0 |
| 7.5° | 1864.8 | <i>1885.5</i> | 1941.1 | 2137.3 | 2318.4 | 2273.0 | 2258.4 | 2303.2 | 2299.3 | 2195.6 | 2247.2 |
| 10° | 1790.2 | <i>1807.6</i> | 1900.1 | 2257.3 | 2336.3 | 2540.4 | 2590.3 | 2487.2 | 2445.1 | 2218.0 | 2118.8 |
| 12.5° | 1708.9 | <i>1738.1</i> | 1855.8 | 2284.2 | 2521.4 | 2727.7 | 2892.0 | 2745.1 | 2605.5 | 2363.8 | 2273.0 |
| 15° | 1864.8 | <i>1881.1</i> | 2066.1 | 2340.3 | 2547.7 | 2690.1 | 2824.7 | 2775.9 | 2754.6 | 2580.8 | 2273.0 |
| 17.5° | 2170.4 | <i>2208.5</i> | 2342.5 | 2477.6 | 2641.3 | 2727.1 | 2695.2 | 2680.0 | 2625.6 | 2898.7 | 2580.2 |
| 20° | 2387.9 | <i>2459.1</i> | 2634.6 | 2692.9 | 2562.8 | 2643.0 | 2623.4 | 2609.9 | 2567.3 | 3075.3 | 2933.4 |
| 22.5° | 2858.9 | <i>2924.5</i> | 2927.8 | 2948.6 | 2645.8 | 2518.0 | 2485.5 | 2489.4 | 2682.8 | 3128.0 | 3373.0 |
| 25° | 3179.6 | <i>3202.0</i> | 3379.2 | 3231.2 | 2872.3 | 2556.1 | 2432.2 | 2487.7 | 2766.4 | 3507.0 | 3786.2 |
| 27.5° | 3704.4 | <i>3757.6</i> | 3868.1 | 3366.8 | 3008.0 | 2532.0 | 2334.6 | 2536.5 | 2986.2 | 3632.6 | 4245.4 |
| 30° | 4132.2 | <i>4183.2</i> | 4360.9 | 3552.4 | 3125.8 | 2651.4 | 2376.7 | 2634.6 | 3123.0 | 3891.1 | 4658.1 |
| 32.5° | 4479.2 | <i>4611.0</i> | 4812.8 | 3838.9 | 3121.3 | 2788.8 | 2591.4 | 2602.1 | 3291.2 | 4225.8 | 5066.3 |
| 35° | 4922.7 | <i>5045.5</i> | 5187.4 | 4036.3 | 3325.4 | 2833.1 | 2654.8 | 2921.7 | 3541.2 | 4575.7 | 5615.7 |
| 37.5° | 5922.4 | <i>6108.0</i> | 5827.6 | 4533.6 | 3563.1 | 3233.4 | 2904.9 | 3118.5 | 3803.1 | 4932.8 | 6370.9 |
| 40° | 6532.4 | <i>6688.8</i> | 6418.0 | 4787.6 | 3974.6 | 3435.3 | 3351.1 | 3460.5 | 4059.3 | 5117.3 | 6940.0 |
| 42.5° | 7133.5 | <i>7339.8</i> | 6887.3 | 5170.0 | 4365.4 | 4004.9 | 3775.0 | 3863.0 | 4429.9 | 5562.4 | 7580.3 |
| 45° | 7568.5 | <i>7696.4</i> | 6988.8 | 5370.1 | 4902.5 | 4654.2 | 4501.1 | 4369.9 | 4946.8 | 5848.4 | 7993.5 |
| 47.5° | 7787.2 | <i>7889.2</i> | 7189.0 | 5433.5 | 5222.1 | 5341.0 | 5676.3 | 5402.1 | 5404.3 | 6055.3 | 8216.1 |
| 50° | 8090.0 | <i>8161.2</i> | 7301.1 | 5509.2 | 5569.2 | 6411.3 | 6580.6 | 5997.0 | 5926.9 | 6262.7 | 8252.6 |
| 52.5° | 8515.5 | <i>8550.3</i> | 7518.6 | 5708.8 | 6088.9 | 7249.5 | 7310.6 | 7074.6 | 6450.0 | 6648.5 | 8333.3 |
| 55° | 9081.2 | <i>9020.1</i> | 7907.2 | 6128.2 | 6631.1 | 7863.5 | 7945.3 | 7739.5 | 7107.7 | 7033.7 | 8583.4 |
| 57.5° | 9691.3 | <i>9621.2</i> | 8483.0 | 6719.1 | 7219.2 | 8332.7 | 8381.5 | 8397.8 | 7544.4 | 7374.5 | 9008.4 |
| 60° | 10128.6 | <i>10141.5</i> | 9208.0 | 7397.0 | 7584.8 | 8781.8 | 8684.3 | 8536.3 | 7985.1 | 7874.1 | 9215.2 |
| 62.5° | <i>10281.6</i> | <i>10405.6</i> | <i>9772.6</i> | <i>8107.3</i> | <i>7899.9</i> | <i>8809.9</i> | <i>8658.5</i> | <i>8533.5</i> | <i>8182.5</i> | <i>8389.4</i> | <i>8978.1</i> |
| 65° | 10156.6 | <i>10373.0</i> | 9903.7 | 8731.4 | 8090.5 | 8458.3 | 8300.8 | 8220.6 | 8176.3 | 8599.6 | 8453.3 |
| 67.5° | 9659.9 | <i>9930.7</i> | 9528.1 | 8737.0 | 7397.5 | 7201.9 | 7388.0 | 7642.0 | 7495.1 | 8425.3 | 7718.2 |
| 70° | 8546.9 | <i>8843.5</i> | 8656.2 | 8224.5 | 6162.4 | 5666.2 | 5871.4 | 6255.4 | 6151.7 | 7493.4 | 6636.7 |
| 72.5° | 6412.4 | <i>6793.7</i> | 6830.7 | 7100.4 | 4891.9 | 4264.5 | 4294.2 | 4283.6 | 4462.4 | 6042.4 | 5178.9 |
| 75° | 4119.3 | <i>4415.9</i> | 4816.8 | 5729.5 | 3716.1 | 3113.4 | 2828.6 | 2759.1 | 3092.7 | 4721.4 | 3707.7 |
| 77.5° | 2391.3 | <i>2426.6</i> | 2611.6 | 4322.8 | 2661.5 | 2243.3 | 2049.3 | 2148.5 | 2265.1 | 3295.1 | 2457.4 |
| 80° | 1143.8 | <i>1161.7</i> | 1238.0 | 2224.2 | 1849.1 | 1941.6 | 1791.9 | 1903.5 | 1555.3 | 1894.0 | 1394.4 |
| 82.5° | 362.8 | <i>366.7</i> | 379.6 | 1092.8 | 1148.3 | 1286.2 | 824.2 | 1105.1 | 961.6 | 1144.9 | 928.5 |
| 85° | 60.6 | <i>103.2</i> | 127.3 | 315.7 | 648.1 | 434.0 | 178.9 | 394.2 | 536.6 | 722.1 | 421.6 |
| 87.5° | 0.0 | <i>0.0</i> | 0.0 | 5.6 | 52.7 | 24.7 | 3.9 | 22.4 | 82.4 | 160.9 | 19.1 |
| 90° | 0.0 | <i>0.0</i> | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P367577
 CATALOG NUMBER: MSA-SA2D-740-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 |
| 2.5° | 1571.6 | 1610.3 | 1464.5 | 1333.8 | 1366.9 | 1340.6 | 1300.8 | 1232.9 | 1075.9 | 1191.4 | 1183.6 |
| 5° | 2022.4 | 1950.6 | 1753.2 | 1661.3 | 1549.1 | 1378.1 | 1357.4 | 1226.2 | 1168.4 | 1178.0 | 1169.6 |
| 7.5° | 2179.3 | 2050.9 | 1876.6 | 1599.6 | 1336.6 | 1090.0 | 1014.3 | 928.5 | 911.1 | 948.1 | 972.2 |
| 10° | 2056.0 | 1919.7 | 1767.2 | 1423.0 | 1220.6 | 1042.3 | 855.6 | 735.6 | 670.6 | 662.7 | 669.4 |
| 12.5° | 2112.6 | 1965.7 | 1651.7 | 1388.2 | 1176.9 | 1015.4 | 806.8 | 625.7 | 484.4 | 495.1 | 467.0 |
| 15° | 2151.9 | 1983.1 | 1624.3 | 1315.3 | 1086.6 | 870.7 | 619.5 | 438.4 | 322.9 | 289.3 | 269.1 |
| 17.5° | 2382.3 | 2141.2 | 1589.5 | 1231.2 | 960.4 | 677.9 | 389.1 | 254.0 | 216.4 | 204.6 | 195.1 |
| 20° | 2678.3 | 2335.8 | 1589.0 | 1142.7 | 774.3 | 423.9 | 242.8 | 183.9 | 174.9 | 181.7 | 174.4 |
| 22.5° | 3022.6 | 2594.8 | 1673.6 | 1032.2 | 555.6 | 267.4 | 188.9 | 163.2 | 154.2 | 159.8 | 160.4 |
| 25° | 3369.1 | 2983.3 | 1742.6 | 927.4 | 386.9 | 205.2 | 168.2 | 150.3 | 140.2 | 145.2 | 142.4 |
| 27.5° | 3994.8 | 3305.2 | 1726.9 | 793.4 | 284.8 | 180.5 | 156.4 | 140.7 | 125.6 | 133.4 | 132.9 |
| 30° | 4404.1 | 3873.1 | 1788.0 | 605.5 | 226.0 | 158.1 | 145.8 | 128.4 | 112.1 | 121.1 | 120.5 |
| 32.5° | 4893.6 | 4117.0 | 1854.1 | 464.8 | 187.8 | 149.7 | 131.2 | 114.4 | 104.8 | 110.5 | 109.3 |
| 35° | 5443.6 | 4599.2 | 1732.5 | 386.9 | 163.2 | 135.1 | 116.1 | 103.2 | 94.8 | 97.6 | 97.6 |
| 37.5° | 6415.2 | 5002.3 | 1659.6 | 315.1 | 151.9 | 122.2 | 108.8 | 93.1 | 88.0 | 88.0 | 90.8 |
| 40° | 6966.9 | 5618.0 | 1442.1 | 249.5 | 155.3 | 112.7 | 101.5 | 85.2 | 78.5 | 77.9 | 80.7 |
| 42.5° | 7684.6 | 5972.9 | 1305.8 | 201.8 | 140.7 | 109.9 | 93.1 | 77.4 | 69.5 | 69.0 | 71.8 |
| 45° | 8110.2 | 6171.3 | 1114.1 | 158.7 | 126.2 | 127.8 | 86.3 | 71.2 | 59.4 | 57.2 | 62.2 |
| 47.5° | 8378.7 | 6434.3 | 1005.3 | 126.2 | 109.9 | 127.3 | 84.1 | 61.7 | 49.9 | 47.1 | 51.6 |
| 50° | 8515.0 | 6564.4 | 984.0 | 108.2 | 95.3 | 113.8 | 96.4 | 51.6 | 42.6 | 38.7 | 42.6 |
| 52.5° | 8656.8 | 6775.7 | 991.8 | 99.8 | 84.1 | 91.4 | 91.4 | 44.3 | 37.6 | 33.1 | 35.9 |
| 55° | 8943.3 | 7088.0 | 974.5 | 94.8 | 77.4 | 69.5 | 58.9 | 39.2 | 34.2 | 29.2 | 32.0 |
| 57.5° | 9295.4 | 7312.3 | 974.5 | 90.3 | 71.8 | 59.4 | 47.1 | 36.4 | 31.4 | 25.2 | 27.5 |
| 60° | 9228.7 | 7076.3 | 926.2 | 85.8 | 67.3 | 55.5 | 42.6 | 33.6 | 29.2 | 23.0 | 24.7 |
| 62.5° | 8770.6 | 6434.3 | 750.2 | 79.1 | 63.4 | 52.7 | 38.7 | 32.0 | 27.5 | 20.2 | 21.9 |
| 65° | 8232.4 | 5752.5 | 521.4 | 71.8 | 58.9 | 47.7 | 34.8 | 30.3 | 25.2 | 17.9 | 19.1 |
| 67.5° | 7584.2 | 4940.1 | 289.3 | 64.5 | 54.4 | 41.5 | 32.0 | 29.7 | 24.1 | 16.3 | 17.4 |
| 70° | 6459.5 | 3729.6 | 155.3 | 58.9 | 51.0 | 38.1 | 30.3 | 29.7 | 24.1 | 15.7 | 16.3 |
| 72.5° | 4849.3 | 2348.7 | 90.8 | 53.8 | 46.5 | 35.3 | 28.6 | 30.3 | 23.5 | 15.1 | 15.1 |
| 75° | 3299.6 | 1425.8 | 65.0 | 46.0 | 41.5 | 29.7 | 27.5 | 29.2 | 24.1 | 15.1 | 14.0 |
| 77.5° | 2243.3 | 1001.9 | 53.3 | 41.5 | 37.6 | 26.4 | 28.0 | 29.2 | 24.1 | 12.3 | 9.5 |
| 80° | 1400.6 | 516.9 | 40.4 | 33.1 | 32.5 | 23.0 | 28.0 | 25.2 | 15.7 | 2.8 | 0.0 |
| 82.5° | 979.5 | 192.3 | 23.5 | 25.2 | 25.2 | 16.3 | 21.9 | 17.9 | 9.0 | 0.0 | 0.0 |
| 85° | 411.0 | 33.1 | 12.9 | 17.9 | 15.7 | 9.5 | 17.4 | 13.5 | 5.6 | 0.0 | 0.0 |
| 87.5° | 7.3 | 0.0 | 5.0 | 10.7 | 11.2 | 5.6 | 9.0 | 5.6 | 0.0 | 0.0 | 0.0 |
| 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: P367577
 CATALOG NUMBER: MSA-SA2D-740-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 | 1185.3 |
| 2.5° | 1220.6 | 1167.3 | 1055.2 | 1109.0 | 1103.4 | 1128.1 | 1130.3 | 1073.1 | 1196.5 | 1272.7 | 1283.9 |
| 5° | 1170.7 | 1134.8 | 1128.6 | 1097.8 | 1090.0 | 1135.4 | 1110.7 | 1109.0 | 1168.4 | 1255.3 | 1255.9 |
| 7.5° | 972.8 | 945.3 | 958.2 | 922.3 | 829.8 | 835.4 | 843.8 | 879.1 | 930.2 | 987.3 | 1008.1 |
| 10° | 667.8 | 739.0 | 686.8 | 682.3 | 672.8 | 643.1 | 619.5 | 638.0 | 704.2 | 756.9 | 776.5 |
| 12.5° | 476.6 | 487.8 | 519.7 | 508.0 | 524.2 | 499.0 | 489.5 | 547.2 | 611.7 | 665.5 | 704.2 |
| 15° | 278.7 | 297.7 | 316.8 | 357.1 | 373.4 | 368.4 | 397.5 | 445.7 | 497.9 | 522.5 | 570.2 |
| 17.5° | 196.2 | 197.9 | 201.8 | 245.6 | 274.2 | 285.4 | 302.8 | 339.2 | 360.5 | 371.7 | 391.4 |
| 20° | 171.6 | 166.5 | 159.8 | 184.5 | 211.4 | 225.4 | 220.3 | 248.9 | 266.3 | 277.5 | 291.6 |
| 22.5° | 155.3 | 146.9 | 143.0 | 151.4 | 172.1 | 184.5 | 186.7 | 203.5 | 229.9 | 237.7 | 242.2 |
| 25° | 140.2 | 134.6 | 131.8 | 136.2 | 147.5 | 159.2 | 161.5 | 183.3 | 206.9 | 210.3 | 219.2 |
| 27.5° | 130.1 | 119.4 | 120.5 | 123.9 | 129.0 | 143.5 | 148.0 | 160.4 | 194.6 | 198.5 | 201.3 |
| 30° | 119.4 | 108.2 | 111.6 | 114.9 | 112.7 | 130.6 | 137.4 | 151.4 | 184.5 | 190.6 | 194.0 |
| 32.5° | 108.8 | 100.4 | 99.8 | 103.2 | 107.1 | 116.6 | 131.2 | 147.5 | 177.7 | 186.1 | 194.6 |
| 35° | 97.0 | 90.3 | 91.4 | 92.0 | 97.0 | 109.3 | 120.0 | 128.4 | 149.1 | 153.6 | 156.4 |
| 37.5° | 88.6 | 83.0 | 81.9 | 87.5 | 92.5 | 102.0 | 106.0 | 109.9 | 137.4 | 147.5 | 148.0 |
| 40° | 78.5 | 75.1 | 75.1 | 79.1 | 90.3 | 89.1 | 94.2 | 106.5 | 132.9 | 143.5 | 144.7 |
| 42.5° | 71.2 | 66.7 | 67.8 | 71.8 | 79.6 | 74.0 | 84.1 | 102.0 | 131.2 | 141.9 | 141.3 |
| 45° | 60.0 | 58.9 | 61.1 | 64.5 | 67.8 | 62.8 | 78.5 | 97.6 | 125.6 | 139.6 | 135.7 |
| 47.5° | 49.9 | 49.9 | 52.7 | 56.1 | 54.4 | 56.1 | 71.2 | 91.4 | 122.2 | 135.1 | 132.3 |
| 50° | 40.9 | 41.5 | 44.3 | 49.9 | 44.9 | 49.3 | 63.9 | 85.2 | 116.6 | 130.6 | 128.4 |
| 52.5° | 34.8 | 35.3 | 37.0 | 40.9 | 38.7 | 44.9 | 58.9 | 79.1 | 111.0 | 122.8 | 121.7 |
| 55° | 30.3 | 31.4 | 31.4 | 33.6 | 34.8 | 42.1 | 53.3 | 72.9 | 102.6 | 115.5 | 113.3 |
| 57.5° | 26.9 | 28.0 | 27.5 | 29.2 | 30.3 | 37.0 | 47.7 | 66.2 | 94.2 | 104.8 | 101.5 |
| 60° | 24.1 | 25.2 | 24.7 | 26.9 | 26.4 | 32.0 | 41.5 | 58.9 | 85.2 | 93.6 | 90.8 |
| 62.5° | 21.3 | 22.4 | 22.4 | 23.5 | 24.1 | 26.9 | 35.9 | 52.1 | 76.3 | 83.0 | 80.7 |
| 65° | 19.1 | 20.2 | 20.7 | 20.2 | 21.3 | 23.0 | 30.3 | 47.1 | 66.2 | 72.9 | 69.5 |
| 67.5° | 17.4 | 18.5 | 19.6 | 17.4 | 18.5 | 19.1 | 25.8 | 42.1 | 58.3 | 63.9 | 61.1 |
| 70° | 16.8 | 17.4 | 17.4 | 15.1 | 14.6 | 15.1 | 22.4 | 35.9 | 51.0 | 56.6 | 52.7 |
| 72.5° | 15.7 | 16.3 | 15.7 | 12.3 | 10.7 | 11.8 | 19.1 | 30.3 | 43.2 | 47.7 | 44.3 |
| 75° | 14.6 | 15.1 | 14.6 | 10.1 | 6.7 | 8.4 | 15.7 | 26.4 | 37.0 | 39.2 | 37.6 |
| 77.5° | 12.3 | 13.5 | 13.5 | 7.3 | 2.2 | 5.0 | 11.8 | 21.3 | 30.8 | 30.8 | 31.4 |
| 80° | 1.1 | 3.4 | 5.6 | 3.9 | 0.0 | 0.6 | 3.9 | 11.2 | 19.6 | 19.1 | 20.7 |
| 82.5° | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 | 5.0 | 5.6 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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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| 80° | 31.4 | 34.8 | 33.6 | 34.8 | 51.6 | 79.6 | 130.1 | 790.0 | 1050.1 | 1143.8 |
| 82.5° | 10.1 | 16.8 | 18.5 | 15.7 | 33.6 | 39.2 | 37.6 | 273.0 | 341.5 | 362.8 |
| 85° | 2.2 | 6.2 | 2.8 | 0.0 | 11.2 | 20.2 | 2.8 | 41.5 | 81.9 | 60.6 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
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