

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: P596727

Luminaire Tested: **MSA-SA3D-827-U-SLL-HSS**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P596727
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-543-25)
Test Lab: INNOVATIONS CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: MSA-SA3D-827-U-SLL-HSS
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) 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: 10674 lumens
Efficiency: N/A
Efficacy: 55.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

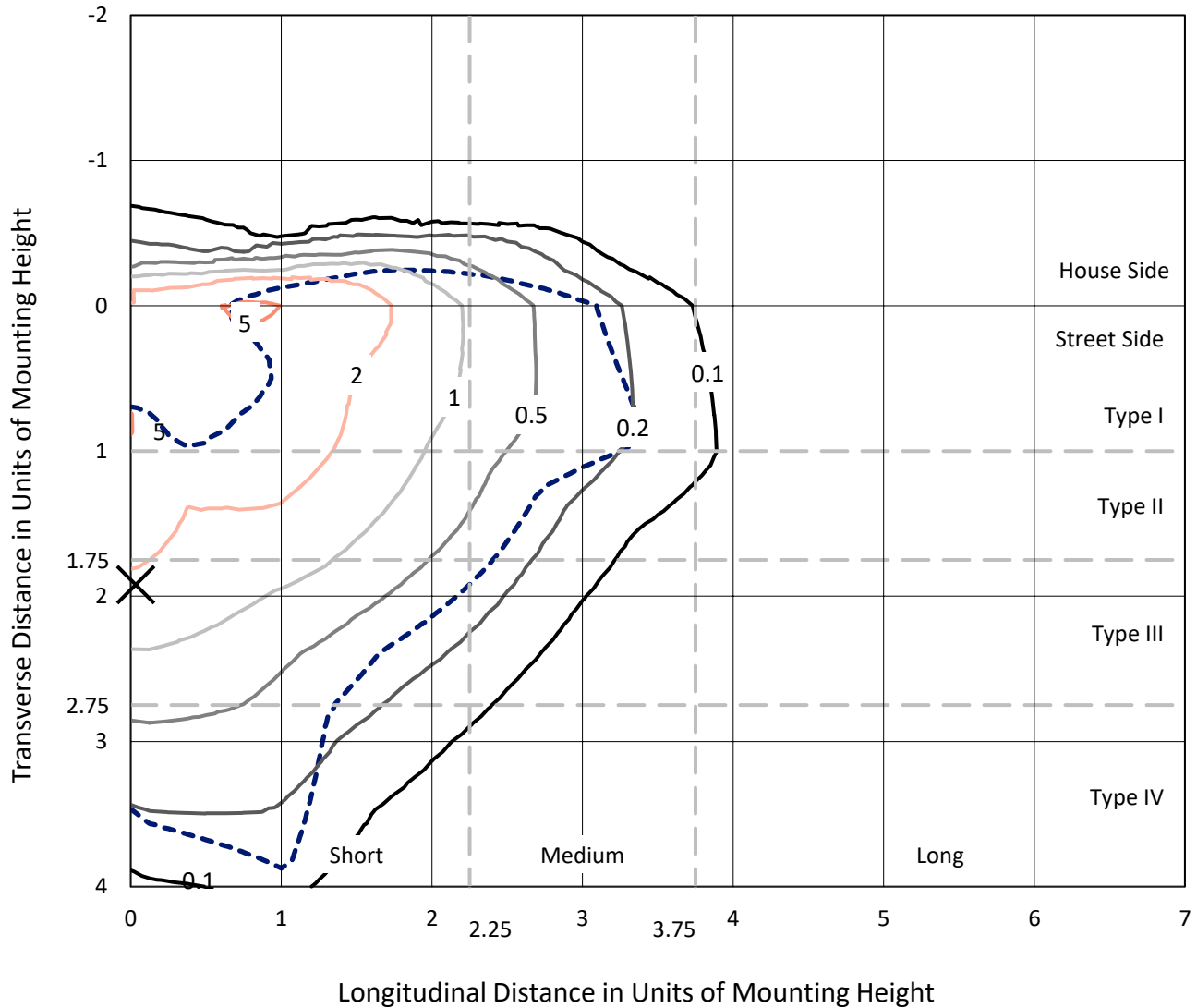
Input Watts (W): 192
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

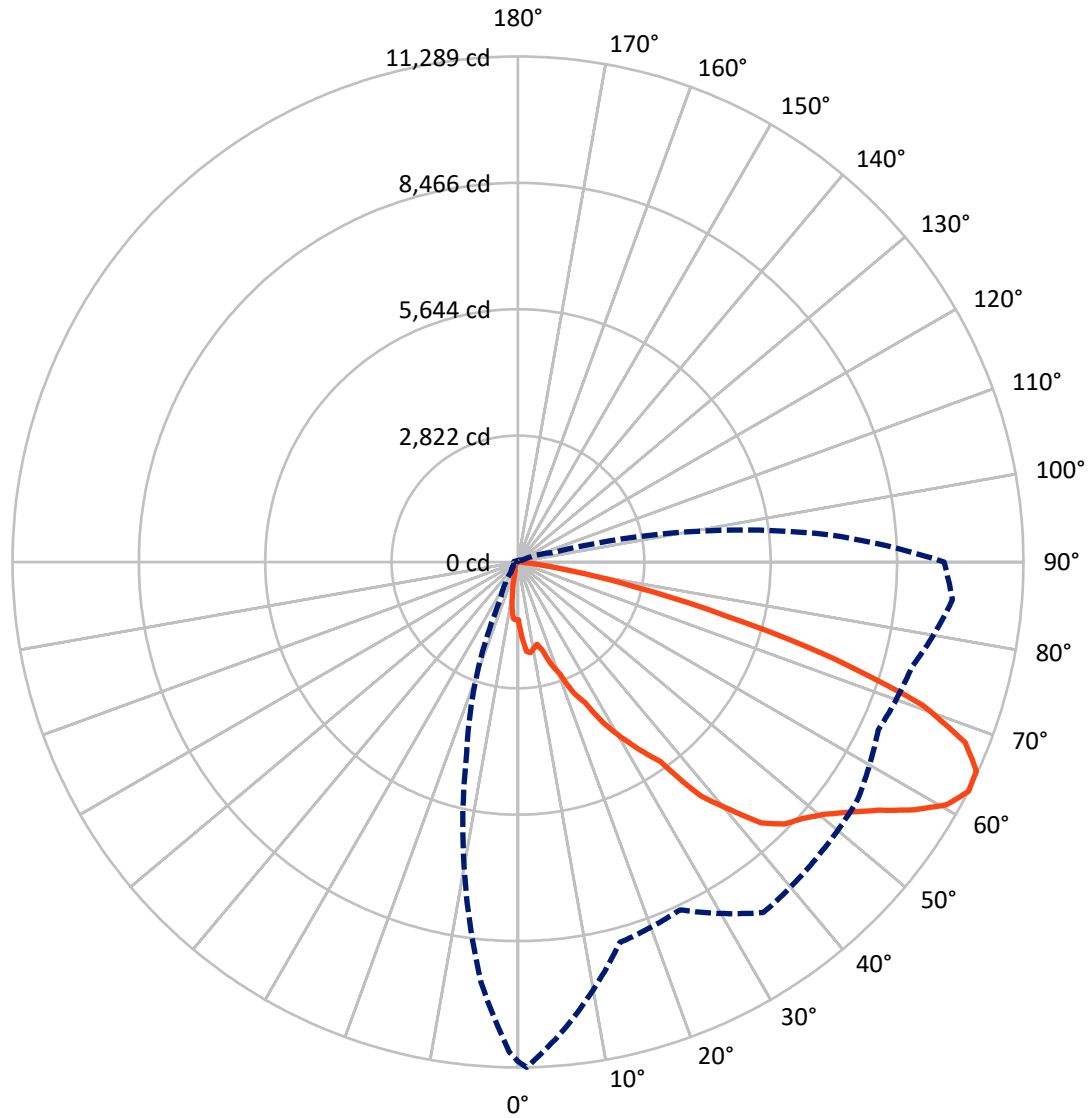
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type IV - Short - N/A

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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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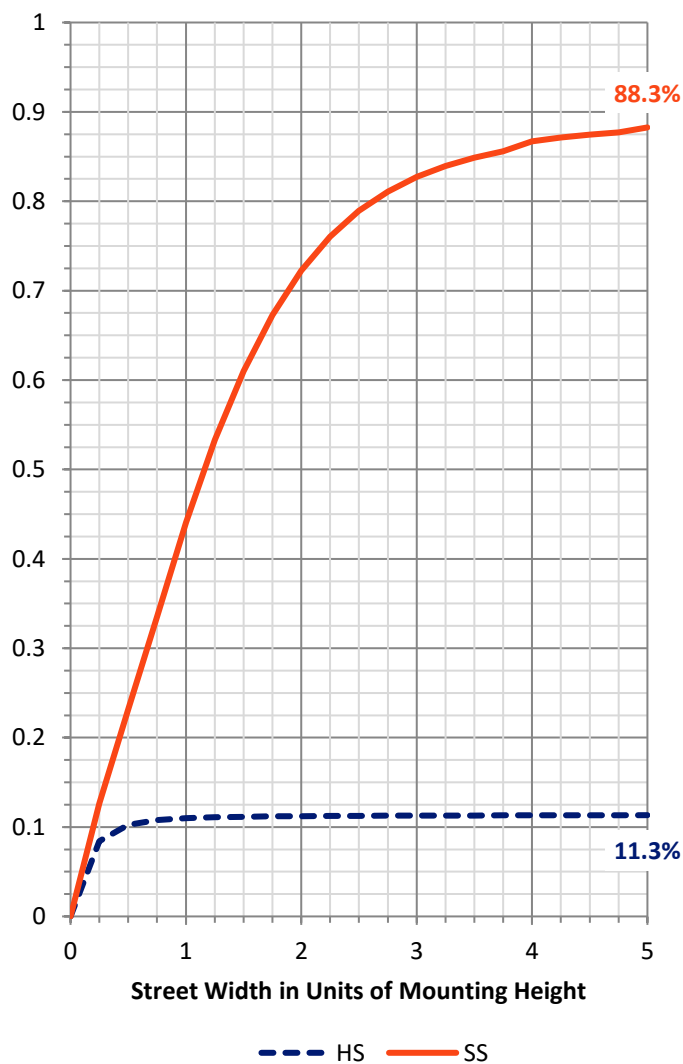
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1220.6 | 0.0 | 1220.6 |
| | % Fixture | 11.4 | 0.0 | 11.4 |
| Street Side | Lumens | 9453.4 | 0.0 | 9453.4 |
| | % Fixture | 88.6 | 0.0 | 88.6 |
| Total | Lumens | 10674.0 | 0.0 | 10674.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 143.7 | 1.3 |
| 10°-20° | 375.3 | 3.5 |
| 20°-30° | 606.6 | 5.7 |
| 30°-40° | 1016.1 | 9.5 |
| 40°-50° | 1661.5 | 15.6 |
| 50°-60° | 2459.4 | 23.0 |
| 60°-70° | 2823.6 | 26.5 |
| 70°-80° | 1396.3 | 13.1 |
| 80°-90° | 191.7 | 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° | 10674.0 | 100.0 |
| 0°-180° | 10674.0 | 100.0 |

Coefficient of Utilization



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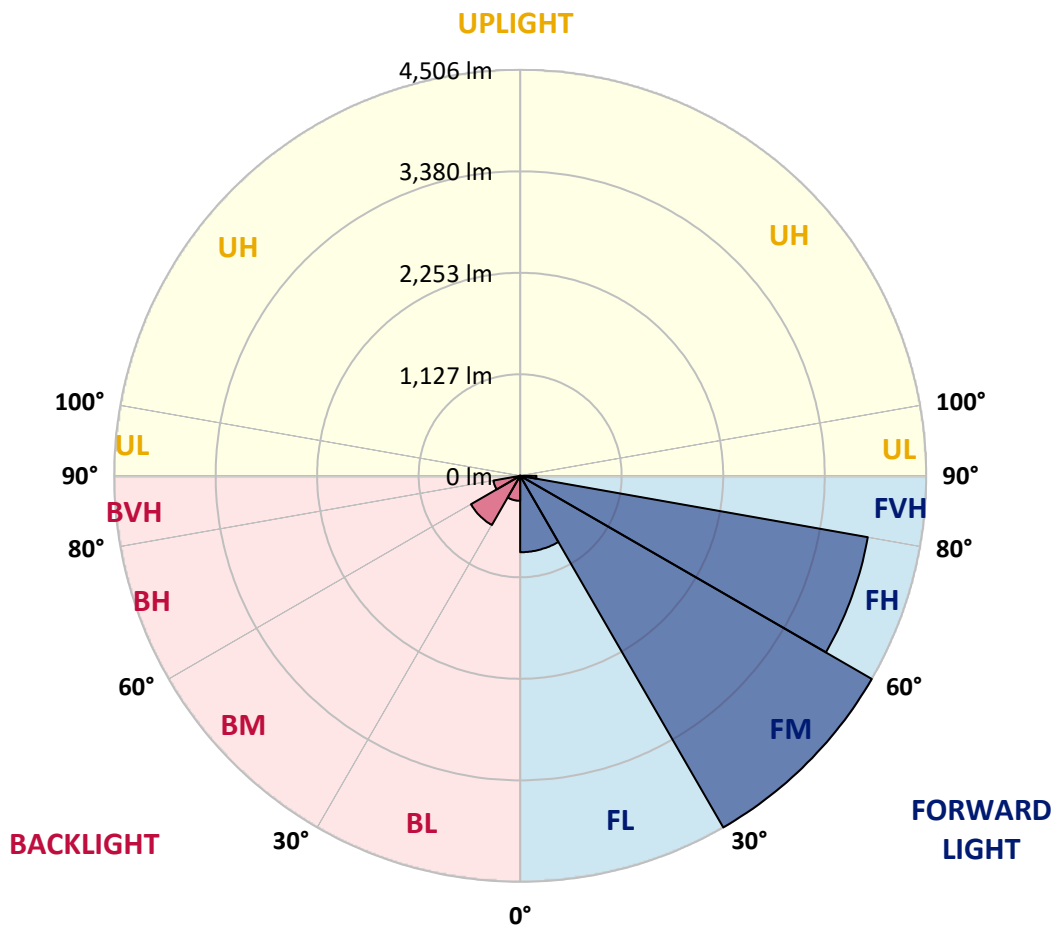
CATALOG NUMBER: MSA-SA3D-827-U-SLL-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 847.8 | 7.9 | | | |
| FM (30°-60°) | 4506.5 | 42.2 | | | |
| FH (60°-80°) | 3918.0 | 36.7 | | | G2/5000 |
| FVH (80°-90°) | 181.1 | 1.7 | | | G2/225 |
| BL (0°-30°) | 277.7 | 2.6 | B1/500 | | |
| BM (30°-60°) | 630.5 | 5.9 | B1/1000 | | |
| BH (60°-80°) | 301.8 | 2.8 | B1/500 | | G1/500 |
| BVH (80°-90°) | 10.6 | 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-G2

Type IV Short





REPORT NUMBER: P596727

CATALOG NUMBER: MSA-SA3D-827-U-SLL-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 1° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 |
| 2.5° | 1658.1 | 1666.0 | 1628.9 | 1624.0 | 1537.7 | 1645.3 | 1648.4 | 1661.1 | 1582.1 | 1428.8 | 1642.9 |
| 5° | 1984.1 | 2006.0 | 1977.4 | 2104.6 | 2141.1 | 2219.5 | 2075.4 | 2204.3 | 2149.6 | 2164.8 | 2195.8 |
| 7.5° | 2023.1 | 2045.6 | 2105.8 | 2318.7 | 2515.1 | 2465.9 | 2450.1 | 2498.7 | 2494.5 | 2381.9 | 2437.9 |
| 10° | 1942.2 | 1961.0 | 2061.4 | 2448.8 | 2534.6 | 2756.0 | 2810.1 | 2698.2 | 2652.6 | 2406.3 | 2298.6 |
| 12.5° | 1854.0 | 1885.6 | 2013.3 | 2478.0 | 2735.3 | 2959.2 | 3137.4 | 2978.0 | 2826.6 | 2564.4 | 2465.9 |
| 15° | 2023.1 | 2040.7 | 2241.4 | 2538.9 | 2763.9 | 2918.4 | 3064.4 | 3011.5 | 2988.4 | 2799.8 | 2465.9 |
| 17.5° | 2354.6 | 2395.9 | 2541.3 | 2687.9 | 2865.5 | 2958.6 | 2923.9 | 2907.5 | 2848.5 | 3144.7 | 2799.2 |
| 20° | 2590.6 | 2667.8 | 2858.2 | 2921.5 | 2780.3 | 2867.3 | 2846.0 | 2831.4 | 2785.2 | 3336.3 | 3182.4 |
| 22.5° | 3101.5 | 3172.7 | 3176.3 | 3198.8 | 2870.4 | 2731.7 | 2696.4 | 2700.7 | 2910.5 | 3393.5 | 3659.3 |
| 25° | 3449.4 | 3473.8 | 3666.0 | 3505.4 | 3116.1 | 2773.0 | 2638.6 | 2698.8 | 3001.1 | 3804.6 | 4107.6 |
| 27.5° | 4018.8 | 4076.5 | 4196.4 | 3652.6 | 3263.3 | 2746.9 | 2532.8 | 2751.8 | 3239.6 | 3940.9 | 4605.7 |
| 30° | 4482.9 | 4538.2 | 4731.0 | 3853.9 | 3391.0 | 2876.4 | 2578.4 | 2858.2 | 3388.0 | 4221.3 | 5053.4 |
| 32.5° | 4859.4 | 5002.3 | 5221.3 | 4164.7 | 3386.2 | 3025.5 | 2811.4 | 2822.9 | 3570.5 | 4584.4 | 5496.2 |
| 35° | 5340.5 | 5473.7 | 5627.6 | 4378.8 | 3607.6 | 3073.5 | 2880.1 | 3169.6 | 3841.7 | 4964.0 | 6092.3 |
| 37.5° | 6425.0 | 6626.3 | 6322.2 | 4918.4 | 3865.5 | 3507.8 | 3151.4 | 3383.1 | 4125.8 | 5351.4 | 6911.6 |
| 40° | 7086.8 | 7256.5 | 6962.7 | 5193.9 | 4311.9 | 3726.8 | 3635.5 | 3754.2 | 4403.8 | 5551.6 | 7529.0 |
| 42.5° | 7738.8 | 7962.7 | 7471.8 | 5608.7 | 4735.9 | 4344.8 | 4095.4 | 4190.9 | 4805.8 | 6034.5 | 8223.6 |
| 45° | 8210.9 | 8349.5 | 7581.9 | 5825.9 | 5318.6 | 5049.1 | 4883.1 | 4740.8 | 5366.6 | 6344.7 | 8671.9 |
| 47.5° | 8448.1 | 8558.8 | 7799.1 | 5894.6 | 5665.3 | 5794.3 | 6158.0 | 5860.6 | 5863.0 | 6569.2 | 8913.4 |
| 50° | 8776.5 | 8853.8 | 7920.7 | 5976.7 | 6041.8 | 6955.4 | 7139.1 | 6505.9 | 6429.9 | 6794.2 | 8952.9 |
| 52.5° | 9238.2 | 9275.9 | 8156.7 | 6193.3 | 6605.7 | 7864.8 | 7931.1 | 7675.0 | 6997.4 | 7212.7 | 9040.5 |
| 55° | 9851.9 | 9785.6 | 8578.2 | 6648.2 | 7193.9 | 8530.8 | 8619.6 | 8396.4 | 7710.9 | 7630.6 | 9311.8 |
| 57.5° | 10513.7 | 10437.7 | 9202.9 | 7289.3 | 7831.9 | 9039.9 | 9092.8 | 9110.5 | 8184.7 | 8000.4 | 9772.9 |
| 60° | 10988.2 | 11002.1 | 9989.4 | 8024.7 | 8228.5 | 9527.1 | 9421.3 | 9260.7 | 8662.8 | 8542.4 | 9997.3 |
| 62.5° | 11154.2 | 11288.6 | 10601.9 | 8795.4 | 8570.3 | 9557.5 | 9393.3 | 9257.7 | 8876.9 | 9101.3 | 9740.0 |
| 65° | 11018.6 | 11253.4 | 10744.2 | 9472.4 | 8777.1 | 9176.2 | 9005.2 | 8918.3 | 8870.2 | 9329.4 | 9170.7 |
| 67.5° | 10479.7 | 10773.4 | 10336.7 | 9478.5 | 8025.3 | 7813.1 | 8015.0 | 8290.5 | 8131.2 | 9140.3 | 8373.3 |
| 70° | 9272.3 | 9594.0 | 9390.9 | 8922.5 | 6685.3 | 6147.0 | 6369.7 | 6786.3 | 6673.8 | 8129.3 | 7199.9 |
| 72.5° | 6956.6 | 7370.2 | 7410.4 | 7703.0 | 5307.0 | 4626.4 | 4658.6 | 4647.1 | 4841.1 | 6555.2 | 5618.5 |
| 75° | 4468.9 | 4790.6 | 5225.5 | 6215.8 | 4031.5 | 3377.6 | 3068.7 | 2993.2 | 3355.1 | 5122.1 | 4022.4 |
| 77.5° | 2594.2 | 2632.5 | 2833.3 | 4689.7 | 2887.4 | 2433.6 | 2223.2 | 2330.8 | 2457.4 | 3574.7 | 2666.0 |
| 80° | 1240.8 | 1260.3 | 1343.0 | 2413.0 | 2006.0 | 2106.4 | 1944.0 | 2065.0 | 1687.3 | 2054.7 | 1512.7 |
| 82.5° | 393.5 | 397.8 | 411.8 | 1185.5 | 1245.7 | 1395.3 | 894.1 | 1198.9 | 1043.2 | 1242.1 | 1007.3 |
| 85° | 65.7 | 111.9 | 138.1 | 342.4 | 703.1 | 470.8 | 194.0 | 427.6 | 582.1 | 783.4 | 457.4 |
| 87.5° | 0.0 | 0.0 | 0.0 | 6.1 | 57.2 | 26.8 | 4.3 | 24.3 | 89.4 | 174.6 | 20.7 |
| 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: MSA-SA3D-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 |
| 2.5° | 1704.9 | 1746.9 | 1588.8 | 1447.0 | 1482.9 | 1454.3 | 1411.2 | 1337.6 | 1167.2 | 1292.5 | 1284.0 |
| 5° | 2194.0 | 2116.1 | 1902.0 | 1802.3 | 1680.6 | 1495.1 | 1472.6 | 1330.3 | 1267.6 | 1277.9 | 1268.8 |
| 7.5° | 2364.3 | 2225.0 | 2035.8 | 1735.4 | 1450.1 | 1182.5 | 1100.3 | 1007.3 | 988.4 | 1028.6 | 1054.7 |
| 10° | 2230.5 | 2082.7 | 1917.2 | 1543.8 | 1324.2 | 1130.7 | 928.2 | 798.0 | 727.5 | 719.0 | 726.3 |
| 12.5° | 2291.9 | 2132.5 | 1791.9 | 1506.0 | 1276.7 | 1101.6 | 875.3 | 678.8 | 525.5 | 537.1 | 506.7 |
| 15° | 2334.5 | 2151.4 | 1762.1 | 1427.0 | 1178.8 | 944.6 | 672.1 | 475.7 | 350.4 | 313.9 | 292.0 |
| 17.5° | 2584.5 | 2322.9 | 1724.4 | 1335.7 | 1041.9 | 735.4 | 422.1 | 275.5 | 234.8 | 222.0 | 211.7 |
| 20° | 2905.6 | 2534.0 | 1723.8 | 1239.6 | 840.0 | 459.8 | 263.4 | 199.5 | 189.8 | 197.1 | 189.2 |
| 22.5° | 3279.1 | 2815.0 | 1815.6 | 1119.8 | 602.8 | 290.1 | 205.0 | 177.0 | 167.3 | 173.4 | 174.0 |
| 25° | 3655.0 | 3236.5 | 1890.5 | 1006.1 | 419.7 | 222.6 | 182.5 | 163.0 | 152.1 | 157.5 | 154.5 |
| 27.5° | 4333.8 | 3585.7 | 1873.4 | 860.7 | 309.0 | 195.9 | 169.7 | 152.7 | 136.2 | 144.8 | 144.2 |
| 30° | 4777.9 | 4201.8 | 1939.7 | 656.9 | 245.1 | 171.5 | 158.1 | 139.3 | 121.7 | 131.4 | 130.8 |
| 32.5° | 5308.9 | 4466.4 | 2011.5 | 504.2 | 203.8 | 162.4 | 142.3 | 124.1 | 113.7 | 119.8 | 118.6 |
| 35° | 5905.6 | 4989.5 | 1879.5 | 419.7 | 177.0 | 146.6 | 125.9 | 111.9 | 102.8 | 105.8 | 105.8 |
| 37.5° | 6959.7 | 5426.9 | 1800.4 | 341.8 | 164.8 | 132.6 | 118.0 | 101.0 | 95.5 | 95.5 | 98.5 |
| 40° | 7558.2 | 6094.7 | 1564.4 | 270.7 | 168.5 | 122.3 | 110.1 | 92.5 | 85.2 | 84.5 | 87.6 |
| 42.5° | 8336.8 | 6479.8 | 1416.6 | 219.0 | 152.7 | 119.2 | 101.0 | 83.9 | 75.4 | 74.8 | 77.9 |
| 45° | 8798.4 | 6695.1 | 1208.6 | 172.1 | 136.9 | 138.7 | 93.7 | 77.2 | 64.5 | 62.0 | 67.5 |
| 47.5° | 9089.8 | 6980.4 | 1090.6 | 136.9 | 119.2 | 138.1 | 91.2 | 66.9 | 54.1 | 51.1 | 56.0 |
| 50° | 9237.6 | 7121.5 | 1067.5 | 117.4 | 103.4 | 123.5 | 104.6 | 56.0 | 46.2 | 42.0 | 46.2 |
| 52.5° | 9391.5 | 7350.8 | 1076.0 | 108.3 | 91.2 | 99.1 | 99.1 | 48.1 | 40.8 | 35.9 | 38.9 |
| 55° | 9702.3 | 7689.6 | 1057.1 | 102.8 | 83.9 | 75.4 | 63.9 | 42.6 | 37.1 | 31.6 | 34.7 |
| 57.5° | 10084.3 | 7932.9 | 1057.1 | 97.9 | 77.9 | 64.5 | 51.1 | 39.5 | 34.1 | 27.4 | 29.8 |
| 60° | 10011.9 | 7676.8 | 1004.8 | 93.1 | 73.0 | 60.2 | 46.2 | 36.5 | 31.6 | 24.9 | 26.8 |
| 62.5° | 9515.0 | 6980.4 | 813.8 | 85.8 | 68.7 | 57.2 | 42.0 | 34.7 | 29.8 | 21.9 | 23.7 |
| 65° | 8931.0 | 6240.7 | 565.7 | 77.9 | 63.9 | 51.7 | 37.7 | 32.8 | 27.4 | 19.5 | 20.7 |
| 67.5° | 8227.9 | 5359.3 | 313.9 | 69.9 | 59.0 | 45.0 | 34.7 | 32.2 | 26.2 | 17.6 | 18.9 |
| 70° | 7007.7 | 4046.1 | 168.5 | 63.9 | 55.4 | 41.4 | 32.8 | 32.2 | 26.2 | 17.0 | 17.6 |
| 72.5° | 5260.8 | 2548.0 | 98.5 | 58.4 | 50.5 | 38.3 | 31.0 | 32.8 | 25.5 | 16.4 | 16.4 |
| 75° | 3579.6 | 1546.8 | 70.6 | 49.9 | 45.0 | 32.2 | 29.8 | 31.6 | 26.2 | 16.4 | 15.2 |
| 77.5° | 2433.6 | 1087.0 | 57.8 | 45.0 | 40.8 | 28.6 | 30.4 | 31.6 | 26.2 | 13.4 | 10.3 |
| 80° | 1519.4 | 560.8 | 43.8 | 35.9 | 35.3 | 24.9 | 30.4 | 27.4 | 17.0 | 3.0 | 0.0 |
| 82.5° | 1062.6 | 208.6 | 25.5 | 27.4 | 27.4 | 17.6 | 23.7 | 19.5 | 9.7 | 0.0 | 0.0 |
| 85° | 445.9 | 35.9 | 14.0 | 19.5 | 17.0 | 10.3 | 18.9 | 14.6 | 6.1 | 0.0 | 0.0 |
| 87.5° | 7.9 | 0.0 | 5.5 | 11.6 | 12.2 | 6.1 | 9.7 | 6.1 | 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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 CATALOG NUMBER: MSA-SA3D-827-U-SLL-HSS

CANDELA DISTRIBUTION (continued):

| | 185° | 195° | 205° | 215° | 225° | 235° | 245° | 255° | 265° | 270° | 275° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 | 1285.9 |
| 2.5° | 1324.2 | 1266.4 | 1144.7 | 1203.1 | 1197.0 | 1223.8 | 1226.2 | 1164.2 | 1298.0 | 1380.7 | 1392.9 |
| 5° | 1270.0 | 1231.1 | 1224.4 | 1191.0 | 1182.5 | 1231.7 | 1205.0 | 1203.1 | 1267.6 | 1361.9 | 1362.5 |
| 7.5° | 1055.3 | 1025.5 | 1039.5 | 1000.6 | 900.2 | 906.3 | 915.4 | 953.7 | 1009.1 | 1071.1 | 1093.6 |
| 10° | 724.4 | 801.7 | 745.1 | 740.2 | 729.9 | 697.7 | 672.1 | 692.2 | 764.0 | 821.1 | 842.4 |
| 12.5° | 517.0 | 529.2 | 563.9 | 551.1 | 568.7 | 541.3 | 531.0 | 593.7 | 663.6 | 722.0 | 764.0 |
| 15° | 302.3 | 323.0 | 343.7 | 387.5 | 405.1 | 399.6 | 431.3 | 483.6 | 540.1 | 566.9 | 618.6 |
| 17.5° | 212.9 | 214.7 | 219.0 | 266.4 | 297.4 | 309.6 | 328.5 | 368.0 | 391.1 | 403.3 | 424.6 |
| 20° | 186.1 | 180.7 | 173.4 | 200.1 | 229.3 | 244.5 | 239.0 | 270.1 | 288.9 | 301.1 | 316.3 |
| 22.5° | 168.5 | 159.4 | 155.1 | 164.2 | 186.7 | 200.1 | 202.5 | 220.8 | 249.4 | 257.9 | 262.8 |
| 25° | 152.1 | 146.0 | 142.9 | 147.8 | 160.0 | 172.7 | 175.2 | 198.9 | 224.4 | 228.1 | 237.8 |
| 27.5° | 141.1 | 129.6 | 130.8 | 134.4 | 139.9 | 155.7 | 160.6 | 174.0 | 211.1 | 215.3 | 218.4 |
| 30° | 129.6 | 117.4 | 121.0 | 124.7 | 122.3 | 141.7 | 149.0 | 164.2 | 200.1 | 206.8 | 210.5 |
| 32.5° | 118.0 | 108.9 | 108.3 | 111.9 | 116.2 | 126.5 | 142.3 | 160.0 | 192.8 | 201.9 | 211.1 |
| 35° | 105.2 | 97.9 | 99.1 | 99.8 | 105.2 | 118.6 | 130.2 | 139.3 | 161.8 | 166.7 | 169.7 |
| 37.5° | 96.1 | 90.0 | 88.8 | 94.9 | 100.4 | 110.7 | 115.0 | 119.2 | 149.0 | 160.0 | 160.6 |
| 40° | 85.2 | 81.5 | 81.5 | 85.8 | 97.9 | 96.7 | 102.2 | 115.6 | 144.2 | 155.7 | 156.9 |
| 42.5° | 77.2 | 72.4 | 73.6 | 77.9 | 86.4 | 80.3 | 91.2 | 110.7 | 142.3 | 153.9 | 153.3 |
| 45° | 65.1 | 63.9 | 66.3 | 69.9 | 73.6 | 68.1 | 85.2 | 105.8 | 136.2 | 151.5 | 147.2 |
| 47.5° | 54.1 | 54.1 | 57.2 | 60.8 | 59.0 | 60.8 | 77.2 | 99.1 | 132.6 | 146.6 | 143.5 |
| 50° | 44.4 | 45.0 | 48.1 | 54.1 | 48.7 | 53.5 | 69.3 | 92.5 | 126.5 | 141.7 | 139.3 |
| 52.5° | 37.7 | 38.3 | 40.1 | 44.4 | 42.0 | 48.7 | 63.9 | 85.8 | 120.4 | 133.2 | 132.0 |
| 55° | 32.8 | 34.1 | 34.1 | 36.5 | 37.7 | 45.6 | 57.8 | 79.1 | 111.3 | 125.3 | 122.9 |
| 57.5° | 29.2 | 30.4 | 29.8 | 31.6 | 32.8 | 40.1 | 51.7 | 71.8 | 102.2 | 113.7 | 110.1 |
| 60° | 26.2 | 27.4 | 26.8 | 29.2 | 28.6 | 34.7 | 45.0 | 63.9 | 92.5 | 101.6 | 98.5 |
| 62.5° | 23.1 | 24.3 | 24.3 | 25.5 | 26.2 | 29.2 | 38.9 | 56.6 | 82.7 | 90.0 | 87.6 |
| 65° | 20.7 | 21.9 | 22.5 | 21.9 | 23.1 | 24.9 | 32.8 | 51.1 | 71.8 | 79.1 | 75.4 |
| 67.5° | 18.9 | 20.1 | 21.3 | 18.9 | 20.1 | 20.7 | 28.0 | 45.6 | 63.3 | 69.3 | 66.3 |
| 70° | 18.2 | 18.9 | 18.9 | 16.4 | 15.8 | 16.4 | 24.3 | 38.9 | 55.4 | 61.4 | 57.2 |
| 72.5° | 17.0 | 17.6 | 17.0 | 13.4 | 11.6 | 12.8 | 20.7 | 32.8 | 46.8 | 51.7 | 48.1 |
| 75° | 15.8 | 16.4 | 15.8 | 10.9 | 7.3 | 9.1 | 17.0 | 28.6 | 40.1 | 42.6 | 40.8 |
| 77.5° | 13.4 | 14.6 | 14.6 | 7.9 | 2.4 | 5.5 | 12.8 | 23.1 | 33.5 | 33.5 | 34.1 |
| 80° | 1.2 | 3.6 | 6.1 | 4.3 | 0.0 | 0.6 | 4.3 | 12.2 | 21.3 | 20.7 | 22.5 |
| 82.5° | 0.0 | 0.0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.3 | 5.5 | 6.1 |
| 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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| 82.5° | 10.9 | 18.2 | 20.1 | 17.0 | 36.5 | 42.6 | 40.8 | 296.2 | 370.4 | 393.5 |
| 85° | 2.4 | 6.7 | 3.0 | 0.0 | 12.2 | 21.9 | 3.0 | 45.0 | 88.8 | 65.7 |
| 87.5° | 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 |

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