

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: P596243

Luminaire Tested: **MSA-SA2B-722-U-SLL-HSS**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P596243  
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-SA2B-722-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**

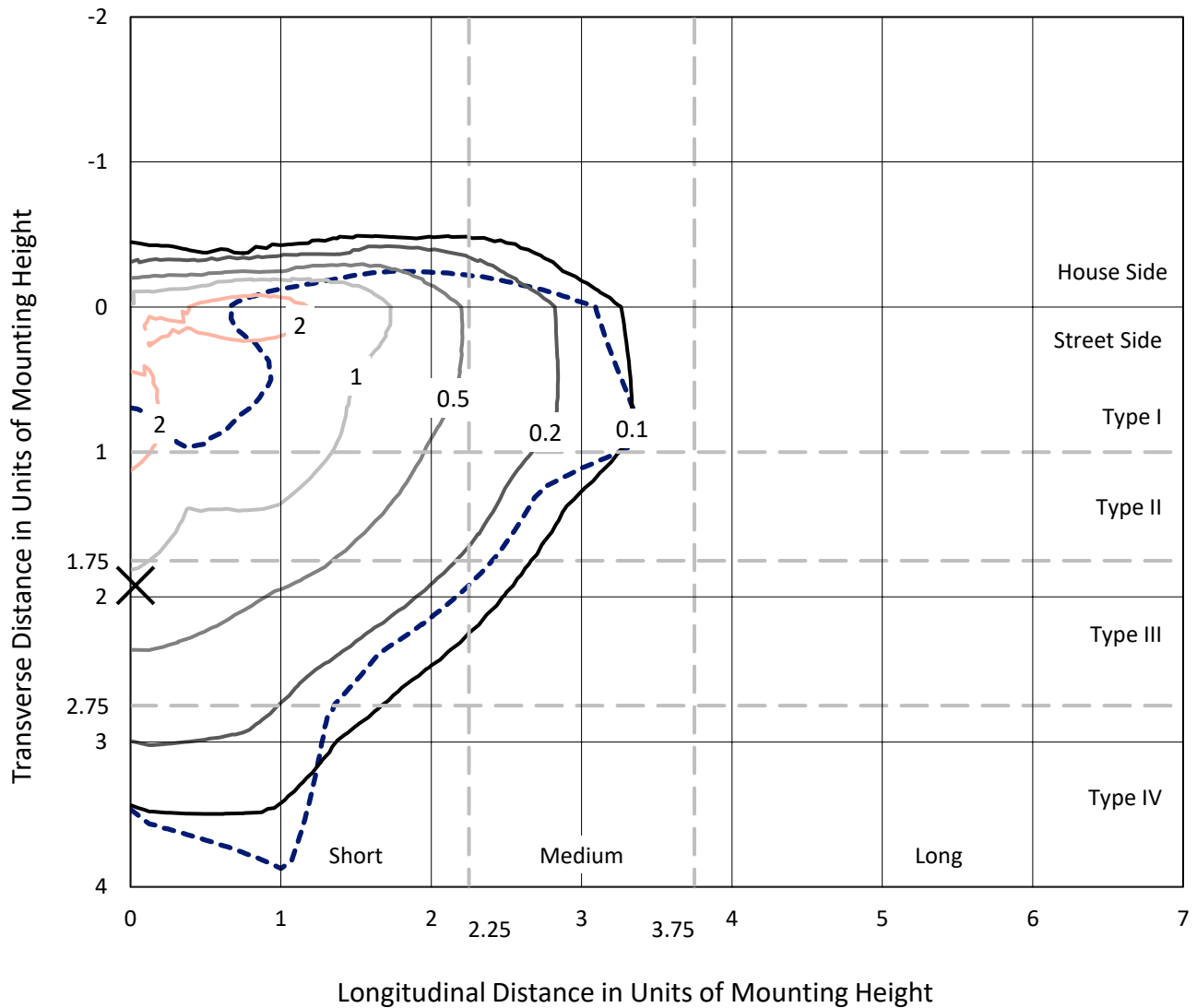
Lumens per Lamp: N/A  
Luminaire Lumens: 5342 lumens  
Efficiency: N/A  
Efficacy: 62.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2  
  
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage 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

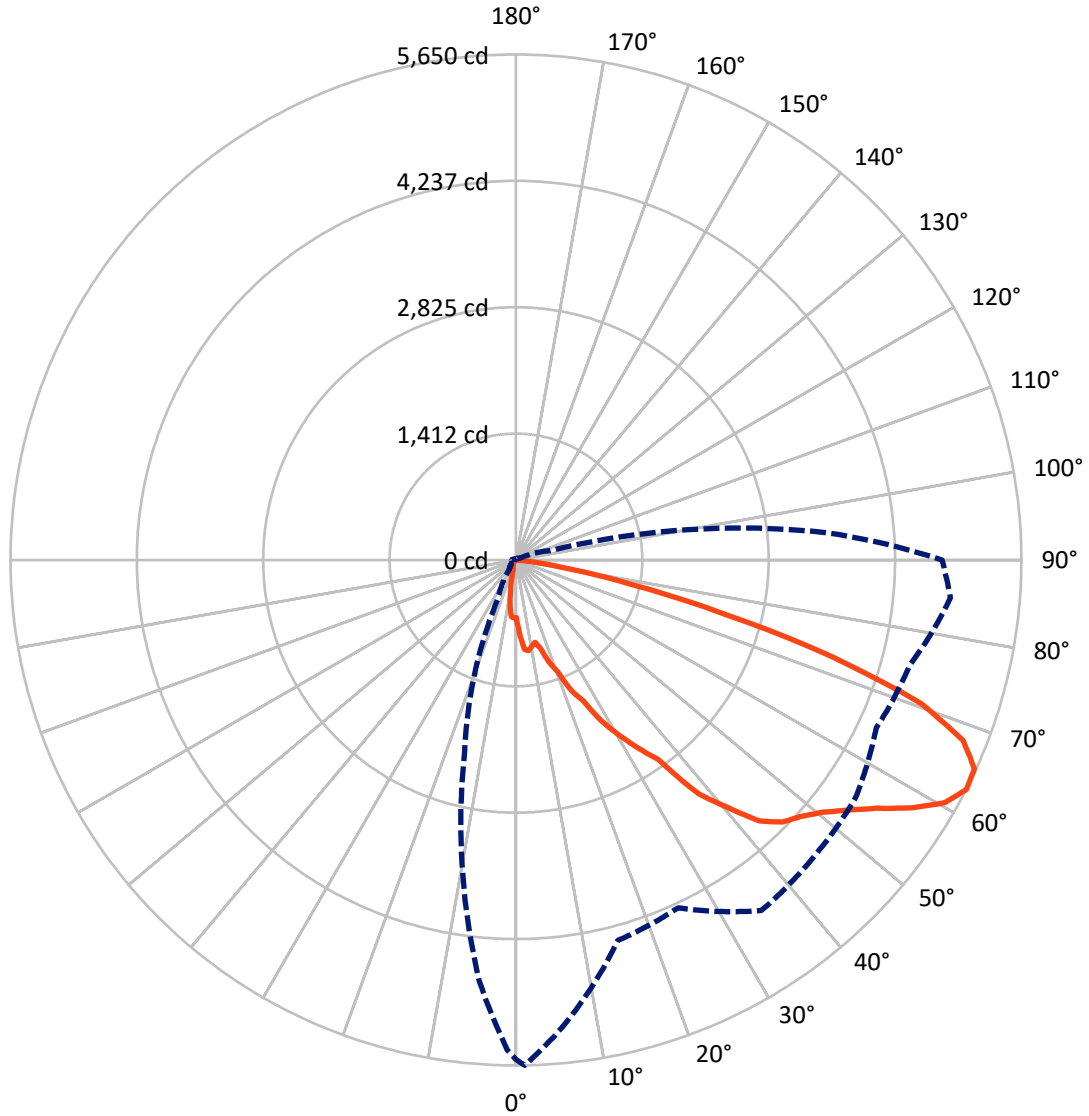
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.7 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  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 610.9    | 0.0    | 610.9  |
|                    | % Fixture | 11.4     | 0.0    | 11.4   |
| <b>Street Side</b> | Lumens    | 4731.1   | 0.0    | 4731.1 |
|                    | % Fixture | 88.6     | 0.0    | 88.6   |
| <b>Total</b>       | Lumens    | 5342.0   | 0.0    | 5342.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 71.9   | 1.3       |
| 10°-20°   | 187.8  | 3.5       |
| 20°-30°   | 303.6  | 5.7       |
| 30°-40°   | 508.5  | 9.5       |
| 40°-50°   | 831.5  | 15.6      |
| 50°-60°   | 1230.9 | 23.0      |
| 60°-70°   | 1413.1 | 26.5      |
| 70°-80°   | 698.8  | 13.1      |
| 80°-90°   | 95.9   | 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°    | 5342.0 | 100.0     |
| 0°-180°   | 5342.0 | 100.0     |

**Coefficient of Utilization**



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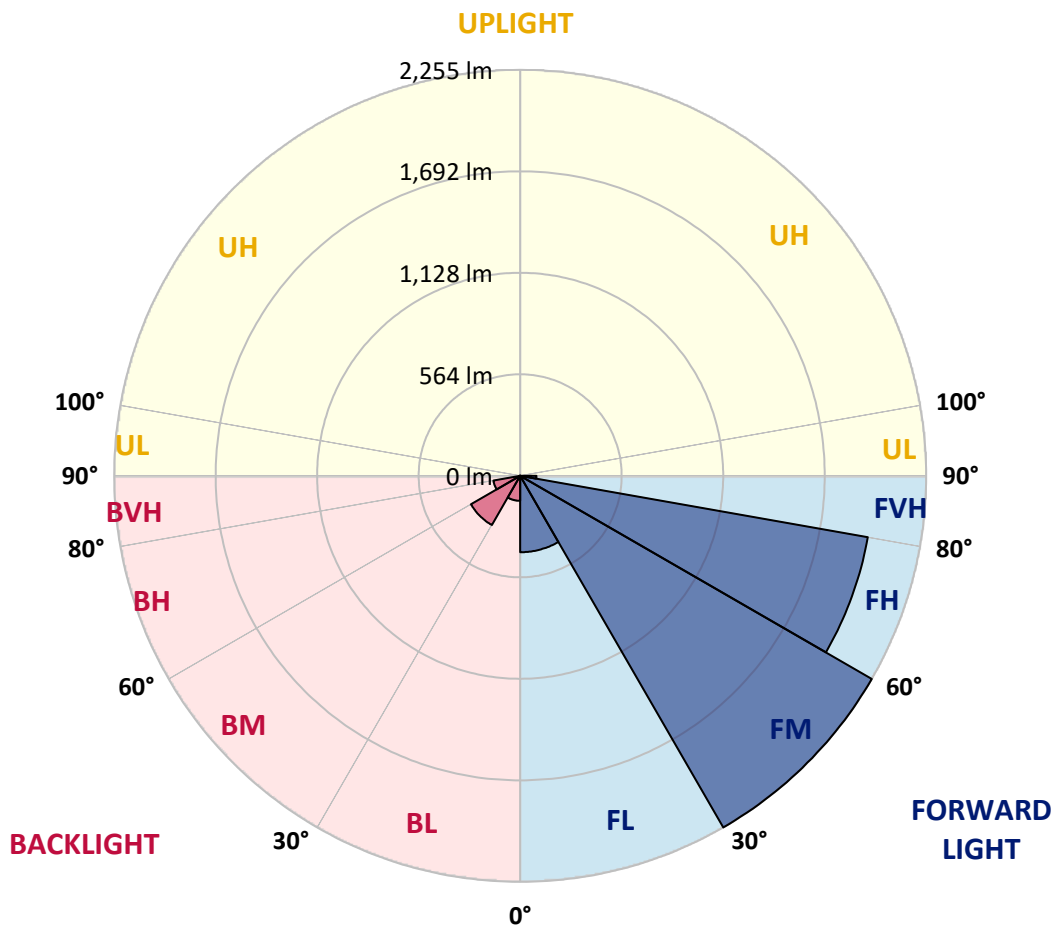
CATALOG NUMBER: MSA-SA2B-722-U-SLL-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 424.3  | 7.9       |                         |      |         |
| FM (30°-60°)   | 2255.4 | 42.2      |                         |      |         |
| FH (60°-80°)   | 1960.8 | 36.7      |                         |      | G2/5000 |
| FVH (80°-90°)  | 90.6   | 1.7       |                         |      | G1/100  |
| BL (0°-30°)    | 139.0  | 2.6       | B1/500                  |      |         |
| BM (30°-60°)   | 315.5  | 5.9       | B1/1000                 |      |         |
| BH (60°-80°)   | 151.0  | 2.8       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 5.3    | 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





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 1°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 643.5  | 643.5  | 643.5  | 643.5  | 643.5  | 643.5  | 643.5  | 643.5  | 643.5  | 643.5  | 643.5  |
| 2.5°  | 829.8  | 833.8  | 815.2  | 812.8  | 769.6  | 823.4  | 825.0  | 831.4  | 791.8  | 715.1  | 822.2  |
| 5°    | 993.0  | 1004.0 | 989.6  | 1053.3 | 1071.5 | 1110.8 | 1038.7 | 1103.2 | 1075.8 | 1083.4 | 1098.9 |
| 7.5°  | 1012.5 | 1023.7 | 1053.9 | 1160.4 | 1258.7 | 1234.1 | 1226.2 | 1250.5 | 1248.4 | 1192.1 | 1220.1 |
| 10°   | 972.0  | 981.4  | 1031.7 | 1225.6 | 1268.5 | 1379.3 | 1406.4 | 1350.4 | 1327.5 | 1204.3 | 1150.4 |
| 12.5° | 927.9  | 943.7  | 1007.6 | 1240.2 | 1368.9 | 1481.0 | 1570.2 | 1490.4 | 1414.6 | 1283.4 | 1234.1 |
| 15°   | 1012.5 | 1021.3 | 1121.8 | 1270.6 | 1383.3 | 1460.6 | 1533.6 | 1507.1 | 1495.6 | 1401.2 | 1234.1 |
| 17.5° | 1178.4 | 1199.1 | 1271.8 | 1345.2 | 1434.1 | 1480.7 | 1463.3 | 1455.1 | 1425.6 | 1573.8 | 1400.9 |
| 20°   | 1296.5 | 1335.2 | 1430.4 | 1462.1 | 1391.5 | 1435.0 | 1424.3 | 1417.0 | 1393.9 | 1669.7 | 1592.7 |
| 22.5° | 1552.2 | 1587.8 | 1589.6 | 1600.9 | 1436.5 | 1367.1 | 1349.5 | 1351.6 | 1456.6 | 1698.3 | 1831.3 |
| 25°   | 1726.3 | 1738.5 | 1834.7 | 1754.3 | 1559.5 | 1387.8 | 1320.5 | 1350.7 | 1502.0 | 1904.1 | 2055.7 |
| 27.5° | 2011.3 | 2040.2 | 2100.1 | 1828.0 | 1633.2 | 1374.7 | 1267.6 | 1377.2 | 1621.3 | 1972.3 | 2305.0 |
| 30°   | 2243.5 | 2271.2 | 2367.7 | 1928.8 | 1697.1 | 1439.6 | 1290.4 | 1430.4 | 1695.6 | 2112.6 | 2529.1 |
| 32.5° | 2432.0 | 2503.5 | 2613.1 | 2084.3 | 1694.7 | 1514.2 | 1407.0 | 1412.8 | 1786.9 | 2294.4 | 2750.7 |
| 35°   | 2672.7 | 2739.4 | 2816.4 | 2191.5 | 1805.5 | 1538.2 | 1441.4 | 1586.3 | 1922.7 | 2484.3 | 3049.0 |
| 37.5° | 3215.5 | 3316.3 | 3164.1 | 2461.5 | 1934.5 | 1755.6 | 1577.2 | 1693.1 | 2064.8 | 2678.2 | 3459.0 |
| 40°   | 3546.7 | 3631.6 | 3484.6 | 2599.4 | 2158.0 | 1865.1 | 1819.5 | 1878.8 | 2204.0 | 2778.4 | 3768.0 |
| 42.5° | 3873.0 | 3985.1 | 3739.4 | 2807.0 | 2370.2 | 2174.4 | 2049.6 | 2097.4 | 2405.2 | 3020.1 | 4115.7 |
| 45°   | 4109.3 | 4178.7 | 3794.5 | 2915.7 | 2661.8 | 2526.9 | 2443.8 | 2372.6 | 2685.8 | 3175.3 | 4340.0 |
| 47.5° | 4228.0 | 4283.4 | 3903.2 | 2950.1 | 2835.3 | 2899.8 | 3081.9 | 2933.0 | 2934.2 | 3287.7 | 4460.9 |
| 50°   | 4392.4 | 4431.0 | 3964.1 | 2991.2 | 3023.7 | 3481.0 | 3572.9 | 3256.0 | 3218.0 | 3400.3 | 4480.7 |
| 52.5° | 4623.4 | 4642.3 | 4082.2 | 3099.5 | 3305.9 | 3936.1 | 3969.2 | 3841.1 | 3502.0 | 3609.7 | 4524.5 |
| 55°   | 4930.6 | 4897.4 | 4293.1 | 3327.2 | 3600.3 | 4269.4 | 4313.8 | 4202.1 | 3859.0 | 3818.9 | 4660.3 |
| 57.5° | 5261.8 | 5223.7 | 4605.8 | 3648.1 | 3919.6 | 4524.2 | 4550.7 | 4559.5 | 4096.2 | 4003.9 | 4891.0 |
| 60°   | 5499.2 | 5506.2 | 4999.4 | 4016.1 | 4118.1 | 4768.0 | 4715.1 | 4634.7 | 4335.5 | 4275.2 | 5003.3 |
| 62.5° | 5582.3 | 5649.6 | 5305.9 | 4401.8 | 4289.2 | 4783.2 | 4701.1 | 4633.2 | 4442.6 | 4554.9 | 4874.6 |
| 65°   | 5514.4 | 5631.9 | 5377.2 | 4740.6 | 4392.7 | 4592.4 | 4506.8 | 4463.3 | 4439.3 | 4669.1 | 4589.6 |
| 67.5° | 5244.7 | 5391.8 | 5173.2 | 4743.7 | 4016.4 | 3910.2 | 4011.3 | 4149.2 | 4069.4 | 4574.4 | 4190.6 |
| 70°   | 4640.5 | 4801.5 | 4699.8 | 4465.4 | 3345.8 | 3076.4 | 3187.8 | 3396.3 | 3340.0 | 4068.5 | 3603.3 |
| 72.5° | 3481.6 | 3688.6 | 3708.7 | 3855.1 | 2656.0 | 2315.4 | 2331.5 | 2325.7 | 2422.8 | 3280.7 | 2811.9 |
| 75°   | 2236.5 | 2397.6 | 2615.2 | 3110.8 | 2017.7 | 1690.4 | 1535.8 | 1498.0 | 1679.1 | 2563.5 | 2013.1 |
| 77.5° | 1298.3 | 1317.5 | 1418.0 | 2347.0 | 1445.0 | 1218.0 | 1112.6 | 1166.5 | 1229.8 | 1789.0 | 1334.2 |
| 80°   | 621.0  | 630.7  | 672.1  | 1207.6 | 1004.0 | 1054.2 | 972.9  | 1033.5 | 844.4  | 1028.3 | 757.1  |
| 82.5° | 197.0  | 199.1  | 206.1  | 593.3  | 623.4  | 698.3  | 447.5  | 600.0  | 522.1  | 621.6  | 504.1  |
| 85°   | 32.9   | 56.0   | 69.1   | 171.4  | 351.9  | 235.6  | 97.1   | 214.0  | 291.3  | 392.1  | 228.9  |
| 87.5° | 0.0    | 0.0    | 0.0    | 3.0    | 28.6   | 13.4   | 2.1    | 12.2   | 44.7   | 87.4   | 10.4   |
| 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):**

|       | 90°    | 95°    | 105°   | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 643.5  | 643.5  | 643.5  | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 |
| 2.5°  | 853.3  | 874.3  | 795.1  | 724.2 | 742.2 | 727.9 | 706.2 | 669.4 | 584.2 | 646.9 | 642.6 |
| 5°    | 1098.0 | 1059.1 | 951.9  | 902.0 | 841.1 | 748.2 | 737.0 | 665.8 | 634.4 | 639.6 | 635.0 |
| 7.5°  | 1183.3 | 1113.5 | 1018.9 | 868.5 | 725.7 | 591.8 | 550.7 | 504.1 | 494.7 | 514.8 | 527.9 |
| 10°   | 1116.3 | 1042.3 | 959.5  | 772.6 | 662.7 | 565.9 | 464.5 | 399.4 | 364.1 | 359.8 | 363.5 |
| 12.5° | 1147.0 | 1067.3 | 896.8  | 753.7 | 639.0 | 551.3 | 438.1 | 339.7 | 263.0 | 268.8 | 253.6 |
| 15°   | 1168.3 | 1076.7 | 881.9  | 714.2 | 590.0 | 472.8 | 336.4 | 238.1 | 175.3 | 157.1 | 146.1 |
| 17.5° | 1293.5 | 1162.6 | 863.0  | 668.5 | 521.5 | 368.0 | 211.3 | 137.9 | 117.5 | 111.1 | 105.9 |
| 20°   | 1454.2 | 1268.2 | 862.7  | 620.4 | 420.4 | 230.1 | 131.8 | 99.8  | 95.0  | 98.6  | 94.7  |
| 22.5° | 1641.1 | 1408.8 | 908.7  | 560.4 | 301.7 | 145.2 | 102.6 | 88.6  | 83.7  | 86.8  | 87.1  |
| 25°   | 1829.2 | 1619.8 | 946.1  | 503.5 | 210.0 | 111.4 | 91.3  | 81.6  | 76.1  | 78.8  | 77.3  |
| 27.5° | 2168.9 | 1794.5 | 937.6  | 430.7 | 154.6 | 98.0  | 84.9  | 76.4  | 68.2  | 72.5  | 72.1  |
| 30°   | 2391.2 | 2102.9 | 970.8  | 328.8 | 122.7 | 85.8  | 79.1  | 69.7  | 60.9  | 65.8  | 65.4  |
| 32.5° | 2656.9 | 2235.3 | 1006.7 | 252.4 | 102.0 | 81.3  | 71.2  | 62.1  | 56.9  | 60.0  | 59.4  |
| 35°   | 2955.5 | 2497.1 | 940.6  | 210.0 | 88.6  | 73.4  | 63.0  | 56.0  | 51.4  | 53.0  | 53.0  |
| 37.5° | 3483.1 | 2716.0 | 901.1  | 171.1 | 82.5  | 66.4  | 59.1  | 50.5  | 47.8  | 47.8  | 49.3  |
| 40°   | 3782.6 | 3050.2 | 783.0  | 135.5 | 84.3  | 61.2  | 55.1  | 46.3  | 42.6  | 42.3  | 43.8  |
| 42.5° | 4172.3 | 3242.9 | 709.0  | 109.6 | 76.4  | 59.7  | 50.5  | 42.0  | 37.7  | 37.4  | 39.0  |
| 45°   | 4403.3 | 3350.7 | 604.9  | 86.1  | 68.5  | 69.4  | 46.9  | 38.7  | 32.3  | 31.1  | 33.8  |
| 47.5° | 4549.2 | 3493.4 | 545.8  | 68.5  | 59.7  | 69.1  | 45.7  | 33.5  | 27.1  | 25.6  | 28.0  |
| 50°   | 4623.1 | 3564.1 | 534.2  | 58.8  | 51.8  | 61.8  | 52.4  | 28.0  | 23.1  | 21.0  | 23.1  |
| 52.5° | 4700.1 | 3678.8 | 538.5  | 54.2  | 45.7  | 49.6  | 49.6  | 24.0  | 20.4  | 18.0  | 19.5  |
| 55°   | 4855.7 | 3848.4 | 529.1  | 51.4  | 42.0  | 37.7  | 32.0  | 21.3  | 18.6  | 15.8  | 17.4  |
| 57.5° | 5046.9 | 3970.2 | 529.1  | 49.0  | 39.0  | 32.3  | 25.6  | 19.8  | 17.0  | 13.7  | 14.9  |
| 60°   | 5010.6 | 3842.0 | 502.9  | 46.6  | 36.5  | 30.1  | 23.1  | 18.3  | 15.8  | 12.5  | 13.4  |
| 62.5° | 4761.9 | 3493.4 | 407.3  | 42.9  | 34.4  | 28.6  | 21.0  | 17.4  | 14.9  | 11.0  | 11.9  |
| 65°   | 4469.7 | 3123.3 | 283.1  | 39.0  | 32.0  | 25.9  | 18.9  | 16.4  | 13.7  | 9.7   | 10.4  |
| 67.5° | 4117.8 | 2682.2 | 157.1  | 35.0  | 29.5  | 22.5  | 17.4  | 16.1  | 13.1  | 8.8   | 9.4   |
| 70°   | 3507.1 | 2025.0 | 84.3   | 32.0  | 27.7  | 20.7  | 16.4  | 16.1  | 13.1  | 8.5   | 8.8   |
| 72.5° | 2632.9 | 1275.2 | 49.3   | 29.2  | 25.3  | 19.2  | 15.5  | 16.4  | 12.8  | 8.2   | 8.2   |
| 75°   | 1791.5 | 774.1  | 35.3   | 25.0  | 22.5  | 16.1  | 14.9  | 15.8  | 13.1  | 8.2   | 7.6   |
| 77.5° | 1218.0 | 544.0  | 28.9   | 22.5  | 20.4  | 14.3  | 15.2  | 15.8  | 13.1  | 6.7   | 5.2   |
| 80°   | 760.4  | 280.7  | 21.9   | 18.0  | 17.7  | 12.5  | 15.2  | 13.7  | 8.5   | 1.5   | 0.0   |
| 82.5° | 531.8  | 104.4  | 12.8   | 13.7  | 13.7  | 8.8   | 11.9  | 9.7   | 4.9   | 0.0   | 0.0   |
| 85°   | 223.1  | 18.0   | 7.0    | 9.7   | 8.5   | 5.2   | 9.4   | 7.3   | 3.0   | 0.0   | 0.0   |
| 87.5° | 4.0    | 0.0    | 2.7    | 5.8   | 6.1   | 3.0   | 4.9   | 3.0   | 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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**CANDELA DISTRIBUTION (continued):**

|       | 185°  | 195°  | 205°  | 215°  | 225°  | 235°  | 245°  | 255°  | 265°  | 270°  | 275°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 |
| 2.5°  | 662.7 | 633.8 | 572.9 | 602.1 | 599.1 | 612.5 | 613.7 | 582.6 | 649.6 | 691.0 | 697.1 |
| 5°    | 635.6 | 616.1 | 612.8 | 596.0 | 591.8 | 616.4 | 603.0 | 602.1 | 634.4 | 681.6 | 681.9 |
| 7.5°  | 528.2 | 513.2 | 520.2 | 500.8 | 450.5 | 453.6 | 458.1 | 477.3 | 505.0 | 536.1 | 547.3 |
| 10°   | 362.6 | 401.2 | 372.9 | 370.5 | 365.3 | 349.2 | 336.4 | 346.4 | 382.3 | 411.0 | 421.6 |
| 12.5° | 258.8 | 264.8 | 282.2 | 275.8 | 284.6 | 270.9 | 265.8 | 297.1 | 332.1 | 361.3 | 382.3 |
| 15°   | 151.3 | 161.6 | 172.0 | 193.9 | 202.7 | 200.0 | 215.8 | 242.0 | 270.3 | 283.7 | 309.6 |
| 17.5° | 106.5 | 107.5 | 109.6 | 133.3 | 148.9 | 154.9 | 164.4 | 184.2 | 195.7 | 201.8 | 212.5 |
| 20°   | 93.2  | 90.4  | 86.8  | 100.2 | 114.8 | 122.4 | 119.6 | 135.2 | 144.6 | 150.7 | 158.3 |
| 22.5° | 84.3  | 79.8  | 77.6  | 82.2  | 93.5  | 100.2 | 101.4 | 110.5 | 124.8 | 129.1 | 131.5 |
| 25°   | 76.1  | 73.1  | 71.5  | 74.0  | 80.1  | 86.5  | 87.7  | 99.5  | 112.3 | 114.2 | 119.0 |
| 27.5° | 70.6  | 64.8  | 65.4  | 67.3  | 70.0  | 77.9  | 80.4  | 87.1  | 105.6 | 107.8 | 109.3 |
| 30°   | 64.8  | 58.8  | 60.6  | 62.4  | 61.2  | 70.9  | 74.6  | 82.2  | 100.2 | 103.5 | 105.3 |
| 32.5° | 59.1  | 54.5  | 54.2  | 56.0  | 58.1  | 63.3  | 71.2  | 80.1  | 96.5  | 101.1 | 105.6 |
| 35°   | 52.7  | 49.0  | 49.6  | 49.9  | 52.7  | 59.4  | 65.1  | 69.7  | 81.0  | 83.4  | 84.9  |
| 37.5° | 48.1  | 45.1  | 44.4  | 47.5  | 50.2  | 55.4  | 57.5  | 59.7  | 74.6  | 80.1  | 80.4  |
| 40°   | 42.6  | 40.8  | 40.8  | 42.9  | 49.0  | 48.4  | 51.1  | 57.8  | 72.1  | 77.9  | 78.5  |
| 42.5° | 38.7  | 36.2  | 36.8  | 39.0  | 43.2  | 40.2  | 45.7  | 55.4  | 71.2  | 77.0  | 76.7  |
| 45°   | 32.6  | 32.0  | 33.2  | 35.0  | 36.8  | 34.1  | 42.6  | 53.0  | 68.2  | 75.8  | 73.7  |
| 47.5° | 27.1  | 27.1  | 28.6  | 30.4  | 29.5  | 30.4  | 38.7  | 49.6  | 66.4  | 73.4  | 71.8  |
| 50°   | 22.2  | 22.5  | 24.0  | 27.1  | 24.4  | 26.8  | 34.7  | 46.3  | 63.3  | 70.9  | 69.7  |
| 52.5° | 18.9  | 19.2  | 20.1  | 22.2  | 21.0  | 24.4  | 32.0  | 42.9  | 60.3  | 66.7  | 66.1  |
| 55°   | 16.4  | 17.0  | 17.0  | 18.3  | 18.9  | 22.8  | 28.9  | 39.6  | 55.7  | 62.7  | 61.5  |
| 57.5° | 14.6  | 15.2  | 14.9  | 15.8  | 16.4  | 20.1  | 25.9  | 35.9  | 51.1  | 56.9  | 55.1  |
| 60°   | 13.1  | 13.7  | 13.4  | 14.6  | 14.3  | 17.4  | 22.5  | 32.0  | 46.3  | 50.8  | 49.3  |
| 62.5° | 11.6  | 12.2  | 12.2  | 12.8  | 13.1  | 14.6  | 19.5  | 28.3  | 41.4  | 45.1  | 43.8  |
| 65°   | 10.4  | 11.0  | 11.3  | 11.0  | 11.6  | 12.5  | 16.4  | 25.6  | 35.9  | 39.6  | 37.7  |
| 67.5° | 9.4   | 10.0  | 10.7  | 9.4   | 10.0  | 10.4  | 14.0  | 22.8  | 31.7  | 34.7  | 33.2  |
| 70°   | 9.1   | 9.4   | 9.4   | 8.2   | 7.9   | 8.2   | 12.2  | 19.5  | 27.7  | 30.7  | 28.6  |
| 72.5° | 8.5   | 8.8   | 8.5   | 6.7   | 5.8   | 6.4   | 10.4  | 16.4  | 23.4  | 25.9  | 24.0  |
| 75°   | 7.9   | 8.2   | 7.9   | 5.5   | 3.7   | 4.6   | 8.5   | 14.3  | 20.1  | 21.3  | 20.4  |
| 77.5° | 6.7   | 7.3   | 7.3   | 4.0   | 1.2   | 2.7   | 6.4   | 11.6  | 16.7  | 16.7  | 17.0  |
| 80°   | 0.6   | 1.8   | 3.0   | 2.1   | 0.0   | 0.3   | 2.1   | 6.1   | 10.7  | 10.4  | 11.3  |
| 82.5° | 0.0   | 0.0   | 0.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 3.7   | 2.7   | 3.0   |
| 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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 CATALOG NUMBER: MSA-SA2B-722-U-SLL-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 285°  | 295°  | 305°  | 315°  | 325°  | 335°  | 345°   | 355°   | 359°   | 360°   |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| 0°    | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5 | 643.5  | 643.5  | 643.5  | 643.5  |
| 2.5°  | 682.8 | 673.4 | 685.2 | 721.5 | 706.8 | 709.6 | 699.8  | 759.8  | 827.7  | 829.8  |
| 5°    | 682.5 | 674.0 | 691.6 | 690.1 | 731.8 | 777.2 | 821.0  | 891.9  | 992.4  | 993.0  |
| 7.5°  | 542.2 | 592.7 | 605.8 | 601.8 | 655.4 | 717.8 | 785.4  | 921.2  | 1003.7 | 1012.5 |
| 10°   | 488.9 | 510.8 | 537.6 | 547.3 | 569.6 | 628.9 | 705.3  | 859.1  | 951.6  | 972.0  |
| 12.5° | 423.7 | 493.8 | 529.4 | 598.5 | 611.3 | 619.8 | 740.3  | 874.0  | 930.3  | 927.9  |
| 15°   | 351.0 | 411.9 | 468.2 | 552.5 | 587.2 | 676.7 | 771.7  | 946.7  | 980.2  | 1012.5 |
| 17.5° | 248.4 | 294.4 | 380.8 | 469.4 | 575.3 | 672.8 | 858.1  | 1076.7 | 1140.0 | 1178.4 |
| 20°   | 166.2 | 188.4 | 266.7 | 383.9 | 518.1 | 614.9 | 893.5  | 1194.2 | 1263.3 | 1296.5 |
| 22.5° | 134.9 | 145.5 | 186.0 | 281.3 | 442.6 | 612.2 | 907.8  | 1322.4 | 1508.1 | 1552.2 |
| 25°   | 118.7 | 126.0 | 147.6 | 208.2 | 367.4 | 600.0 | 986.9  | 1466.7 | 1690.7 | 1726.3 |
| 27.5° | 103.8 | 114.8 | 130.9 | 171.7 | 315.1 | 591.5 | 1027.1 | 1709.0 | 1976.3 | 2011.3 |
| 30°   | 99.2  | 112.6 | 128.2 | 156.5 | 278.5 | 558.6 | 1091.0 | 1927.5 | 2181.1 | 2243.5 |
| 32.5° | 107.2 | 111.7 | 119.3 | 143.4 | 250.2 | 523.9 | 1203.3 | 2188.7 | 2350.7 | 2432.0 |
| 35°   | 84.9  | 93.2  | 106.5 | 131.5 | 238.4 | 522.1 | 1267.0 | 2356.8 | 2622.5 | 2672.7 |
| 37.5° | 83.1  | 90.7  | 108.1 | 128.2 | 252.7 | 536.1 | 1361.3 | 2701.1 | 3112.6 | 3215.5 |
| 40°   | 80.7  | 90.4  | 106.8 | 126.6 | 252.7 | 549.8 | 1421.6 | 2976.6 | 3442.3 | 3546.7 |
| 42.5° | 79.8  | 92.2  | 106.5 | 133.0 | 244.7 | 557.4 | 1512.6 | 3251.4 | 3790.6 | 3873.0 |
| 45°   | 79.1  | 94.1  | 107.5 | 140.6 | 242.9 | 582.3 | 1564.1 | 3385.1 | 4014.6 | 4109.3 |
| 47.5° | 77.6  | 94.1  | 119.9 | 136.1 | 232.9 | 579.9 | 1630.7 | 3583.2 | 4148.2 | 4228.0 |
| 50°   | 76.4  | 94.7  | 135.8 | 127.5 | 234.4 | 565.0 | 1721.2 | 3769.2 | 4335.5 | 4392.4 |
| 52.5° | 73.7  | 96.8  | 133.3 | 115.7 | 229.8 | 563.5 | 1856.0 | 4033.8 | 4581.7 | 4623.4 |
| 55°   | 67.6  | 94.1  | 120.5 | 101.1 | 213.7 | 546.1 | 2034.7 | 4377.8 | 4923.3 | 4930.6 |
| 57.5° | 62.1  | 87.4  | 100.8 | 92.8  | 179.0 | 548.2 | 2188.7 | 4694.4 | 5227.7 | 5261.8 |
| 60°   | 56.6  | 90.7  | 78.2  | 86.5  | 148.2 | 509.3 | 2263.3 | 4815.5 | 5449.3 | 5499.2 |
| 62.5° | 51.4  | 83.7  | 66.7  | 79.5  | 132.1 | 473.1 | 2211.6 | 4718.1 | 5477.6 | 5582.3 |
| 65°   | 45.7  | 58.1  | 56.3  | 71.2  | 133.6 | 422.2 | 2038.7 | 4432.9 | 5370.2 | 5514.4 |
| 67.5° | 39.3  | 45.7  | 49.6  | 61.5  | 143.1 | 378.7 | 1742.2 | 3975.0 | 5081.3 | 5244.7 |
| 70°   | 34.4  | 41.1  | 43.2  | 53.9  | 148.9 | 350.1 | 1374.7 | 3339.7 | 4489.5 | 4640.5 |
| 72.5° | 28.6  | 38.1  | 38.7  | 47.2  | 143.4 | 321.8 | 979.6  | 2397.6 | 3409.1 | 3481.6 |
| 75°   | 24.7  | 31.7  | 35.0  | 39.6  | 120.5 | 240.2 | 539.7  | 1484.0 | 2155.5 | 2236.5 |
| 77.5° | 22.2  | 24.0  | 26.5  | 27.4  | 51.1  | 125.1 | 185.7  | 915.1  | 1207.0 | 1298.3 |
| 80°   | 17.0  | 18.9  | 18.3  | 18.9  | 28.0  | 43.2  | 70.6   | 428.9  | 570.2  | 621.0  |
| 82.5° | 5.5   | 9.1   | 10.0  | 8.5   | 18.3  | 21.3  | 20.4   | 148.2  | 185.4  | 197.0  |
| 85°   | 1.2   | 3.3   | 1.5   | 0.0   | 6.1   | 11.0  | 1.5    | 22.5   | 44.4   | 32.9   |
| 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    |

(END OF REPORT)