

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: P821469

Luminaire Tested: **TT-D5-830-12VDC-WQ**

Issue Date: 2/18/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P821469  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-473-14)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 2/18/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-D5-830-12VDC-WQ  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
3000K, 80 CRI LEDS AND WIDE DISTRIBUTION  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

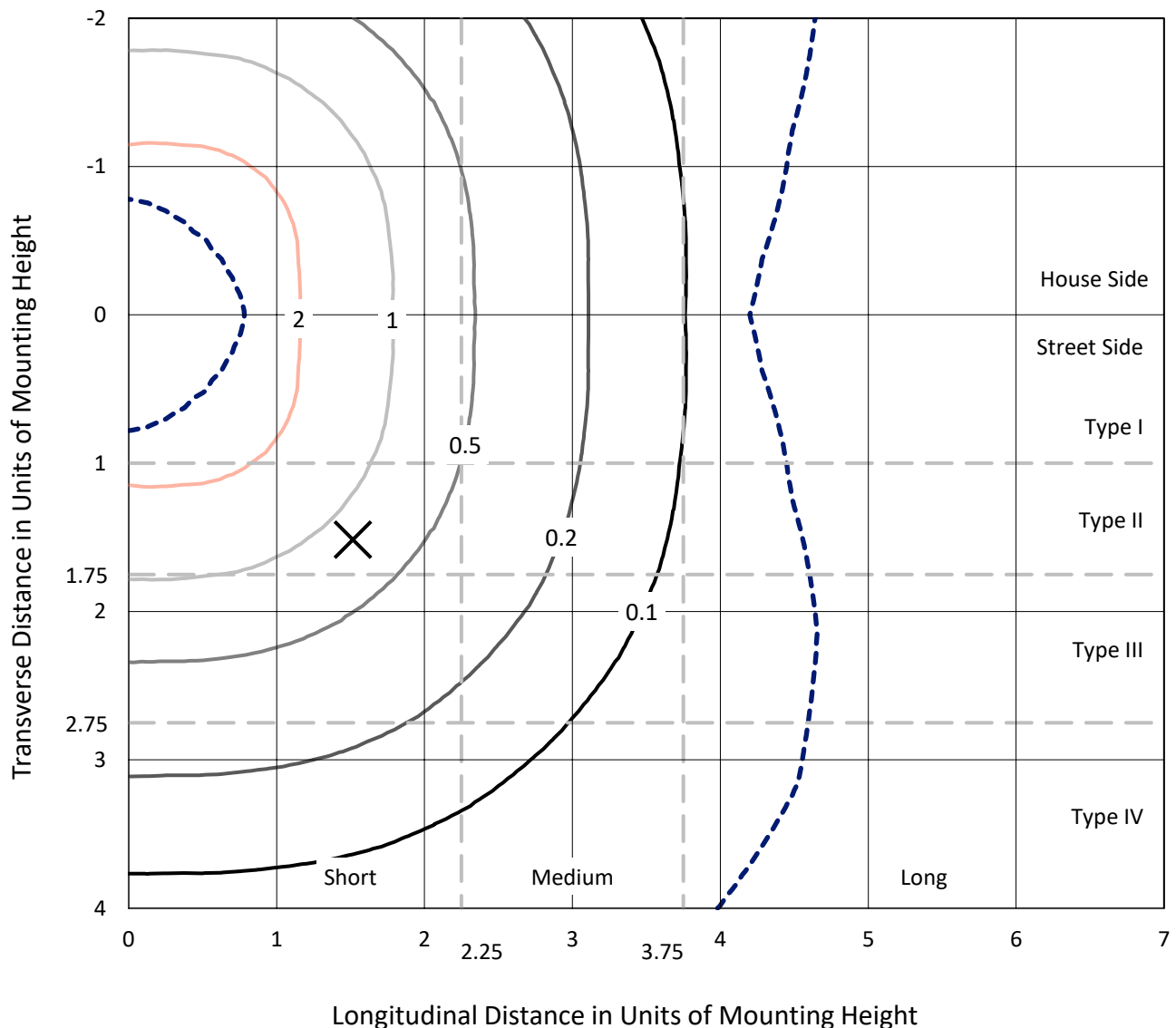
Lumens per Lamp: N/A  
Luminaire Lumens: 8483 lumens  
Efficiency: N/A  
Efficacy: 116.2 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B3 - U0 - G2

Input Watts (W): 73  
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

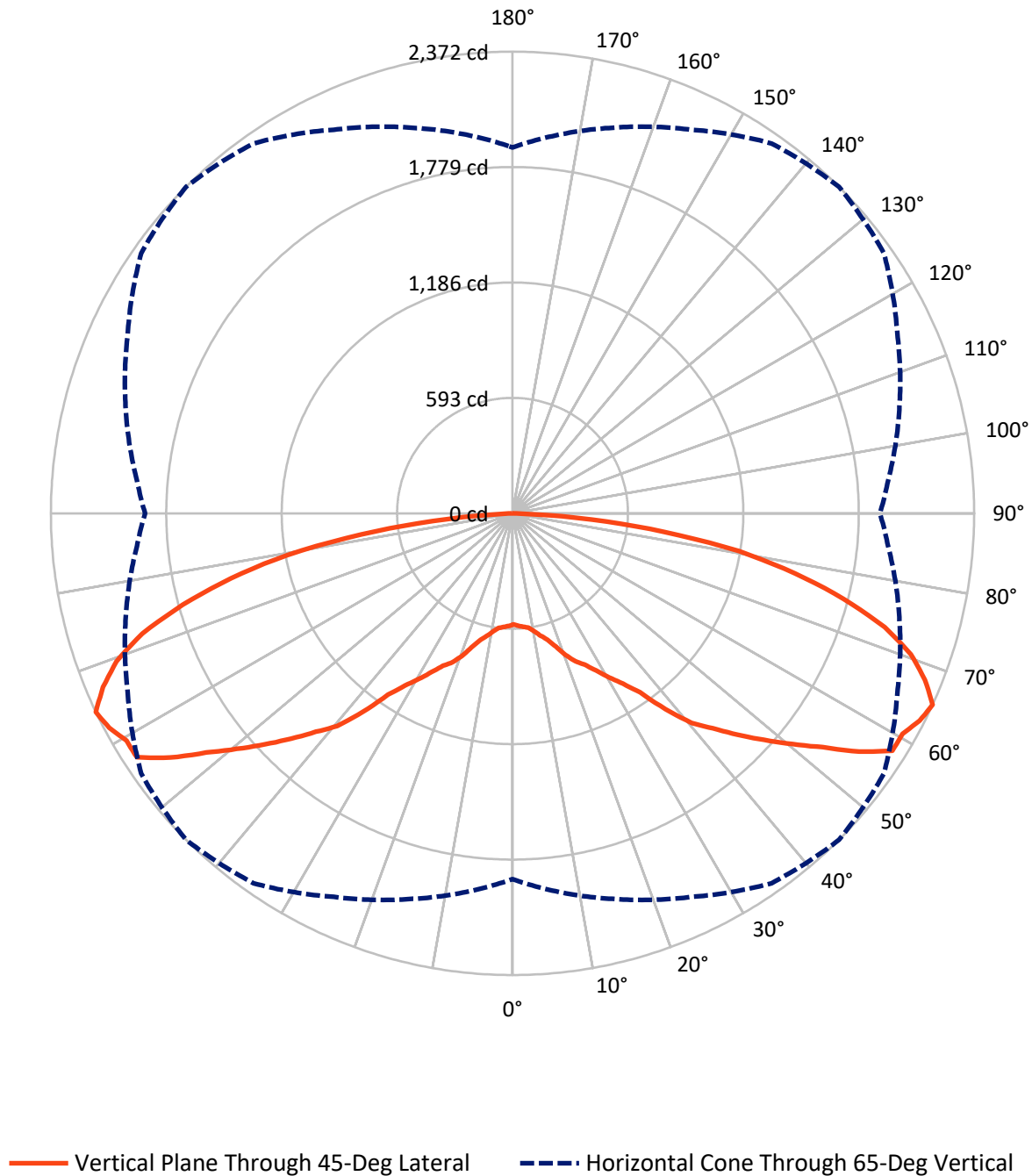
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.9 fc  
 Type V - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 4241.5   | 0.0    | 4241.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 4241.5   | 0.0    | 4241.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 8483.0   | 0.0    | 8483.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 56.9   | 0.7       |
| 10°-20°   | 195.8  | 2.3       |
| 20°-30°   | 402.1  | 4.7       |
| 30°-40°   | 714.3  | 8.4       |
| 40°-50°   | 1204.1 | 14.2      |
| 50°-60°   | 1776.3 | 20.9      |
| 60°-70°   | 2084.7 | 24.6      |
| 70°-80°   | 1624.1 | 19.1      |
| 80°-90°   | 424.6  | 5.0       |
| 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°    | 8483.0 | 100.0     |
| 0°-180°   | 8483.0 | 100.0     |



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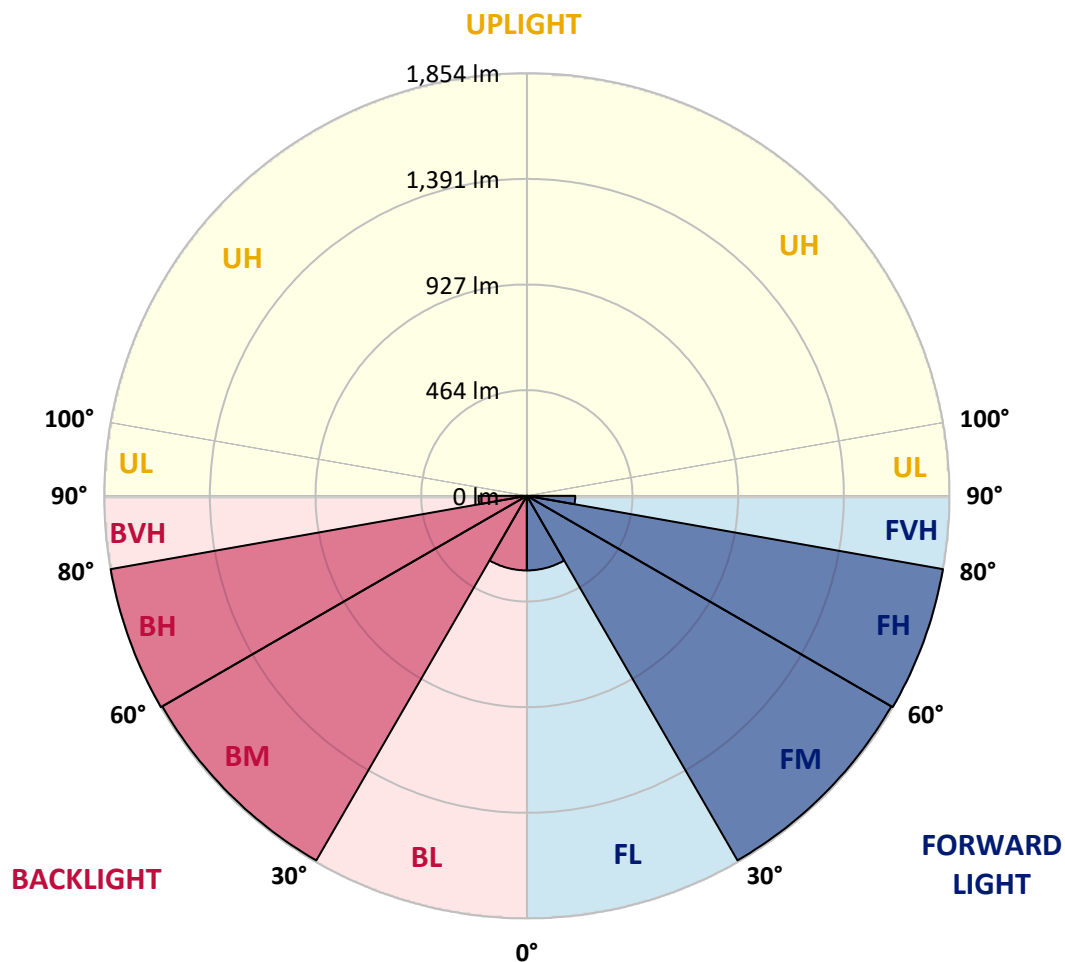
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 327.4  | 3.9       |                         |      |         |
| FM   | (30°-60°)   | 1847.4 | 21.8      |                         |      |         |
| FH   | (60°-80°)   | 1854.4 | 21.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 212.3  | 2.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 327.4  | 3.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1847.4 | 21.8      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1854.4 | 21.9      | B3/2500                 |      | G2/5000 |
| BVH  | (80°-90°)   | 212.3  | 2.5       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 570.9  | 570.9  | 570.9  | 570.9  | 570.9  | 570.9  | 570.9  | 570.9  | 570.9  | 570.9  | 570.9  |
| 2.5°  | 580.3  | 580.3  | 580.3  | 578.9  | 578.9  | 578.9  | 578.9  | 580.3  | 580.3  | 580.3  | 580.3  |
| 5°    | 593.6  | 593.6  | 590.9  | 588.3  | 585.6  | 585.6  | 586.9  | 588.3  | 589.6  | 592.3  | 592.3  |
| 7.5°  | 601.6  | 601.6  | 600.3  | 597.6  | 593.6  | 593.6  | 594.9  | 597.6  | 598.9  | 598.9  | 597.6  |
| 10°   | 612.3  | 613.6  | 617.6  | 619.0  | 616.3  | 616.3  | 617.6  | 619.0  | 616.3  | 612.3  | 612.3  |
| 12.5° | 637.6  | 639.0  | 644.3  | 648.3  | 648.3  | 645.6  | 647.0  | 649.6  | 643.0  | 636.3  | 637.6  |
| 15°   | 673.6  | 673.6  | 675.0  | 679.0  | 676.3  | 673.6  | 676.3  | 677.6  | 673.6  | 672.3  | 675.0  |
| 17.5° | 721.7  | 721.7  | 713.7  | 720.3  | 721.7  | 720.3  | 723.0  | 716.3  | 712.3  | 717.7  | 720.3  |
| 20°   | 773.7  | 768.4  | 764.4  | 769.7  | 780.4  | 776.4  | 781.7  | 767.0  | 763.0  | 765.7  | 767.0  |
| 22.5° | 807.0  | 811.0  | 813.7  | 816.4  | 831.1  | 825.7  | 831.1  | 815.0  | 812.4  | 807.0  | 803.0  |
| 25°   | 847.1  | 851.1  | 867.1  | 859.1  | 868.4  | 860.4  | 867.1  | 857.7  | 863.1  | 847.1  | 847.1  |
| 27.5° | 892.4  | 900.4  | 909.8  | 905.8  | 917.8  | 913.8  | 917.8  | 904.4  | 905.8  | 899.1  | 896.4  |
| 30°   | 953.8  | 953.8  | 951.1  | 959.1  | 980.5  | 977.8  | 979.1  | 961.8  | 949.8  | 951.1  | 956.4  |
| 32.5° | 1015.1 | 1007.1 | 1011.1 | 1035.1 | 1048.5 | 1043.2 | 1045.8 | 1037.8 | 1011.1 | 1005.8 | 1009.8 |
| 35°   | 1072.5 | 1084.5 | 1093.8 | 1113.9 | 1132.5 | 1129.9 | 1128.5 | 1115.2 | 1097.8 | 1076.5 | 1069.8 |
| 37.5° | 1161.9 | 1175.2 | 1200.6 | 1236.6 | 1269.9 | 1276.6 | 1259.3 | 1241.9 | 1201.9 | 1171.2 | 1155.2 |
| 40°   | 1279.3 | 1280.6 | 1309.9 | 1379.3 | 1410.0 | 1415.3 | 1406.0 | 1376.6 | 1315.3 | 1280.6 | 1279.3 |
| 42.5° | 1382.0 | 1372.6 | 1420.7 | 1479.4 | 1507.4 | 1510.0 | 1503.4 | 1479.4 | 1420.7 | 1371.3 | 1380.6 |
| 45°   | 1462.0 | 1462.0 | 1519.4 | 1566.1 | 1611.4 | 1622.1 | 1610.1 | 1559.4 | 1520.7 | 1463.3 | 1459.3 |
| 47.5° | 1535.4 | 1555.4 | 1603.4 | 1660.8 | 1724.8 | 1739.5 | 1724.8 | 1664.8 | 1599.4 | 1556.7 | 1534.0 |
| 50°   | 1623.4 | 1647.4 | 1682.1 | 1771.5 | 1843.5 | 1863.5 | 1842.2 | 1776.8 | 1682.1 | 1646.1 | 1632.8 |
| 52.5° | 1726.1 | 1746.1 | 1800.8 | 1912.9 | 1966.2 | 1995.6 | 1978.3 | 1915.6 | 1803.5 | 1748.8 | 1738.1 |
| 55°   | 1848.9 | 1830.2 | 1915.6 | 2023.6 | 2122.3 | 2161.0 | 2126.3 | 2026.3 | 1928.9 | 1830.2 | 1848.9 |
| 57.5° | 1911.6 | 1890.2 | 2010.3 | 2113.0 | 2250.4 | 2301.1 | 2258.4 | 2121.0 | 2010.3 | 1896.9 | 1910.2 |
| 60°   | 1916.9 | 1926.2 | 2016.9 | 2185.0 | 2279.7 | 2301.1 | 2287.7 | 2197.0 | 2020.9 | 1934.2 | 1908.9 |
| 62.5° | 1900.9 | 1958.2 | 2035.6 | 2209.0 | 2294.4 | 2346.4 | 2301.1 | 2211.7 | 2043.6 | 1967.6 | 1902.2 |
| 65°   | 1879.5 | 1936.9 | 2051.6 | 2174.3 | 2319.7 | 2371.8 | 2329.1 | 2181.0 | 2057.0 | 1936.9 | 1887.5 |
| 67.5° | 1842.2 | 1822.2 | 1963.6 | 2127.7 | 2254.4 | 2285.1 | 2258.4 | 2130.3 | 1962.2 | 1819.5 | 1846.2 |
| 70°   | 1723.5 | 1706.1 | 1827.5 | 2007.6 | 2129.0 | 2171.7 | 2139.7 | 2010.3 | 1830.2 | 1710.1 | 1726.1 |
| 72.5° | 1547.4 | 1552.7 | 1670.1 | 1842.2 | 1972.9 | 1999.6 | 1982.3 | 1840.9 | 1676.8 | 1559.4 | 1538.0 |
| 75°   | 1342.0 | 1355.3 | 1467.3 | 1623.4 | 1742.1 | 1758.2 | 1740.8 | 1630.1 | 1466.0 | 1363.3 | 1335.3 |
| 77.5° | 1103.2 | 1123.2 | 1213.9 | 1370.0 | 1448.7 | 1484.7 | 1456.7 | 1374.0 | 1220.6 | 1128.5 | 1100.5 |
| 80°   | 855.1  | 861.7  | 925.8  | 1051.2 | 1155.2 | 1179.2 | 1152.5 | 1055.2 | 933.8  | 864.4  | 844.4  |
| 82.5° | 560.3  | 570.9  | 628.3  | 724.3  | 792.4  | 785.7  | 792.4  | 716.3  | 635.0  | 568.3  | 534.9  |
| 85°   | 249.4  | 270.8  | 309.5  | 354.8  | 398.9  | 410.9  | 398.9  | 360.2  | 309.5  | 265.5  | 260.1  |
| 87.5° | 17.3   | 20.0   | 24.0   | 25.3   | 28.0   | 21.3   | 21.3   | 21.3   | 18.7   | 21.3   | 17.3   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)