

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P147371

Luminaire Tested: **TLM-E06-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147371
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33674)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-E06-LED-E1-5MQ-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (126) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

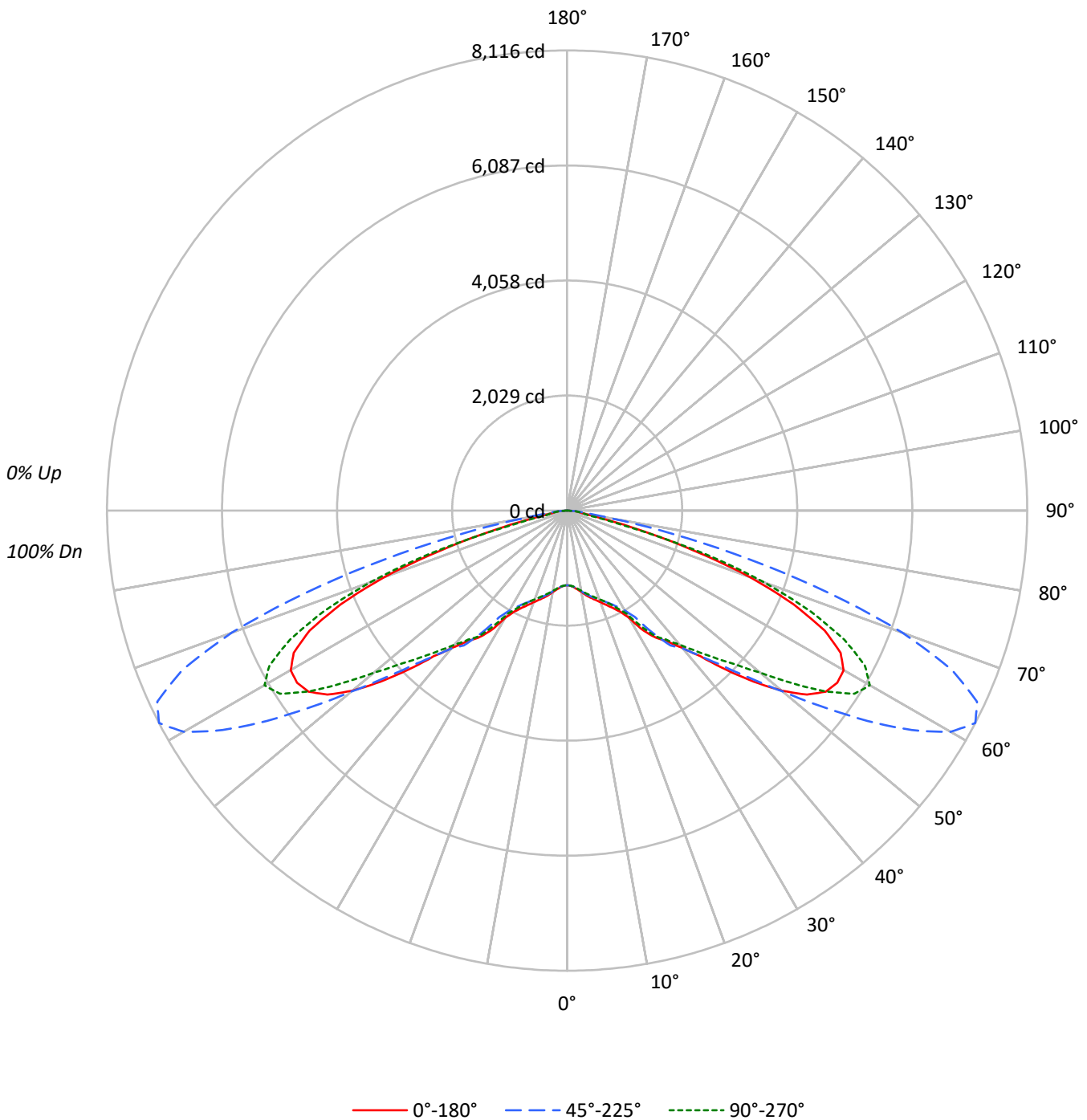
Lumens per Lamp: N/A
Luminaire Lumens: 19847.6 lumens
Efficiency: N/A
Efficacy: 131.9 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

Input Watts (W): 150.5
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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CATALOG NUMBER: TLM-E06-LED-E1-5MQ-7050

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 106 | 100 | 94 | 90 | 103 | 97 | 93 | 88 | 93 | 89 | 85 | 89 | 86 | 83 | 85 | 83 | 80 | 78 |
| 2 | 93 | 82 | 73 | 66 | 90 | 80 | 72 | 65 | 76 | 70 | 64 | 73 | 67 | 62 | 70 | 65 | 61 | 58 |
| 3 | 82 | 68 | 58 | 50 | 79 | 67 | 57 | 49 | 63 | 55 | 48 | 60 | 53 | 47 | 57 | 51 | 46 | 44 |
| 4 | 73 | 57 | 46 | 38 | 70 | 56 | 46 | 38 | 53 | 44 | 37 | 51 | 43 | 36 | 48 | 41 | 36 | 33 |
| 5 | 65 | 49 | 38 | 30 | 63 | 48 | 37 | 30 | 46 | 36 | 29 | 43 | 35 | 29 | 41 | 34 | 28 | 26 |
| 6 | 59 | 43 | 32 | 24 | 57 | 42 | 31 | 24 | 40 | 30 | 23 | 38 | 29 | 23 | 36 | 29 | 23 | 20 |
| 7 | 54 | 37 | 27 | 20 | 52 | 37 | 27 | 19 | 35 | 26 | 19 | 33 | 25 | 19 | 32 | 24 | 19 | 16 |
| 8 | 49 | 33 | 23 | 16 | 47 | 33 | 23 | 16 | 31 | 22 | 16 | 30 | 22 | 16 | 28 | 21 | 16 | 13 |
| 9 | 46 | 30 | 20 | 14 | 44 | 29 | 20 | 14 | 28 | 20 | 14 | 27 | 19 | 14 | 26 | 19 | 13 | 11 |
| 10 | 42 | 27 | 18 | 12 | 41 | 27 | 18 | 12 | 25 | 17 | 12 | 24 | 17 | 12 | 23 | 17 | 12 | 10 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 14181 | 14181 | 14181 |
| 5° | 14657 | 14579 | 14547 |
| 10° | 15949 | 15780 | 15701 |
| 15° | 17701 | 17368 | 17198 |
| 20° | 19676 | 19205 | 19041 |
| 25° | 22460 | 21547 | 21716 |
| 30° | 27127 | 25303 | 26171 |
| 35° | 36015 | 34693 | 35570 |
| 40° | 44408 | 44537 | 43399 |
| 45° | 60496 | 58777 | 55825 |
| 50° | 82735 | 83166 | 74538 |
| 55° | 104504 | 121411 | 104369 |
| 60° | 121206 | 168059 | 132672 |
| 65° | 127641 | 203171 | 137467 |
| 70° | 108281 | 198054 | 116385 |
| 75° | 54922 | 139031 | 47710 |
| 80° | 17431 | 48282 | 17555 |
| 85° | 18883 | 25096 | 19266 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 132.0 | 0.7 |
| 10°-20° | 446.3 | 2.2 |
| 20°-30° | 863.0 | 4.3 |
| 30°-40° | 1670.8 | 8.4 |
| 40°-50° | 3016.9 | 15.2 |
| 50°-60° | 5245.9 | 26.4 |
| 60°-70° | 5955.5 | 30.0 |
| 70°-80° | 2308.9 | 11.6 |
| 80°-90° | 208.3 | 1.0 |
| 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°-30° | 1441.3 | 7.3 |
| 0°-40° | 3112.1 | 15.7 |
| 0°-60° | 11374.9 | 57.3 |
| 0°-90° | 19847.6 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 19847.6 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1318 | 1318 | 1318 | 1318 | 1318 | |
| 5° | 1356 | 1354 | 1349 | 1348 | 1346 | 133 |
| 15° | 1588 | 1577 | 1559 | 1547 | 1543 | 454 |
| 25° | 1891 | 1853 | 1814 | 1816 | 1828 | 891 |
| 35° | 2741 | 2688 | 2640 | 2687 | 2707 | 1712 |
| 45° | 3974 | 3883 | 3861 | 3710 | 3667 | 3113 |
| 55° | 5569 | 5836 | 6470 | 5758 | 5562 | 4903 |
| 65° | 5012 | 5753 | 7977 | 6193 | 5397 | 4778 |
| 75° | 1321 | 1848 | 3343 | 1748 | 1147 | 1599 |
| 85° | 153 | 219 | 203 | 219 | 156 | 150 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P147371

CATALOG NUMBER: TLM-E06-LED-E1-5MQ-7050

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 |
| 2.5° | 1325.8 | 1329.8 | 1328.8 | 1326.8 | 1326.8 | 1326.8 | 1325.7 | 1322.6 | 1321.6 | 1323.7 | 1325.8 |
| 5° | 1356.5 | 1356.5 | 1356.5 | 1356.5 | 1354.4 | 1354.4 | 1352.4 | 1350.4 | 1351.4 | 1349.3 | 1348.3 |
| 7.5° | 1403.8 | 1400.6 | 1400.6 | 1399.6 | 1399.6 | 1397.6 | 1394.4 | 1390.4 | 1391.4 | 1390.4 | 1389.4 |
| 10° | 1459.2 | 1460.2 | 1457.0 | 1460.2 | 1455.0 | 1454.0 | 1449.9 | 1447.8 | 1446.8 | 1443.7 | 1443.8 |
| 12.5° | 1525.8 | 1522.8 | 1522.8 | 1520.7 | 1518.6 | 1516.6 | 1510.4 | 1509.4 | 1505.3 | 1503.2 | 1500.2 |
| 15° | 1588.4 | 1587.4 | 1583.2 | 1579.2 | 1578.1 | 1576.1 | 1568.9 | 1564.8 | 1563.8 | 1558.6 | 1554.6 |
| 17.5° | 1651.0 | 1649.0 | 1643.8 | 1641.8 | 1637.6 | 1634.6 | 1628.4 | 1622.2 | 1619.2 | 1617.2 | 1612.0 |
| 20° | 1717.7 | 1715.6 | 1710.5 | 1706.4 | 1701.2 | 1697.2 | 1688.0 | 1682.8 | 1679.7 | 1676.6 | 1672.6 |
| 22.5° | 1800.8 | 1796.7 | 1788.5 | 1781.4 | 1770.0 | 1766.0 | 1753.6 | 1746.4 | 1741.3 | 1737.2 | 1735.1 |
| 25° | 1891.1 | 1892.1 | 1880.8 | 1871.6 | 1858.2 | 1847.0 | 1831.6 | 1823.4 | 1818.3 | 1814.2 | 1813.2 |
| 27.5° | 2004.0 | 2005.0 | 1994.7 | 1981.4 | 1960.9 | 1948.6 | 1928.0 | 1917.8 | 1914.7 | 1910.6 | 1909.6 |
| 30° | 2182.5 | 2173.3 | 2155.8 | 2134.3 | 2115.9 | 2089.2 | 2059.4 | 2049.2 | 2038.9 | 2035.8 | 2035.8 |
| 32.5° | 2510.9 | 2505.8 | 2491.4 | 2438.0 | 2413.4 | 2358.0 | 2305.6 | 2275.9 | 2242.0 | 2225.6 | 2215.4 |
| 35° | 2740.8 | 2738.6 | 2727.4 | 2709.0 | 2693.5 | 2682.2 | 2651.4 | 2646.3 | 2640.2 | 2640.2 | 2648.4 |
| 37.5° | 2910.0 | 2897.7 | 2895.6 | 2898.8 | 2894.6 | 2896.7 | 2921.3 | 2955.2 | 2984.0 | 2998.3 | 2996.2 |
| 40° | 3160.4 | 3143.0 | 3153.2 | 3146.0 | 3136.8 | 3134.8 | 3143.0 | 3156.3 | 3169.6 | 3169.6 | 3166.6 |
| 42.5° | 3487.7 | 3496.0 | 3500.0 | 3470.3 | 3450.8 | 3445.6 | 3465.2 | 3461.0 | 3474.4 | 3469.2 | 3455.9 |
| 45° | 3974.1 | 3969.0 | 3961.8 | 3925.8 | 3895.1 | 3870.4 | 3875.6 | 3868.4 | 3869.4 | 3861.2 | 3851.0 |
| 47.5° | 4464.6 | 4482.0 | 4452.2 | 4434.8 | 4400.0 | 4382.5 | 4396.8 | 4384.6 | 4408.2 | 4365.0 | 4344.5 |
| 50° | 4940.7 | 4953.0 | 4942.8 | 4918.1 | 4918.2 | 4942.8 | 4960.2 | 4982.8 | 5015.6 | 4966.4 | 4892.5 |
| 52.5° | 5330.6 | 5340.9 | 5356.2 | 5376.8 | 5427.0 | 5479.4 | 5553.3 | 5632.3 | 5694.9 | 5685.6 | 5601.5 |
| 55° | 5568.7 | 5581.0 | 5606.6 | 5677.5 | 5767.8 | 5905.2 | 6072.5 | 6256.2 | 6399.8 | 6469.6 | 6408.0 |
| 57.5° | 5648.7 | 5658.0 | 5727.8 | 5812.9 | 5953.5 | 6157.6 | 6437.8 | 6754.8 | 7030.8 | 7206.4 | 7178.6 |
| 60° | 5630.2 | 5630.2 | 5701.0 | 5818.0 | 6015.0 | 6285.9 | 6682.0 | 7121.2 | 7544.0 | 7806.6 | 7767.6 |
| 62.5° | 5436.3 | 5446.6 | 5548.2 | 5688.8 | 5926.8 | 6251.0 | 6723.0 | 7284.3 | 7790.2 | 8116.4 | 8084.7 |
| 65° | 5011.5 | 5018.6 | 5128.4 | 5295.8 | 5561.5 | 5945.3 | 6461.4 | 7083.2 | 7663.0 | 7977.0 | 7917.4 |
| 67.5° | 4325.0 | 4332.2 | 4421.5 | 4610.2 | 4891.4 | 5292.6 | 5849.8 | 6534.2 | 7101.7 | 7350.0 | 7171.4 |
| 70° | 3440.6 | 3461.0 | 3518.5 | 3718.6 | 3932.0 | 4325.0 | 4838.1 | 5522.5 | 6058.2 | 6293.1 | 6096.1 |
| 72.5° | 2344.6 | 2397.0 | 2466.8 | 2644.3 | 2848.5 | 3174.8 | 3583.2 | 4159.8 | 4589.8 | 4861.7 | 4686.2 |
| 75° | 1320.6 | 1394.5 | 1416.0 | 1550.4 | 1718.8 | 1976.2 | 2274.9 | 2688.4 | 3122.4 | 3343.0 | 3131.7 |
| 77.5° | 570.5 | 631.1 | 657.7 | 720.3 | 851.6 | 959.4 | 1141.0 | 1420.1 | 1755.6 | 1910.6 | 1657.2 |
| 80° | 281.2 | 295.6 | 306.8 | 326.3 | 363.2 | 398.2 | 484.4 | 606.4 | 744.0 | 778.9 | 619.8 |
| 82.5° | 217.6 | 227.8 | 247.3 | 262.7 | 271.9 | 281.2 | 289.4 | 305.8 | 319.1 | 326.3 | 307.8 |
| 85° | 152.9 | 166.2 | 187.8 | 205.2 | 215.5 | 222.6 | 229.8 | 235.0 | 222.6 | 203.2 | 213.4 |
| 87.5° | 40.0 | 52.4 | 72.8 | 79.0 | 89.2 | 94.4 | 92.4 | 95.5 | 86.2 | 62.6 | 69.8 |
| 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° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 | 1317.5 |
| 2.5° | 1324.7 | 1323.7 | 1324.7 | 1324.7 | 1324.7 | 1323.7 | 1323.7 | 1323.7 |
| 5° | 1348.4 | 1348.3 | 1349.4 | 1347.2 | 1347.2 | 1348.3 | 1347.3 | 1346.3 |
| 7.5° | 1388.3 | 1387.3 | 1387.3 | 1386.3 | 1387.3 | 1386.3 | 1386.2 | 1385.2 |
| 10° | 1441.7 | 1439.6 | 1440.7 | 1437.6 | 1437.6 | 1436.6 | 1436.6 | 1436.5 |
| 12.5° | 1499.1 | 1496.0 | 1497.1 | 1494.0 | 1488.8 | 1489.9 | 1491.0 | 1489.9 |
| 15° | 1554.6 | 1551.5 | 1548.4 | 1546.4 | 1543.2 | 1544.3 | 1544.3 | 1543.3 |
| 17.5° | 1611.0 | 1604.8 | 1603.8 | 1600.8 | 1599.7 | 1599.7 | 1599.7 | 1600.7 |
| 20° | 1669.5 | 1665.4 | 1664.4 | 1661.3 | 1660.2 | 1663.3 | 1664.4 | 1662.3 |
| 22.5° | 1732.1 | 1730.0 | 1732.1 | 1730.0 | 1733.0 | 1735.2 | 1736.2 | 1734.1 |
| 25° | 1811.0 | 1809.0 | 1812.1 | 1819.3 | 1823.4 | 1825.4 | 1830.6 | 1828.5 |
| 27.5° | 1912.6 | 1910.6 | 1917.8 | 1928.0 | 1934.2 | 1944.5 | 1949.6 | 1951.7 |
| 30° | 2044.0 | 2053.2 | 2057.3 | 2077.9 | 2082.0 | 2098.4 | 2098.4 | 2105.6 |
| 32.5° | 2234.8 | 2252.3 | 2283.1 | 2314.9 | 2359.0 | 2390.8 | 2390.8 | 2407.2 |
| 35° | 2653.5 | 2660.7 | 2684.3 | 2689.4 | 2698.6 | 2708.9 | 2698.6 | 2706.9 |
| 37.5° | 2974.7 | 2942.9 | 2920.3 | 2888.5 | 2869.0 | 2869.0 | 2871.0 | 2869.0 |
| 40° | 3138.8 | 3126.5 | 3116.2 | 3089.6 | 3085.5 | 3084.5 | 3084.4 | 3088.6 |
| 42.5° | 3432.4 | 3402.6 | 3386.2 | 3363.6 | 3356.4 | 3354.4 | 3353.3 | 3355.4 |
| 45° | 3814.0 | 3765.8 | 3721.7 | 3699.1 | 3679.6 | 3661.1 | 3667.3 | 3667.3 |
| 47.5° | 4258.3 | 4183.4 | 4111.6 | 4072.6 | 4038.8 | 4023.4 | 4013.1 | 4010.0 |
| 50° | 4799.1 | 4694.4 | 4602.1 | 4529.2 | 4480.0 | 4479.0 | 4484.1 | 4451.2 |
| 52.5° | 5462.0 | 5296.8 | 5181.8 | 5083.4 | 5037.2 | 5032.0 | 5015.6 | 4997.1 |
| 55° | 6196.6 | 6000.6 | 5810.8 | 5705.2 | 5644.6 | 5611.8 | 5592.2 | 5561.5 |
| 57.5° | 6953.9 | 6690.2 | 6417.2 | 6248.0 | 6141.2 | 6067.4 | 6028.4 | 6010.9 |
| 60° | 7537.8 | 7177.6 | 6817.4 | 6545.6 | 6368.0 | 6258.2 | 6190.5 | 6162.8 |
| 62.5° | 7767.6 | 7279.2 | 6817.4 | 6460.3 | 6203.8 | 6052.0 | 5960.6 | 5920.6 |
| 65° | 7493.6 | 6915.0 | 6389.6 | 5995.6 | 5709.2 | 5540.0 | 5440.4 | 5397.3 |
| 67.5° | 6728.2 | 6217.2 | 5645.6 | 5253.6 | 4959.2 | 4792.0 | 4684.2 | 4652.4 |
| 70° | 5640.5 | 5118.2 | 4572.4 | 4222.4 | 3959.8 | 3823.3 | 3711.4 | 3698.1 |
| 72.5° | 4238.8 | 3788.4 | 3320.4 | 3031.1 | 2819.8 | 2594.0 | 2536.6 | 2565.3 |
| 75° | 2717.1 | 2295.4 | 1878.8 | 1618.2 | 1425.2 | 1209.8 | 1126.7 | 1147.2 |
| 77.5° | 1286.8 | 996.4 | 719.3 | 556.2 | 466.9 | 399.2 | 381.7 | 371.5 |
| 80° | 477.2 | 386.8 | 341.7 | 324.2 | 312.0 | 300.6 | 292.5 | 283.2 |
| 82.5° | 308.8 | 301.6 | 292.4 | 289.4 | 280.2 | 265.8 | 239.1 | 227.8 |
| 85° | 230.8 | 230.8 | 218.6 | 219.6 | 212.4 | 194.0 | 169.3 | 156.0 |
| 87.5° | 67.7 | 60.5 | 55.4 | 51.3 | 50.2 | 45.2 | 32.8 | 28.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)