

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: P147376

Luminaire Tested: **TLM-F06-LED-E1-5MQ-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P147376  
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-F06-LED-E1-5MQ-7050  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM  
Light Source: (42) 5000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

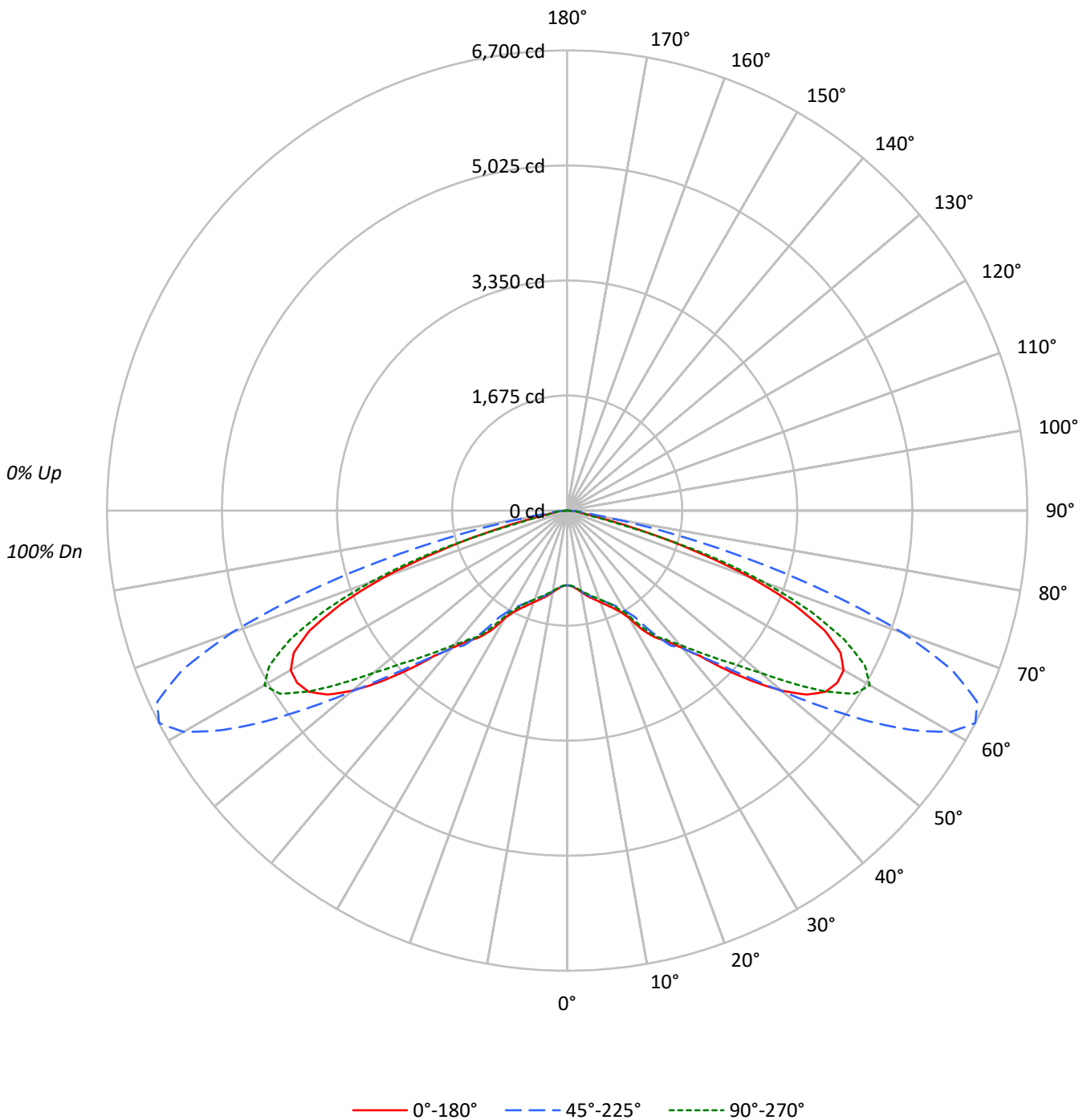
Lumens per Lamp: N/A  
Luminaire Lumens: 16384.7 lumens  
Efficiency: N/A  
Efficacy: 104.7 lumens/watt  
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 156.5  
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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### 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°  | 11707  | 11707  | 11707  |
| 5°  | 12099  | 12036  | 12009  |
| 10° | 13166  | 13026  | 12962  |
| 15° | 14613  | 14340  | 14197  |
| 20° | 16243  | 15854  | 15719  |
| 25° | 18542  | 17786  | 17928  |
| 30° | 22395  | 20888  | 21604  |
| 35° | 29731  | 28639  | 29363  |
| 40° | 36660  | 36767  | 35827  |
| 45° | 49942  | 48522  | 46085  |
| 50° | 68299  | 68654  | 61534  |
| 55° | 86271  | 100227 | 86158  |
| 60° | 100059 | 138738 | 109523 |
| 65° | 105373 | 167722 | 113482 |
| 70° | 89386  | 163501 | 96080  |
| 75° | 45340  | 114776 | 39384  |
| 80° | 14387  | 39851  | 14493  |
| 85° | 15586  | 20724  | 15907  |



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CATALOG NUMBER: TLM-F06-LED-E1-5MQ-7050

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 109.0   | 0.7       |
| 10°-20°   | 368.4   | 2.2       |
| 20°-30°   | 712.4   | 4.3       |
| 30°-40°   | 1379.3  | 8.4       |
| 40°-50°   | 2490.5  | 15.2      |
| 50°-60°   | 4330.6  | 26.4      |
| 60°-70°   | 4916.4  | 30.0      |
| 70°-80°   | 1906.1  | 11.6      |
| 80°-90°   | 172.0   | 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°    | 1189.8  | 7.3       |
| 0°-40°    | 2569.1  | 15.7      |
| 0°-60°    | 9390.3  | 57.3      |
| 0°-90°    | 16384.7 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 16384.7 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 1088 | 1088  | 1088 | 1088  | 1088 |      |
| 5°  | 1120 | 1118  | 1114 | 1113  | 1111 | 110  |
| 15° | 1311 | 1302  | 1287 | 1277  | 1274 | 375  |
| 25° | 1561 | 1529  | 1498 | 1499  | 1510 | 735  |
| 35° | 2263 | 2219  | 2180 | 2218  | 2235 | 1414 |
| 45° | 3281 | 3205  | 3188 | 3063  | 3027 | 2570 |
| 55° | 4597 | 4818  | 5341 | 4753  | 4591 | 4047 |
| 65° | 4137 | 4750  | 6585 | 5112  | 4456 | 3944 |
| 75° | 1090 | 1525  | 2760 | 1443  | 947  | 1320 |
| 85° | 126  | 181   | 168  | 181   | 129  | 124  |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P147376

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 |
| 2.5°  | 1094.4 | 1097.8 | 1096.9 | 1095.2 | 1095.2 | 1095.2 | 1094.4 | 1091.8 | 1091.0 | 1092.7 | 1094.4 |
| 5°    | 1119.8 | 1119.8 | 1119.8 | 1119.8 | 1118.2 | 1118.1 | 1116.4 | 1114.8 | 1115.6 | 1113.9 | 1113.1 |
| 7.5°  | 1158.8 | 1156.2 | 1156.2 | 1155.4 | 1155.4 | 1153.8 | 1151.2 | 1147.8 | 1148.6 | 1147.8 | 1147.0 |
| 10°   | 1204.6 | 1205.4 | 1202.8 | 1205.4 | 1201.2 | 1200.3 | 1196.9 | 1195.2 | 1194.4 | 1191.8 | 1191.8 |
| 12.5° | 1259.6 | 1257.1 | 1257.1 | 1255.4 | 1253.7 | 1252.0 | 1246.9 | 1246.1 | 1242.6 | 1241.0 | 1238.4 |
| 15°   | 1311.3 | 1310.4 | 1307.0 | 1303.6 | 1302.8 | 1301.1 | 1295.2 | 1291.8 | 1290.9 | 1286.8 | 1283.4 |
| 17.5° | 1362.9 | 1361.2 | 1357.0 | 1355.3 | 1352.0 | 1349.4 | 1344.3 | 1339.2 | 1336.7 | 1335.0 | 1330.8 |
| 20°   | 1418.0 | 1416.3 | 1412.1 | 1408.7 | 1404.4 | 1401.0 | 1393.4 | 1389.2 | 1386.6 | 1384.1 | 1380.8 |
| 22.5° | 1486.6 | 1483.2 | 1476.4 | 1470.5 | 1461.2 | 1457.8 | 1447.7 | 1441.8 | 1437.4 | 1434.1 | 1432.4 |
| 25°   | 1561.2 | 1562.0 | 1552.6 | 1545.1 | 1534.0 | 1524.8 | 1512.0 | 1505.2 | 1501.1 | 1497.6 | 1496.8 |
| 27.5° | 1654.4 | 1655.2 | 1646.7 | 1635.7 | 1618.8 | 1608.6 | 1591.6 | 1583.2 | 1580.6 | 1577.3 | 1576.4 |
| 30°   | 1801.8 | 1794.1 | 1779.8 | 1761.9 | 1746.6 | 1724.6 | 1700.1 | 1691.6 | 1683.1 | 1680.6 | 1680.6 |
| 32.5° | 2072.8 | 2068.6 | 2056.7 | 2012.6 | 1992.4 | 1946.6 | 1903.4 | 1878.8 | 1850.8 | 1837.3 | 1828.8 |
| 35°   | 2262.6 | 2260.8 | 2251.6 | 2236.3 | 2223.6 | 2214.2 | 2188.8 | 2184.6 | 2179.6 | 2179.5 | 2186.3 |
| 37.5° | 2402.3 | 2392.1 | 2390.4 | 2393.0 | 2389.6 | 2391.3 | 2411.6 | 2439.6 | 2463.3 | 2475.2 | 2473.5 |
| 40°   | 2609.0 | 2594.6 | 2603.0 | 2597.1 | 2589.5 | 2587.8 | 2594.6 | 2605.6 | 2616.6 | 2616.6 | 2614.1 |
| 42.5° | 2879.2 | 2886.0 | 2889.4 | 2864.8 | 2848.8 | 2844.4 | 2860.6 | 2857.2 | 2868.2 | 2864.0 | 2853.0 |
| 45°   | 3280.8 | 3276.4 | 3270.6 | 3240.9 | 3215.5 | 3195.1 | 3199.4 | 3193.4 | 3194.3 | 3187.5 | 3179.1 |
| 47.5° | 3685.6 | 3700.0 | 3675.4 | 3661.1 | 3632.3 | 3617.8 | 3629.7 | 3619.6 | 3639.0 | 3603.4 | 3586.5 |
| 50°   | 4078.6 | 4088.8 | 4080.4 | 4060.0 | 4060.0 | 4080.4 | 4094.8 | 4113.4 | 4140.5 | 4099.8 | 4038.8 |
| 52.5° | 4400.6 | 4409.0 | 4421.8 | 4438.7 | 4480.2 | 4523.4 | 4584.4 | 4649.6 | 4701.3 | 4693.6 | 4624.2 |
| 55°   | 4597.1 | 4607.2 | 4628.4 | 4686.8 | 4761.4 | 4874.9 | 5013.0 | 5164.6 | 5283.2 | 5340.8 | 5290.0 |
| 57.5° | 4663.2 | 4670.8 | 4728.4 | 4798.7 | 4914.8 | 5083.3 | 5314.5 | 5576.3 | 5804.2 | 5949.0 | 5926.1 |
| 60°   | 4647.9 | 4647.9 | 4706.4 | 4802.9 | 4965.6 | 5189.2 | 5516.2 | 5878.8 | 6227.7 | 6444.6 | 6412.4 |
| 62.5° | 4487.8 | 4496.2 | 4580.2 | 4696.2 | 4892.7 | 5160.4 | 5550.0 | 6013.4 | 6431.0 | 6700.4 | 6674.1 |
| 65°   | 4137.2 | 4143.0 | 4233.7 | 4371.8 | 4591.2 | 4908.0 | 5334.0 | 5847.4 | 6326.0 | 6585.2 | 6536.0 |
| 67.5° | 3570.4 | 3576.3 | 3650.0 | 3806.0 | 4038.0 | 4369.2 | 4829.2 | 5394.2 | 5862.6 | 6067.6 | 5920.2 |
| 70°   | 2840.2 | 2857.2 | 2904.6 | 3069.8 | 3246.0 | 3570.4 | 3994.0 | 4559.0 | 5001.2 | 5195.2 | 5032.5 |
| 72.5° | 1935.6 | 1978.8 | 2036.4 | 2182.9 | 2351.5 | 2620.8 | 2958.0 | 3434.0 | 3789.0 | 4013.4 | 3868.6 |
| 75°   | 1090.2 | 1151.2 | 1169.0 | 1280.0 | 1418.9 | 1631.4 | 1878.0 | 2219.4 | 2577.6 | 2759.8 | 2585.2 |
| 77.5° | 471.0  | 521.0  | 543.0  | 594.7  | 703.0  | 792.0  | 942.0  | 1172.4 | 1449.4 | 1577.2 | 1368.0 |
| 80°   | 232.1  | 244.0  | 253.3  | 269.4  | 299.8  | 328.6  | 399.8  | 500.6  | 614.1  | 642.9  | 511.6  |
| 82.5° | 179.6  | 188.0  | 204.2  | 216.8  | 224.5  | 232.1  | 238.8  | 252.4  | 263.4  | 269.4  | 254.1  |
| 85°   | 126.2  | 137.2  | 155.0  | 169.4  | 177.9  | 183.8  | 189.8  | 194.0  | 183.8  | 167.8  | 176.2  |
| 87.5° | 33.0   | 43.2   | 60.1   | 65.2   | 73.7   | 77.9   | 76.2   | 78.8   | 71.2   | 51.6   | 57.6   |
| 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°    | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 | 1087.6 |
| 2.5°  | 1093.6 | 1092.8 | 1093.6 | 1093.6 | 1093.6 | 1092.8 | 1092.7 | 1092.7 |
| 5°    | 1113.0 | 1113.1 | 1114.0 | 1112.2 | 1112.2 | 1113.0 | 1112.2 | 1111.4 |
| 7.5°  | 1146.1 | 1145.2 | 1145.2 | 1144.4 | 1145.2 | 1144.4 | 1144.4 | 1143.6 |
| 10°   | 1190.2 | 1188.4 | 1189.3 | 1186.8 | 1186.8 | 1185.9 | 1185.9 | 1185.9 |
| 12.5° | 1237.6 | 1235.0 | 1235.9 | 1233.4 | 1229.1 | 1230.0 | 1230.8 | 1230.0 |
| 15°   | 1283.3 | 1280.8 | 1278.2 | 1276.6 | 1274.0 | 1274.8 | 1274.8 | 1274.0 |
| 17.5° | 1329.9 | 1324.8 | 1324.0 | 1321.4 | 1320.6 | 1320.6 | 1320.6 | 1321.4 |
| 20°   | 1378.2 | 1374.8 | 1374.0 | 1371.4 | 1370.6 | 1373.1 | 1374.0 | 1372.3 |
| 22.5° | 1429.8 | 1428.2 | 1429.9 | 1428.2 | 1430.7 | 1432.4 | 1433.2 | 1431.6 |
| 25°   | 1495.0 | 1493.4 | 1496.0 | 1501.8 | 1505.2 | 1507.0 | 1511.2 | 1509.5 |
| 27.5° | 1578.9 | 1577.2 | 1583.2 | 1591.6 | 1596.8 | 1605.2 | 1609.4 | 1611.1 |
| 30°   | 1687.4 | 1695.0 | 1698.4 | 1715.3 | 1718.8 | 1732.2 | 1732.3 | 1738.2 |
| 32.5° | 1845.0 | 1859.3 | 1884.8 | 1911.0 | 1947.4 | 1973.7 | 1973.6 | 1987.2 |
| 35°   | 2190.6 | 2196.4 | 2216.0 | 2220.2 | 2227.8 | 2236.3 | 2227.8 | 2234.6 |
| 37.5° | 2455.6 | 2429.4 | 2410.8 | 2384.6 | 2368.4 | 2368.4 | 2370.1 | 2368.4 |
| 40°   | 2591.2 | 2581.0 | 2572.6 | 2550.5 | 2547.2 | 2546.3 | 2546.3 | 2549.7 |
| 42.5° | 2833.4 | 2808.9 | 2795.4 | 2776.7 | 2770.8 | 2769.1 | 2768.2 | 2769.9 |
| 45°   | 3148.6 | 3108.8 | 3072.4 | 3053.7 | 3037.6 | 3022.4 | 3027.4 | 3027.4 |
| 47.5° | 3515.4 | 3453.5 | 3394.2 | 3362.0 | 3334.1 | 3321.4 | 3312.9 | 3310.4 |
| 50°   | 3961.8 | 3875.4 | 3799.2 | 3739.0 | 3698.4 | 3697.5 | 3701.7 | 3674.6 |
| 52.5° | 4509.0 | 4372.6 | 4277.7 | 4196.4 | 4158.3 | 4154.0 | 4140.6 | 4125.3 |
| 55°   | 5115.5 | 4953.7 | 4797.0 | 4709.7 | 4659.8 | 4632.6 | 4616.6 | 4591.1 |
| 57.5° | 5740.6 | 5523.0 | 5297.6 | 5157.8 | 5069.8 | 5008.8 | 4976.6 | 4962.2 |
| 60°   | 6222.6 | 5925.3 | 5628.0 | 5403.5 | 5257.0 | 5166.3 | 5110.4 | 5087.5 |
| 62.5° | 6412.4 | 6009.2 | 5628.0 | 5333.2 | 5121.4 | 4996.0 | 4920.7 | 4887.6 |
| 65°   | 6186.2 | 5708.4 | 5274.8 | 4949.5 | 4713.1 | 4573.4 | 4491.2 | 4455.6 |
| 67.5° | 5554.3 | 5132.4 | 4660.6 | 4337.0 | 4094.0 | 3955.8 | 3866.9 | 3840.6 |
| 70°   | 4656.4 | 4225.2 | 3774.6 | 3485.8 | 3268.9 | 3156.2 | 3063.9 | 3052.9 |
| 72.5° | 3499.2 | 3127.4 | 2741.2 | 2502.2 | 2327.8 | 2141.4 | 2094.0 | 2117.7 |
| 75°   | 2243.0 | 1895.0 | 1551.0 | 1335.9 | 1176.6 | 998.7  | 930.1  | 947.0  |
| 77.5° | 1062.2 | 822.5  | 593.8  | 459.2  | 385.4  | 329.5  | 315.1  | 306.6  |
| 80°   | 393.9  | 319.4  | 282.1  | 267.7  | 257.5  | 248.2  | 241.4  | 233.8  |
| 82.5° | 255.0  | 249.0  | 241.4  | 238.9  | 231.2  | 219.4  | 197.4  | 188.1  |
| 85°   | 190.6  | 190.6  | 180.5  | 181.2  | 175.4  | 160.1  | 139.8  | 128.8  |
| 87.5° | 55.9   | 50.0   | 45.8   | 42.3   | 41.5   | 37.3   | 27.1   | 23.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)