

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: P147373

Luminaire Tested: **TLM-F06-LED-E1-5MQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147373
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-8030
Description: TALON MEDIUM LED SITE LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

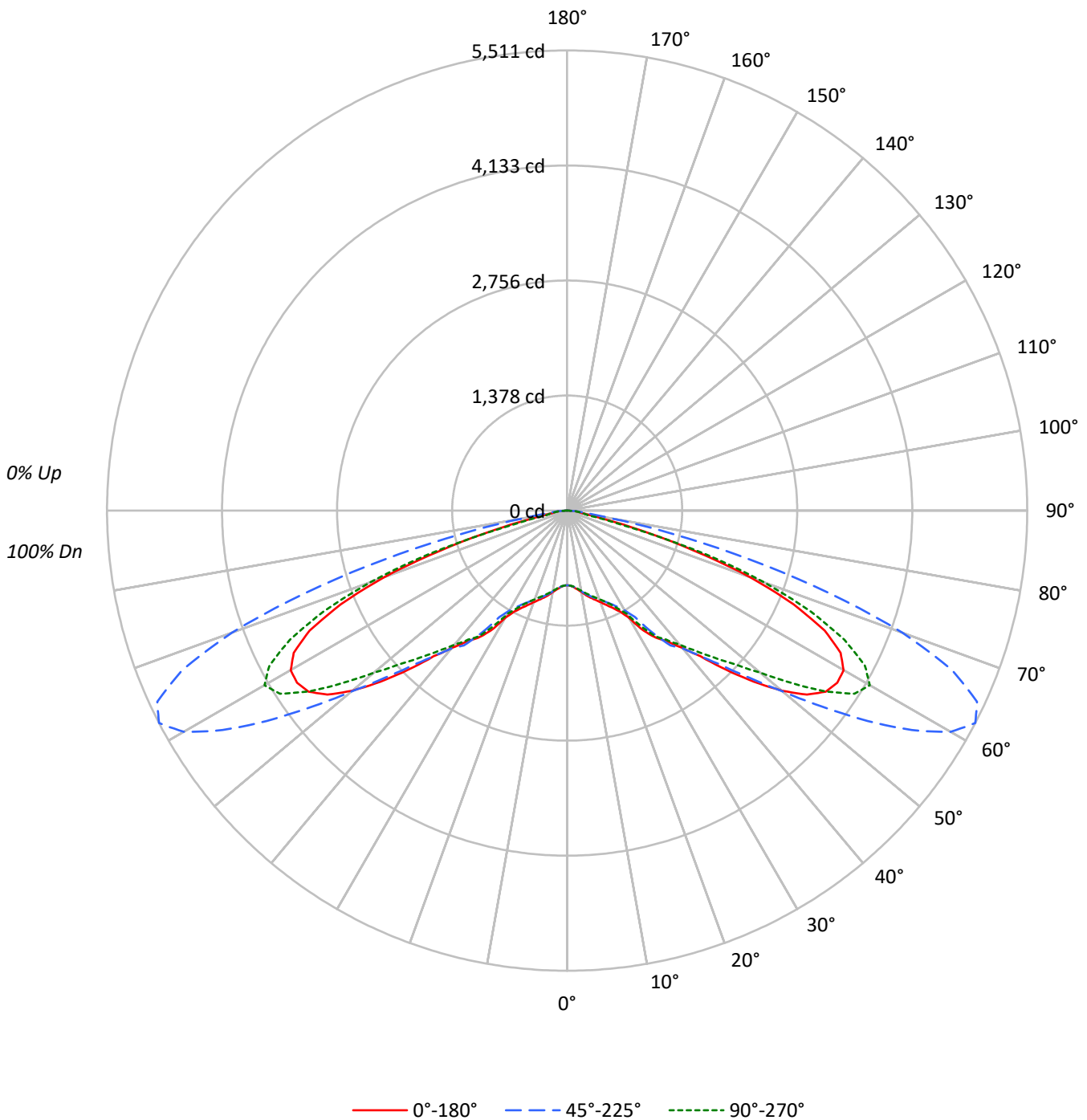
Lumens per Lamp: N/A
Luminaire Lumens: 13476.7 lumens
Efficiency: N/A
Efficacy: 86.1 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P147373
CATALOG NUMBER: TLM-F06-LED-E1-5MQ-8030

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° | 9629 | 9629 | 9629 |
| 5° | 9951 | 9900 | 9877 |
| 10° | 10829 | 10716 | 10661 |
| 15° | 12020 | 11794 | 11677 |
| 20° | 13361 | 13041 | 12929 |
| 25° | 15250 | 14630 | 14746 |
| 30° | 18419 | 17182 | 17770 |
| 35° | 24454 | 23557 | 24152 |
| 40° | 30154 | 30241 | 29468 |
| 45° | 41076 | 39910 | 37905 |
| 50° | 56178 | 56470 | 50612 |
| 55° | 70959 | 82439 | 70867 |
| 60° | 82301 | 114115 | 90085 |
| 65° | 86668 | 137956 | 93341 |
| 70° | 73524 | 134478 | 79025 |
| 75° | 37292 | 94406 | 32397 |
| 80° | 11833 | 32779 | 11920 |
| 85° | 12820 | 17043 | 13079 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 89.6 | 0.7 |
| 10°-20° | 303.1 | 2.2 |
| 20°-30° | 586.0 | 4.3 |
| 30°-40° | 1134.5 | 8.4 |
| 40°-50° | 2048.5 | 15.2 |
| 50°-60° | 3562.0 | 26.4 |
| 60°-70° | 4043.8 | 30.0 |
| 70°-80° | 1567.8 | 11.6 |
| 80°-90° | 141.4 | 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° | 978.7 | 7.3 |
| 0°-40° | 2113.2 | 15.7 |
| 0°-60° | 7723.7 | 57.3 |
| 0°-90° | 13476.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 13476.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 895 | 895 | 895 | 895 | 895 | |
| 5° | 921 | 920 | 916 | 916 | 914 | 90 |
| 15° | 1079 | 1071 | 1058 | 1051 | 1048 | 308 |
| 25° | 1284 | 1258 | 1232 | 1233 | 1242 | 605 |
| 35° | 1861 | 1825 | 1793 | 1824 | 1838 | 1163 |
| 45° | 2698 | 2636 | 2622 | 2519 | 2490 | 2114 |
| 55° | 3781 | 3963 | 4393 | 3910 | 3776 | 3329 |
| 65° | 3403 | 3907 | 5416 | 4205 | 3665 | 3244 |
| 75° | 897 | 1254 | 2270 | 1187 | 779 | 1086 |
| 85° | 104 | 149 | 138 | 149 | 106 | 102 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P147373

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 |
| 2.5° | 900.2 | 903.0 | 902.2 | 900.8 | 900.8 | 900.9 | 900.2 | 898.1 | 897.4 | 898.8 | 900.2 |
| 5° | 921.0 | 921.0 | 921.0 | 921.0 | 919.7 | 919.7 | 918.3 | 916.9 | 917.6 | 916.2 | 915.5 |
| 7.5° | 953.2 | 951.0 | 951.0 | 950.4 | 950.4 | 949.0 | 946.8 | 944.0 | 944.8 | 944.1 | 943.4 |
| 10° | 990.8 | 991.4 | 989.4 | 991.4 | 988.0 | 987.3 | 984.5 | 983.1 | 982.4 | 980.4 | 980.3 |
| 12.5° | 1036.0 | 1034.0 | 1034.0 | 1032.6 | 1031.2 | 1029.8 | 1025.6 | 1024.9 | 1022.1 | 1020.8 | 1018.6 |
| 15° | 1078.6 | 1077.8 | 1075.1 | 1072.3 | 1071.6 | 1070.2 | 1065.3 | 1062.6 | 1061.8 | 1058.4 | 1055.6 |
| 17.5° | 1121.0 | 1119.6 | 1116.2 | 1114.8 | 1112.0 | 1109.9 | 1105.8 | 1101.6 | 1099.4 | 1098.0 | 1094.6 |
| 20° | 1166.4 | 1164.9 | 1161.5 | 1158.7 | 1155.2 | 1152.4 | 1146.2 | 1142.6 | 1140.6 | 1138.5 | 1135.7 |
| 22.5° | 1222.8 | 1219.9 | 1214.4 | 1209.6 | 1201.8 | 1199.1 | 1190.7 | 1185.8 | 1182.4 | 1179.6 | 1178.2 |
| 25° | 1284.0 | 1284.8 | 1277.2 | 1270.8 | 1261.8 | 1254.1 | 1243.6 | 1238.1 | 1234.6 | 1231.8 | 1231.2 |
| 27.5° | 1360.7 | 1361.4 | 1354.4 | 1345.4 | 1331.4 | 1323.1 | 1309.2 | 1302.2 | 1300.1 | 1297.4 | 1296.6 |
| 30° | 1481.9 | 1475.7 | 1463.9 | 1449.2 | 1436.6 | 1418.6 | 1398.4 | 1391.4 | 1384.4 | 1382.4 | 1382.3 |
| 32.5° | 1704.9 | 1701.4 | 1691.6 | 1655.4 | 1638.8 | 1601.1 | 1565.6 | 1545.4 | 1522.4 | 1511.2 | 1504.2 |
| 35° | 1861.0 | 1859.6 | 1851.9 | 1839.4 | 1829.0 | 1821.2 | 1800.4 | 1796.9 | 1792.7 | 1792.7 | 1798.3 |
| 37.5° | 1976.0 | 1967.6 | 1966.2 | 1968.2 | 1965.5 | 1966.9 | 1983.6 | 2006.6 | 2026.2 | 2035.8 | 2034.5 |
| 40° | 2146.0 | 2134.1 | 2141.1 | 2136.2 | 2129.9 | 2128.6 | 2134.1 | 2143.1 | 2152.2 | 2152.2 | 2150.1 |
| 42.5° | 2368.2 | 2373.8 | 2376.6 | 2356.4 | 2343.1 | 2339.6 | 2352.8 | 2350.0 | 2359.2 | 2355.6 | 2346.6 |
| 45° | 2698.4 | 2695.0 | 2690.1 | 2665.7 | 2644.8 | 2628.1 | 2631.6 | 2626.7 | 2627.4 | 2621.8 | 2614.9 |
| 47.5° | 3031.5 | 3043.4 | 3023.2 | 3011.3 | 2987.6 | 2975.8 | 2985.6 | 2977.1 | 2993.2 | 2964.0 | 2950.0 |
| 50° | 3354.8 | 3363.2 | 3356.2 | 3339.4 | 3339.4 | 3356.2 | 3368.0 | 3383.4 | 3405.6 | 3372.2 | 3322.0 |
| 52.5° | 3619.6 | 3626.5 | 3637.0 | 3650.9 | 3685.0 | 3720.6 | 3770.7 | 3824.4 | 3866.9 | 3860.6 | 3803.4 |
| 55° | 3781.2 | 3789.6 | 3807.0 | 3855.0 | 3916.4 | 4009.8 | 4123.3 | 4248.0 | 4345.5 | 4392.9 | 4351.1 |
| 57.5° | 3835.6 | 3841.8 | 3889.2 | 3947.0 | 4042.4 | 4181.1 | 4371.3 | 4586.6 | 4774.0 | 4893.2 | 4874.4 |
| 60° | 3823.0 | 3823.0 | 3871.0 | 3950.5 | 4084.2 | 4268.2 | 4537.1 | 4835.4 | 5122.4 | 5300.8 | 5274.3 |
| 62.5° | 3691.3 | 3698.3 | 3767.2 | 3862.7 | 4024.4 | 4244.5 | 4565.0 | 4946.2 | 5289.6 | 5511.2 | 5489.6 |
| 65° | 3402.8 | 3407.8 | 3482.2 | 3595.8 | 3776.3 | 4036.8 | 4387.4 | 4809.6 | 5203.2 | 5416.5 | 5376.0 |
| 67.5° | 2936.8 | 2941.6 | 3002.2 | 3130.4 | 3321.3 | 3593.8 | 3972.0 | 4436.8 | 4822.1 | 4990.7 | 4869.5 |
| 70° | 2336.2 | 2350.0 | 2389.1 | 2525.0 | 2669.9 | 2936.8 | 3285.1 | 3749.8 | 4113.6 | 4273.0 | 4139.3 |
| 72.5° | 1592.0 | 1627.6 | 1675.0 | 1795.5 | 1934.1 | 2155.7 | 2433.0 | 2824.6 | 3116.5 | 3301.1 | 3182.0 |
| 75° | 896.7 | 946.8 | 961.5 | 1052.8 | 1167.0 | 1341.9 | 1544.6 | 1825.4 | 2120.1 | 2270.0 | 2126.4 |
| 77.5° | 387.4 | 428.4 | 446.6 | 489.1 | 578.2 | 651.4 | 774.8 | 964.2 | 1192.1 | 1297.4 | 1125.2 |
| 80° | 190.9 | 200.7 | 208.4 | 221.6 | 246.6 | 270.4 | 328.8 | 411.8 | 505.1 | 528.8 | 420.8 |
| 82.5° | 147.7 | 154.7 | 167.9 | 178.4 | 184.6 | 190.9 | 196.5 | 207.6 | 216.7 | 221.6 | 209.0 |
| 85° | 103.8 | 112.8 | 127.5 | 139.4 | 146.4 | 151.2 | 156.0 | 159.6 | 151.2 | 138.0 | 145.0 |
| 87.5° | 27.2 | 35.6 | 49.5 | 53.6 | 60.6 | 64.1 | 62.7 | 64.8 | 58.5 | 42.5 | 47.4 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 | 894.6 |
| 2.5° | 899.5 | 898.8 | 899.4 | 899.4 | 899.4 | 898.8 | 898.8 | 898.8 |
| 5° | 915.6 | 915.5 | 916.2 | 914.8 | 914.8 | 915.6 | 914.8 | 914.1 |
| 7.5° | 942.7 | 942.0 | 942.0 | 941.3 | 942.0 | 941.3 | 941.3 | 940.6 |
| 10° | 978.9 | 977.5 | 978.2 | 976.2 | 976.1 | 975.4 | 975.4 | 975.4 |
| 12.5° | 1017.9 | 1015.8 | 1016.6 | 1014.4 | 1011.0 | 1011.6 | 1012.4 | 1011.7 |
| 15° | 1055.6 | 1053.4 | 1051.4 | 1050.0 | 1047.9 | 1048.6 | 1048.6 | 1047.9 |
| 17.5° | 1093.9 | 1089.7 | 1089.0 | 1086.9 | 1086.2 | 1086.2 | 1086.2 | 1086.9 |
| 20° | 1133.6 | 1130.8 | 1130.1 | 1128.0 | 1127.3 | 1129.4 | 1130.1 | 1128.7 |
| 22.5° | 1176.1 | 1174.7 | 1176.0 | 1174.7 | 1176.8 | 1178.2 | 1178.9 | 1177.5 |
| 25° | 1229.8 | 1228.3 | 1230.4 | 1235.3 | 1238.1 | 1239.5 | 1243.0 | 1241.6 |
| 27.5° | 1298.7 | 1297.4 | 1302.2 | 1309.2 | 1313.4 | 1320.3 | 1323.8 | 1325.2 |
| 30° | 1387.9 | 1394.2 | 1397.0 | 1410.9 | 1413.6 | 1424.8 | 1424.8 | 1429.7 |
| 32.5° | 1517.5 | 1529.3 | 1550.2 | 1571.8 | 1601.8 | 1623.4 | 1623.4 | 1634.5 |
| 35° | 1801.8 | 1806.6 | 1822.6 | 1826.2 | 1832.4 | 1839.4 | 1832.4 | 1838.0 |
| 37.5° | 2019.8 | 1998.2 | 1983.0 | 1961.3 | 1948.1 | 1948.0 | 1949.5 | 1948.1 |
| 40° | 2131.3 | 2123.0 | 2116.0 | 2097.9 | 2095.0 | 2094.4 | 2094.4 | 2097.2 |
| 42.5° | 2330.6 | 2310.4 | 2299.2 | 2283.9 | 2279.0 | 2277.6 | 2277.0 | 2278.3 |
| 45° | 2589.8 | 2557.0 | 2527.0 | 2511.8 | 2498.5 | 2486.0 | 2490.1 | 2490.1 |
| 47.5° | 2891.4 | 2840.6 | 2791.8 | 2765.3 | 2742.4 | 2731.9 | 2724.9 | 2722.8 |
| 50° | 3258.6 | 3187.6 | 3124.8 | 3075.4 | 3042.0 | 3041.2 | 3044.8 | 3022.4 |
| 52.5° | 3708.7 | 3596.6 | 3518.6 | 3451.6 | 3420.2 | 3416.8 | 3405.6 | 3393.1 |
| 55° | 4207.6 | 4074.5 | 3945.6 | 3873.8 | 3832.8 | 3810.4 | 3797.2 | 3776.3 |
| 57.5° | 4721.8 | 4542.7 | 4357.4 | 4242.4 | 4170.0 | 4119.8 | 4093.4 | 4081.5 |
| 60° | 5118.2 | 4873.6 | 4629.1 | 4444.4 | 4324.0 | 4249.4 | 4203.4 | 4184.6 |
| 62.5° | 5274.2 | 4942.6 | 4629.1 | 4386.6 | 4212.4 | 4109.4 | 4047.4 | 4020.2 |
| 65° | 5088.2 | 4695.3 | 4338.6 | 4071.0 | 3876.6 | 3761.7 | 3694.1 | 3664.8 |
| 67.5° | 4568.5 | 4221.5 | 3833.4 | 3567.2 | 3367.3 | 3253.8 | 3180.6 | 3159.0 |
| 70° | 3830.0 | 3475.3 | 3104.6 | 2867.0 | 2688.7 | 2596.0 | 2520.1 | 2511.0 |
| 72.5° | 2878.2 | 2572.4 | 2254.6 | 2058.2 | 1914.6 | 1761.4 | 1722.4 | 1741.8 |
| 75° | 1845.0 | 1558.6 | 1275.8 | 1098.8 | 967.8 | 821.4 | 765.0 | 779.0 |
| 77.5° | 873.7 | 676.6 | 488.4 | 377.6 | 317.0 | 271.0 | 259.2 | 252.2 |
| 80° | 324.0 | 262.6 | 232.0 | 220.2 | 211.8 | 204.1 | 198.6 | 192.3 |
| 82.5° | 209.8 | 204.8 | 198.6 | 196.5 | 190.2 | 180.4 | 162.3 | 154.7 |
| 85° | 156.8 | 156.8 | 148.4 | 149.1 | 144.2 | 131.7 | 115.0 | 105.9 |
| 87.5° | 46.0 | 41.1 | 37.6 | 34.8 | 34.2 | 30.6 | 22.3 | 19.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)