

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: P147374

Luminaire Tested: **TLM-F06-LED-E1-5MQ-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P147374
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-7030
Description: TALON MEDIUM LED SITE LUMINAIRE
(6) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (42) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

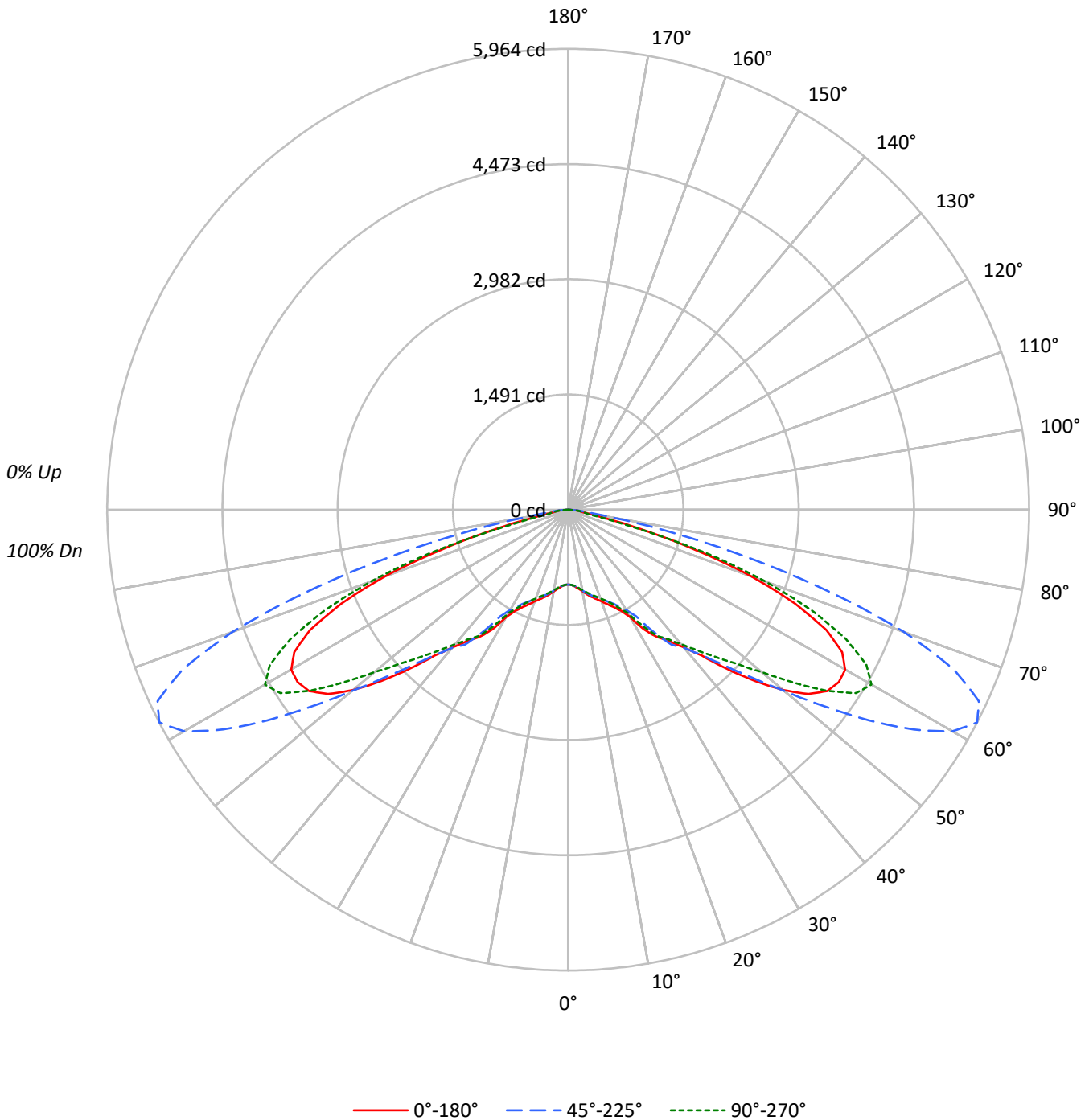
Lumens per Lamp: N/A
Luminaire Lumens: 14584.2 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 3.55 / 3.67 / 3.6
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: TLM-F06-LED-E1-5MQ-7030

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° | 10421 | 10421 | 10421 |
| 5° | 10770 | 10713 | 10688 |
| 10° | 11719 | 11595 | 11538 |
| 15° | 13007 | 12763 | 12637 |
| 20° | 14458 | 14112 | 13992 |
| 25° | 16504 | 15833 | 15957 |
| 30° | 19934 | 18594 | 19230 |
| 35° | 26465 | 25492 | 26136 |
| 40° | 32631 | 32727 | 31889 |
| 45° | 44453 | 43189 | 41022 |
| 50° | 60795 | 61110 | 54772 |
| 55° | 76792 | 89213 | 76690 |
| 60° | 89065 | 123492 | 97489 |
| 65° | 93792 | 149293 | 101012 |
| 70° | 79566 | 145531 | 85521 |
| 75° | 40358 | 102162 | 35059 |
| 80° | 12806 | 35469 | 12899 |
| 85° | 13882 | 18439 | 14153 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 97.0 | 0.7 |
| 10°-20° | 328.0 | 2.2 |
| 20°-30° | 634.1 | 4.3 |
| 30°-40° | 1227.8 | 8.4 |
| 40°-50° | 2216.8 | 15.2 |
| 50°-60° | 3854.7 | 26.4 |
| 60°-70° | 4376.1 | 30.0 |
| 70°-80° | 1696.6 | 11.6 |
| 80°-90° | 153.1 | 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° | 1059.1 | 7.3 |
| 0°-40° | 2286.8 | 15.7 |
| 0°-60° | 8358.4 | 57.3 |
| 0°-90° | 14584.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 14584.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 968 | 968 | 968 | 968 | 968 | |
| 5° | 997 | 995 | 992 | 991 | 989 | 98 |
| 15° | 1167 | 1159 | 1145 | 1137 | 1134 | 334 |
| 25° | 1390 | 1361 | 1333 | 1334 | 1344 | 655 |
| 35° | 2014 | 1975 | 1940 | 1974 | 1989 | 1258 |
| 45° | 2920 | 2853 | 2837 | 2726 | 2695 | 2287 |
| 55° | 4092 | 4289 | 4754 | 4231 | 4087 | 3603 |
| 65° | 3682 | 4228 | 5862 | 4550 | 3966 | 3511 |
| 75° | 970 | 1358 | 2456 | 1285 | 843 | 1175 |
| 85° | 112 | 161 | 149 | 161 | 115 | 110 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P147374

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 |
| 2.5° | 974.2 | 977.2 | 976.4 | 974.9 | 974.9 | 974.9 | 974.2 | 971.9 | 971.2 | 972.6 | 974.2 |
| 5° | 996.8 | 996.8 | 996.8 | 996.8 | 995.3 | 995.3 | 993.8 | 992.2 | 993.0 | 991.5 | 990.7 |
| 7.5° | 1031.5 | 1029.2 | 1029.2 | 1028.4 | 1028.4 | 1027.0 | 1024.7 | 1021.6 | 1022.4 | 1021.6 | 1021.0 |
| 10° | 1072.2 | 1072.9 | 1070.6 | 1072.9 | 1069.2 | 1068.4 | 1065.4 | 1063.9 | 1063.2 | 1060.8 | 1060.8 |
| 12.5° | 1121.2 | 1118.9 | 1118.9 | 1117.4 | 1115.9 | 1114.4 | 1109.8 | 1109.1 | 1106.1 | 1104.6 | 1102.4 |
| 15° | 1167.2 | 1166.4 | 1163.4 | 1160.4 | 1159.6 | 1158.2 | 1152.8 | 1149.8 | 1149.1 | 1145.3 | 1142.3 |
| 17.5° | 1213.2 | 1211.6 | 1207.9 | 1206.4 | 1203.4 | 1201.1 | 1196.6 | 1192.0 | 1189.8 | 1188.2 | 1184.5 |
| 20° | 1262.2 | 1260.7 | 1256.9 | 1253.9 | 1250.2 | 1247.1 | 1240.4 | 1236.6 | 1234.3 | 1232.0 | 1229.0 |
| 22.5° | 1323.2 | 1320.2 | 1314.2 | 1309.0 | 1300.6 | 1297.6 | 1288.6 | 1283.3 | 1279.6 | 1276.5 | 1275.0 |
| 25° | 1389.6 | 1390.4 | 1382.1 | 1375.2 | 1365.4 | 1357.2 | 1345.9 | 1339.8 | 1336.1 | 1333.1 | 1332.3 |
| 27.5° | 1472.6 | 1473.3 | 1465.8 | 1455.9 | 1440.9 | 1431.8 | 1416.8 | 1409.2 | 1406.9 | 1403.9 | 1403.2 |
| 30° | 1603.8 | 1596.9 | 1584.2 | 1568.3 | 1554.7 | 1535.2 | 1513.3 | 1505.8 | 1498.2 | 1496.0 | 1495.9 |
| 32.5° | 1845.0 | 1841.2 | 1830.7 | 1791.5 | 1773.4 | 1732.7 | 1694.2 | 1672.4 | 1647.4 | 1635.4 | 1627.9 |
| 35° | 2014.0 | 2012.4 | 2004.1 | 1990.6 | 1979.2 | 1971.0 | 1948.3 | 1944.6 | 1940.0 | 1940.0 | 1946.0 |
| 37.5° | 2138.4 | 2129.3 | 2127.8 | 2130.0 | 2127.0 | 2128.6 | 2146.6 | 2171.5 | 2192.6 | 2203.2 | 2201.6 |
| 40° | 2322.3 | 2309.5 | 2317.0 | 2311.8 | 2305.0 | 2303.4 | 2309.5 | 2319.3 | 2329.0 | 2329.1 | 2326.8 |
| 42.5° | 2562.8 | 2568.8 | 2571.9 | 2550.0 | 2535.7 | 2532.0 | 2546.2 | 2543.2 | 2553.0 | 2549.2 | 2539.4 |
| 45° | 2920.2 | 2916.4 | 2911.2 | 2884.8 | 2862.2 | 2844.0 | 2847.8 | 2842.6 | 2843.3 | 2837.2 | 2829.8 |
| 47.5° | 3280.6 | 3293.4 | 3271.6 | 3258.8 | 3233.1 | 3220.3 | 3230.9 | 3221.8 | 3239.2 | 3207.5 | 3192.4 |
| 50° | 3630.5 | 3639.5 | 3632.0 | 3613.8 | 3613.9 | 3632.0 | 3644.8 | 3661.4 | 3685.5 | 3649.3 | 3595.0 |
| 52.5° | 3917.0 | 3924.5 | 3935.8 | 3950.9 | 3987.8 | 4026.4 | 4080.6 | 4138.7 | 4184.7 | 4177.9 | 4116.0 |
| 55° | 4092.0 | 4101.0 | 4119.8 | 4171.8 | 4238.2 | 4339.2 | 4462.2 | 4597.1 | 4702.6 | 4753.9 | 4708.7 |
| 57.5° | 4150.8 | 4157.5 | 4208.8 | 4271.4 | 4374.7 | 4524.8 | 4730.6 | 4963.6 | 5166.4 | 5295.3 | 5274.9 |
| 60° | 4137.2 | 4137.2 | 4189.2 | 4275.2 | 4419.9 | 4619.0 | 4910.0 | 5232.8 | 5543.4 | 5736.4 | 5707.7 |
| 62.5° | 3994.6 | 4002.2 | 4076.8 | 4180.2 | 4355.0 | 4593.3 | 4940.2 | 5352.6 | 5724.3 | 5964.0 | 5940.7 |
| 65° | 3682.5 | 3687.8 | 3768.5 | 3891.4 | 4086.6 | 4368.6 | 4747.9 | 5204.8 | 5630.8 | 5861.6 | 5817.8 |
| 67.5° | 3178.1 | 3183.4 | 3249.0 | 3387.7 | 3594.3 | 3889.1 | 4298.5 | 4801.5 | 5218.4 | 5400.8 | 5269.6 |
| 70° | 2528.2 | 2543.2 | 2585.4 | 2732.4 | 2889.3 | 3178.1 | 3555.0 | 4058.0 | 4451.5 | 4624.2 | 4479.5 |
| 72.5° | 1722.9 | 1761.3 | 1812.6 | 1943.0 | 2093.1 | 2332.8 | 2633.0 | 3056.7 | 3372.6 | 3572.4 | 3443.5 |
| 75° | 970.4 | 1024.7 | 1040.6 | 1139.3 | 1263.0 | 1452.2 | 1671.6 | 1975.4 | 2294.4 | 2456.5 | 2301.2 |
| 77.5° | 419.2 | 463.7 | 483.4 | 529.3 | 625.8 | 705.0 | 838.4 | 1043.5 | 1290.0 | 1404.0 | 1217.7 |
| 80° | 206.6 | 217.2 | 225.4 | 239.8 | 266.9 | 292.6 | 355.9 | 445.6 | 546.6 | 572.2 | 455.4 |
| 82.5° | 159.8 | 167.4 | 181.7 | 193.0 | 199.8 | 206.6 | 212.6 | 224.7 | 234.5 | 239.8 | 226.2 |
| 85° | 112.4 | 122.2 | 138.0 | 150.8 | 158.4 | 163.6 | 168.9 | 172.6 | 163.6 | 149.3 | 156.8 |
| 87.5° | 29.4 | 38.4 | 53.6 | 58.0 | 65.6 | 69.4 | 67.8 | 70.1 | 63.3 | 46.0 | 51.3 |
| 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° | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 | 968.1 |
| 2.5° | 973.4 | 972.6 | 973.4 | 973.4 | 973.4 | 972.6 | 972.6 | 972.7 |
| 5° | 990.8 | 990.8 | 991.5 | 990.0 | 990.0 | 990.8 | 990.0 | 989.2 |
| 7.5° | 1020.2 | 1019.4 | 1019.4 | 1018.6 | 1019.4 | 1018.6 | 1018.6 | 1017.9 |
| 10° | 1059.4 | 1057.8 | 1058.6 | 1056.4 | 1056.4 | 1055.6 | 1055.6 | 1055.6 |
| 12.5° | 1101.6 | 1099.3 | 1100.0 | 1097.8 | 1094.1 | 1094.8 | 1095.6 | 1094.8 |
| 15° | 1142.3 | 1140.0 | 1137.8 | 1136.3 | 1134.0 | 1134.8 | 1134.8 | 1134.0 |
| 17.5° | 1183.8 | 1179.2 | 1178.5 | 1176.2 | 1175.4 | 1175.5 | 1175.5 | 1176.2 |
| 20° | 1226.8 | 1223.8 | 1223.0 | 1220.7 | 1220.0 | 1222.2 | 1223.0 | 1221.5 |
| 22.5° | 1272.8 | 1271.2 | 1272.8 | 1271.2 | 1273.5 | 1275.0 | 1275.8 | 1274.2 |
| 25° | 1330.8 | 1329.3 | 1331.6 | 1336.8 | 1339.8 | 1341.4 | 1345.2 | 1343.6 |
| 27.5° | 1405.4 | 1403.9 | 1409.2 | 1416.8 | 1421.3 | 1428.8 | 1432.6 | 1434.1 |
| 30° | 1501.9 | 1508.7 | 1511.8 | 1526.9 | 1529.9 | 1542.0 | 1541.9 | 1547.2 |
| 32.5° | 1642.2 | 1655.0 | 1677.6 | 1701.0 | 1733.4 | 1756.8 | 1756.8 | 1768.9 |
| 35° | 1949.8 | 1955.1 | 1972.4 | 1976.2 | 1983.0 | 1990.6 | 1983.0 | 1989.0 |
| 37.5° | 2185.8 | 2162.5 | 2145.9 | 2122.4 | 2108.2 | 2108.2 | 2109.6 | 2108.2 |
| 40° | 2306.4 | 2297.4 | 2289.9 | 2270.3 | 2267.2 | 2266.5 | 2266.5 | 2269.5 |
| 42.5° | 2522.2 | 2500.2 | 2488.2 | 2471.6 | 2466.4 | 2464.8 | 2464.1 | 2465.6 |
| 45° | 2802.6 | 2767.2 | 2734.8 | 2718.1 | 2703.8 | 2690.2 | 2694.8 | 2694.8 |
| 47.5° | 3129.0 | 3074.0 | 3021.2 | 2992.6 | 2967.7 | 2956.4 | 2948.8 | 2946.6 |
| 50° | 3526.4 | 3449.5 | 3381.6 | 3328.2 | 3291.9 | 3291.2 | 3295.0 | 3270.8 |
| 52.5° | 4013.6 | 3892.1 | 3807.7 | 3735.2 | 3701.4 | 3697.6 | 3685.5 | 3671.9 |
| 55° | 4553.4 | 4409.4 | 4269.8 | 4192.2 | 4147.7 | 4123.6 | 4109.3 | 4086.6 |
| 57.5° | 5109.8 | 4916.0 | 4715.5 | 4591.0 | 4512.6 | 4458.4 | 4429.7 | 4416.9 |
| 60° | 5538.8 | 5274.2 | 5009.5 | 4809.7 | 4679.3 | 4598.6 | 4548.8 | 4528.5 |
| 62.5° | 5707.7 | 5348.8 | 5009.5 | 4747.1 | 4558.6 | 4447.1 | 4380.0 | 4350.5 |
| 65° | 5506.4 | 5081.2 | 4695.2 | 4405.6 | 4195.2 | 4070.8 | 3997.6 | 3966.0 |
| 67.5° | 4944.0 | 4568.4 | 4148.5 | 3860.4 | 3644.0 | 3521.2 | 3442.0 | 3418.6 |
| 70° | 4144.7 | 3760.9 | 3359.8 | 3102.7 | 2909.6 | 2809.4 | 2727.2 | 2717.4 |
| 72.5° | 3114.8 | 2783.8 | 2439.9 | 2227.3 | 2072.0 | 1906.1 | 1863.8 | 1885.0 |
| 75° | 1996.6 | 1686.7 | 1380.6 | 1189.1 | 1047.3 | 889.0 | 827.9 | 843.0 |
| 77.5° | 945.5 | 732.2 | 528.6 | 408.6 | 343.0 | 293.3 | 280.4 | 272.9 |
| 80° | 350.6 | 284.2 | 251.1 | 238.2 | 229.2 | 220.9 | 214.9 | 208.1 |
| 82.5° | 227.0 | 221.6 | 214.9 | 212.6 | 205.8 | 195.3 | 175.6 | 167.4 |
| 85° | 169.6 | 169.6 | 160.6 | 161.4 | 156.1 | 142.5 | 124.4 | 114.6 |
| 87.5° | 49.8 | 44.5 | 40.7 | 37.7 | 37.0 | 33.2 | 24.1 | 21.1 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)