

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: P821174

Luminaire Tested: **TT-D2-735-24VDC-5CQ-PM**

Issue Date: 5/19/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P821174  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1908-473-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-D2-735-24VDC-5CQ-PM  
Description: TOPTIER LED SITE LUMINAIRE  
3500K, 70 CRI LEDS AND CONCENTRATED DISTRIBUTION  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

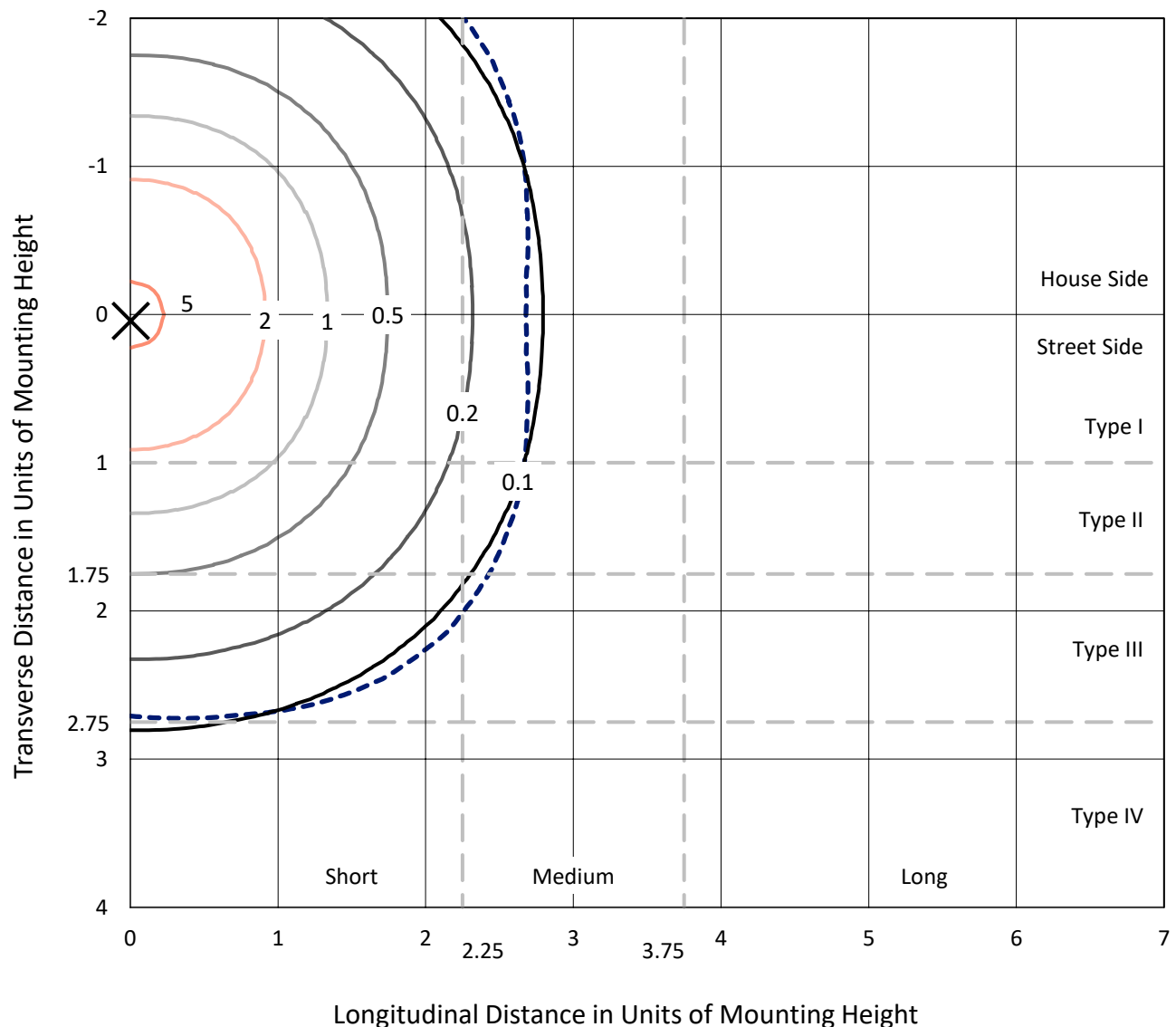
Lumens per Lamp: N/A  
Luminaire Lumens: 4925 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B2 - U0 - G1

Input Watts (W): 38  
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

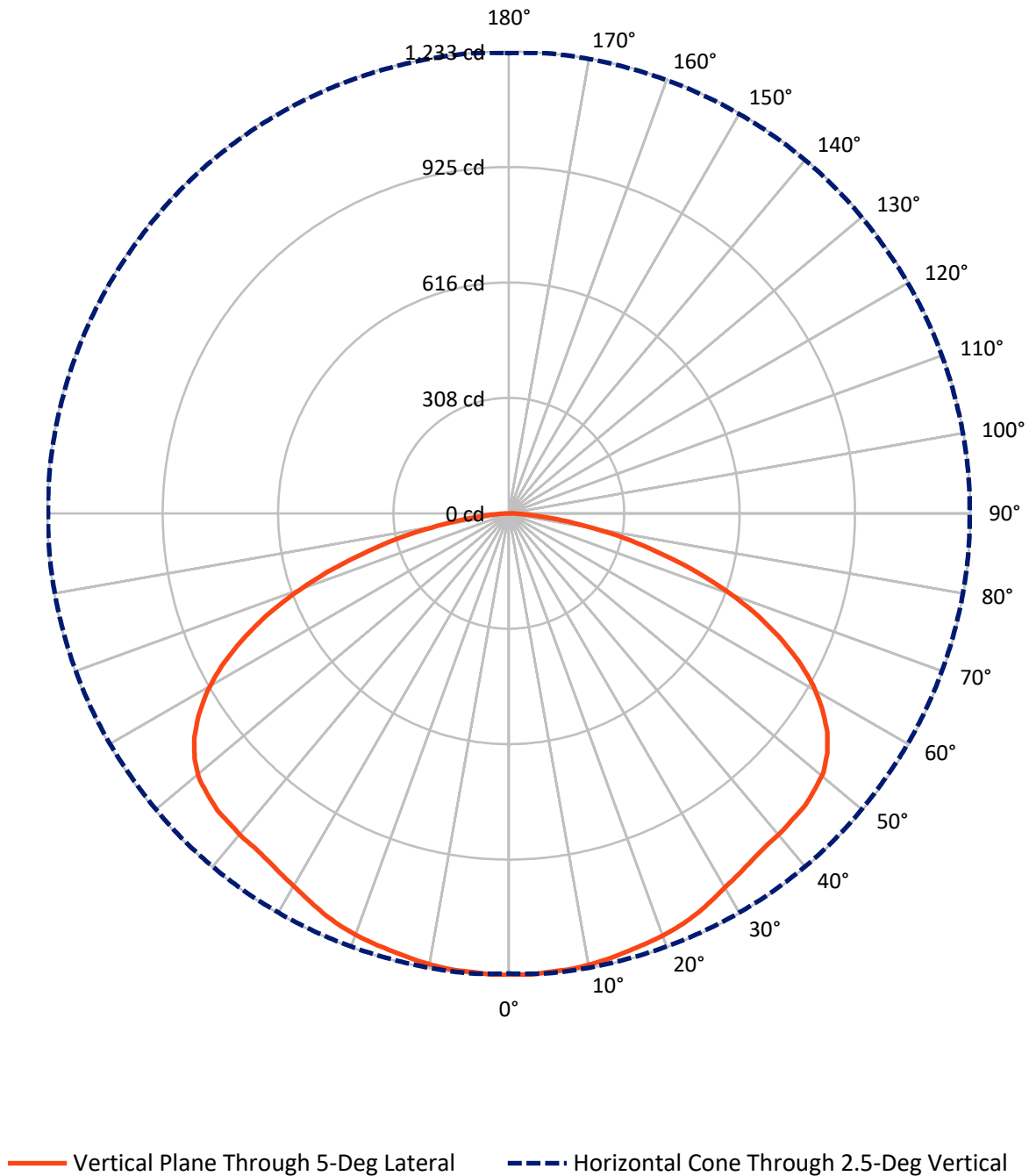
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 5.5 fc  
 Type V - Short - N/A

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## Luminous Intensity Polar Plot



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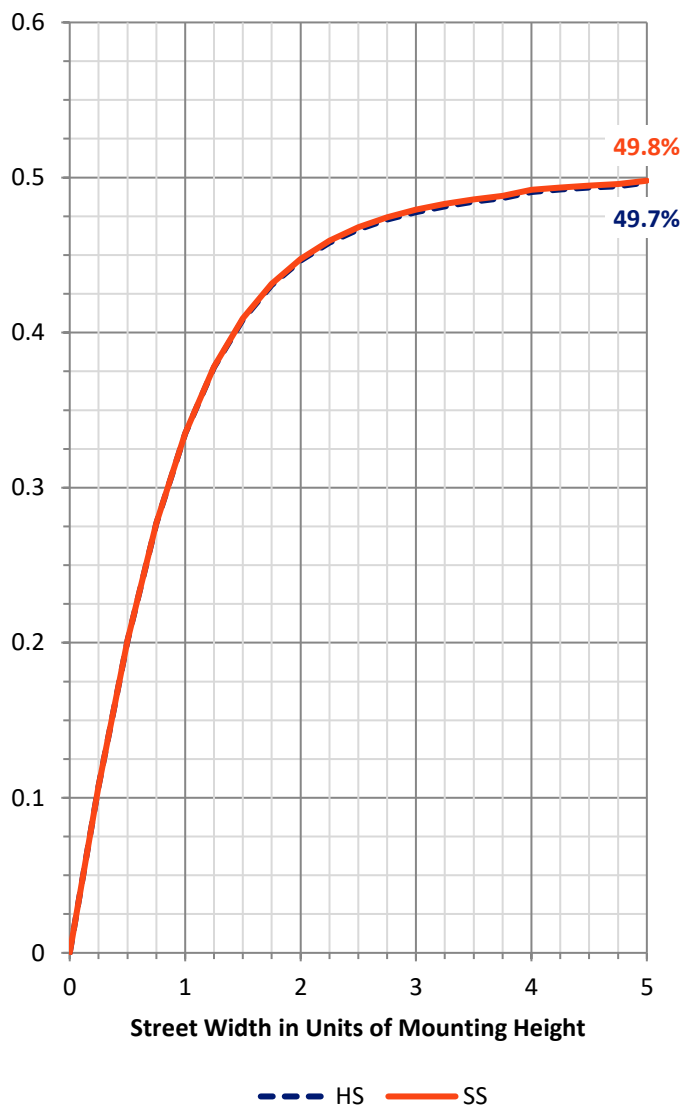
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2462.5   | 0.0    | 2462.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2462.5   | 0.0    | 2462.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 4925.0   | 0.0    | 4925.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 117.2  | 2.4       |
| 10°-20°   | 343.2  | 7.0       |
| 20°-30°   | 545.8  | 11.1      |
| 30°-40°   | 717.9  | 14.6      |
| 40°-50°   | 878.7  | 17.8      |
| 50°-60°   | 951.8  | 19.3      |
| 60°-70°   | 818.8  | 16.6      |
| 70°-80°   | 460.3  | 9.3       |
| 80°-90°   | 91.3   | 1.9       |
| 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°    | 4925.0 | 100.0     |
| 0°-180°   | 4925.0 | 100.0     |

**Coefficient of Utilization**



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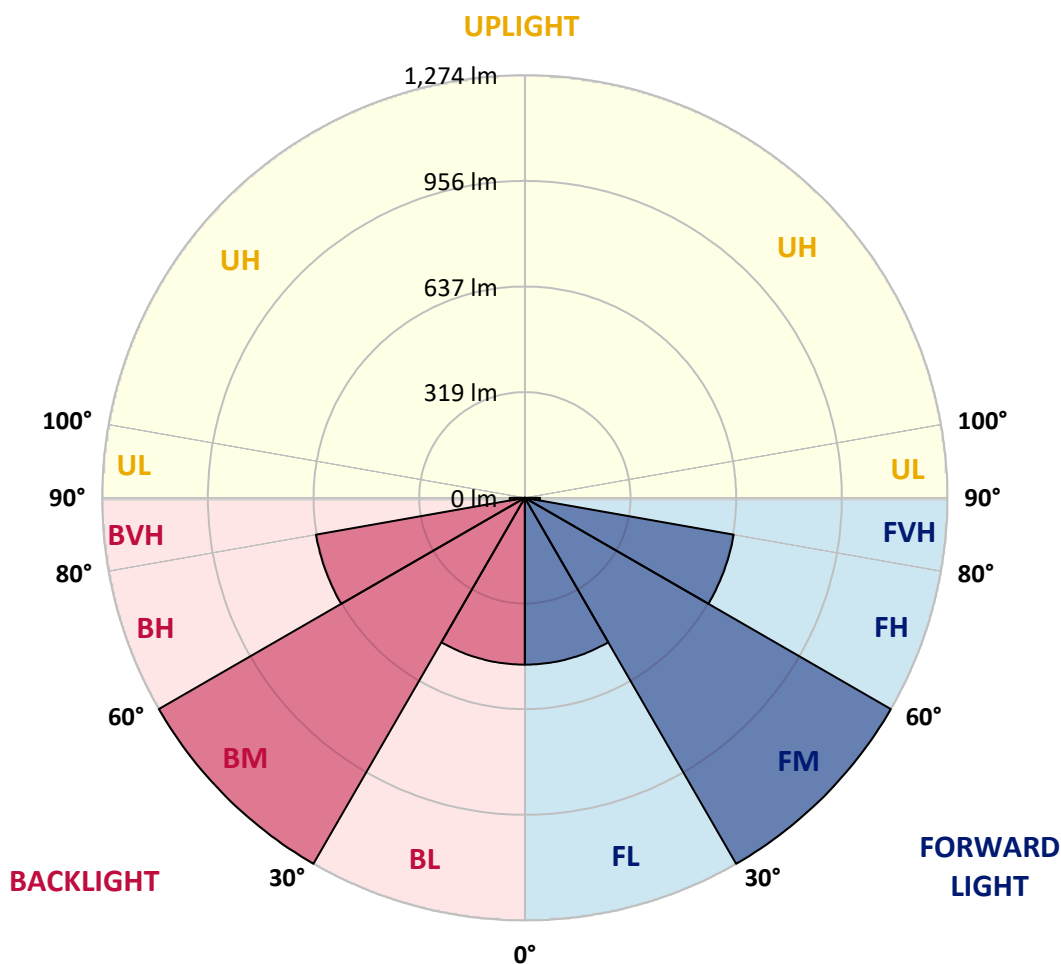
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 503.1  | 10.2      |                         |      |        |
| FM   | (30°-60°)   | 1274.2 | 25.9      |                         |      |        |
| FH   | (60°-80°)   | 639.6  | 13.0      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 45.6   | 0.9       |                         |      | G1/100 |
| BL   | (0°-30°)    | 503.1  | 10.2      | B2/1000                 |      |        |
| BM   | (30°-60°)   | 1274.2 | 25.9      | B2/2500                 |      |        |
| BH   | (60°-80°)   | 639.6  | 13.0      | B2/1000                 |      | G0/660 |
| BVH  | (80°-90°)   | 45.6   | 0.9       |                         |      | G1/100 |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G1**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1232.1 | 1232.1 | 1232.1 | 1232.1 | 1232.1 | 1232.1 | 1232.1 | 1232.1 | 1232.1 | 1232.1 | 1232.1 |
| 2.5°  | 1229.0 | 1232.9 | 1231.3 | 1231.3 | 1231.3 | 1231.3 | 1229.7 | 1231.3 | 1231.3 | 1232.1 | 1231.3 |
| 5°    | 1229.7 | 1229.0 | 1229.0 | 1229.7 | 1229.7 | 1230.5 | 1229.0 | 1229.7 | 1230.5 | 1230.5 | 1231.3 |
| 7.5°  | 1227.4 | 1228.2 | 1226.6 | 1228.2 | 1226.6 | 1227.4 | 1227.4 | 1228.2 | 1227.4 | 1228.2 | 1229.7 |
| 10°   | 1222.7 | 1223.5 | 1222.7 | 1222.7 | 1222.7 | 1224.3 | 1221.1 | 1223.5 | 1222.7 | 1223.5 | 1222.7 |
| 12.5° | 1214.1 | 1218.0 | 1216.4 | 1218.0 | 1218.0 | 1218.0 | 1215.6 | 1217.2 | 1218.0 | 1218.0 | 1218.0 |
| 15°   | 1210.1 | 1210.9 | 1208.6 | 1211.7 | 1212.5 | 1213.3 | 1210.1 | 1211.7 | 1211.7 | 1212.5 | 1213.3 |
| 17.5° | 1201.5 | 1205.4 | 1204.7 | 1207.0 | 1206.2 | 1208.6 | 1207.8 | 1207.0 | 1206.2 | 1207.8 | 1206.2 |
| 20°   | 1195.3 | 1199.2 | 1198.4 | 1200.7 | 1201.5 | 1203.9 | 1201.5 | 1201.5 | 1199.2 | 1200.0 | 1202.3 |
| 22.5° | 1189.0 | 1190.6 | 1190.6 | 1192.9 | 1192.9 | 1195.3 | 1192.9 | 1192.1 | 1192.1 | 1191.3 | 1193.7 |
| 25°   | 1178.8 | 1179.6 | 1178.8 | 1181.1 | 1182.7 | 1184.3 | 1183.5 | 1181.9 | 1181.1 | 1181.1 | 1180.4 |
| 27.5° | 1162.3 | 1165.5 | 1167.0 | 1170.2 | 1171.0 | 1173.3 | 1170.2 | 1170.2 | 1168.6 | 1167.0 | 1167.8 |
| 30°   | 1149.8 | 1151.4 | 1151.4 | 1158.4 | 1158.4 | 1162.3 | 1158.4 | 1157.6 | 1156.8 | 1156.1 | 1154.5 |
| 32.5° | 1138.0 | 1140.4 | 1142.7 | 1148.2 | 1152.1 | 1153.7 | 1151.4 | 1149.8 | 1145.9 | 1143.5 | 1142.7 |
| 35°   | 1128.6 | 1129.4 | 1134.1 | 1142.0 | 1146.7 | 1150.6 | 1147.4 | 1143.5 | 1138.0 | 1134.1 | 1137.3 |
| 37.5° | 1121.6 | 1122.4 | 1129.4 | 1139.6 | 1148.2 | 1151.4 | 1146.7 | 1140.4 | 1131.8 | 1127.1 | 1125.5 |
| 40°   | 1115.3 | 1120.0 | 1127.8 | 1142.0 | 1151.4 | 1156.1 | 1152.1 | 1143.5 | 1131.0 | 1121.6 | 1120.8 |
| 42.5° | 1112.2 | 1114.5 | 1126.3 | 1142.7 | 1156.1 | 1162.3 | 1156.8 | 1145.1 | 1129.4 | 1118.4 | 1117.7 |
| 45°   | 1104.3 | 1111.4 | 1122.4 | 1143.5 | 1158.4 | 1166.3 | 1158.4 | 1143.5 | 1124.7 | 1112.2 | 1109.8 |
| 47.5° | 1098.1 | 1100.4 | 1117.7 | 1142.0 | 1160.0 | 1166.3 | 1158.4 | 1139.6 | 1116.1 | 1099.6 | 1098.1 |
| 50°   | 1083.2 | 1088.7 | 1105.9 | 1131.8 | 1152.9 | 1159.2 | 1149.8 | 1124.7 | 1098.1 | 1080.0 | 1076.9 |
| 52.5° | 1060.4 | 1065.1 | 1085.5 | 1117.7 | 1138.0 | 1145.1 | 1131.0 | 1104.3 | 1073.0 | 1051.0 | 1051.0 |
| 55°   | 1025.2 | 1032.2 | 1053.4 | 1086.3 | 1112.2 | 1118.4 | 1102.0 | 1073.8 | 1038.5 | 1016.6 | 1015.8 |
| 57.5° | 982.9  | 987.6  | 1010.3 | 1046.3 | 1071.4 | 1080.8 | 1064.4 | 1033.0 | 997.7  | 971.9  | 969.5  |
| 60°   | 928.0  | 934.3  | 958.6  | 993.0  | 1018.9 | 1026.7 | 1012.6 | 981.3  | 945.2  | 917.8  | 917.8  |
| 62.5° | 862.2  | 869.2  | 893.5  | 928.8  | 955.4  | 967.2  | 947.6  | 917.8  | 880.2  | 853.5  | 851.2  |
| 65°   | 785.3  | 791.6  | 813.6  | 850.4  | 877.8  | 886.4  | 871.6  | 840.2  | 804.2  | 779.1  | 776.7  |
| 67.5° | 699.1  | 707.7  | 729.7  | 761.0  | 784.6  | 795.5  | 786.1  | 757.9  | 720.3  | 694.4  | 692.1  |
| 70°   | 605.9  | 612.1  | 629.4  | 658.4  | 685.0  | 692.9  | 678.7  | 659.9  | 624.7  | 601.2  | 598.0  |
| 72.5° | 506.3  | 511.8  | 525.9  | 553.3  | 572.2  | 582.3  | 574.5  | 550.2  | 522.0  | 502.4  | 505.5  |
| 75°   | 406.0  | 405.2  | 420.9  | 440.5  | 457.7  | 464.8  | 459.3  | 443.6  | 417.8  | 401.3  | 400.5  |
| 77.5° | 305.7  | 313.5  | 319.0  | 335.5  | 349.6  | 355.0  | 347.2  | 334.7  | 315.1  | 301.8  | 304.1  |
| 80°   | 214.8  | 210.1  | 220.2  | 230.4  | 239.8  | 245.3  | 240.6  | 233.6  | 220.2  | 210.1  | 208.5  |
| 82.5° | 131.7  | 127.8  | 132.5  | 141.9  | 148.1  | 149.7  | 150.5  | 141.9  | 136.4  | 128.5  | 130.1  |
| 85°   | 58.0   | 58.8   | 62.7   | 69.0   | 69.8   | 70.5   | 70.5   | 69.0   | 62.7   | 61.9   | 60.4   |
| 87.5° | 14.1   | 14.1   | 14.9   | 17.2   | 17.2   | 18.0   | 18.0   | 15.7   | 14.9   | 13.3   | 14.1   |
| 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)