

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: P832647

Luminaire Tested: **TTN-D2-830-U-MQ-CG**

Issue Date: 5/14/2024

Test Information

Test Method: LM-79-08
Report Number: P832647
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2312-254-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TTN-D2-830-U-MQ-CG
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE
3000K, 80 CRI LEDS AND MEDIUM DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4802.9 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Luminous Opening: Circular (Dia: 0.71' x H: 0')
IES Classification: Type V - Short
BUG Rating: B2 - U0 - G1

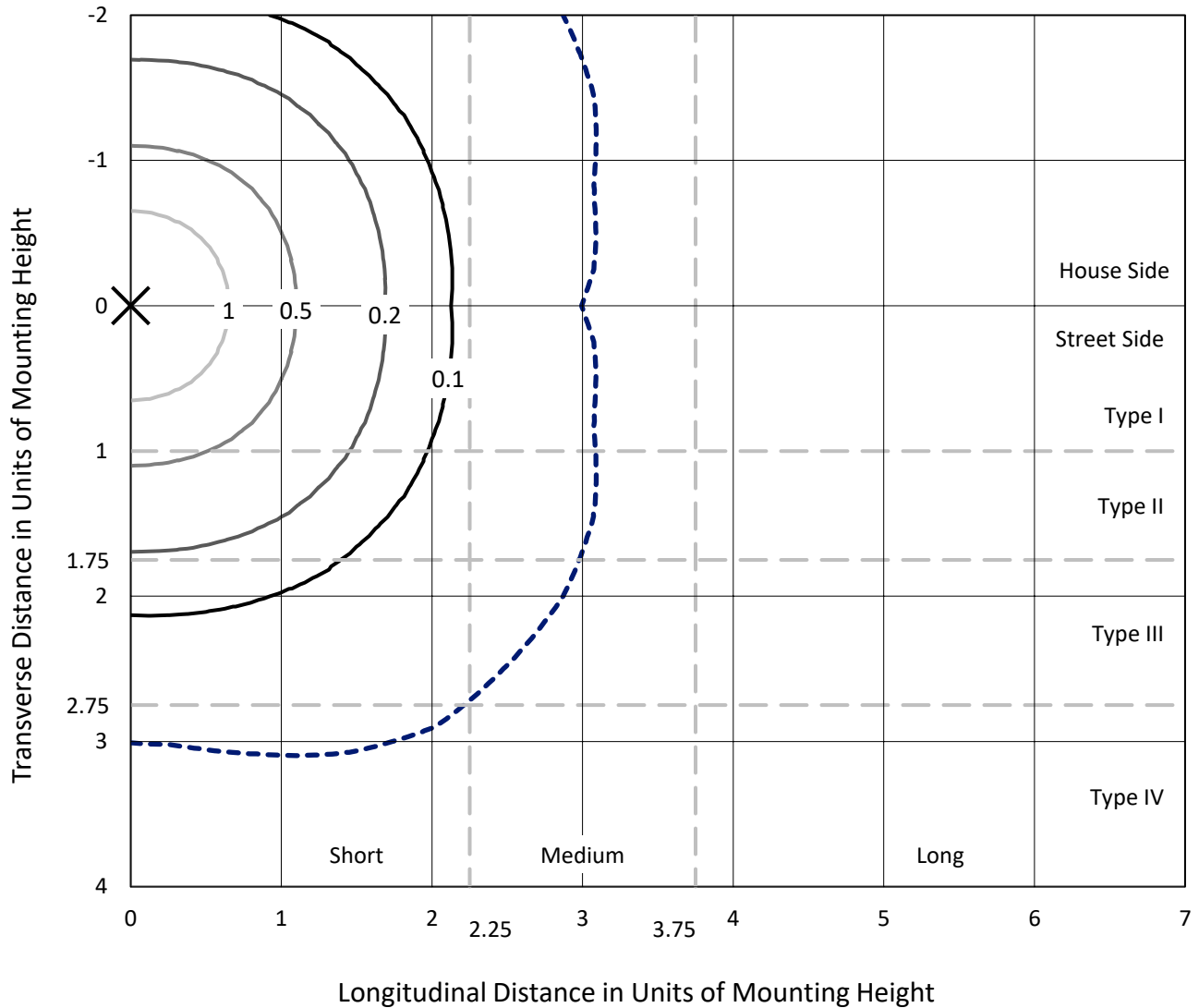
Input Watts (W): 42.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

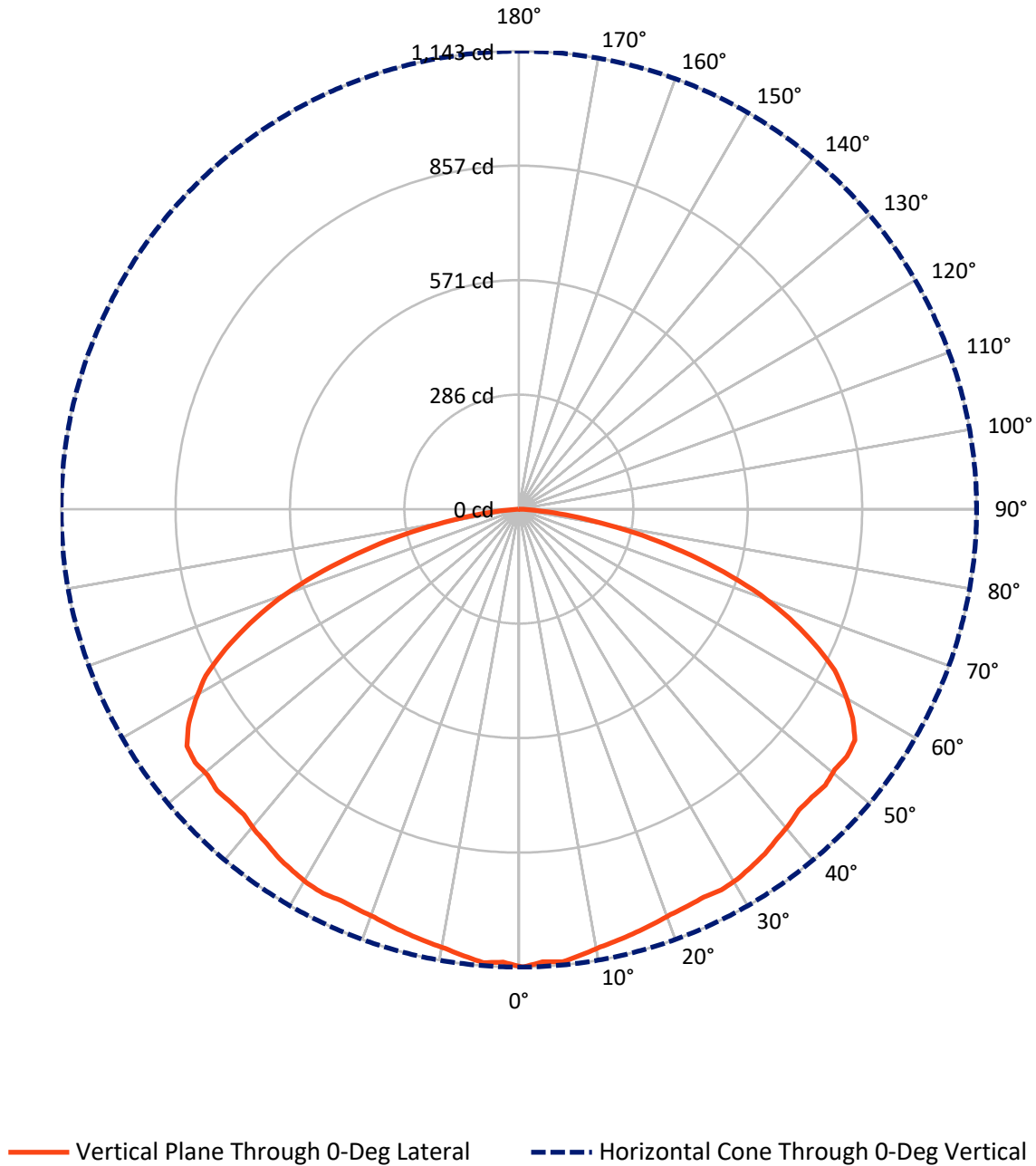
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.8 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



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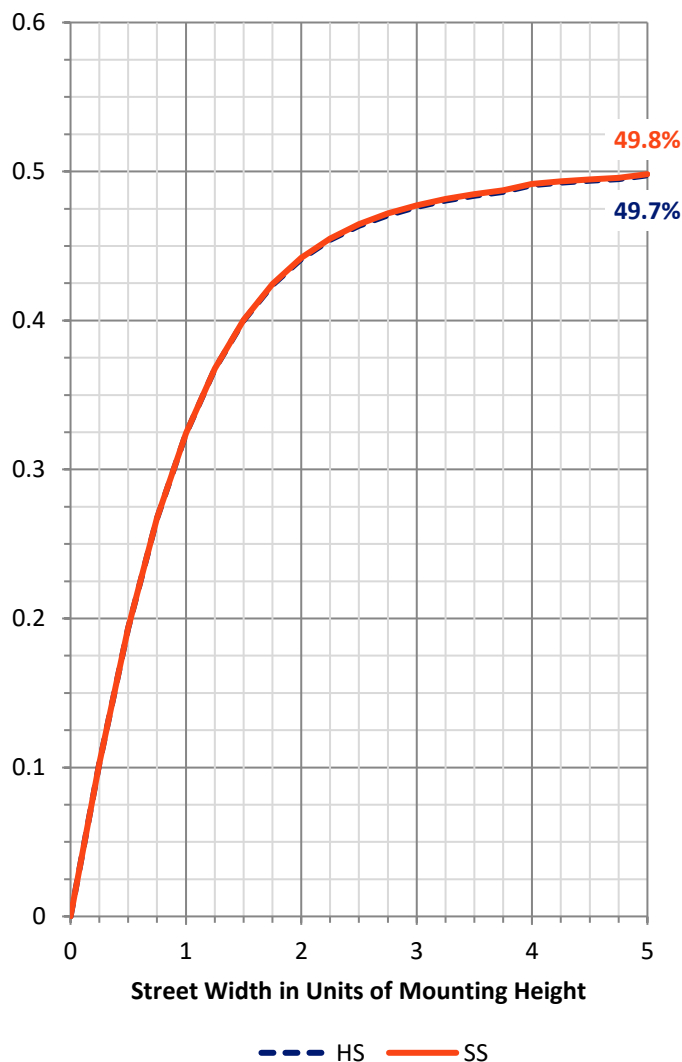
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 2401.5 | 0.0 | 2401.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 2401.5 | 0.0 | 2401.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 4802.9 | 0.0 | 4802.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 107.3 | 2.2 |
| 10°-20° | 310.4 | 6.5 |
| 20°-30° | 499.3 | 10.4 |
| 30°-40° | 667.1 | 13.9 |
| 40°-50° | 810.5 | 16.9 |
| 50°-60° | 941.7 | 19.6 |
| 60°-70° | 868.8 | 18.1 |
| 70°-80° | 508.6 | 10.6 |
| 80°-90° | 89.1 | 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° | 4802.9 | 100.0 |
| 0°-180° | 4802.9 | 100.0 |

Coefficient of Utilization



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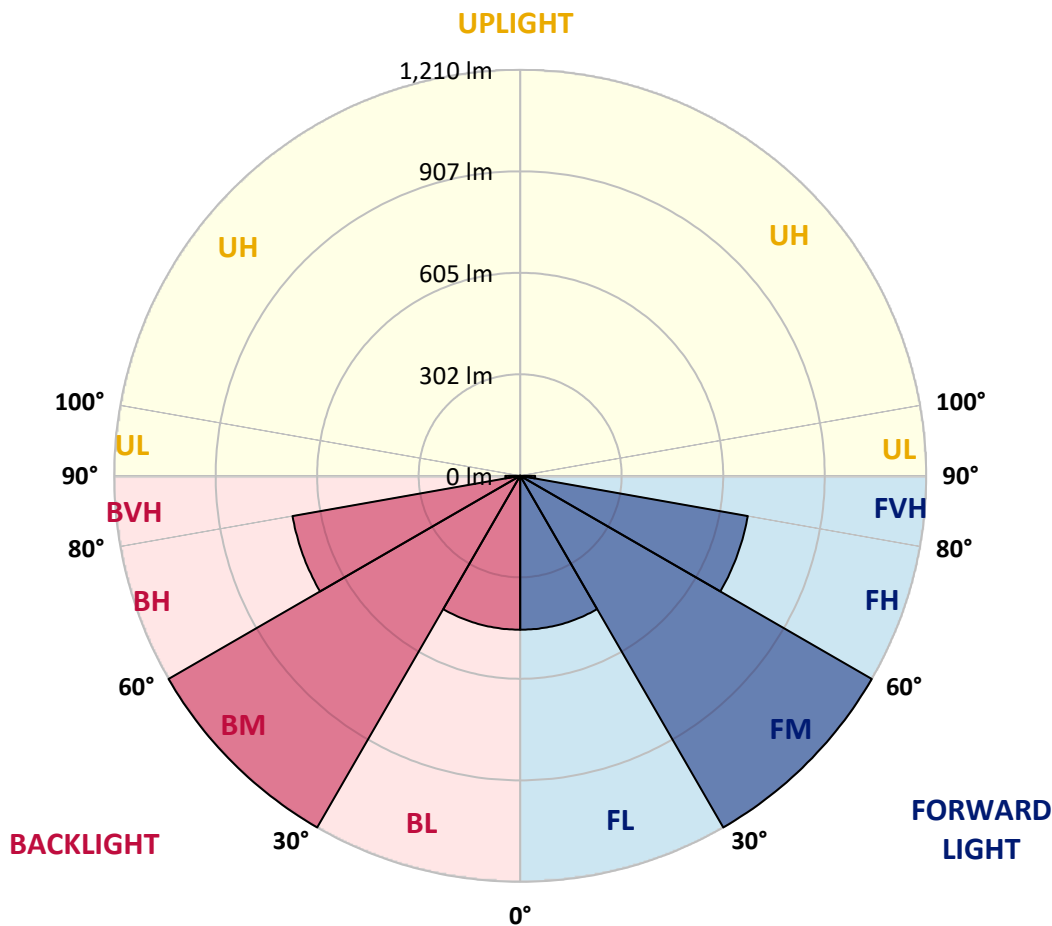
CATALOG NUMBER: TTN-D2-830-U-MQ-CG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 458.5 | 9.5 | | | |
| FM (30°-60°) | 1209.6 | 25.2 | | | |
| FH (60°-80°) | 688.7 | 14.3 | | | G1/1800 |
| FVH (80°-90°) | 44.6 | 0.9 | | | G1/100 |
| BL (0°-30°) | 458.5 | 9.5 | B1/500 | | |
| BM (30°-60°) | 1209.6 | 25.2 | B2/2500 | | |
| BH (60°-80°) | 688.7 | 14.3 | B2/1000 | | G1/1800 |
| BVH (80°-90°) | 44.6 | 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° | 1142.6 | 1142.6 | 1142.6 | 1142.6 | 1142.6 | 1142.6 | 1142.6 | 1142.6 | 1142.6 | 1142.6 | 1142.6 |
| 2.5° | 1130.9 | 1134.8 | 1130.9 | 1130.9 | 1130.9 | 1130.9 | 1130.9 | 1130.9 | 1130.9 | 1130.9 | 1134.8 |
| 5° | 1134.8 | 1134.8 | 1134.8 | 1134.8 | 1130.9 | 1130.9 | 1130.9 | 1130.9 | 1130.9 | 1134.8 | 1134.8 |
| 7.5° | 1123.1 | 1123.1 | 1123.1 | 1123.1 | 1123.1 | 1119.2 | 1123.1 | 1123.1 | 1123.1 | 1123.1 | 1123.1 |
| 10° | 1111.4 | 1111.4 | 1111.4 | 1111.4 | 1111.4 | 1111.4 | 1111.4 | 1111.4 | 1111.4 | 1111.4 | 1111.4 |
| 12.5° | 1103.6 | 1103.6 | 1103.6 | 1103.6 | 1103.6 | 1103.6 | 1103.6 | 1103.6 | 1103.6 | 1099.7 | 1099.7 |
| 15° | 1095.8 | 1095.8 | 1095.8 | 1095.8 | 1099.7 | 1099.7 | 1095.8 | 1095.8 | 1095.8 | 1095.8 | 1095.8 |
| 17.5° | 1088.0 | 1088.0 | 1088.0 | 1088.0 | 1091.9 | 1091.9 | 1091.9 | 1088.0 | 1088.0 | 1088.0 | 1088.0 |
| 20° | 1080.2 | 1080.2 | 1080.2 | 1080.2 | 1084.1 | 1084.1 | 1084.1 | 1084.1 | 1084.1 | 1080.2 | 1080.2 |
| 22.5° | 1076.3 | 1076.3 | 1076.3 | 1076.3 | 1080.2 | 1080.2 | 1080.2 | 1080.2 | 1076.3 | 1076.3 | 1076.3 |
| 25° | 1072.4 | 1076.3 | 1076.3 | 1076.3 | 1080.2 | 1084.1 | 1084.1 | 1080.2 | 1076.3 | 1072.4 | 1072.4 |
| 27.5° | 1076.3 | 1076.3 | 1076.3 | 1080.2 | 1080.2 | 1084.1 | 1084.1 | 1080.2 | 1076.3 | 1076.3 | 1076.3 |
| 30° | 1072.4 | 1072.4 | 1072.4 | 1076.3 | 1080.2 | 1084.1 | 1080.2 | 1080.2 | 1076.3 | 1072.4 | 1072.4 |
| 32.5° | 1064.6 | 1064.6 | 1068.5 | 1072.4 | 1076.3 | 1076.3 | 1076.3 | 1072.4 | 1068.5 | 1064.6 | 1064.6 |
| 35° | 1056.8 | 1056.8 | 1056.8 | 1060.7 | 1068.5 | 1068.5 | 1068.5 | 1064.6 | 1060.7 | 1056.8 | 1052.9 |
| 37.5° | 1045.1 | 1049.0 | 1049.0 | 1056.8 | 1060.7 | 1064.6 | 1060.7 | 1056.8 | 1049.0 | 1045.1 | 1045.1 |
| 40° | 1037.3 | 1037.3 | 1041.2 | 1049.0 | 1056.8 | 1056.8 | 1052.9 | 1049.0 | 1041.2 | 1037.3 | 1037.3 |
| 42.5° | 1025.6 | 1025.6 | 1033.4 | 1041.2 | 1052.9 | 1052.9 | 1049.0 | 1041.2 | 1033.4 | 1025.6 | 1025.6 |
| 45° | 1025.6 | 1025.6 | 1033.4 | 1049.0 | 1056.8 | 1064.6 | 1056.8 | 1049.0 | 1033.4 | 1025.6 | 1021.7 |
| 47.5° | 1029.5 | 1029.5 | 1037.3 | 1056.8 | 1072.4 | 1080.2 | 1068.5 | 1052.9 | 1037.3 | 1029.5 | 1025.6 |
| 50° | 1021.7 | 1025.6 | 1041.2 | 1060.7 | 1080.2 | 1084.1 | 1080.2 | 1056.8 | 1041.2 | 1021.7 | 1021.7 |
| 52.5° | 1025.6 | 1025.6 | 1045.1 | 1076.3 | 1095.8 | 1103.6 | 1095.8 | 1076.3 | 1041.2 | 1021.7 | 1021.7 |
| 55° | 1017.8 | 1013.9 | 1041.2 | 1076.3 | 1107.5 | 1123.1 | 1107.5 | 1076.3 | 1037.3 | 1013.9 | 1010.0 |
| 57.5° | 982.7 | 982.7 | 1017.8 | 1052.9 | 1091.9 | 1099.7 | 1088.0 | 1052.9 | 1013.9 | 982.7 | 974.9 |
| 60° | 935.9 | 939.8 | 974.9 | 1013.9 | 1049.0 | 1052.9 | 1045.1 | 1013.9 | 974.9 | 939.8 | 928.1 |
| 62.5° | 885.2 | 893.0 | 928.1 | 967.1 | 1010.0 | 1017.8 | 1006.1 | 967.1 | 920.3 | 896.9 | 877.4 |
| 65° | 811.1 | 822.8 | 861.8 | 904.7 | 951.5 | 947.6 | 947.6 | 900.8 | 865.7 | 826.7 | 807.2 |
| 67.5° | 729.3 | 741.0 | 768.2 | 826.7 | 865.7 | 861.8 | 857.9 | 826.7 | 768.2 | 741.0 | 729.3 |
| 70° | 639.6 | 647.4 | 674.7 | 733.2 | 768.2 | 772.1 | 760.4 | 729.3 | 674.7 | 655.2 | 635.7 |
| 72.5° | 534.3 | 538.2 | 577.2 | 624.0 | 659.1 | 655.2 | 651.3 | 624.0 | 573.3 | 553.8 | 530.4 |
| 75° | 421.2 | 425.1 | 460.2 | 503.1 | 530.4 | 526.5 | 522.6 | 503.1 | 460.2 | 436.8 | 417.3 |
| 77.5° | 315.9 | 312.0 | 347.1 | 378.3 | 393.9 | 397.8 | 390.0 | 374.4 | 343.2 | 323.7 | 312.0 |
| 80° | 206.7 | 202.8 | 234.0 | 257.4 | 269.1 | 269.1 | 265.2 | 253.5 | 230.1 | 214.5 | 206.7 |
| 82.5° | 117.0 | 113.1 | 132.6 | 148.2 | 159.9 | 156.0 | 152.1 | 144.3 | 132.6 | 120.9 | 113.1 |
| 85° | 42.9 | 42.9 | 54.6 | 62.4 | 70.2 | 70.2 | 66.3 | 62.4 | 50.7 | 46.8 | 42.9 |
| 87.5° | 3.9 | 3.9 | 7.8 | 11.7 | 11.7 | 11.7 | 7.8 | 7.8 | 3.9 | 3.9 | 3.9 |
| 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)