

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: P651488

Luminaire Tested: **GALN-SA7D-840-U-5MQ-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651488
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-3)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA7D-840-U-5MQ-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(7) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
MEDIUM OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27195.4 lumens
Efficiency: N/A
Efficacy: 62.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G1

Input Watts (W): 433
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

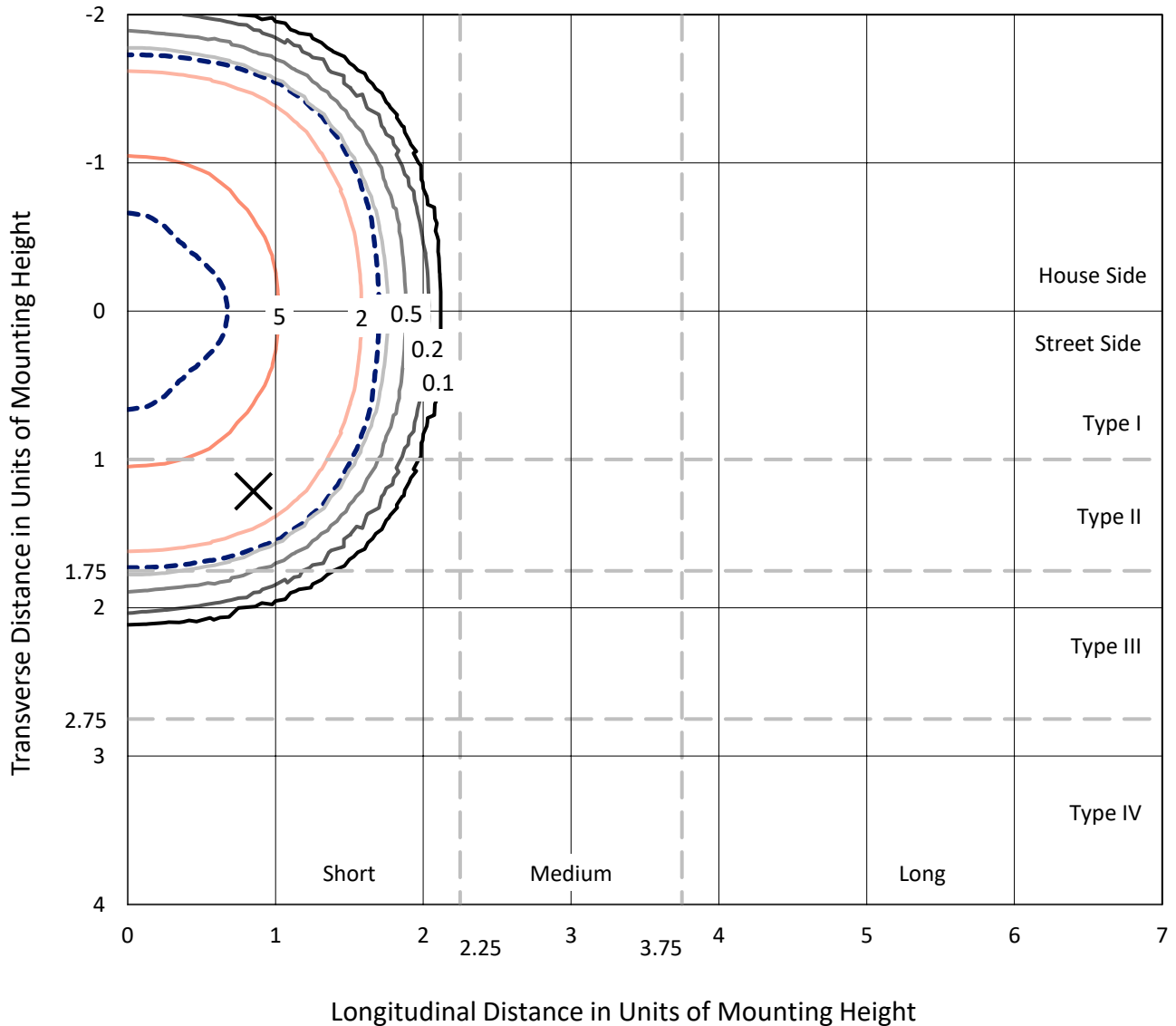




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Iso-Footcandle Lines of Horizontal Illumination

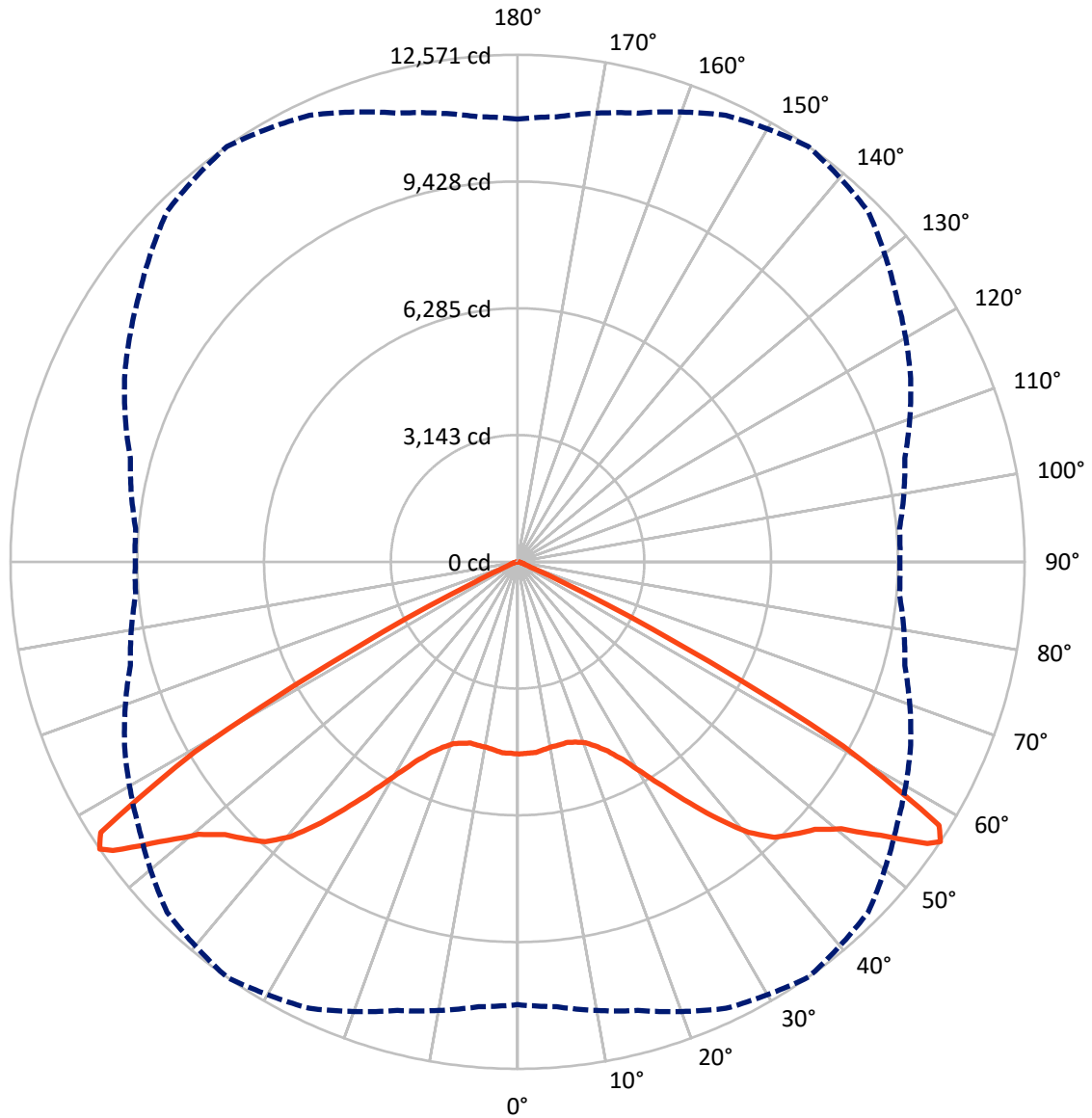
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 56-Deg Vertical

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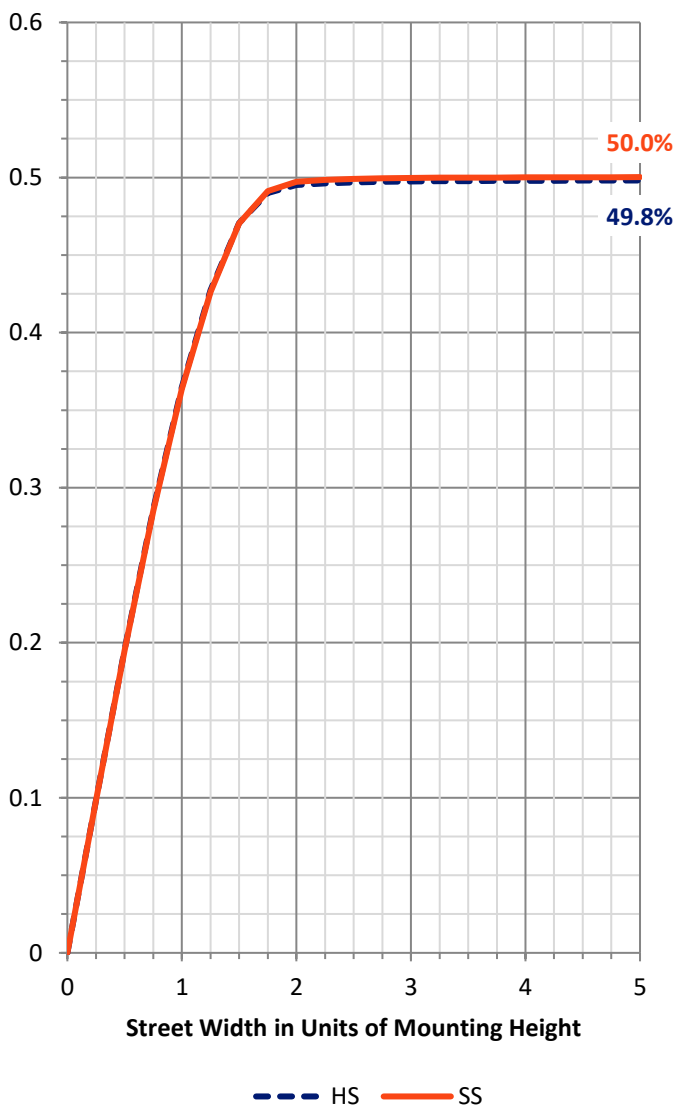
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 13597.7 | 0.0 | 13597.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 13597.7 | 0.0 | 13597.7 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 27195.4 | 0.0 | 27195.4 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 447.9 | 1.6 |
| 10°-20° | 1307.5 | 4.8 |
| 20°-30° | 2367.7 | 8.7 |
| 30°-40° | 4390.7 | 16.1 |
| 40°-50° | 7207.0 | 26.5 |
| 50°-60° | 9284.7 | 34.1 |
| 60°-70° | 2046.2 | 7.5 |
| 70°-80° | 118.7 | 0.4 |
| 80°-90° | 25.0 | 0.1 |
| 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° | 27195.4 | 100.0 |
| 0°-180° | 27195.4 | 100.0 |

Coefficient of Utilization

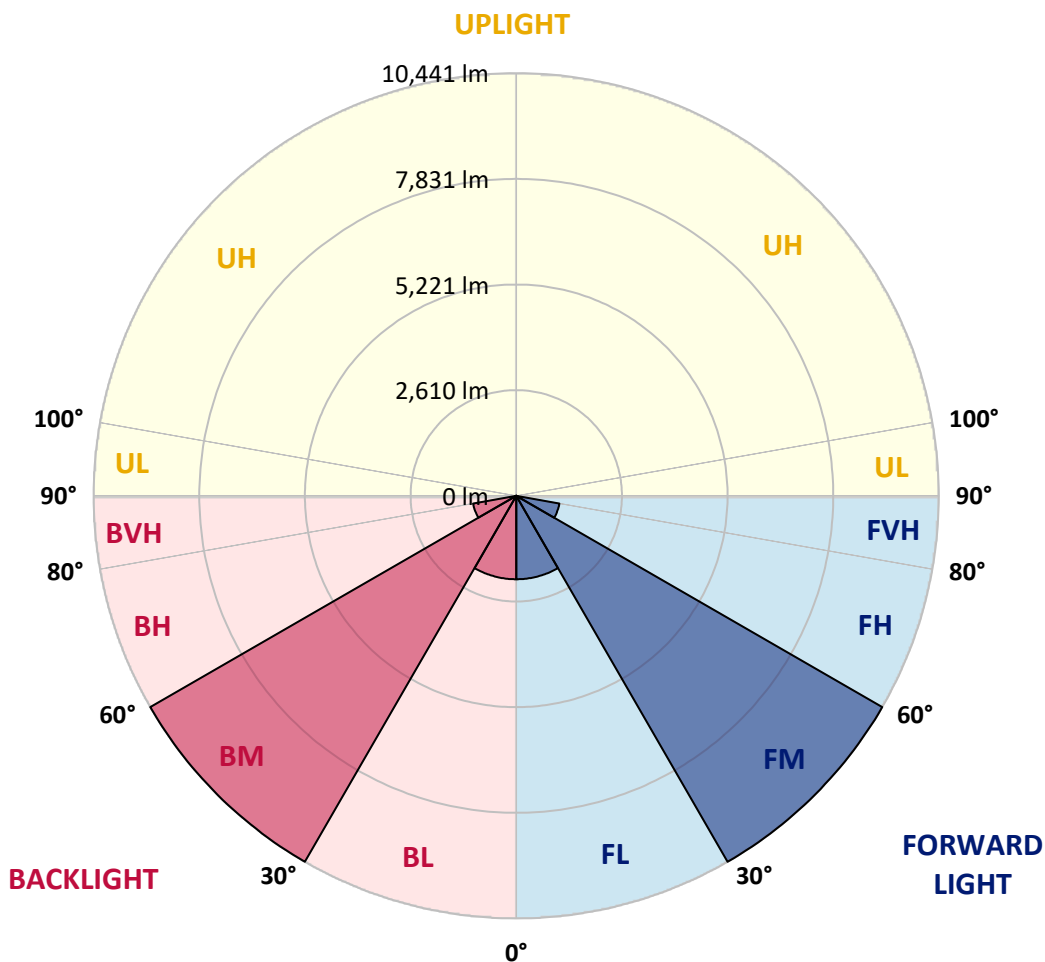


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2061.6 | 7.6 | | | |
| FM (30°-60°) | 10441.2 | 38.4 | | | |
| FH (60°-80°) | 1082.5 | 4.0 | | | G1/1800 |
| FVH (80°-90°) | 12.5 | 0.0 | | | G1/100 |
| BL (0°-30°) | 2061.6 | 7.6 | B3/2500 | | |
| BM (30°-60°) | 10441.2 | 38.4 | B5 | | |
| BH (60°-80°) | 1082.5 | 4.0 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 12.5 | 0.0 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|
| 0° | 4765.2 | 4765.2 | 4765.2 | 4765.2 | 4765.2 | 4765.2 | 4765.2 | 4765.2 | 4765.2 | 4765.2 | 4765.2 |
| 2.5° | 4775.1 | 4775.1 | 4780.0 | 4785.0 | 4750.5 | 4735.7 | 4740.5 | 4730.7 | 4725.8 | 4740.5 | 4740.5 |
| 5° | 4760.3 | 4760.3 | 4745.5 | 4750.5 | 4750.5 | 4706.1 | 4706.1 | 4715.9 | 4715.9 | 4686.4 | 4676.5 |
| 7.5° | 4720.9 | 4711.0 | 4691.3 | 4715.9 | 4701.2 | 4701.2 | 4666.6 | 4642.1 | 4632.1 | 4651.9 | 4632.1 |
| 10° | 4637.1 | 4642.1 | 4661.7 | 4671.6 | 4661.7 | 4691.3 | 4632.1 | 4597.7 | 4563.2 | 4548.4 | 4548.4 |
| 12.5° | 4597.7 | 4627.3 | 4597.7 | 4622.3 | 4656.8 | 4632.1 | 4597.7 | 4573.0 | 4523.7 | 4504.1 | 4504.1 |
| 15° | 4592.8 | 4612.5 | 4622.3 | 4656.8 | 4642.1 | 4651.9 | 4582.9 | 4553.3 | 4479.4 | 4444.9 | 4430.1 |
| 17.5° | 4587.8 | 4612.5 | 4627.3 | 4691.3 | 4701.2 | 4706.1 | 4651.9 | 4563.2 | 4499.1 | 4464.6 | 4430.1 |
| 20° | 4642.1 | 4651.9 | 4681.4 | 4745.5 | 4785.0 | 4853.9 | 4755.4 | 4661.7 | 4523.7 | 4484.3 | 4469.6 |
| 22.5° | 4711.0 | 4760.3 | 4789.8 | 4858.9 | 4962.3 | 5021.4 | 4893.4 | 4775.1 | 4632.1 | 4582.9 | 4523.7 |
| 25° | 4932.8 | 4922.9 | 4972.2 | 5115.1 | 5198.9 | 5243.2 | 5139.8 | 4967.3 | 4780.0 | 4720.9 | 4730.7 |
| 27.5° | 5208.7 | 5218.6 | 5262.9 | 5420.7 | 5543.8 | 5612.8 | 5489.6 | 5262.9 | 5080.6 | 4982.1 | 4972.2 |
| 30° | 5568.4 | 5558.6 | 5607.9 | 5819.8 | 6041.5 | 6145.0 | 5928.2 | 5662.1 | 5484.7 | 5356.6 | 5386.1 |
| 32.5° | 5947.9 | 5952.9 | 6090.8 | 6283.0 | 6642.7 | 6844.7 | 6494.9 | 6169.7 | 5903.6 | 5814.8 | 5770.5 |
| 35° | 6509.7 | 6534.3 | 6642.7 | 6938.4 | 7337.6 | 7598.8 | 7214.4 | 6825.1 | 6519.5 | 6357.0 | 6376.6 |
| 37.5° | 7204.5 | 7179.9 | 7362.2 | 7682.5 | 8101.4 | 8293.5 | 7968.3 | 7524.8 | 7214.4 | 7105.9 | 7174.9 |
| 40° | 7943.7 | 7968.3 | 8061.9 | 8352.7 | 8820.8 | 8949.0 | 8466.0 | 8224.6 | 7953.5 | 7899.3 | 7983.1 |
| 42.5° | 8682.8 | 8668.1 | 8737.1 | 8998.2 | 9338.3 | 9249.6 | 8963.7 | 8820.8 | 8628.7 | 8520.3 | 8633.5 |
| 45° | 9224.9 | 9200.3 | 9328.4 | 9505.8 | 9629.0 | 9461.4 | 9333.3 | 9284.1 | 9185.5 | 9067.2 | 9170.7 |
| 47.5° | 9752.2 | 9732.5 | 9855.7 | 9905.0 | 9914.8 | 9693.0 | 9717.7 | 9806.4 | 9560.0 | 9313.7 | 9431.9 |
| 50° | 10200.7 | 10166.2 | 10318.9 | 10427.3 | 10402.7 | 10047.8 | 10136.6 | 10047.8 | 9663.5 | 9372.8 | 9328.4 |
| 52.5° | 10949.7 | 10964.5 | 11127.1 | 11324.1 | 11265.0 | 10969.4 | 10841.2 | 10437.1 | 9944.4 | 9683.2 | 9530.5 |
| 55° | 11422.7 | 11348.8 | 11629.7 | 12255.6 | 12324.5 | 12019.0 | 11452.3 | 10856.0 | 10116.9 | 9796.6 | 9757.1 |
| 56° | 10979.3 | 11072.9 | 11516.4 | 12216.1 | 12570.9 | 12290.0 | 11467.1 | 10752.5 | 9939.4 | 9505.8 | 9476.2 |
| 57.5° | 9850.7 | 9801.4 | 10402.7 | 11358.7 | 12324.5 | 12206.3 | 11063.0 | 10013.4 | 9067.2 | 8579.4 | 8520.3 |
| 60° | 6130.2 | 6273.1 | 6800.4 | 7983.1 | 9274.2 | 9333.3 | 8199.9 | 7298.1 | 6194.3 | 5760.7 | 5864.1 |
| 62.5° | 2399.9 | 2276.7 | 2606.8 | 3488.9 | 4375.9 | 4573.0 | 4144.3 | 3444.6 | 2828.6 | 2399.9 | 2370.3 |
| 65° | 556.8 | 542.0 | 611.1 | 842.7 | 1177.7 | 1365.0 | 1296.0 | 931.3 | 685.0 | 650.5 | 601.2 |
| 67.5° | 315.4 | 315.4 | 300.6 | 300.6 | 330.2 | 349.9 | 335.1 | 330.2 | 345.0 | 359.7 | 354.8 |
| 70° | 221.8 | 216.8 | 207.0 | 211.9 | 202.0 | 202.0 | 216.8 | 241.5 | 261.2 | 261.2 | 266.1 |
| 72.5° | 133.0 | 133.0 | 133.0 | 147.8 | 147.8 | 147.8 | 162.6 | 182.3 | 187.3 | 182.3 | 177.4 |
| 75° | 59.1 | 59.1 | 69.0 | 83.8 | 93.6 | 98.6 | 113.4 | 123.2 | 133.0 | 123.2 | 113.4 |
| 77.5° | 14.8 | 14.8 | 24.6 | 34.5 | 44.3 | 54.2 | 73.9 | 88.7 | 93.6 | 88.7 | 73.9 |
| 80° | 5.0 | 5.0 | 9.8 | 24.6 | 44.3 | 54.2 | 73.9 | 78.9 | 83.8 | 73.9 | 59.1 |
| 82.5° | 5.0 | 5.0 | 9.8 | 24.6 | 34.5 | 44.3 | 59.1 | 69.0 | 73.9 | 64.1 | 59.1 |
| 85° | 0.0 | 5.0 | 9.8 | 19.7 | 29.6 | 39.4 | 39.4 | 29.6 | 24.6 | 14.8 | 19.7 |
| 87.5° | 0.0 | 0.0 | 5.0 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)