

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: P651324

Luminaire Tested: **GALN-SA4D-840-U-5MQ-GRSWH**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P651324
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-4)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4D-840-U-5MQ-GRSWH
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
MEDIUM OPTICS WITH WHITE GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22717.1 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G1

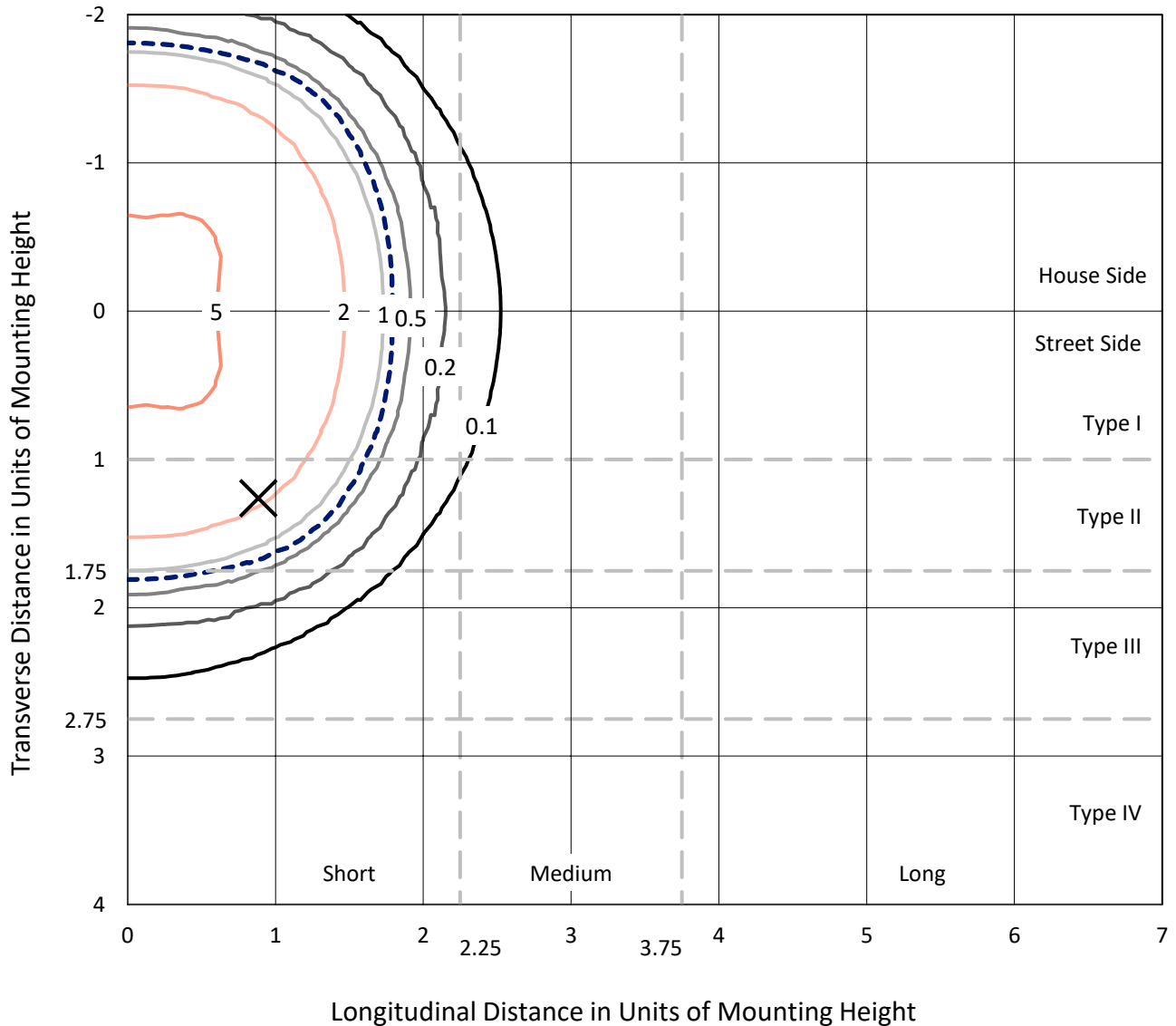
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P651324
 CATALOG NUMBER: GALN-SA4D-840-U-5MQ-GRSWH

Iso-Footcandle Lines of Horizontal Illumination

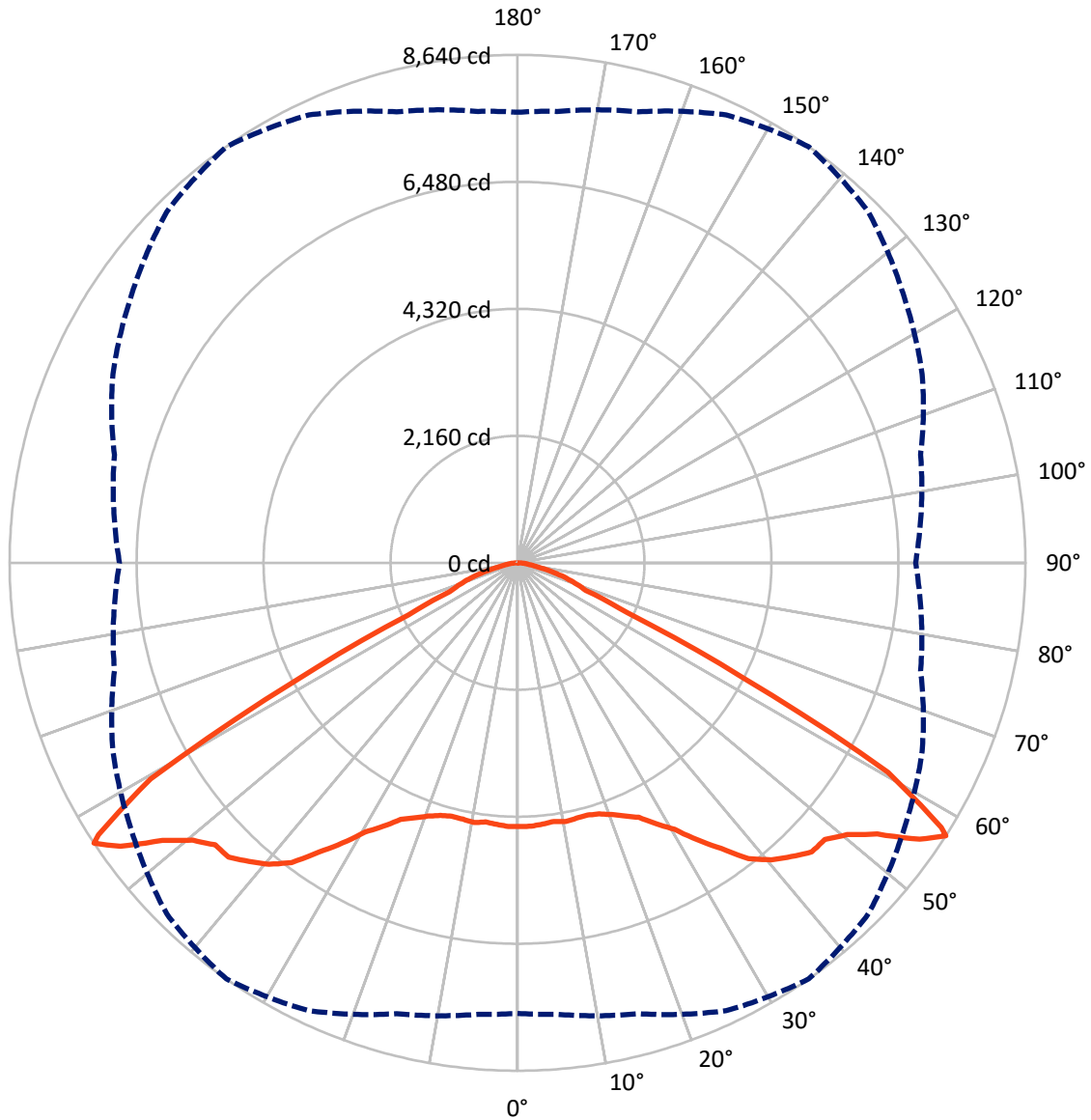
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type V - Short - N/A

REPORT NUMBER: P651324
CATALOG NUMBER: GALN-SA4D-840-U-5MQ-GRSWH

Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 57-Deg Vertical

REPORT NUMBER: P651324
 CATALOG NUMBER: GALN-SA4D-840-U-5MQ-GRSWH

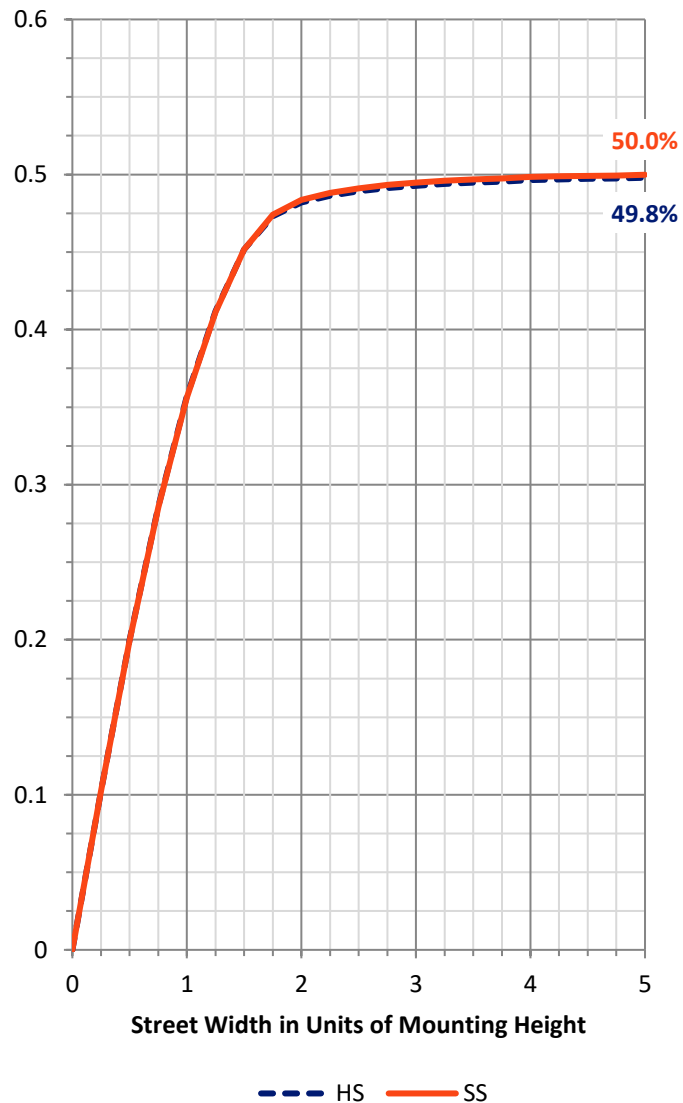
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 11358.6 | 0.0 | 11358.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 11358.6 | 0.0 | 11358.6 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 22717.1 | 0.0 | 22717.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 425.3 | 1.9 |
| 10°-20° | 1259.7 | 5.5 |
| 20°-30° | 2200.1 | 9.7 |
| 30°-40° | 3604.9 | 15.9 |
| 40°-50° | 5285.6 | 23.3 |
| 50°-60° | 6657.7 | 29.3 |
| 60°-70° | 2503.9 | 11.0 |
| 70°-80° | 665.8 | 2.9 |
| 80°-90° | 114.2 | 0.5 |
| 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° | 22717.1 | 100.0 |
| 0°-180° | 22717.1 | 100.0 |

Coefficient of Utilization



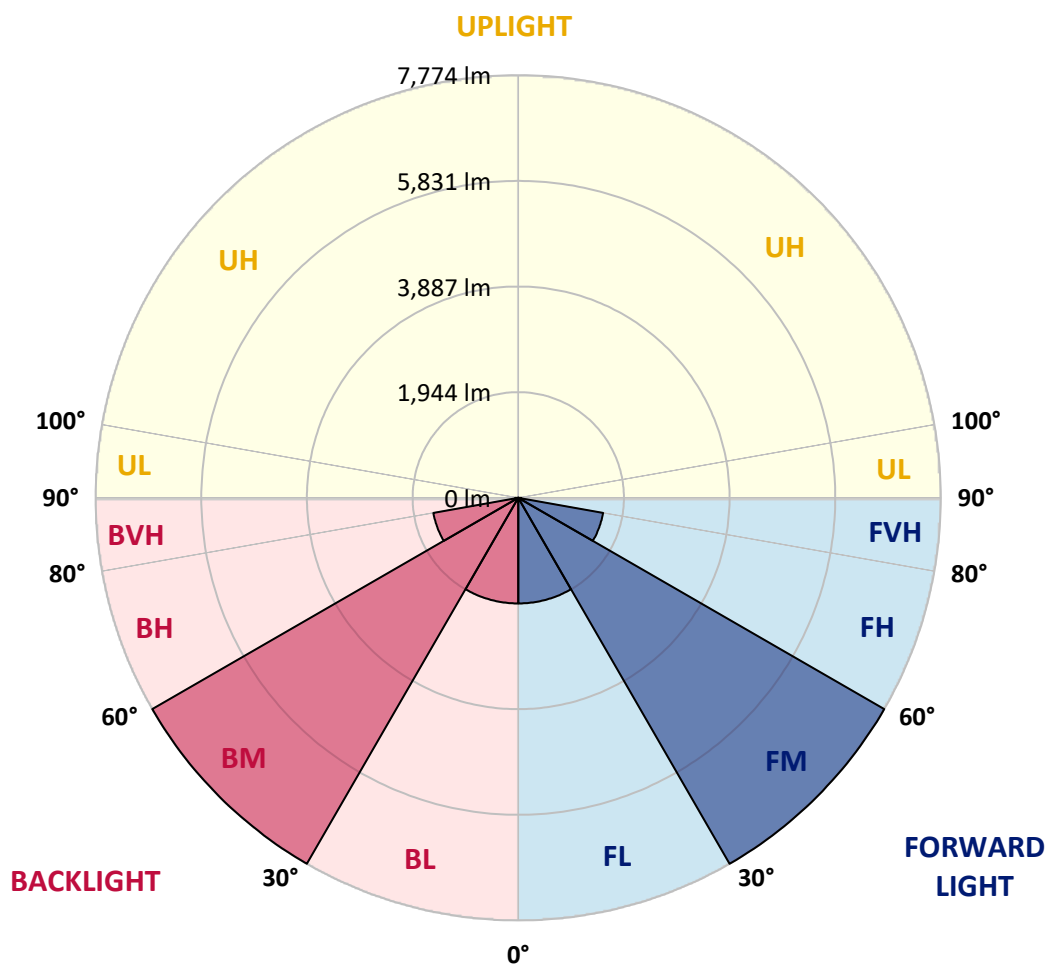
REPORT NUMBER: P651324
 CATALOG NUMBER: GALN-SA4D-840-U-5MQ-GRSWH

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1942.6 | 8.6 | | | |
| FM (30°-60°) | 7774.1 | 34.2 | | | |
| FH (60°-80°) | 1584.8 | 7.0 | | | G1/1800 |
| FVH (80°-90°) | 57.1 | 0.3 | | | G1/100 |
| BL (0°-30°) | 1942.6 | 8.6 | B3/2500 | | |
| BM (30°-60°) | 7774.1 | 34.2 | B4/8500 | | |
| BH (60°-80°) | 1584.8 | 7.0 | B3/2500 | | G1/1800 |
| BVH (80°-90°) | 57.1 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G1

Type V Short





REPORT NUMBER: P651324

CATALOG NUMBER: GALN-SA4D-840-U-5MQ-GRSWH

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 4486.5 | 4486.5 | 4486.5 | 4486.5 | 4486.5 | 4486.5 | 4486.5 | 4486.5 | 4486.5 | 4486.5 | 4486.5 |
| 2.5° | 4464.0 | 4508.9 | 4489.3 | 4478.1 | 4486.5 | 4472.4 | 4450.1 | 4475.3 | 4469.7 | 4447.3 | 4438.9 |
| 5° | 4452.8 | 4486.5 | 4464.0 | 4486.5 | 4464.0 | 4503.2 | 4492.0 | 4450.1 | 4500.4 | 4452.8 | 4469.7 |
| 7.5° | 4444.5 | 4455.7 | 4461.3 | 4450.1 | 4441.7 | 4489.3 | 4464.0 | 4444.5 | 4416.5 | 4408.1 | 4422.1 |
| 10° | 4424.9 | 4452.8 | 4410.9 | 4466.9 | 4478.1 | 4444.5 | 4444.5 | 4408.1 | 4385.7 | 4371.7 | 4419.3 |
| 12.5° | 4475.3 | 4427.7 | 4422.1 | 4450.1 | 4458.5 | 4472.4 | 4433.2 | 4413.7 | 4371.7 | 4377.3 | 4368.9 |
| 15° | 4416.5 | 4436.1 | 4438.9 | 4444.5 | 4452.8 | 4486.5 | 4450.1 | 4408.1 | 4391.3 | 4332.5 | 4338.1 |
| 17.5° | 4438.9 | 4419.3 | 4438.9 | 4503.2 | 4492.0 | 4517.3 | 4478.1 | 4413.7 | 4374.5 | 4340.9 | 4385.7 |
| 20° | 4478.1 | 4469.7 | 4478.1 | 4556.5 | 4570.4 | 4592.8 | 4559.2 | 4500.4 | 4424.9 | 4385.7 | 4408.1 |
| 22.5° | 4520.0 | 4514.5 | 4520.0 | 4595.6 | 4676.8 | 4704.7 | 4671.2 | 4534.0 | 4494.9 | 4422.1 | 4396.9 |
| 25° | 4595.6 | 4601.2 | 4660.0 | 4743.9 | 4797.1 | 4850.3 | 4788.7 | 4690.8 | 4564.9 | 4520.0 | 4466.9 |
| 27.5° | 4763.5 | 4777.6 | 4811.1 | 4934.2 | 5026.7 | 5074.2 | 4987.5 | 4853.1 | 4774.7 | 4682.4 | 4668.4 |
| 30° | 4970.6 | 4970.6 | 5029.4 | 5135.8 | 5261.7 | 5334.5 | 5228.2 | 5068.6 | 4973.4 | 4923.0 | 4892.3 |
| 32.5° | 5244.9 | 5214.1 | 5236.6 | 5424.0 | 5620.0 | 5681.5 | 5538.8 | 5342.9 | 5191.7 | 5124.5 | 5102.2 |
| 35° | 5480.0 | 5499.6 | 5550.0 | 5751.5 | 5969.8 | 6112.6 | 5888.7 | 5633.9 | 5480.0 | 5418.5 | 5407.3 |
| 37.5° | 5785.1 | 5818.7 | 5843.9 | 6121.0 | 6384.0 | 6437.2 | 6221.7 | 6017.4 | 5829.9 | 5779.5 | 5751.5 |
| 40° | 6216.1 | 6193.7 | 6202.1 | 6406.4 | 6644.3 | 6677.9 | 6465.2 | 6319.7 | 6165.7 | 6134.9 | 6134.9 |
| 42.5° | 6571.6 | 6546.3 | 6574.3 | 6650.0 | 6831.9 | 6806.6 | 6689.1 | 6582.8 | 6518.3 | 6484.8 | 6518.3 |
| 45° | 6787.0 | 6781.5 | 6831.9 | 6887.8 | 7016.5 | 6932.6 | 6840.3 | 6857.0 | 6795.4 | 6739.5 | 6736.7 |
| 47.5° | 7022.2 | 6985.8 | 7047.3 | 7131.3 | 7033.4 | 6994.2 | 6988.5 | 7025.0 | 7005.4 | 6907.4 | 6876.6 |
| 50° | 7136.9 | 7122.9 | 7220.9 | 7318.8 | 7265.7 | 7176.1 | 7195.7 | 7254.5 | 7002.6 | 6871.1 | 6795.4 |
| 52.5° | 7444.8 | 7447.6 | 7635.1 | 7688.3 | 7665.9 | 7534.4 | 7576.3 | 7416.8 | 7120.2 | 6935.4 | 6943.8 |
| 55° | 7928.9 | 7909.4 | 8119.3 | 8276.0 | 8301.2 | 8133.3 | 7931.8 | 7707.8 | 7335.6 | 7148.1 | 7092.2 |
| 57° | 7663.1 | 7707.8 | 7940.1 | 8404.8 | 8639.8 | 8441.1 | 8001.8 | 7593.1 | 7097.7 | 6871.1 | 6770.3 |
| 57.5° | 7307.6 | 7380.4 | 7783.5 | 8250.8 | 8497.1 | 8480.3 | 7915.0 | 7380.4 | 6938.2 | 6585.5 | 6593.9 |
| 60° | 5354.1 | 5368.1 | 5731.9 | 6473.6 | 7243.3 | 7260.0 | 6571.6 | 5863.5 | 5370.9 | 4987.5 | 5040.6 |
| 62.5° | 2824.0 | 2888.3 | 3033.9 | 3630.0 | 4296.2 | 4458.5 | 4041.4 | 3677.6 | 3252.2 | 2961.1 | 2989.1 |
| 65° | 1494.5 | 1486.1 | 1556.1 | 1724.0 | 2051.5 | 2135.5 | 2079.5 | 1791.2 | 1642.9 | 1595.3 | 1598.1 |
| 67.5° | 1214.7 | 1228.7 | 1220.3 | 1228.7 | 1251.1 | 1287.4 | 1279.1 | 1290.3 | 1298.7 | 1312.6 | 1309.9 |
| 70° | 1030.0 | 1030.0 | 1035.5 | 1038.4 | 1038.4 | 1055.1 | 1074.7 | 1111.1 | 1113.9 | 1127.9 | 1133.5 |
| 72.5° | 811.6 | 806.0 | 814.4 | 834.0 | 836.9 | 850.8 | 878.8 | 901.2 | 909.6 | 909.6 | 892.8 |
| 75° | 551.4 | 557.0 | 568.2 | 584.9 | 601.7 | 627.0 | 649.3 | 663.3 | 668.9 | 660.5 | 652.1 |
| 77.5° | 310.7 | 316.3 | 324.6 | 349.9 | 369.5 | 391.8 | 417.1 | 431.0 | 445.0 | 447.8 | 431.0 |
| 80° | 184.7 | 184.7 | 198.7 | 218.3 | 240.7 | 263.1 | 285.4 | 302.3 | 307.9 | 307.9 | 299.5 |
| 82.5° | 111.9 | 114.7 | 126.0 | 145.6 | 165.1 | 179.1 | 198.7 | 212.7 | 223.9 | 221.1 | 215.5 |
| 85° | 58.8 | 58.8 | 70.0 | 86.8 | 100.8 | 114.7 | 114.7 | 106.4 | 100.8 | 86.8 | 81.2 |
| 87.5° | 19.6 | 16.8 | 22.4 | 22.4 | 19.6 | 22.4 | 22.4 | 25.2 | 25.2 | 25.2 | 25.2 |
| 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)