

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: P647363

Luminaire Tested: **GALN-SA4D-835-U-5MQ-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P647363
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-SA4D-835-U-5MQ-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 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: 14380.6 lumens
Efficiency: N/A
Efficacy: 58.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G0

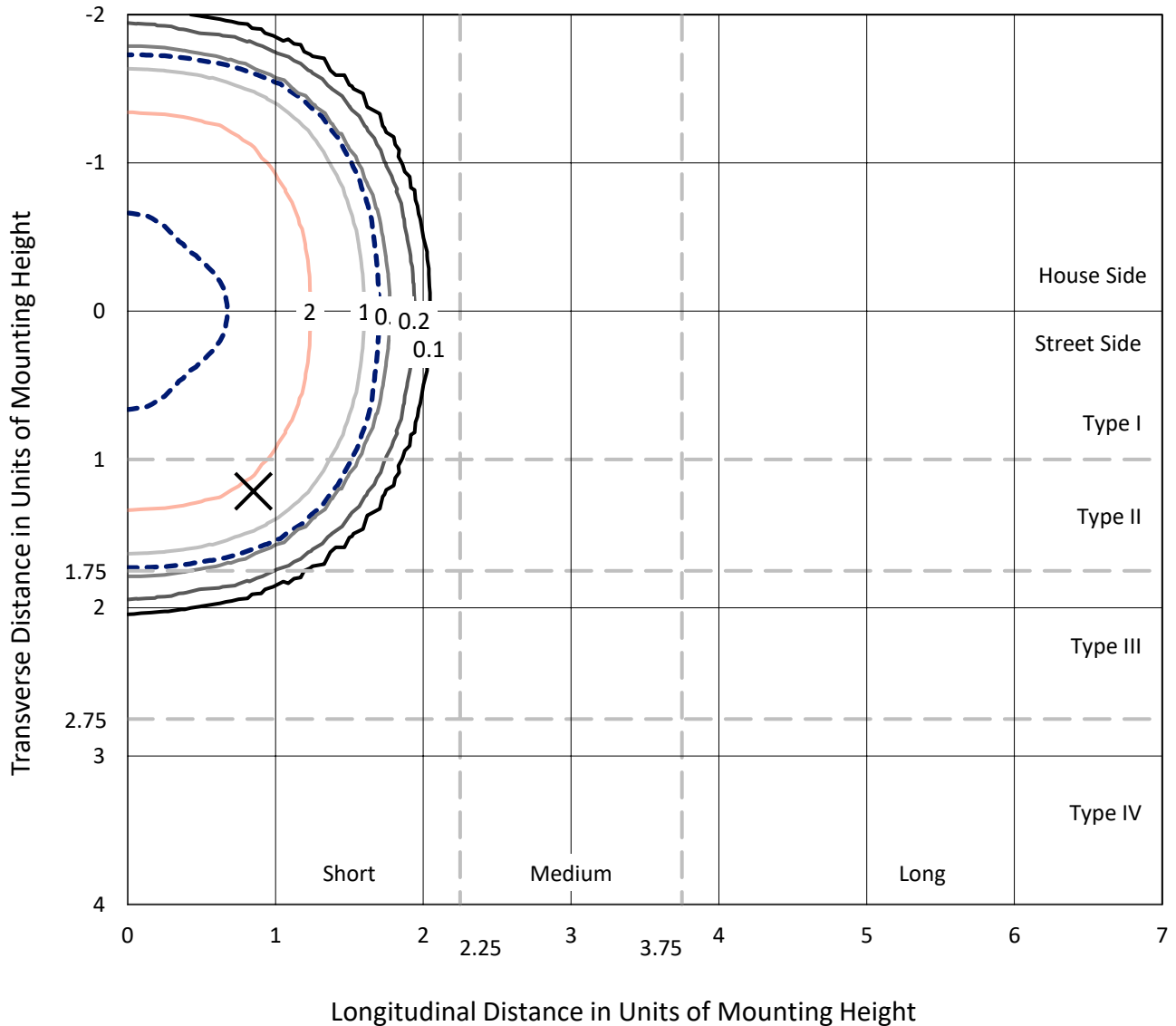
Input Watts (W): 245
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P647363
 CATALOG NUMBER: GALN-SA4D-835-U-5MQ-GRSBK

Iso-Footcandle Lines of Horizontal Illumination

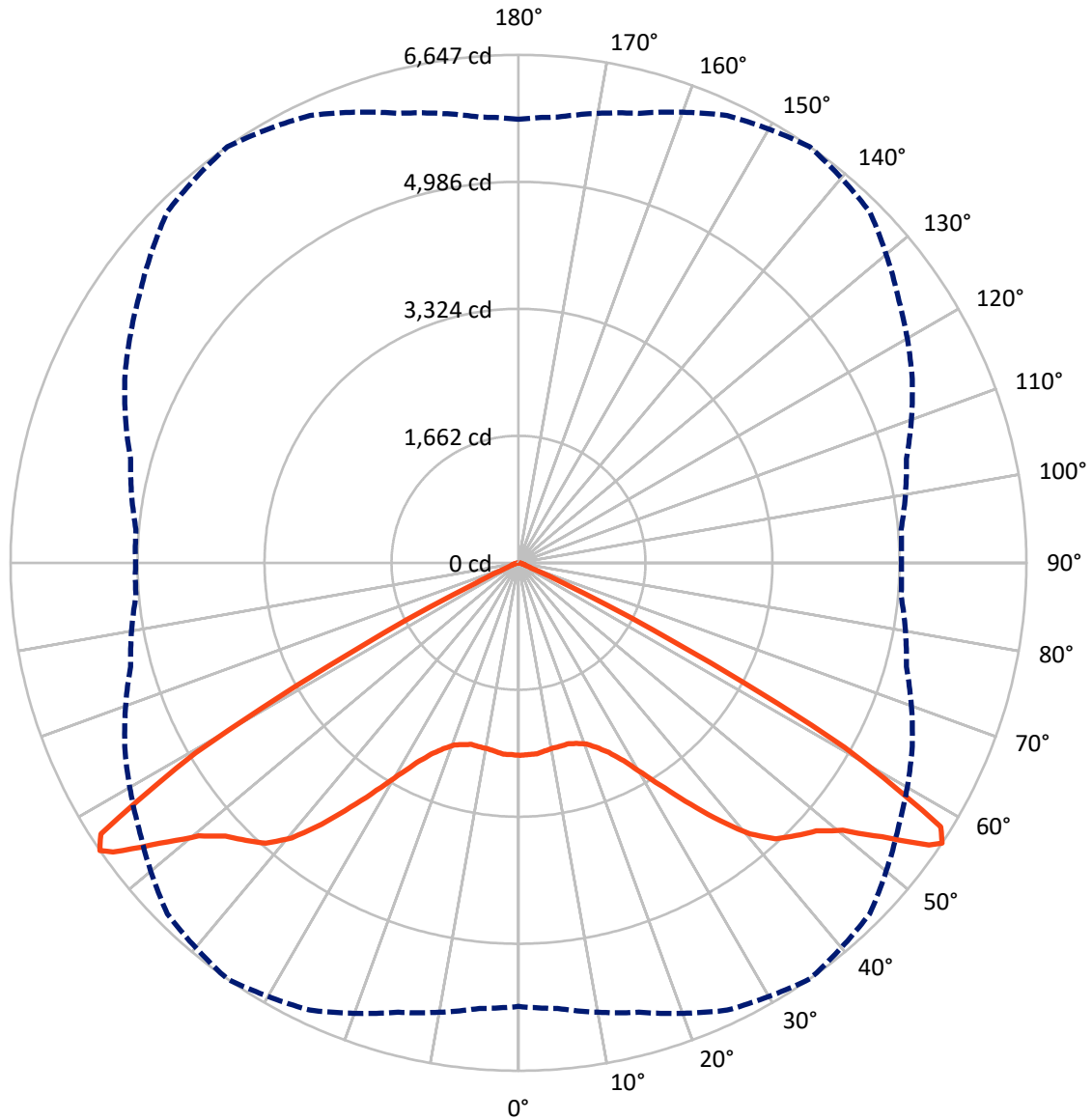
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type V - Short - N/A

REPORT NUMBER: P647363
CATALOG NUMBER: GALN-SA4D-835-U-5MQ-GRSBK

Luminous Intensity Polar Plot



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

REPORT NUMBER: P647363
 CATALOG NUMBER: GALN-SA4D-835-U-5MQ-GRSBK

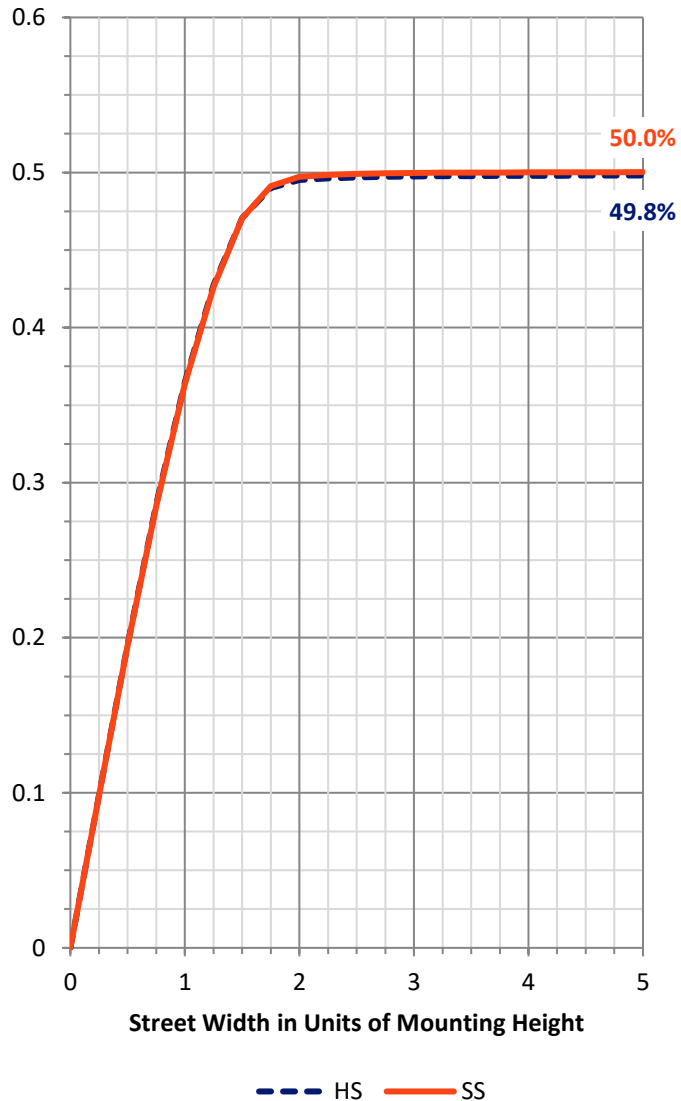
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7190.3 | 0.0 | 7190.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 7190.3 | 0.0 | 7190.3 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 14380.6 | 0.0 | 14380.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 236.8 | 1.6 |
| 10°-20° | 691.4 | 4.8 |
| 20°-30° | 1252.0 | 8.7 |
| 30°-40° | 2321.7 | 16.1 |
| 40°-50° | 3810.9 | 26.5 |
| 50°-60° | 4909.6 | 34.1 |
| 60°-70° | 1082.0 | 7.5 |
| 70°-80° | 62.8 | 0.4 |
| 80°-90° | 13.2 | 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° | 14380.6 | 100.0 |
| 0°-180° | 14380.6 | 100.0 |

Coefficient of Utilization

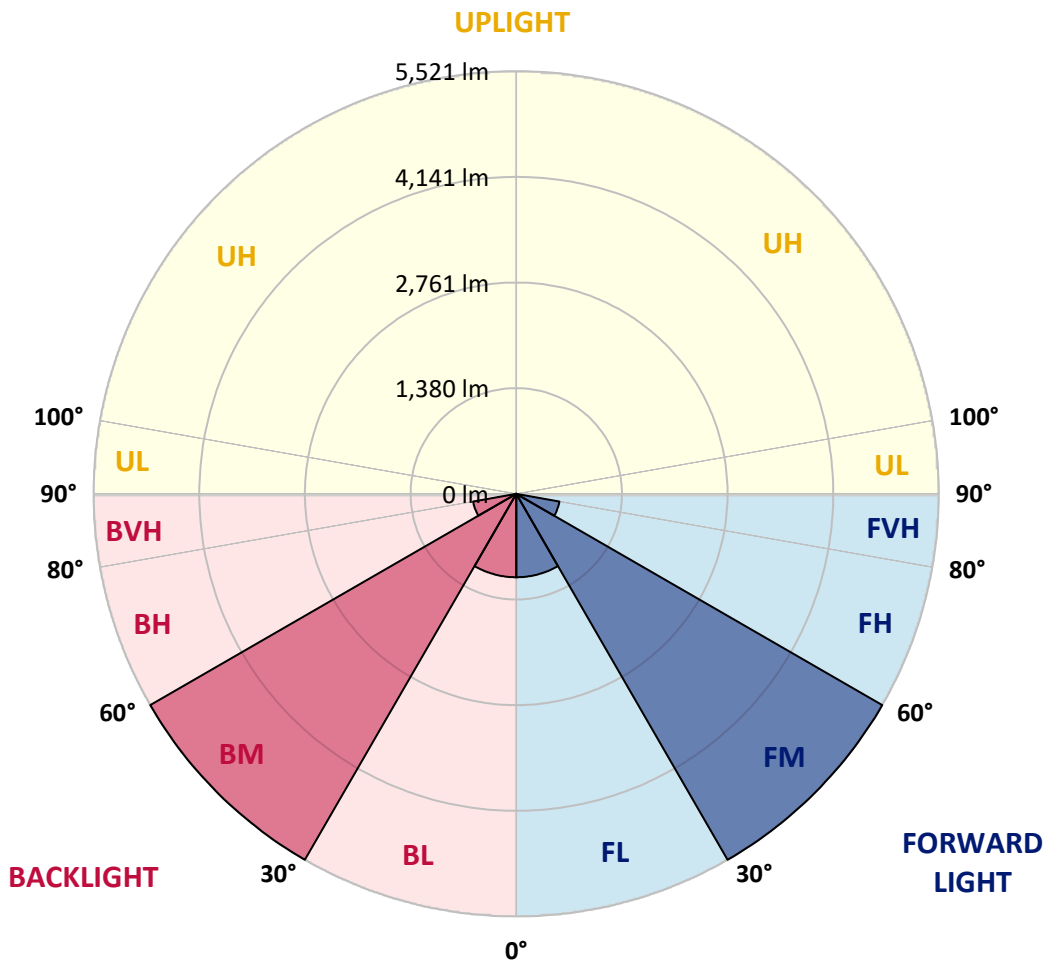


REPORT NUMBER: P647363
 CATALOG NUMBER: GALN-SA4D-835-U-5MQ-GRSBK

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 1090.1 | 7.6 | | | |
| FM (30°-60°) | 5521.1 | 38.4 | | | |
| FH (60°-80°) | 572.4 | 4.0 | | | G0/660 |
| FVH (80°-90°) | 6.6 | 0.0 | | | G0/10 |
| BL (0°-30°) | 1090.1 | 7.6 | B3/2500 | | |
| BM (30°-60°) | 5521.1 | 38.4 | B4/8500 | | |
| BH (60°-80°) | 572.4 | 4.0 | B2/1000 | | G0/660 |
| BVH (80°-90°) | 6.6 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G0
 Type V Short





REPORT NUMBER: P647363

CATALOG NUMBER: GALN-SA4D-835-U-5MQ-GRSBK

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2519.8 | 2519.8 | 2519.8 | 2519.8 | 2519.8 | 2519.8 | 2519.8 | 2519.8 | 2519.8 | 2519.8 | 2519.8 |
| 2.5° | 2525.0 | 2525.0 | 2527.6 | 2530.2 | 2511.9 | 2504.2 | 2506.8 | 2501.5 | 2498.9 | 2506.8 | 2506.8 |
| 5° | 2517.2 | 2517.2 | 2509.4 | 2511.9 | 2511.9 | 2488.5 | 2488.5 | 2493.7 | 2493.7 | 2478.1 | 2472.9 |
| 7.5° | 2496.4 | 2491.1 | 2480.7 | 2493.7 | 2485.9 | 2485.9 | 2467.7 | 2454.6 | 2449.5 | 2459.9 | 2449.5 |
| 10° | 2452.0 | 2454.6 | 2465.0 | 2470.3 | 2465.0 | 2480.7 | 2449.5 | 2431.2 | 2413.0 | 2405.1 | 2405.1 |
| 12.5° | 2431.2 | 2446.8 | 2431.2 | 2444.2 | 2462.5 | 2449.5 | 2431.2 | 2418.1 | 2392.1 | 2381.7 | 2381.7 |
| 15° | 2428.6 | 2439.0 | 2444.2 | 2462.5 | 2454.6 | 2459.9 | 2423.4 | 2407.7 | 2368.7 | 2350.4 | 2342.6 |
| 17.5° | 2426.0 | 2439.0 | 2446.8 | 2480.7 | 2485.9 | 2488.5 | 2459.9 | 2413.0 | 2379.1 | 2360.8 | 2342.6 |
| 20° | 2454.6 | 2459.9 | 2475.5 | 2509.4 | 2530.2 | 2566.7 | 2514.6 | 2465.0 | 2392.1 | 2371.2 | 2363.4 |
| 22.5° | 2491.1 | 2517.2 | 2532.8 | 2569.3 | 2624.0 | 2655.3 | 2587.5 | 2525.0 | 2449.5 | 2423.4 | 2392.1 |
| 25° | 2608.4 | 2603.2 | 2629.2 | 2704.8 | 2749.1 | 2772.5 | 2717.8 | 2626.7 | 2527.6 | 2496.4 | 2501.5 |
| 27.5° | 2754.3 | 2759.5 | 2782.9 | 2866.3 | 2931.5 | 2968.0 | 2902.8 | 2782.9 | 2686.6 | 2634.4 | 2629.2 |
| 30° | 2944.5 | 2939.3 | 2965.4 | 3077.4 | 3194.7 | 3249.4 | 3134.7 | 2994.0 | 2900.2 | 2832.5 | 2848.1 |
| 32.5° | 3145.2 | 3147.8 | 3220.7 | 3322.3 | 3512.6 | 3619.4 | 3434.4 | 3262.4 | 3121.7 | 3074.8 | 3051.4 |
| 35° | 3442.2 | 3455.2 | 3512.6 | 3668.9 | 3880.0 | 4018.1 | 3814.9 | 3609.0 | 3447.5 | 3361.4 | 3371.9 |
| 37.5° | 3809.6 | 3796.6 | 3893.0 | 4062.4 | 4283.9 | 4385.5 | 4213.6 | 3979.0 | 3814.9 | 3757.5 | 3794.0 |
| 40° | 4200.5 | 4213.6 | 4263.0 | 4416.8 | 4664.3 | 4732.1 | 4476.7 | 4349.0 | 4205.7 | 4177.1 | 4221.4 |
| 42.5° | 4591.4 | 4583.5 | 4620.0 | 4758.1 | 4937.9 | 4891.0 | 4739.9 | 4664.3 | 4562.7 | 4505.4 | 4565.4 |
| 45° | 4878.0 | 4865.0 | 4932.7 | 5026.5 | 5091.7 | 5003.1 | 4935.3 | 4909.3 | 4857.2 | 4794.6 | 4849.4 |
| 47.5° | 5156.8 | 5146.4 | 5211.6 | 5237.6 | 5242.8 | 5125.6 | 5138.6 | 5185.5 | 5055.2 | 4924.9 | 4987.5 |
| 50° | 5393.9 | 5375.7 | 5456.5 | 5513.8 | 5500.8 | 5313.2 | 5360.1 | 5313.2 | 5109.9 | 4956.2 | 4932.7 |
| 52.5° | 5790.1 | 5797.9 | 5883.9 | 5988.1 | 5956.8 | 5800.5 | 5732.7 | 5519.1 | 5258.5 | 5120.4 | 5039.5 |
| 55° | 6040.2 | 6001.1 | 6149.6 | 6480.6 | 6517.1 | 6355.5 | 6055.8 | 5740.6 | 5349.7 | 5180.2 | 5159.4 |
| 56° | 5805.7 | 5855.2 | 6089.7 | 6459.8 | 6647.4 | 6498.8 | 6063.6 | 5685.8 | 5255.9 | 5026.5 | 5010.9 |
| 57.5° | 5209.0 | 5182.9 | 5500.8 | 6006.3 | 6517.1 | 6454.5 | 5849.9 | 5295.0 | 4794.6 | 4536.6 | 4505.4 |
| 60° | 3241.6 | 3317.2 | 3596.0 | 4221.4 | 4904.1 | 4935.3 | 4336.0 | 3859.2 | 3275.4 | 3046.2 | 3100.8 |
| 62.5° | 1269.0 | 1203.9 | 1378.5 | 1844.9 | 2313.9 | 2418.1 | 2191.5 | 1821.4 | 1495.7 | 1269.0 | 1253.3 |
| 65° | 294.5 | 286.7 | 323.1 | 445.6 | 622.8 | 721.8 | 685.3 | 492.5 | 362.2 | 344.0 | 317.9 |
| 67.5° | 166.8 | 166.8 | 158.9 | 158.9 | 174.6 | 185.0 | 177.2 | 174.6 | 182.4 | 190.2 | 187.6 |
| 70° | 117.3 | 114.6 | 109.5 | 112.0 | 106.8 | 106.8 | 114.6 | 127.7 | 138.1 | 138.1 | 140.7 |
| 72.5° | 70.4 | 70.4 | 70.4 | 78.1 | 78.1 | 78.1 | 86.0 | 96.4 | 99.0 | 96.4 | 93.8 |
| 75° | 31.2 | 31.2 | 36.5 | 44.3 | 49.5 | 52.1 | 59.9 | 65.1 | 70.4 | 65.1 | 59.9 |
| 77.5° | 7.8 | 7.8 | 13.0 | 18.2 | 23.5 | 28.7 | 39.1 | 46.9 | 49.5 | 46.9 | 39.1 |
| 80° | 2.6 | 2.6 | 5.2 | 13.0 | 23.5 | 28.7 | 39.1 | 41.7 | 44.3 | 39.1 | 31.2 |
| 82.5° | 2.6 | 2.6 | 5.2 | 13.0 | 18.2 | 23.5 | 31.2 | 36.5 | 39.1 | 33.9 | 31.2 |
| 85° | 0.0 | 2.6 | 5.2 | 10.4 | 15.7 | 20.8 | 20.8 | 15.7 | 13.0 | 7.8 | 10.4 |
| 87.5° | 0.0 | 0.0 | 2.6 | 2.6 | 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)