

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: P647418

Luminaire Tested: **GALN-SA5D-835-U-5MQ-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P647418
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-SA5D-835-U-5MQ-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 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: 18204.8 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G1

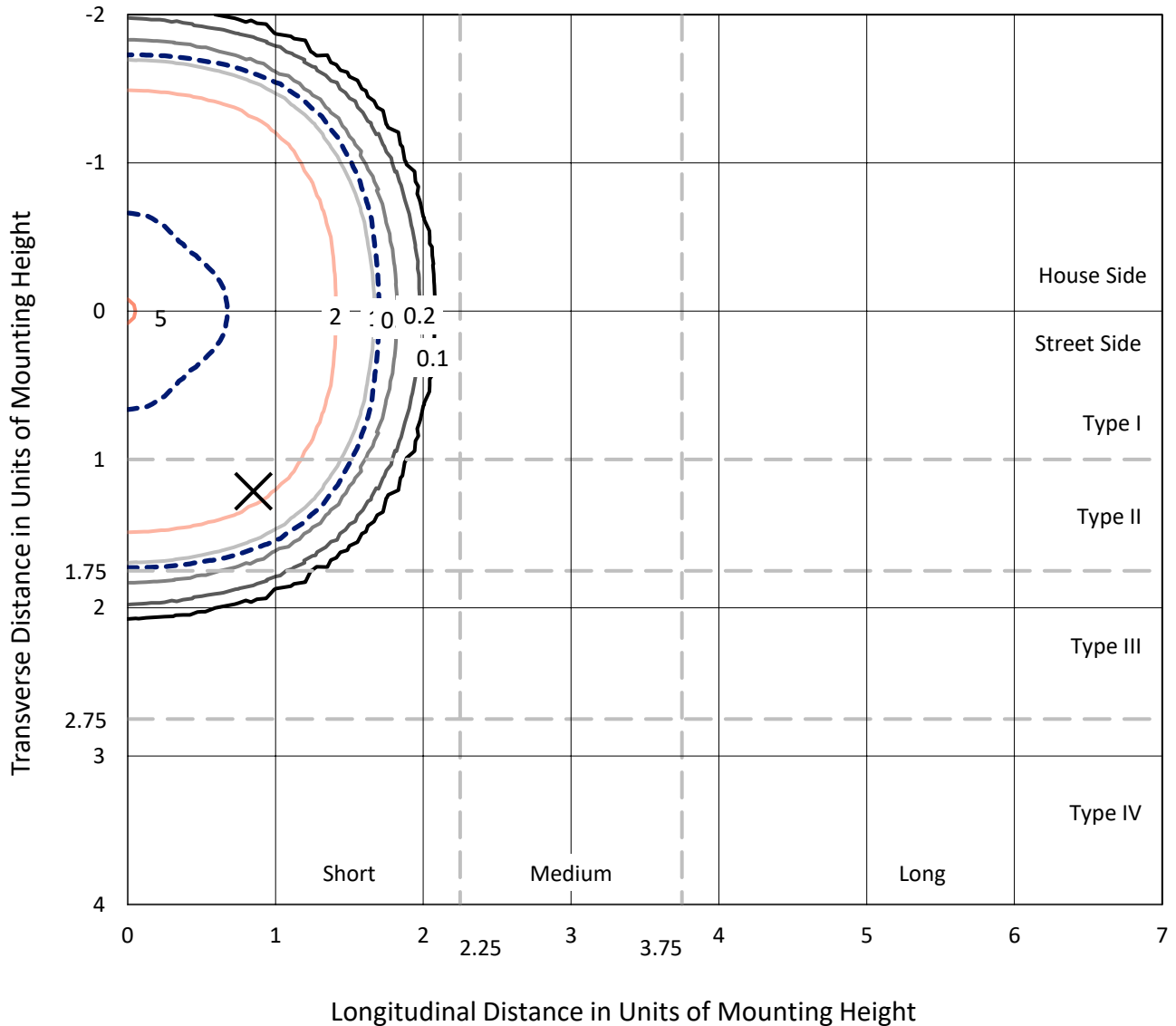
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

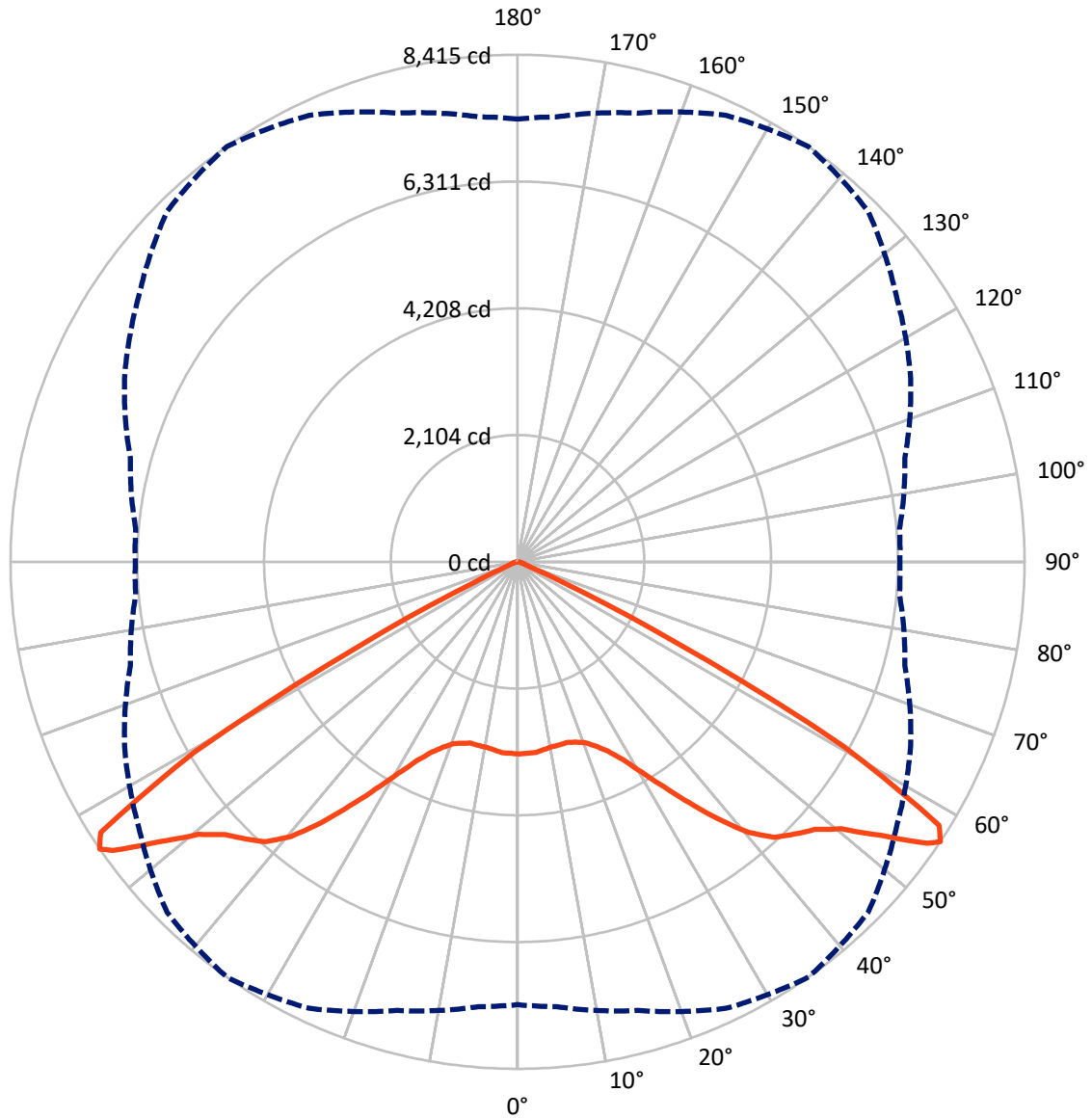
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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 | 9102.4 | 0.0 | 9102.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 9102.4 | 0.0 | 9102.4 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 18204.8 | 0.0 | 18204.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 299.8 | 1.6 |
| 10°-20° | 875.3 | 4.8 |
| 20°-30° | 1585.0 | 8.7 |
| 30°-40° | 2939.1 | 16.1 |
| 40°-50° | 4824.4 | 26.5 |
| 50°-60° | 6215.2 | 34.1 |
| 60°-70° | 1369.8 | 7.5 |
| 70°-80° | 79.5 | 0.4 |
| 80°-90° | 16.7 | 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° | 18204.8 | 100.0 |
| 0°-180° | 18204.8 | 100.0 |

Coefficient of Utilization



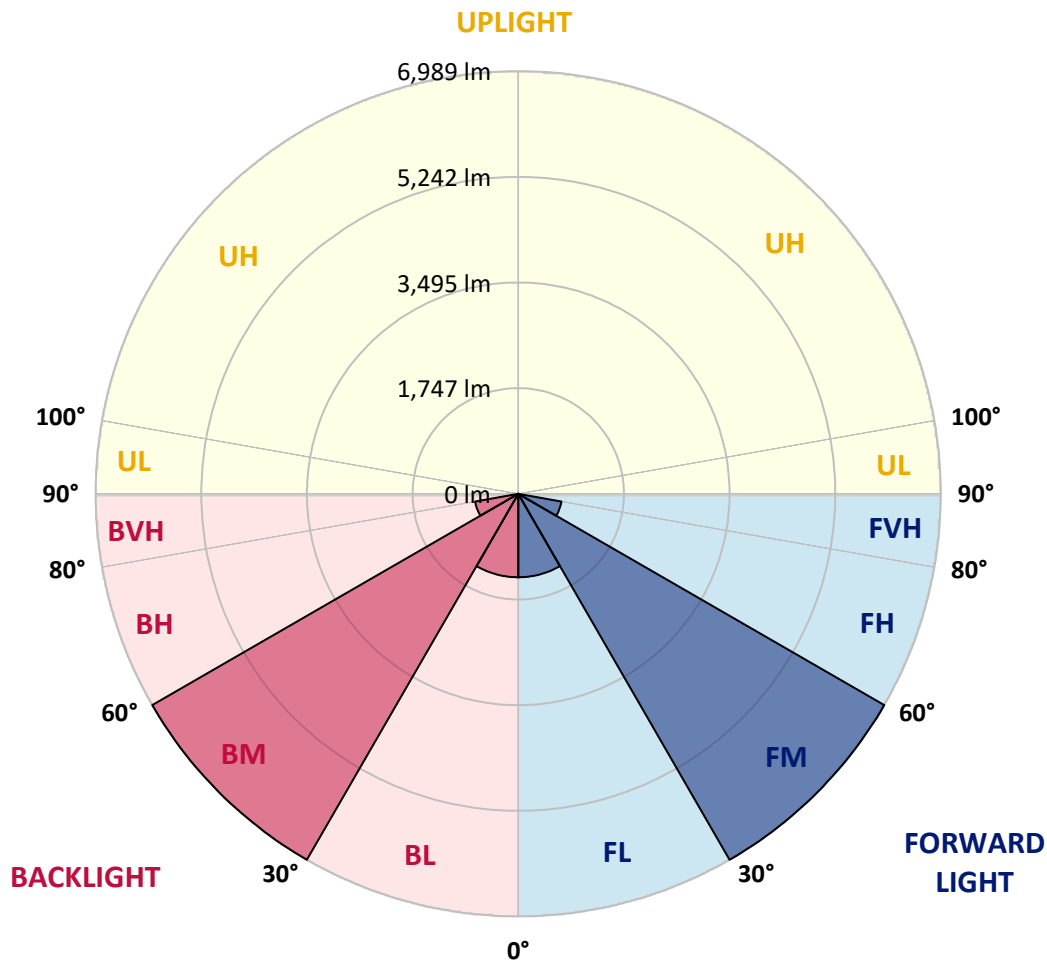
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1380.0 | 7.6 | | | |
| FM (30°-60°) | 6989.4 | 38.4 | | | |
| FH (60°-80°) | 724.6 | 4.0 | | | G1/1800 |
| FVH (80°-90°) | 8.4 | 0.0 | | | G0/10 |
| BL (0°-30°) | 1380.0 | 7.6 | B3/2500 | | |
| BM (30°-60°) | 6989.4 | 38.4 | B4/8500 | | |
| BH (60°-80°) | 724.6 | 4.0 | B2/1000 | | G1/1800 |
| BVH (80°-90°) | 8.4 | 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-G1

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3189.9 | 3189.9 | 3189.9 | 3189.9 | 3189.9 | 3189.9 | 3189.9 | 3189.9 | 3189.9 | 3189.9 | 3189.9 |
| 2.5° | 3196.4 | 3196.4 | 3199.7 | 3203.1 | 3180.0 | 3170.1 | 3173.3 | 3166.8 | 3163.5 | 3173.3 | 3173.3 |
| 5° | 3186.6 | 3186.6 | 3176.6 | 3180.0 | 3180.0 | 3150.2 | 3150.2 | 3156.9 | 3156.9 | 3137.1 | 3130.5 |
| 7.5° | 3160.2 | 3153.6 | 3140.4 | 3156.9 | 3147.0 | 3147.0 | 3123.9 | 3107.4 | 3100.8 | 3114.0 | 3100.8 |
| 10° | 3104.1 | 3107.4 | 3120.6 | 3127.2 | 3120.6 | 3140.4 | 3100.8 | 3077.7 | 3054.6 | 3044.7 | 3044.7 |
| 12.5° | 3077.7 | 3097.5 | 3077.7 | 3094.2 | 3117.3 | 3100.8 | 3077.7 | 3061.2 | 3028.3 | 3015.0 | 3015.0 |
| 15° | 3074.4 | 3087.6 | 3094.2 | 3117.3 | 3107.4 | 3114.0 | 3067.8 | 3048.0 | 2998.6 | 2975.5 | 2965.5 |
| 17.5° | 3071.1 | 3087.6 | 3097.5 | 3140.4 | 3147.0 | 3150.2 | 3114.0 | 3054.6 | 3011.7 | 2988.6 | 2965.5 |
| 20° | 3107.4 | 3114.0 | 3133.8 | 3176.6 | 3203.1 | 3249.2 | 3183.3 | 3120.6 | 3028.3 | 3001.9 | 2991.9 |
| 22.5° | 3153.6 | 3186.6 | 3206.4 | 3252.5 | 3321.8 | 3361.4 | 3275.6 | 3196.4 | 3100.8 | 3067.8 | 3028.3 |
| 25° | 3302.0 | 3295.4 | 3328.4 | 3424.1 | 3480.1 | 3509.9 | 3440.6 | 3325.1 | 3199.7 | 3160.2 | 3166.8 |
| 27.5° | 3486.8 | 3493.4 | 3523.0 | 3628.6 | 3711.0 | 3757.2 | 3674.8 | 3523.0 | 3401.0 | 3335.0 | 3328.4 |
| 30° | 3727.5 | 3721.0 | 3753.9 | 3895.8 | 4044.2 | 4113.5 | 3968.4 | 3790.3 | 3671.5 | 3585.7 | 3605.5 |
| 32.5° | 3981.6 | 3984.8 | 4077.2 | 4205.9 | 4446.7 | 4582.0 | 4347.7 | 4130.0 | 3951.9 | 3892.5 | 3862.8 |
| 35° | 4357.6 | 4374.1 | 4446.7 | 4644.6 | 4911.8 | 5086.6 | 4829.3 | 4568.7 | 4364.2 | 4255.4 | 4268.5 |
| 37.5° | 4822.7 | 4806.2 | 4928.3 | 5142.7 | 5423.1 | 5551.8 | 5334.0 | 5037.1 | 4829.3 | 4756.7 | 4802.9 |
| 40° | 5317.5 | 5334.0 | 5396.7 | 5591.3 | 5904.7 | 5990.5 | 5667.2 | 5505.6 | 5324.2 | 5287.8 | 5343.9 |
| 42.5° | 5812.4 | 5802.4 | 5848.6 | 6023.5 | 6251.1 | 6191.7 | 6000.4 | 5904.7 | 5776.0 | 5703.5 | 5779.3 |
| 45° | 6175.2 | 6158.7 | 6244.5 | 6363.2 | 6445.7 | 6333.5 | 6247.8 | 6214.8 | 6148.8 | 6069.7 | 6139.0 |
| 47.5° | 6528.2 | 6515.0 | 6597.5 | 6630.4 | 6637.0 | 6488.6 | 6505.1 | 6564.4 | 6399.5 | 6234.6 | 6313.7 |
| 50° | 6828.4 | 6805.3 | 6907.5 | 6980.1 | 6963.6 | 6726.1 | 6785.5 | 6726.1 | 6468.8 | 6274.2 | 6244.5 |
| 52.5° | 7329.7 | 7339.7 | 7448.5 | 7580.5 | 7540.9 | 7343.0 | 7257.2 | 6986.7 | 6656.8 | 6482.0 | 6379.7 |
| 55° | 7646.5 | 7597.0 | 7785.0 | 8203.9 | 8250.1 | 8045.6 | 7666.2 | 7267.1 | 6772.2 | 6557.9 | 6531.5 |
| 56° | 7349.6 | 7412.2 | 7709.1 | 8177.5 | 8415.1 | 8227.0 | 7676.1 | 7197.8 | 6653.5 | 6363.2 | 6343.5 |
| 57.5° | 6594.1 | 6561.1 | 6963.6 | 7603.6 | 8250.1 | 8170.9 | 7405.6 | 6703.0 | 6069.7 | 5743.1 | 5703.5 |
| 60° | 4103.6 | 4199.3 | 4552.2 | 5343.9 | 6208.2 | 6247.8 | 5489.1 | 4885.4 | 4146.5 | 3856.2 | 3925.5 |
| 62.5° | 1606.5 | 1524.0 | 1745.0 | 2335.5 | 2929.3 | 3061.2 | 2774.2 | 2305.8 | 1893.5 | 1606.5 | 1586.7 |
| 65° | 372.8 | 362.8 | 409.0 | 564.1 | 788.4 | 913.8 | 867.6 | 623.4 | 458.5 | 435.4 | 402.5 |
| 67.5° | 211.1 | 211.1 | 201.2 | 201.2 | 221.0 | 234.2 | 224.3 | 221.0 | 230.9 | 240.8 | 237.5 |
| 70° | 148.5 | 145.2 | 138.5 | 141.9 | 135.2 | 135.2 | 145.2 | 161.6 | 174.8 | 174.8 | 178.1 |
| 72.5° | 89.0 | 89.0 | 89.0 | 99.0 | 99.0 | 99.0 | 108.8 | 122.1 | 125.4 | 122.1 | 118.8 |
| 75° | 39.6 | 39.6 | 46.2 | 56.1 | 62.6 | 66.0 | 75.9 | 82.4 | 89.0 | 82.4 | 75.9 |
| 77.5° | 9.9 | 9.9 | 16.5 | 23.1 | 29.7 | 36.3 | 49.5 | 59.4 | 62.6 | 59.4 | 49.5 |
| 80° | 3.3 | 3.3 | 6.6 | 16.5 | 29.7 | 36.3 | 49.5 | 52.8 | 56.1 | 49.5 | 39.6 |
| 82.5° | 3.3 | 3.3 | 6.6 | 16.5 | 23.1 | 29.7 | 39.6 | 46.2 | 49.5 | 42.9 | 39.6 |
| 85° | 0.0 | 3.3 | 6.6 | 13.2 | 19.8 | 26.4 | 26.4 | 19.8 | 16.5 | 9.9 | 13.2 |
| 87.5° | 0.0 | 0.0 | 3.3 | 3.3 | 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)