

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: P453965

Luminaire Tested: **GALN-SA5A-740-U-RW**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453965
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5A-740-U-RW
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND RECTANGULAR WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23628 lumens
Efficiency: N/A
Efficacy: 153.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

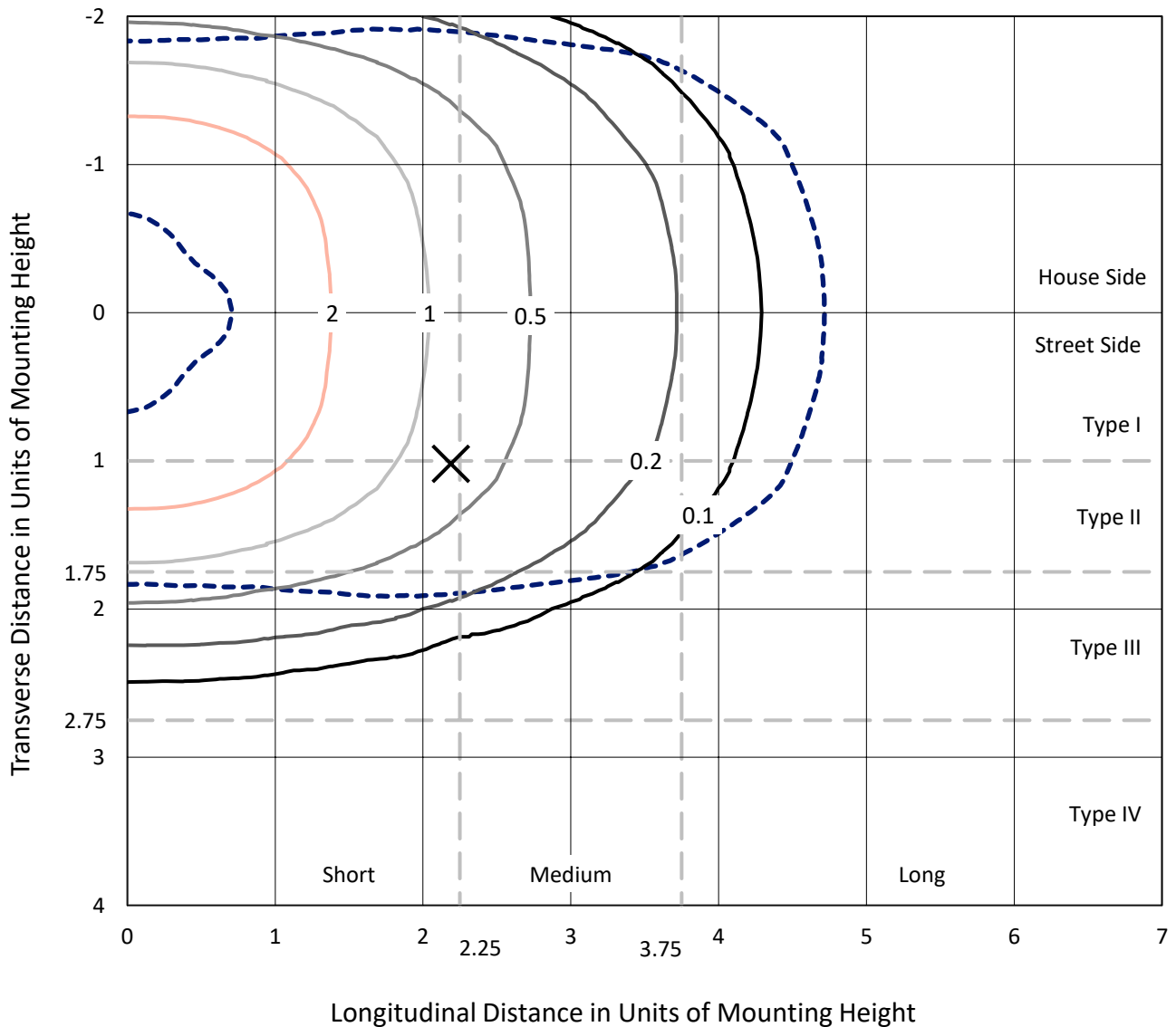
Input Watts (W): 154
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

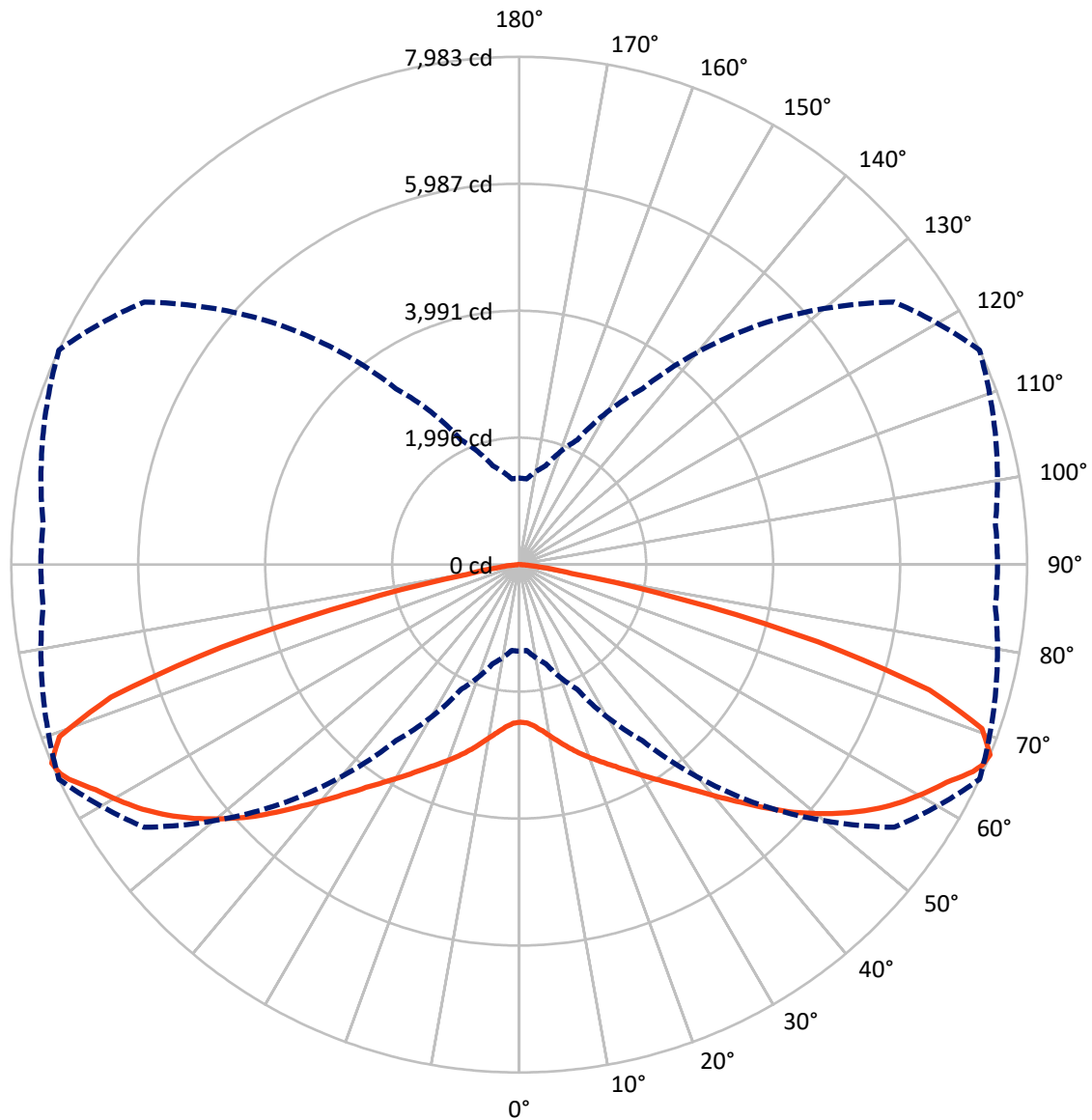
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 11814.0 | 0.0 | 11814.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 11814.0 | 0.0 | 11814.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 23628.0 | 0.0 | 23628.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 244.1 | 1.0 |
| 10°-20° | 816.9 | 3.5 |
| 20°-30° | 1598.0 | 6.8 |
| 30°-40° | 2717.9 | 11.5 |
| 40°-50° | 4301.7 | 18.2 |
| 50°-60° | 5703.9 | 24.1 |
| 60°-70° | 5380.6 | 22.8 |
| 70°-80° | 2659.9 | 11.3 |
| 80°-90° | 205.0 | 0.9 |
| 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° | 23628.0 | 100.0 |
| 0°-180° | 23628.0 | 100.0 |



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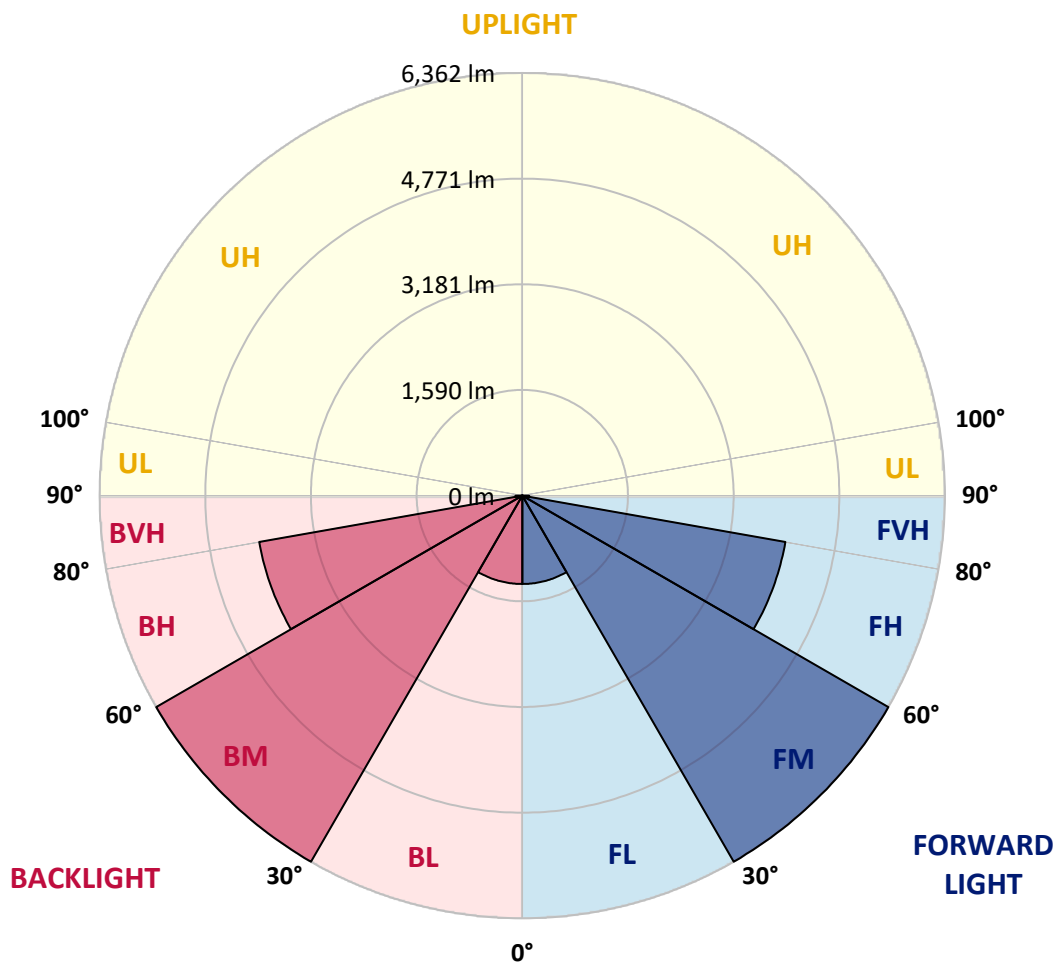
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1329.5 | 5.6 | | | |
| FM | (30°-60°) | 6361.8 | 26.9 | | | |
| FH | (60°-80°) | 4020.2 | 17.0 | | | G2/5000 |
| FVH | (80°-90°) | 102.5 | 0.4 | | | G2/225 |
| BL | (0°-30°) | 1329.5 | 5.6 | B3/2500 | | |
| BM | (30°-60°) | 6361.8 | 26.9 | B4/8500 | | |
| BH | (60°-80°) | 4020.2 | 17.0 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 102.5 | 0.4 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2474.8 | 2474.8 | 2474.8 | 2474.8 | 2474.8 | 2474.8 | 2474.8 | 2474.8 | 2474.8 | 2474.8 | 2474.8 |
| 2.5° | 2462.2 | 2464.7 | 2467.2 | 2471.0 | 2476.1 | 2483.7 | 2488.7 | 2492.5 | 2502.7 | 2503.9 | 2502.7 |
| 5° | 2453.3 | 2455.8 | 2462.2 | 2473.6 | 2490.0 | 2512.8 | 2530.5 | 2552.0 | 2568.5 | 2579.9 | 2577.4 |
| 7.5° | 2452.0 | 2457.1 | 2467.2 | 2491.3 | 2522.9 | 2562.2 | 2602.7 | 2639.4 | 2671.0 | 2696.4 | 2692.6 |
| 10° | 2472.3 | 2478.6 | 2495.1 | 2530.5 | 2579.9 | 2636.9 | 2693.8 | 2748.3 | 2793.8 | 2826.7 | 2838.1 |
| 12.5° | 2506.5 | 2511.5 | 2541.9 | 2595.1 | 2666.0 | 2736.9 | 2801.4 | 2868.5 | 2931.8 | 2987.5 | 2987.5 |
| 15° | 2566.0 | 2574.8 | 2612.8 | 2690.0 | 2777.4 | 2859.7 | 2925.5 | 2996.4 | 3064.7 | 3128.0 | 3147.0 |
| 17.5° | 2648.3 | 2660.9 | 2717.9 | 2816.6 | 2928.0 | 3004.0 | 3066.0 | 3124.2 | 3183.7 | 3244.5 | 3253.3 |
| 20° | 2760.9 | 2773.6 | 2849.5 | 2968.5 | 3100.2 | 3191.3 | 3233.1 | 3247.0 | 3276.1 | 3334.4 | 3342.0 |
| 22.5° | 2914.1 | 2926.7 | 3011.6 | 3145.7 | 3292.6 | 3391.3 | 3409.1 | 3376.1 | 3368.5 | 3414.1 | 3419.2 |
| 25° | 3087.5 | 3098.9 | 3196.4 | 3340.7 | 3492.6 | 3600.2 | 3595.1 | 3514.1 | 3468.6 | 3496.4 | 3504.0 |
| 27.5° | 3282.5 | 3298.9 | 3397.7 | 3547.0 | 3711.6 | 3806.5 | 3791.4 | 3673.6 | 3576.2 | 3571.1 | 3573.6 |
| 30° | 3531.8 | 3549.6 | 3643.2 | 3786.3 | 3948.3 | 4035.7 | 4004.0 | 3845.8 | 3695.1 | 3644.5 | 3644.5 |
| 32.5° | 3795.2 | 3839.5 | 3934.4 | 4083.8 | 4210.4 | 4273.7 | 4225.6 | 4035.7 | 3835.7 | 3764.8 | 3761.0 |
| 35° | 4138.2 | 4162.3 | 4255.9 | 4401.5 | 4496.5 | 4545.8 | 4453.4 | 4249.6 | 4019.2 | 3935.7 | 3924.3 |
| 37.5° | 4473.7 | 4493.9 | 4602.8 | 4742.0 | 4857.2 | 4854.7 | 4729.4 | 4504.1 | 4247.1 | 4153.4 | 4145.8 |
| 40° | 4816.7 | 4838.3 | 4962.3 | 5090.2 | 5205.4 | 5195.2 | 5043.3 | 4791.4 | 4518.0 | 4412.9 | 4433.2 |
| 42.5° | 5114.2 | 5138.3 | 5278.8 | 5461.1 | 5564.9 | 5562.3 | 5386.4 | 5102.8 | 4818.0 | 4724.3 | 4742.0 |
| 45° | 5385.1 | 5406.6 | 5569.9 | 5778.8 | 5930.7 | 5949.7 | 5757.3 | 5457.3 | 5164.9 | 5044.6 | 5049.7 |
| 47.5° | 5576.3 | 5616.8 | 5787.7 | 6026.9 | 6233.3 | 6300.4 | 6111.7 | 5818.1 | 5481.3 | 5356.0 | 5363.6 |
| 50° | 5721.8 | 5747.2 | 5933.2 | 6205.4 | 6466.2 | 6605.4 | 6453.5 | 6152.2 | 5797.8 | 5664.9 | 5682.6 |
| 52.5° | 5739.6 | 5769.9 | 5972.5 | 6286.4 | 6620.6 | 6832.0 | 6757.3 | 6478.9 | 6120.6 | 5983.9 | 6021.9 |
| 55° | 5595.3 | 5613.0 | 5854.8 | 6235.8 | 6681.4 | 7000.4 | 7019.4 | 6782.7 | 6428.2 | 6324.4 | 6349.7 |
| 57.5° | 5183.8 | 5229.4 | 5535.8 | 5999.1 | 6597.8 | 7090.3 | 7215.6 | 7058.6 | 6739.6 | 6637.1 | 6677.6 |
| 60° | 4509.1 | 4554.7 | 4862.3 | 5449.7 | 6282.6 | 7048.5 | 7377.6 | 7302.9 | 7021.9 | 6939.6 | 6961.2 |
| 62.5° | 3533.1 | 3529.3 | 3910.3 | 4630.6 | 5656.0 | 6843.4 | 7497.9 | 7538.4 | 7300.4 | 7196.6 | 7229.5 |
| 65° | 2290.0 | 2301.4 | 2669.8 | 3445.8 | 4710.4 | 6321.9 | 7524.5 | 7838.4 | 7573.8 | 7416.9 | 7440.9 |
| 66° | 1841.9 | 1876.1 | 2188.7 | 2904.0 | 4228.1 | 5980.1 | 7444.7 | 7927.0 | 7657.4 | 7467.5 | 7478.9 |
| 67.5° | 1359.6 | 1353.2 | 1610.2 | 2162.1 | 3376.1 | 5330.7 | 7195.3 | 7982.7 | 7752.3 | 7513.1 | 7518.1 |
| 70° | 776.0 | 774.7 | 865.9 | 1187.4 | 1984.9 | 3753.4 | 6064.9 | 7715.6 | 7944.8 | 7677.7 | 7663.7 |
| 72.5° | 567.1 | 563.3 | 576.0 | 655.7 | 968.4 | 1895.0 | 4183.8 | 6743.4 | 7846.0 | 7651.1 | 7611.8 |
| 75° | 476.0 | 473.4 | 470.9 | 481.0 | 543.1 | 858.3 | 2220.4 | 4850.9 | 6808.0 | 7181.4 | 7140.9 |
| 77.5° | 388.6 | 388.6 | 389.9 | 387.4 | 389.9 | 451.9 | 920.3 | 2600.1 | 4145.8 | 4628.1 | 4740.8 |
| 80° | 303.8 | 302.5 | 324.1 | 315.2 | 295.0 | 289.9 | 407.6 | 836.8 | 1376.0 | 1368.4 | 1129.2 |
| 82.5° | 224.1 | 208.9 | 246.8 | 240.5 | 217.7 | 184.8 | 238.0 | 357.0 | 459.5 | 298.8 | 221.5 |
| 85° | 141.8 | 140.5 | 174.7 | 159.5 | 132.9 | 87.3 | 113.9 | 153.2 | 189.9 | 115.2 | 93.7 |
| 87.5° | 25.3 | 24.1 | 55.7 | 40.5 | 40.5 | 25.3 | 31.6 | 41.8 | 62.0 | 43.0 | 31.6 |
| 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)