

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P638951

Luminaire Tested: GWS-SA4F-830-U-5NQ-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638951
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4F-830-U-5NQ-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19019.6 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short
BUG Rating: B4 - U0 - G0

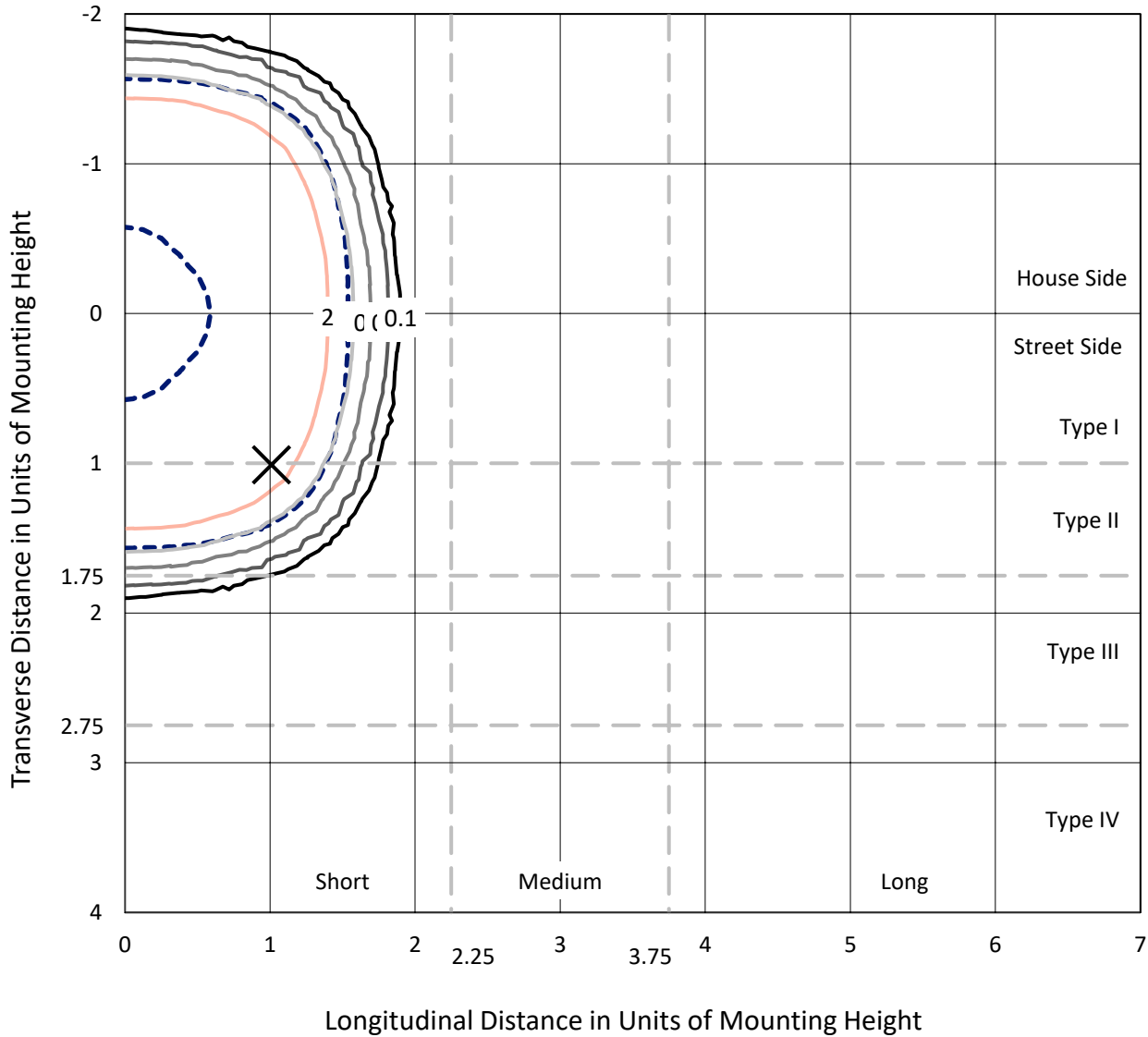
Input Watts (W): 225.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

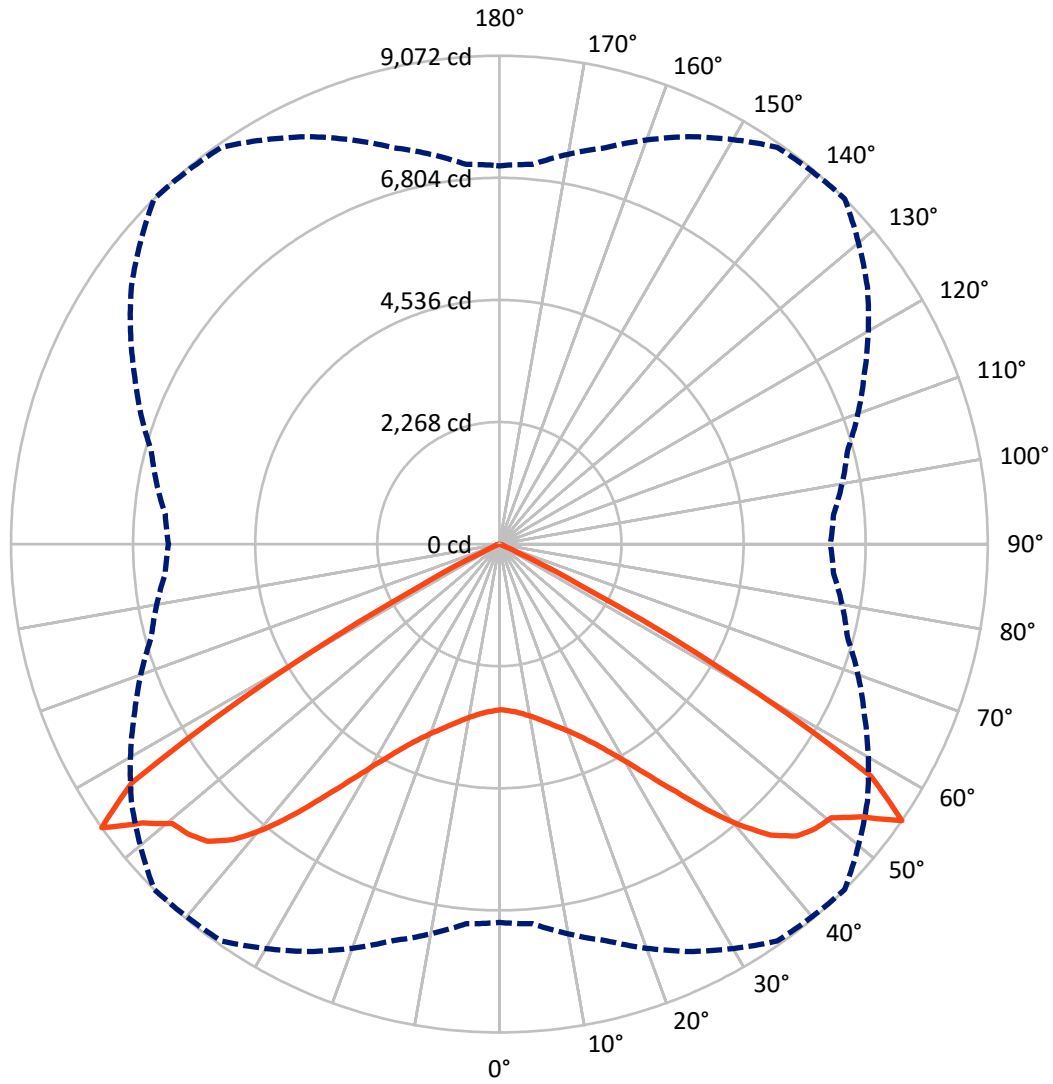
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

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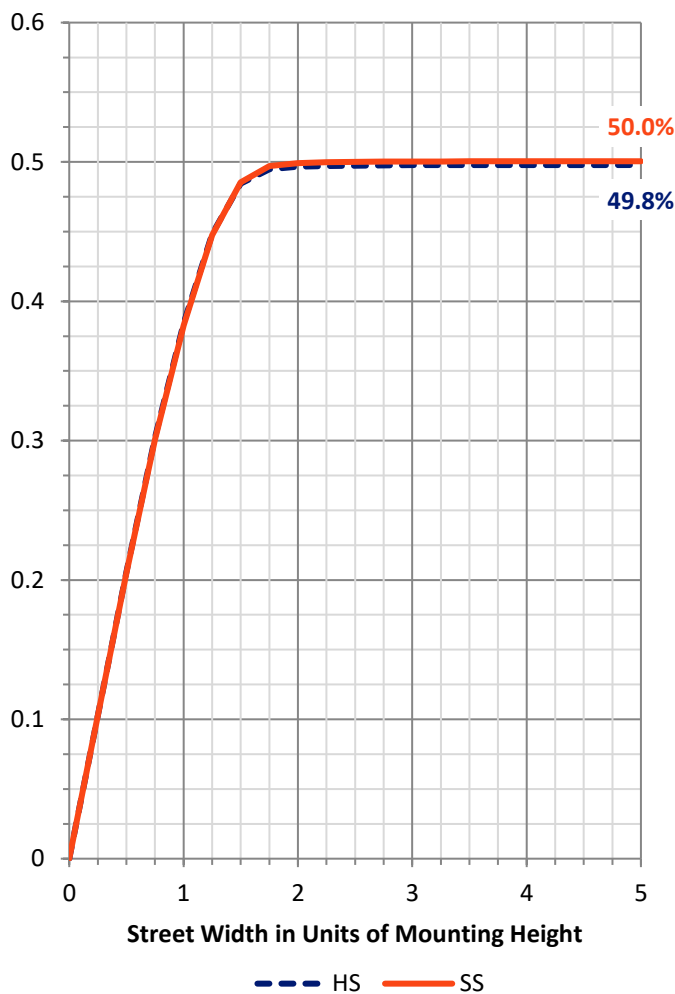
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9509.8 | 0.0 | 9509.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 9509.8 | 0.0 | 9509.8 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 19019.6 | 0.0 | 19019.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 301.3 | 1.6 |
| 10°-20° | 976.6 | 5.1 |
| 20°-30° | 1891.4 | 9.9 |
| 30°-40° | 3388.6 | 17.8 |
| 40°-50° | 5681.2 | 29.9 |
| 50°-60° | 6081.4 | 32.0 |
| 60°-70° | 668.3 | 3.5 |
| 70°-80° | 29.4 | 0.2 |
| 80°-90° | 1.3 | 0.0 |
| 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° | 19019.6 | 100.0 |
| 0°-180° | 19019.6 | 100.0 |

Coefficient of Utilization



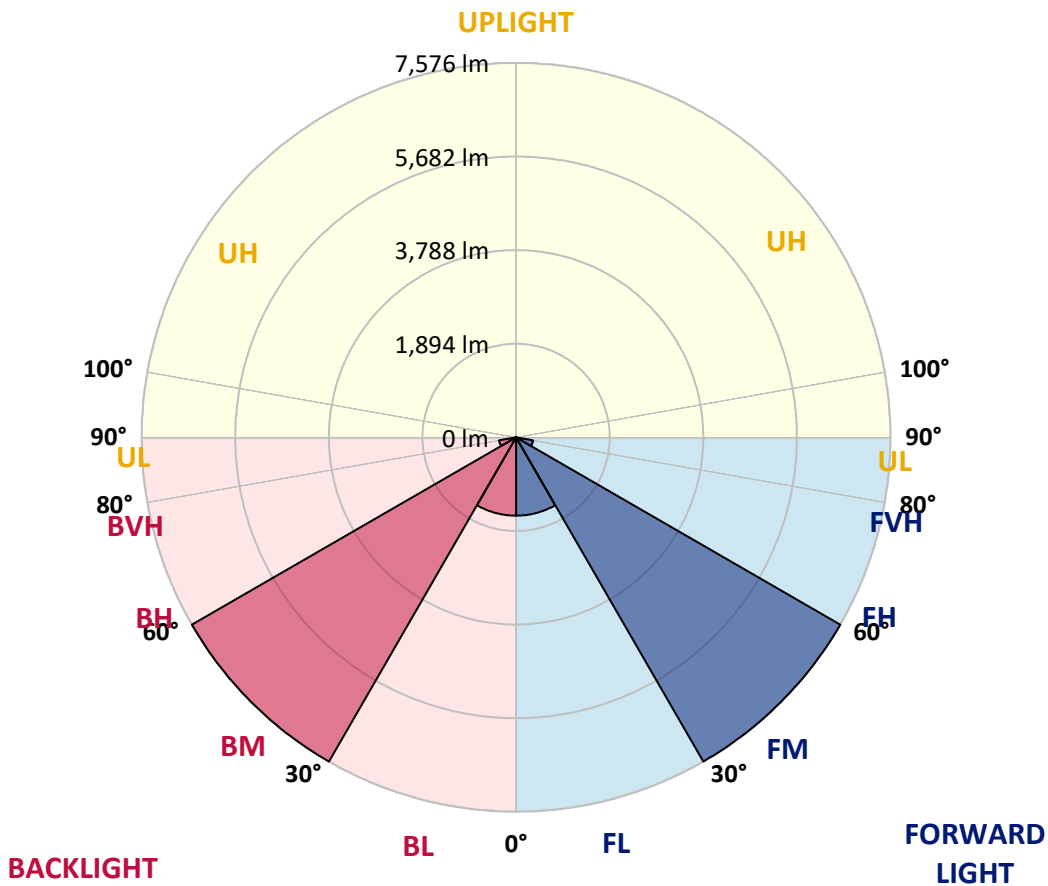
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 1584.7 | 8.3 | | | |
| FM (30°-60°) | 7575.6 | 39.8 | | | |
| FH (60°-80°) | 348.9 | 1.8 | | | G0/660 |
| FVH (80°-90°) | 0.7 | 0.0 | | | G0/10 |
| BL (0°-30°) | 1584.7 | 8.3 | B3/2500 | | |
| BM (30°-60°) | 7575.6 | 39.8 | B4/8500 | | |
| BH (60°-80°) | 348.9 | 1.8 | B1/500 | | G0/660 |
| BVH (80°-90°) | 0.7 | 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





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3075.1 | 3075.1 | 3075.1 | 3075.1 | 3075.1 | 3075.1 | 3075.1 | 3075.1 | 3075.1 | 3075.1 | 3075.1 |
| 2.5° | 3069.3 | 3069.3 | 3077.0 | 3082.9 | 3082.9 | 3098.4 | 3092.5 | 3086.7 | 3086.7 | 3079.0 | 3094.5 |
| 5° | 3113.9 | 3111.9 | 3119.7 | 3123.5 | 3115.8 | 3131.3 | 3121.6 | 3115.8 | 3111.9 | 3104.2 | 3119.7 |
| 7.5° | 3162.3 | 3164.2 | 3166.2 | 3173.9 | 3170.0 | 3185.6 | 3177.8 | 3166.2 | 3162.3 | 3150.7 | 3166.2 |
| 10° | 3220.4 | 3220.4 | 3224.3 | 3234.0 | 3235.9 | 3255.3 | 3247.6 | 3234.0 | 3222.4 | 3210.7 | 3226.2 |
| 12.5° | 3294.1 | 3296.0 | 3301.8 | 3315.4 | 3323.1 | 3344.4 | 3332.8 | 3305.7 | 3288.2 | 3274.7 | 3292.1 |
| 15° | 3400.6 | 3398.7 | 3406.4 | 3425.8 | 3435.5 | 3451.0 | 3433.6 | 3396.8 | 3375.4 | 3359.9 | 3371.6 |
| 17.5° | 3516.9 | 3516.9 | 3520.8 | 3540.1 | 3553.7 | 3577.0 | 3555.6 | 3511.1 | 3491.7 | 3470.4 | 3482.0 |
| 20° | 3644.8 | 3650.6 | 3654.5 | 3668.0 | 3691.3 | 3714.5 | 3697.1 | 3652.5 | 3631.2 | 3604.1 | 3617.7 |
| 22.5° | 3813.4 | 3807.5 | 3809.5 | 3832.7 | 3865.7 | 3888.9 | 3875.4 | 3823.0 | 3786.2 | 3764.9 | 3772.7 |
| 25° | 4001.3 | 3999.4 | 4005.2 | 4040.1 | 4076.9 | 4102.1 | 4082.7 | 4014.9 | 3978.1 | 3941.2 | 3956.7 |
| 27.5° | 4231.9 | 4233.8 | 4237.7 | 4280.3 | 4338.5 | 4375.3 | 4326.8 | 4259.0 | 4208.6 | 4160.2 | 4171.8 |
| 30° | 4505.1 | 4501.2 | 4512.9 | 4571.0 | 4656.3 | 4714.4 | 4658.2 | 4563.2 | 4491.5 | 4445.0 | 4450.9 |
| 32.5° | 4795.8 | 4799.6 | 4830.6 | 4923.7 | 5036.0 | 5138.7 | 5024.4 | 4898.5 | 4805.5 | 4718.3 | 4729.9 |
| 35° | 5109.7 | 5119.4 | 5189.1 | 5326.7 | 5510.8 | 5648.3 | 5489.5 | 5282.1 | 5150.4 | 5038.0 | 5041.9 |
| 37.5° | 5479.8 | 5503.0 | 5599.9 | 5805.3 | 6068.8 | 6252.9 | 6020.4 | 5745.2 | 5574.7 | 5435.2 | 5425.5 |
| 40° | 5966.1 | 5993.3 | 6125.0 | 6369.2 | 6688.9 | 6857.5 | 6588.1 | 6305.2 | 6094.0 | 5942.9 | 5919.6 |
| 42.5° | 6524.2 | 6559.1 | 6702.4 | 6952.4 | 7272.1 | 7386.4 | 7122.9 | 6884.6 | 6694.7 | 6516.4 | 6508.7 |
| 45° | 7153.9 | 7173.3 | 7289.6 | 7481.4 | 7712.0 | 7739.1 | 7541.5 | 7409.7 | 7217.9 | 7051.2 | 7037.7 |
| 47.5° | 7744.9 | 7764.3 | 7843.7 | 7942.6 | 7996.8 | 7899.9 | 7865.1 | 7806.9 | 7558.9 | 7353.5 | 7310.9 |
| 50° | 8194.5 | 8210.0 | 8308.8 | 8347.5 | 8196.4 | 7991.0 | 8058.8 | 7934.8 | 7665.5 | 7434.9 | 7369.0 |
| 52.5° | 8163.5 | 8202.2 | 8456.0 | 8676.9 | 8582.0 | 8415.4 | 8233.2 | 7965.8 | 7547.3 | 7231.4 | 7150.0 |
| 55° | 7028.0 | 7080.3 | 7624.8 | 8351.4 | 9000.5 | 9072.2 | 8343.7 | 7481.4 | 6694.7 | 6231.6 | 6148.3 |
| 57.5° | 4516.7 | 4530.3 | 5194.9 | 6214.1 | 7677.1 | 8138.3 | 6919.5 | 5640.6 | 4662.1 | 4152.5 | 4117.6 |
| 60° | 1660.6 | 1633.5 | 2135.3 | 2980.2 | 4421.8 | 4910.1 | 4073.0 | 2852.3 | 2034.6 | 1674.2 | 1645.1 |
| 62.5° | 399.2 | 403.0 | 499.9 | 749.9 | 1387.4 | 1716.8 | 1356.4 | 757.6 | 482.5 | 405.0 | 401.1 |
| 65° | 201.5 | 197.6 | 199.6 | 215.1 | 296.5 | 354.6 | 290.7 | 205.4 | 197.6 | 199.6 | 197.6 |
| 67.5° | 129.8 | 127.9 | 131.8 | 133.7 | 131.8 | 124.0 | 122.1 | 125.9 | 125.9 | 127.9 | 124.0 |
| 70° | 79.4 | 77.5 | 81.4 | 87.2 | 83.3 | 73.6 | 77.5 | 81.4 | 77.5 | 75.6 | 75.6 |
| 72.5° | 42.6 | 42.6 | 46.5 | 50.4 | 46.5 | 42.6 | 42.6 | 44.6 | 42.6 | 42.6 | 42.6 |
| 75° | 19.4 | 19.4 | 21.3 | 23.3 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 | 19.4 |
| 77.5° | 5.8 | 5.8 | 7.8 | 7.8 | 5.8 | 5.8 | 5.8 | 5.8 | 7.8 | 7.8 | 7.8 |
| 80° | 1.9 | 3.9 | 3.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 3.9 | 3.9 | 3.9 |
| 82.5° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| 85° | 1.9 | 1.9 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 1.9 | 1.9 | 1.9 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 1.9 | 1.9 | 1.9 |
| 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)