

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: P638488

Luminaire Tested: GWS-SA4E-830-U-T2-W-GRSBK

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638488  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-20)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4E-830-U-T2-W-GRSBK  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK  
Light Source: (64) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

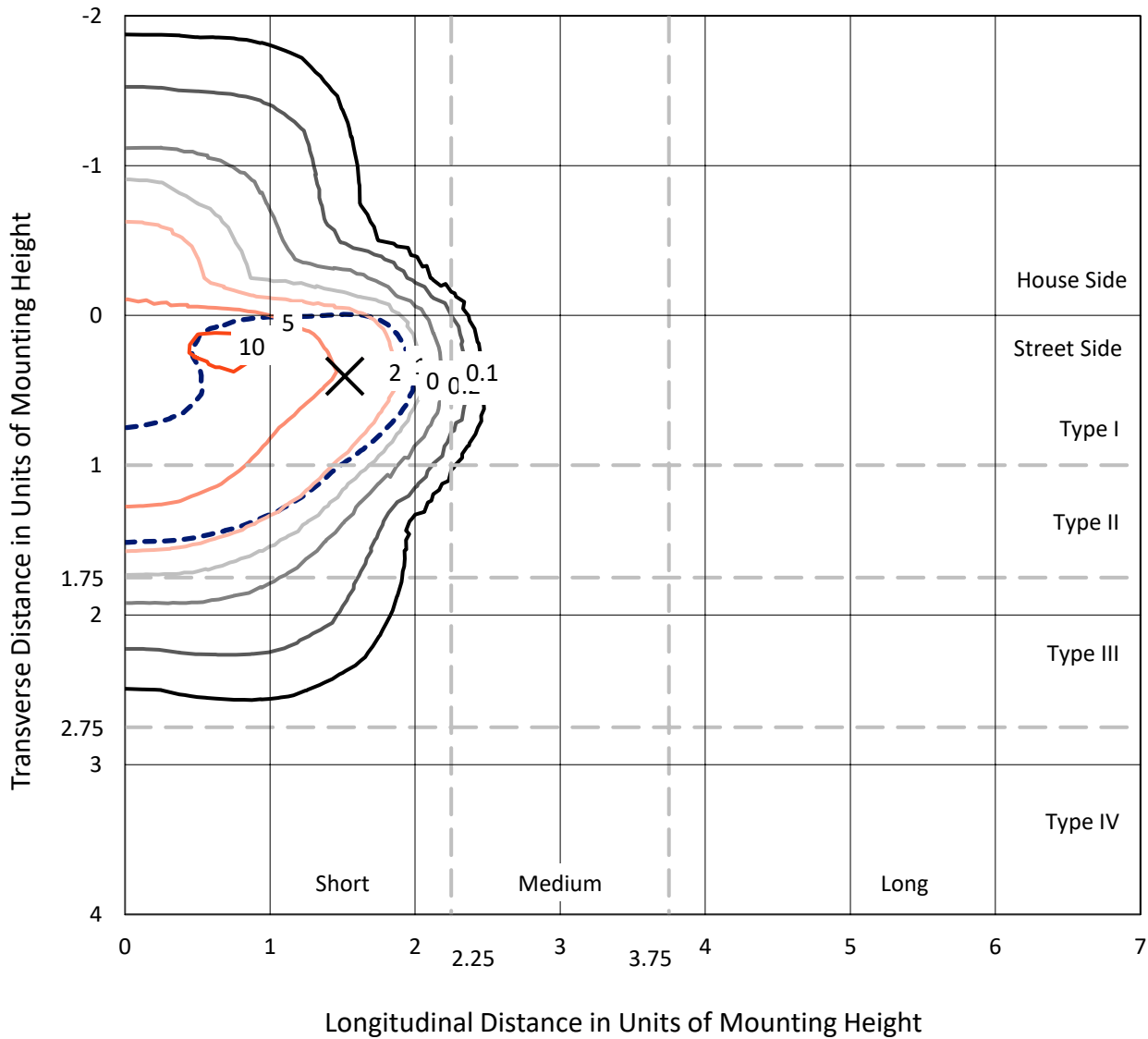
Lumens per Lamp: N/A  
Luminaire Lumens: 14440.4 lumens  
Efficiency: N/A  
Efficacy: 71.3 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G1  
  
Input Watts (W): 202.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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

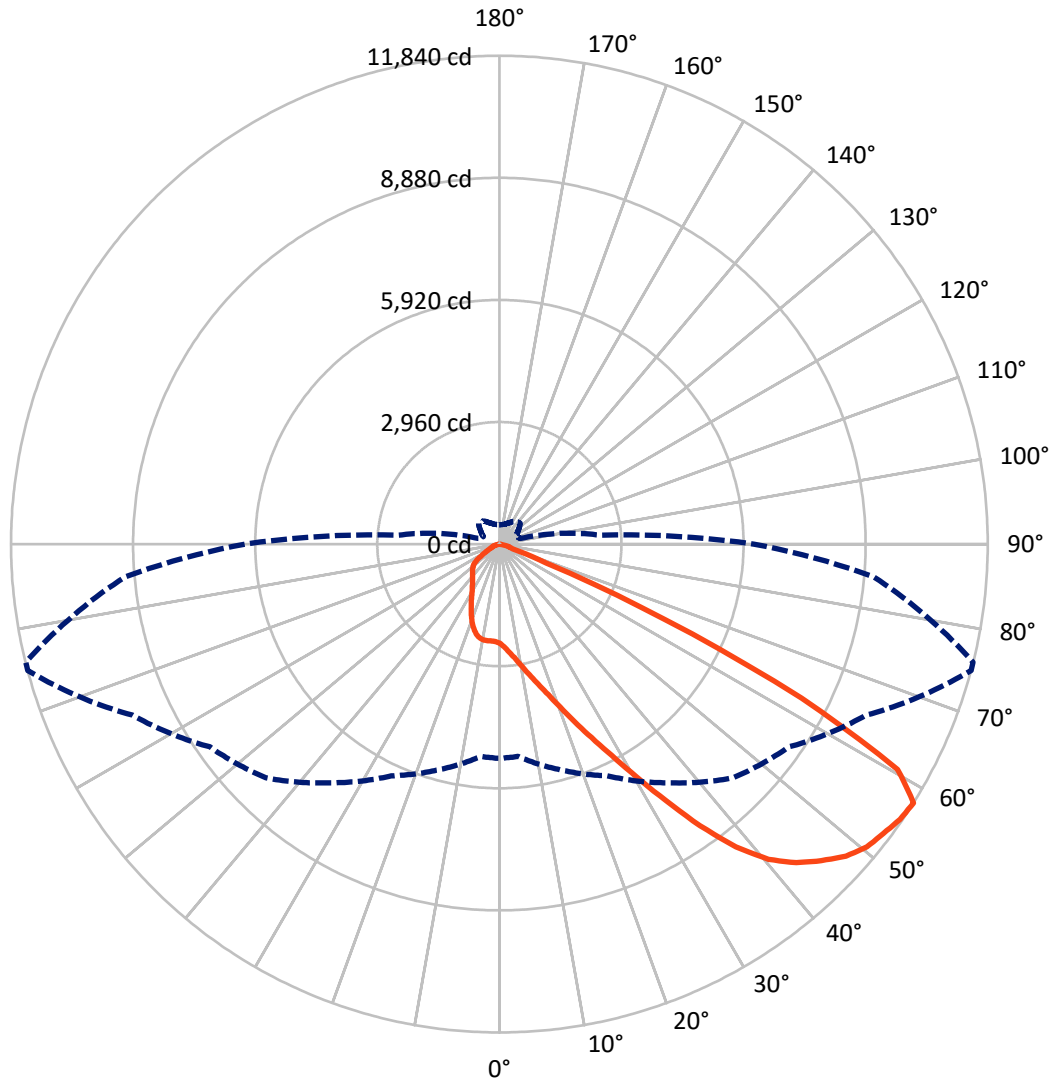
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 11.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2358.8	0.0	2358.8
	% Fixture	16.3	0.0	16.3
<b>Street Side</b>	Lumens	12081.6	0.0	12081.6
	% Fixture	83.7	0.0	83.7
<b>Total</b>	Lumens	14440.4	0.0	14440.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	245.1	1.7
10°-20°	796.1	5.5
20°-30°	1457.9	10.1
30°-40°	2418.8	16.8
40°-50°	3694.1	25.6
50°-60°	4150.9	28.7
60°-70°	1531.0	10.6
70°-80°	146.3	1.0
80°-90°	0.1	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°	14440.4	100.0
0°-180°	14440.4	100.0

**Coefficient of Utilization**



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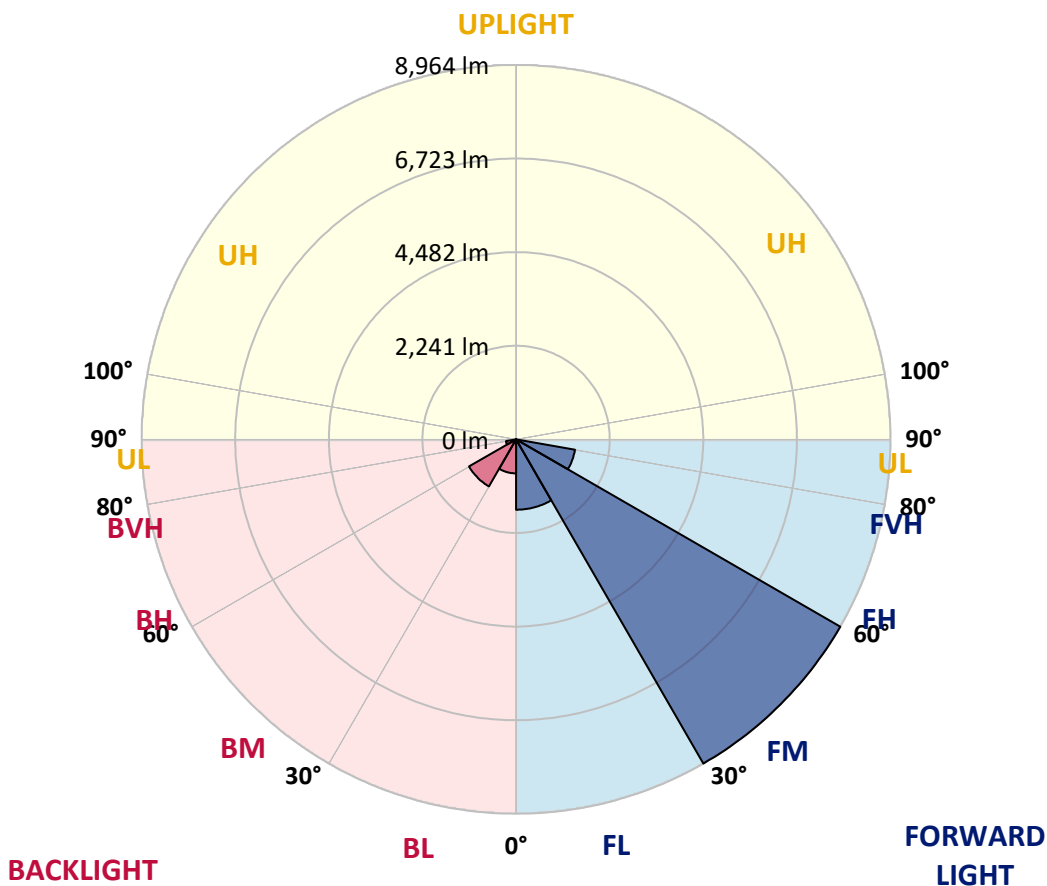
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1685.2	11.7			
FM (30°-60°)	8963.9	62.1			
FH (60°-80°)	1432.4	9.9			G1/1800
FVH (80°-90°)	0.1	0.0			G0/10
BL (0°-30°)	813.9	5.6	B2/1000		
BM (30°-60°)	1299.9	9.0	B2/2500		
BH (60°-80°)	245.0	1.7	B1/500		G1/500
BVH (80°-90°)	0.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5
2.5°	2690.8	2718.7	2710.0	2692.5	2682.1	2645.5	2622.8	2556.6	2509.5	2504.3	2460.7
5°	3030.6	3025.4	3018.4	2997.5	2980.1	2922.6	2854.6	2743.1	2643.7	2631.5	2539.2
7.5°	3217.1	3220.6	3224.1	3220.6	3208.4	3164.8	3089.9	2959.2	2807.5	2797.1	2650.7
10°	3293.8	3300.7	3318.2	3351.3	3380.9	3377.4	3333.8	3199.7	3013.2	2995.8	2798.8
12.5°	3330.4	3339.1	3367.0	3429.7	3509.9	3572.6	3579.6	3459.3	3253.7	3225.8	2974.8
15°	3380.9	3389.6	3424.5	3506.4	3623.1	3746.9	3827.0	3750.4	3520.3	3490.7	3168.3
17.5°	3403.6	3415.8	3466.3	3574.3	3726.0	3915.9	4097.2	4090.2	3835.8	3813.1	3393.1
20°	3447.1	3455.8	3501.2	3617.9	3800.9	4074.5	4379.5	4489.3	4220.9	4187.8	3665.0
22.5°	3584.8	3588.3	3609.2	3682.4	3853.2	4189.5	4667.0	4954.6	4675.8	4632.2	3969.9
25°	3809.6	3807.9	3816.6	3828.8	3954.3	4306.3	4944.1	5479.2	5196.8	5149.8	4315.0
27.5°	4095.4	4095.4	4116.3	4081.5	4132.0	4450.9	5217.7	6082.1	5803.3	5737.1	4693.2
30°	4431.8	4430.0	4478.8	4423.1	4438.7	4679.2	5512.3	6739.2	6535.3	6453.3	5128.9
32.5°	4888.4	4877.9	4933.7	4857.0	4804.7	5024.3	5871.3	7425.8	7411.8	7286.4	5676.1
35°	5465.2	5447.8	5465.2	5390.3	5296.2	5507.0	6341.8	8110.7	8384.3	8251.8	6327.9
37.5°	6038.6	6094.3	6113.5	5984.5	5907.9	6118.7	6908.2	8724.1	9313.2	9175.5	7005.8
40°	6714.8	6697.3	6763.5	6618.9	6570.1	6803.6	7462.4	9180.7	10048.6	9917.9	7608.8
42.5°	7213.2	7244.5	7326.5	7246.3	7207.9	7427.5	7927.7	9447.4	10559.2	10430.3	8039.2
45°	7810.9	7833.6	7865.0	7798.7	7758.6	7974.7	8264.0	9564.1	10947.9	10808.4	8328.5
47.5°	8457.5	8474.9	8474.9	8339.0	8210.0	8298.9	8488.9	9630.3	11305.1	11170.9	8542.9
50°	8921.1	8929.8	9006.4	8910.6	8630.0	8492.3	8591.7	9694.8	11542.1	11416.6	8612.6
52.5°	8509.8	8499.3	8752.0	8950.7	9025.6	8752.0	8769.4	9788.9	11657.1	11549.1	8668.4
55°	7166.1	7148.7	7504.2	7986.9	8647.4	8997.7	8983.8	9844.7	11784.4	11718.1	8870.5
57.5°	5195.1	5165.5	5660.4	6197.2	7063.3	8013.1	8570.8	9813.3	11840.1	11834.9	9105.8
60°	3123.0	3098.6	3565.6	4130.3	4799.5	5754.5	6679.9	8790.3	11094.2	11104.7	8494.1
62.5°	1922.2	1944.9	2366.6	2654.2	2903.4	3190.9	3726.0	5913.1	8218.7	8286.7	5968.9
65°	1293.1	1310.5	1700.9	2063.4	2063.4	1687.0	1448.2	2826.7	4384.7	4269.7	2823.2
67.5°	867.9	887.1	1195.5	1619.0	1680.0	1176.3	587.3	843.5	1221.7	1185.1	698.8
70°	510.6	531.5	796.4	1110.1	1223.4	819.1	392.1	357.3	346.8	336.3	271.9
72.5°	228.3	237.0	406.1	564.6	515.8	345.1	277.1	285.8	270.1	264.9	221.3
75°	69.7	73.2	104.6	122.0	123.7	123.7	167.3	224.8	212.6	214.4	170.8
77.5°	17.4	17.4	27.9	26.1	13.9	12.2	31.4	50.5	52.3	47.1	34.9
80°	0.0	0.0	0.0	0.0	0.0	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5	2408.5
2.5°	2441.6	2396.3	2366.6	2324.8	2295.2	2263.8	2235.9	2213.3	2201.1	2197.6	2199.3
5°	2497.3	2425.9	2356.2	2276.0	2220.2	2168.0	2126.1	2093.0	2077.3	2072.1	2072.1
7.5°	2582.7	2483.4	2359.7	2234.2	2140.1	2058.2	2009.4	1972.8	1958.8	1955.3	1944.9
10°	2694.3	2558.3	2354.4	2159.2	2026.8	1941.4	1906.6	1896.1	1901.3	1903.1	1901.3
12.5°	2828.5	2636.8	2321.3	2049.5	1906.6	1854.3	1857.8	1885.6	1917.0	1932.7	1936.2
15°	2971.4	2708.2	2246.4	1918.7	1803.7	1802.0	1852.5	1917.0	1978.0	2004.1	2011.1
17.5°	3131.7	2765.7	2131.4	1779.3	1714.8	1765.4	1856.0	1955.3	2037.3	2080.8	2089.5
20°	3307.7	2812.8	1985.0	1648.6	1636.4	1727.0	1852.5	1974.5	2075.6	2124.4	2133.1
22.5°	3490.7	2845.9	1815.9	1528.4	1565.0	1683.5	1819.4	1937.9	2033.8	2089.5	2096.5
25°	3699.8	2849.4	1643.4	1427.3	1498.8	1624.2	1739.2	1836.8	1917.0	1965.8	1971.0
27.5°	3882.8	2807.5	1490.0	1345.4	1437.8	1551.0	1627.7	1681.7	1737.5	1765.4	1767.1
30°	4093.7	2734.3	1345.4	1279.2	1375.0	1460.4	1498.8	1510.9	1516.2	1521.4	1514.4
32.5°	4344.6	2645.5	1237.3	1214.7	1303.6	1361.1	1371.5	1347.1	1317.5	1275.7	1265.2
35°	4653.1	2565.3	1148.5	1151.9	1225.1	1260.0	1251.3	1199.0	1141.5	1091.0	1082.2
37.5°	4987.7	2497.3	1080.5	1091.0	1139.7	1164.1	1138.0	1080.5	1054.4	1010.8	1012.5
40°	5284.0	2441.6	1019.5	1030.0	1052.6	1075.3	1033.4	995.1	1043.9	1040.4	1043.9
42.5°	5494.8	2394.5	967.2	962.0	977.7	993.4	962.0	942.8	1024.7	1002.1	1014.3
45°	5618.6	2350.9	923.6	892.3	916.7	944.6	923.6	899.3	927.1	822.6	813.9
47.5°	5702.2	2326.5	885.3	824.3	867.9	916.7	873.1	813.9	773.8	683.2	676.2
50°	5710.9	2314.4	840.0	754.6	810.4	862.7	812.1	730.2	672.7	632.6	627.4
52.5°	5756.2	2338.7	777.3	665.7	726.7	810.4	775.5	693.6	615.2	580.3	573.4
55°	5958.4	2441.6	672.7	543.7	632.6	770.3	745.9	618.7	543.7	522.8	517.6
57.5°	6167.5	2462.5	529.8	430.5	550.7	712.8	681.4	569.9	496.7	472.3	467.1
60°	5639.5	2028.5	397.3	355.5	486.2	658.8	630.9	540.2	454.9	425.2	420.0
62.5°	3705.1	1096.2	315.4	301.5	409.5	557.7	575.1	488.0	406.1	374.7	372.9
65°	1707.9	508.9	242.2	238.8	320.7	444.4	494.9	427.0	343.3	315.4	315.4
67.5°	465.3	252.7	190.0	176.0	217.8	298.0	360.7	318.9	244.0	210.9	209.1
70°	231.8	203.9	170.8	151.6	156.8	184.7	212.6	177.8	123.7	101.1	99.3
72.5°	190.0	167.3	144.6	129.0	118.5	113.3	109.8	88.9	57.5	43.6	41.8
75°	141.2	120.2	102.8	83.7	71.5	66.2	59.3	43.6	24.4	13.9	12.2
77.5°	31.4	29.6	27.9	20.9	19.2	15.7	12.2	8.7	3.5	0.0	0.0
80°	1.7	1.7	1.7	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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)