

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: P638217

Luminaire Tested: GWS-SA4E-735-U-T2R-W-GRSBK

Issue Date: 1/10/2023

Test Information

Test Method: LM-79-2019
Report Number: P638217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/10/2023
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: McGRAW-EDISON
Catalog Number: GWS-SA4E-735-U-T2R-W-GRSBK
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, BK
Light Source: (64) 3500K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20233.2 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G1

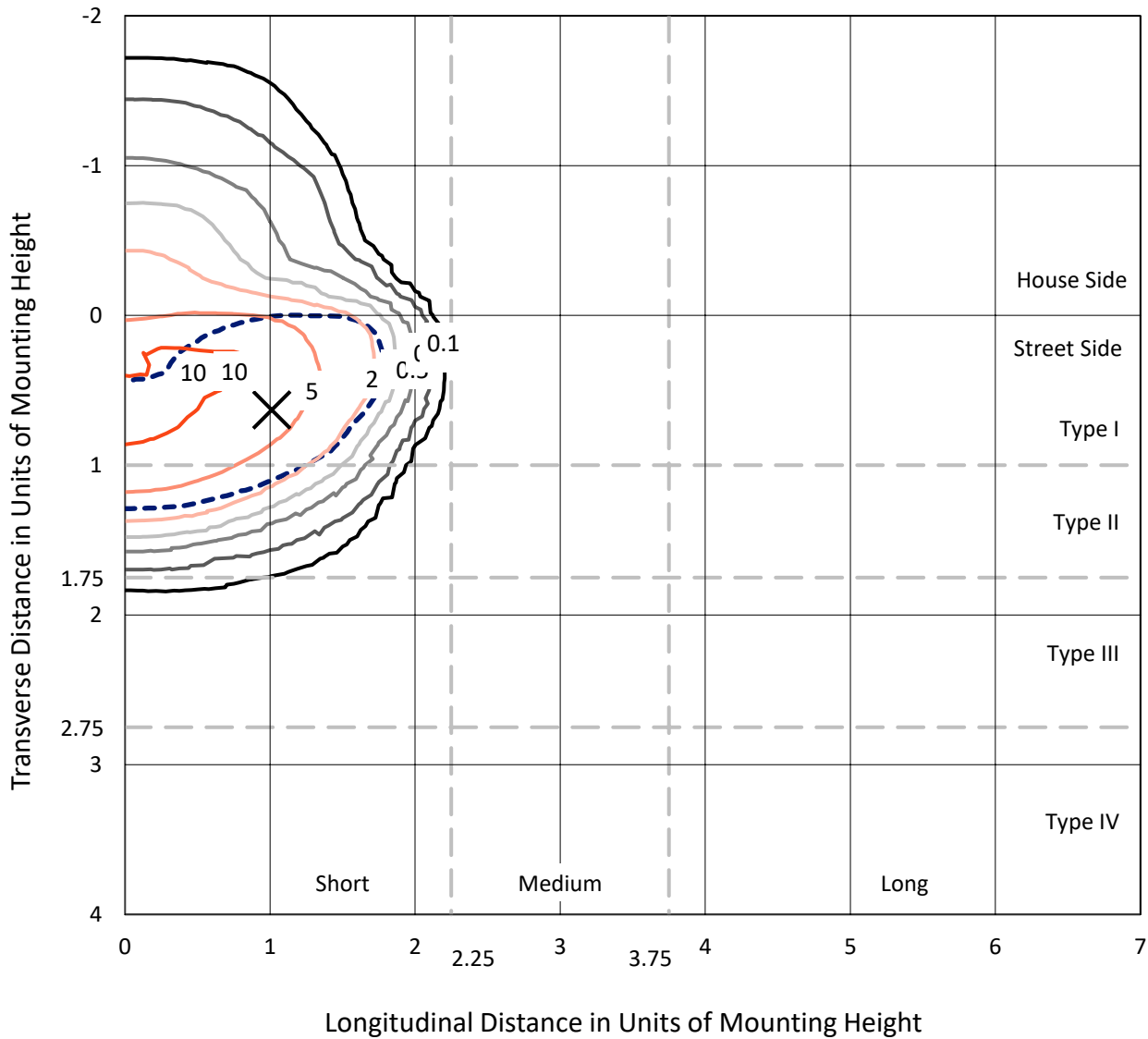
Input Watts (W): 202.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 0
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

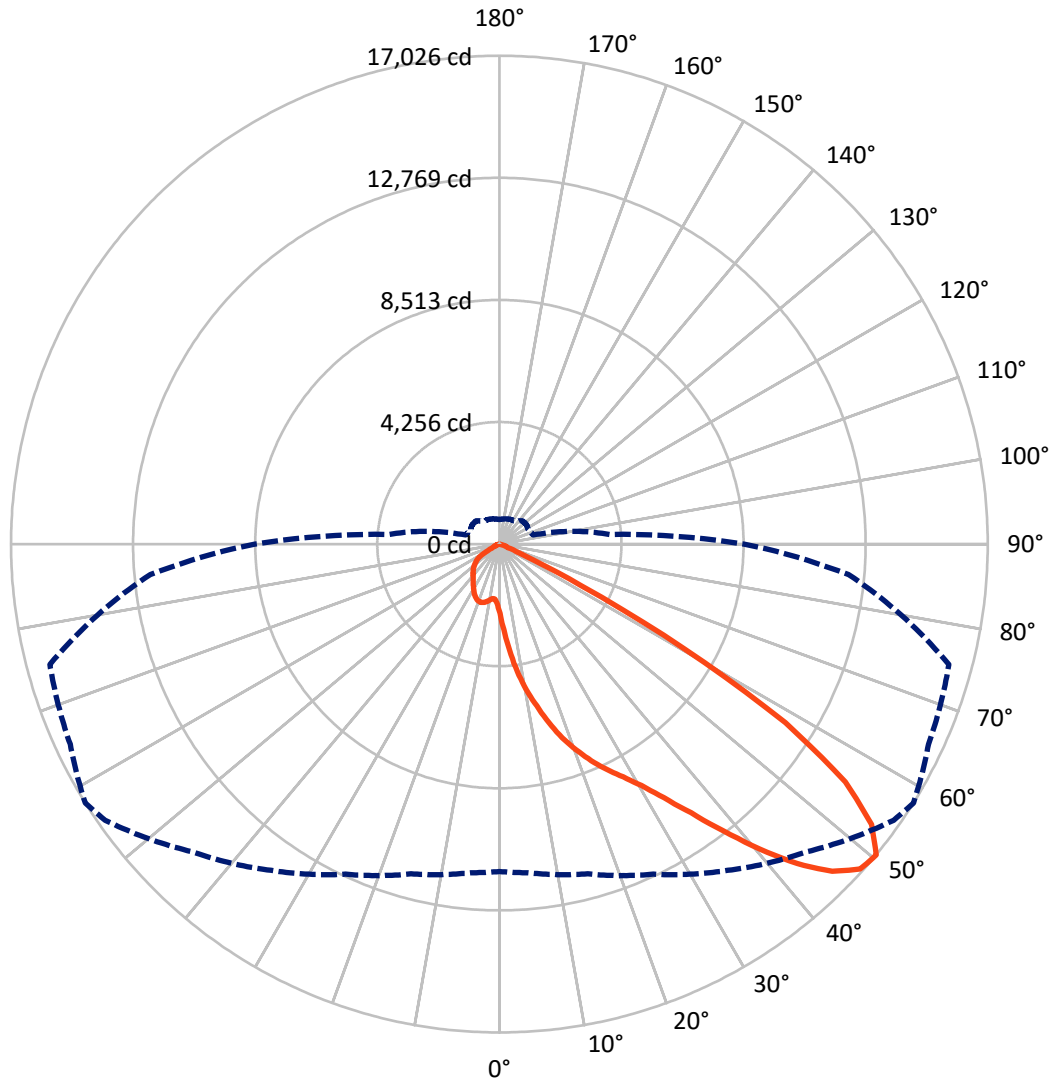
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2833.9	0.0	2833.9
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	17399.3	0.0	17399.3
	% Fixture	86.0	0.0	86.0
Total	Lumens	20233.2	0.0	20233.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	299.4	1.5
10°-20°	1185.3	5.9
20°-30°	2398.4	11.9
30°-40°	4243.1	21.0
40°-50°	6185.5	30.6
50°-60°	4957.9	24.5
60°-70°	893.2	4.4
70°-80°	70.4	0.3
80°-90°	0.0	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°	20233.2	100.0
0°-180°	20233.2	100.0

Coefficient of Utilization



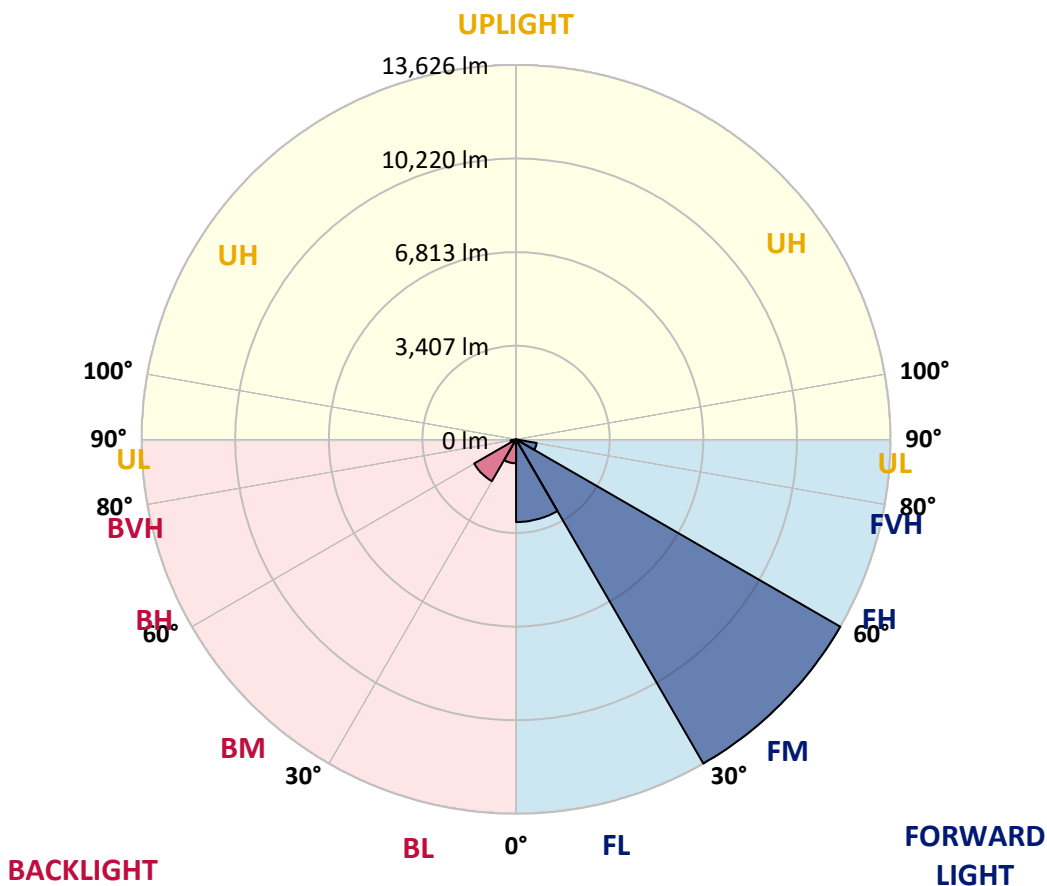
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3010.6	14.9			
FM (30°-60°)	13626.5	67.3			
FH (60°-80°)	762.2	3.8			G1/1800
FVH (80°-90°)	0.0	0.0			G0/10
BL (0°-30°)	872.5	4.3	B2/1000		
BM (30°-60°)	1760.0	8.7	B2/2500		
BH (60°-80°)	201.4	1.0	B1/500		G1/500
BVH (80°-90°)	0.0	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°	58°	65°	75°	85°
0°	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8
2.5°	3576.5	3520.3	3487.8	3461.9	3347.2	3165.5	3046.4	2983.7	2879.8	2704.6	2553.1
5°	4667.0	4625.9	4550.2	4498.3	4351.1	4093.7	3827.5	3721.5	3485.7	3089.7	2734.9
7.5°	5389.7	5359.4	5331.3	5262.0	5123.6	4889.9	4595.6	4485.3	4121.8	3559.2	2977.2
10°	5945.8	5922.0	5889.5	5887.3	5779.2	5569.3	5281.5	5166.8	4773.1	4069.9	3262.8
12.5°	6434.8	6415.3	6408.8	6469.4	6400.1	6244.4	5932.8	5790.0	5372.4	4591.3	3578.7
15°	6770.1	6765.8	6793.9	6912.9	6951.9	6880.5	6618.7	6465.1	5984.7	5114.9	3927.1
17.5°	6923.7	6936.7	6990.8	7196.4	7369.5	7430.0	7228.8	7099.0	6592.7	5645.0	4299.2
20°	7185.6	7181.2	7213.7	7408.4	7620.5	7836.8	7776.2	7665.9	7207.2	6205.4	4712.5
22.5°	7923.4	7860.6	7791.4	7821.7	7897.4	8150.6	8263.1	8206.8	7841.1	6780.9	5138.7
25°	9057.1	8992.2	8769.4	8553.0	8410.2	8524.9	8678.5	8706.6	8470.8	7371.6	5584.4
27.5°	10260.1	10201.7	9950.7	9626.2	9217.2	9018.2	9132.9	9189.1	9089.6	8074.8	6058.3
30°	11387.4	11309.5	11034.7	10632.3	10158.4	9853.4	9723.5	9762.5	9820.9	8907.8	6614.3
32.5°	12365.4	12307.0	11978.1	11554.0	11097.5	10779.4	10476.5	10541.4	10684.2	9926.9	7326.2
35°	13194.1	13163.8	12815.4	12393.5	11911.0	11748.7	11489.1	11502.1	11644.9	11158.1	8193.8
37.5°	13914.6	13862.6	13546.7	13155.1	12772.2	12746.2	12674.8	12681.3	12754.8	12592.6	9191.3
40°	14368.9	14321.3	14096.3	13854.0	13581.4	13585.7	13955.7	13983.8	13899.4	14001.1	10245.0
42.5°	14539.9	14505.3	14384.1	14386.3	14358.1	14485.8	15180.3	15232.2	14929.3	15106.8	11145.1
45°	14243.4	14228.3	14237.0	14548.5	14886.1	15279.8	16182.1	16273.0	15844.6	15840.2	11848.3
47.5°	13287.1	13256.8	13510.0	14040.1	14821.1	15587.1	16787.9	16928.6	16485.0	16260.0	12289.7
50°	11413.4	11499.9	11900.2	12696.4	13884.3	15165.2	16781.4	17025.9	16508.8	16223.2	12216.1
52.5°	8267.4	8250.1	9126.4	10221.2	11666.5	13815.0	15890.0	16247.0	15931.1	15861.9	12051.6
55°	4498.3	4656.2	5246.9	6696.6	8501.1	11259.7	13854.0	14632.9	14998.6	15729.9	12348.1
57.5°	1653.0	1722.3	2092.3	3117.9	4500.4	7001.6	10582.5	11757.4	12886.8	15362.1	12298.3
60°	666.4	679.4	826.5	1146.7	1891.0	3563.6	6348.2	7391.1	8455.6	11759.6	9437.9
62.5°	484.7	502.0	560.4	670.7	956.3	1557.8	2737.0	3182.8	3479.2	5824.6	4649.7
65°	391.6	404.6	452.2	502.0	631.8	837.3	882.8	850.3	846.0	1505.9	1066.7
67.5°	324.6	337.5	372.2	406.8	454.4	417.6	302.9	318.1	259.6	257.5	209.9
70°	238.0	253.1	287.8	324.6	272.6	112.5	175.3	259.6	196.9	164.4	160.1
72.5°	179.6	190.4	222.9	212.0	80.1	43.3	116.8	188.2	151.5	121.2	119.0
75°	134.1	140.6	112.5	34.6	8.7	10.8	43.3	77.9	84.4	69.2	69.2
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	4.3	6.5	8.7	10.8	13.0
80°	0.0	0.0	0.0	0.0	0.0	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8	2416.8
2.5°	2466.6	2375.7	2245.9	2137.7	2055.5	1975.4	1914.8	1854.3	1852.1	1821.8	1815.3
5°	2570.4	2406.0	2168.0	1997.1	1893.2	1830.5	1787.2	1765.6	1754.7	1743.9	1739.6
7.5°	2719.7	2483.9	2155.0	1973.3	1886.7	1845.6	1815.3	1802.3	1795.8	1787.2	1785.0
10°	2903.6	2596.4	2202.6	2018.7	1943.0	1904.0	1871.6	1852.1	1841.3	1826.1	1821.8
12.5°	3124.3	2734.9	2278.3	2094.4	2014.4	1962.4	1919.2	1891.0	1875.9	1856.4	1852.1
15°	3362.3	2884.2	2362.7	2163.7	2068.5	2001.4	1947.3	1904.0	1875.9	1852.1	1845.6
17.5°	3609.0	3035.6	2438.5	2211.3	2094.4	2014.4	1936.5	1878.1	1843.4	1813.2	1804.5
20°	3886.0	3191.4	2488.2	2219.9	2085.8	1979.8	1888.9	1815.3	1780.7	1739.6	1730.9
22.5°	4175.9	3336.4	2509.9	2200.5	2038.2	1914.8	1817.5	1741.8	1692.0	1648.7	1635.7
25°	4457.2	3466.2	2499.0	2146.4	1966.8	1824.0	1724.4	1646.6	1592.5	1549.2	1538.4
27.5°	4755.7	3574.4	2460.1	2066.3	1869.4	1724.4	1629.2	1562.2	1512.4	1464.8	1454.0
30°	5091.1	3673.9	2397.3	1968.9	1754.7	1622.8	1549.2	1503.8	1449.7	1399.9	1384.7
32.5°	5495.7	3762.6	2306.5	1852.1	1653.0	1534.0	1492.9	1458.3	1395.6	1343.6	1332.8
35°	5958.8	3836.2	2191.8	1730.9	1553.5	1477.8	1469.1	1423.7	1341.5	1280.9	1267.9
37.5°	6495.3	3907.6	2055.5	1611.9	1480.0	1451.8	1454.0	1376.1	1276.6	1203.0	1194.3
40°	7073.0	3979.0	1904.0	1508.1	1412.9	1436.7	1417.2	1306.9	1144.6	1073.2	1064.5
42.5°	7674.5	4056.9	1750.4	1410.7	1356.6	1378.3	1350.1	1168.4	1051.5	1014.8	1010.4
45°	8217.6	4149.9	1583.8	1313.3	1300.4	1293.9	1246.3	1058.0	1008.3	982.3	980.1
47.5°	8609.2	4134.8	1406.4	1220.3	1239.8	1218.1	1073.2	1006.1	965.0	930.4	921.7
50°	8537.8	3870.8	1222.5	1116.5	1161.9	1142.4	965.0	945.5	908.7	872.0	859.0
52.5°	8356.1	3511.6	1062.4	1006.1	1077.5	1032.1	891.4	872.0	839.5	791.9	776.8
55°	8453.5	3174.1	936.9	917.4	991.0	854.7	809.2	778.9	744.3	692.4	685.9
57.5°	8139.7	2589.9	753.0	765.9	876.3	729.2	709.7	662.1	603.7	569.0	564.7
60°	5634.2	1391.2	471.7	486.8	634.0	612.3	636.1	592.8	521.4	489.0	482.5
62.5°	2587.8	558.2	257.5	246.7	333.2	415.4	545.2	540.9	452.2	400.3	396.0
65°	627.5	255.3	183.9	173.1	188.2	248.8	354.8	426.2	365.7	305.1	298.6
67.5°	203.4	207.7	168.8	157.9	166.6	186.1	212.0	235.8	233.7	214.2	209.9
70°	162.3	188.2	155.8	142.8	142.8	149.3	142.8	114.7	99.5	108.2	112.5
72.5°	121.2	142.8	123.3	110.3	106.0	103.9	88.7	64.9	45.4	41.1	38.9
75°	71.4	80.1	75.7	64.9	60.6	54.1	43.3	28.1	15.1	10.8	6.5
77.5°	13.0	15.1	17.3	13.0	10.8	8.7	6.5	2.2	0.0	0.0	0.0
80°	0.0	2.2	2.2	2.2	0.0	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)