

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: P638188

Luminaire Tested: GWS-SA4E-735-U-AFL-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638188  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-47)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4E-735-U-AFL-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (64) 3500K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

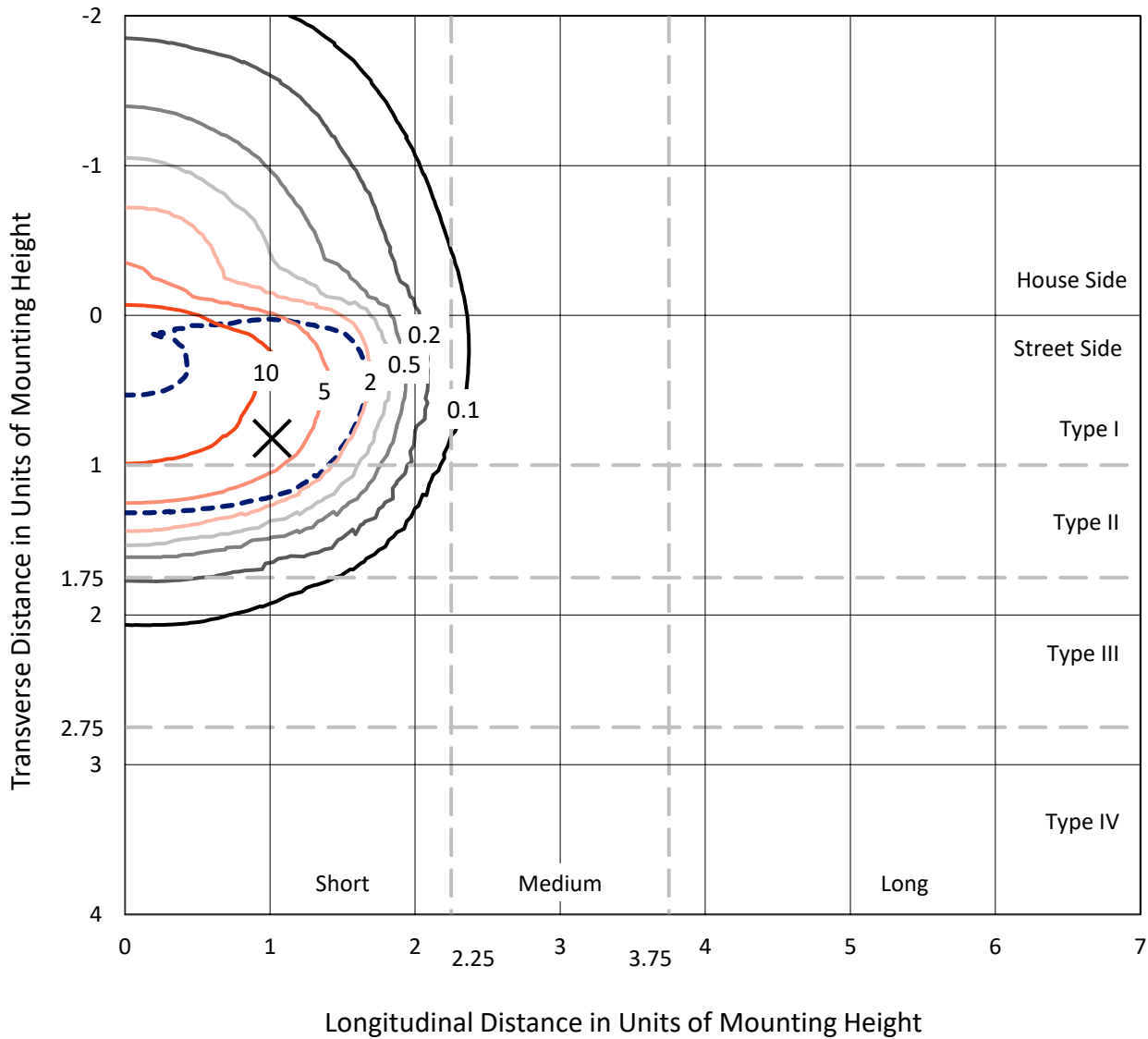
Lumens per Lamp: N/A  
Luminaire Lumens: 27382.2 lumens  
Efficiency: N/A  
Efficacy: 135.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2  
  
Input Watts (W): 202.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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



REPORT NUMBER: P638188  
 CATALOG NUMBER: GWS-SA4E-735-U-AFL-W-GRSWH

### Iso-Footcandle Lines of Horizontal Illumination

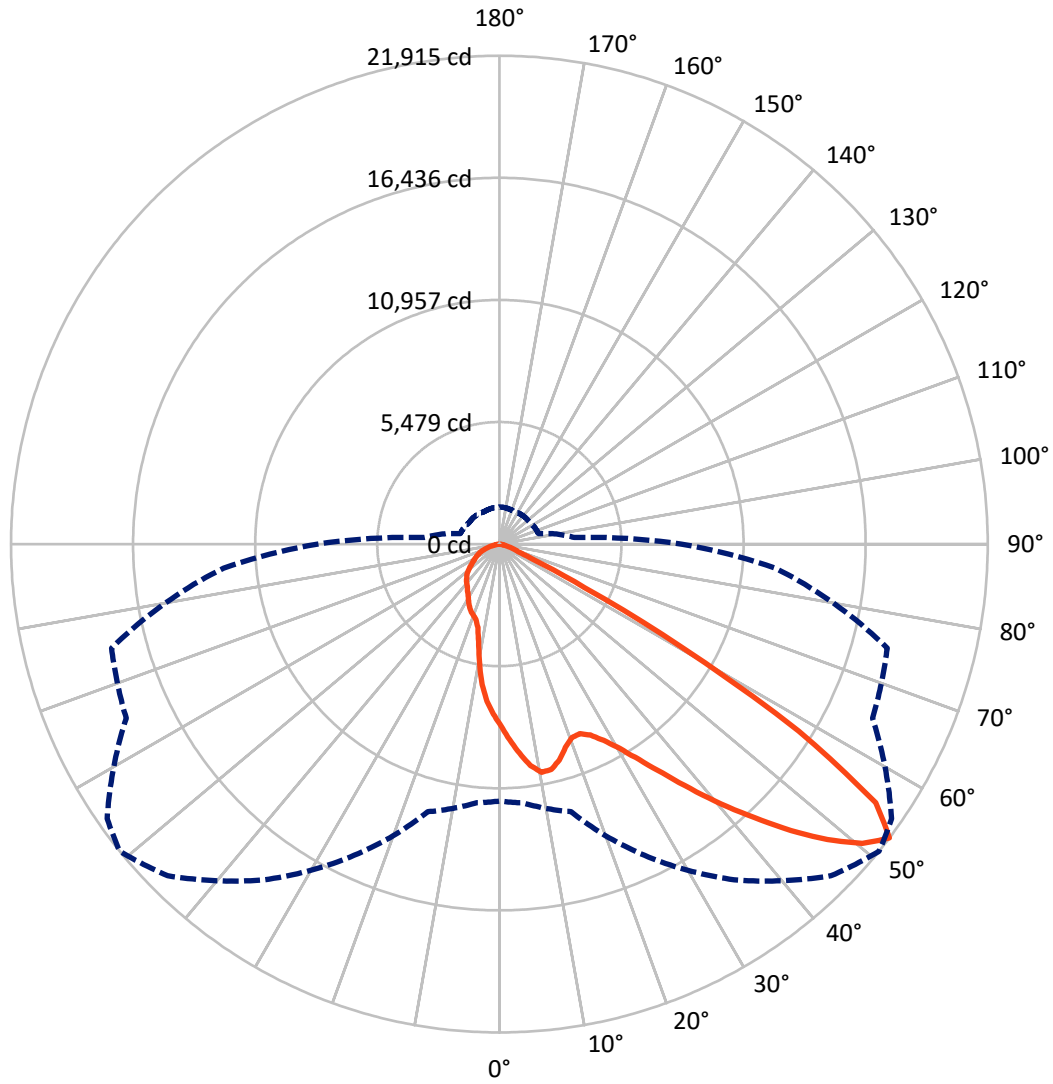
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.9 fc  
 Type II - Short - N/A

REPORT NUMBER: P638188  
CATALOG NUMBER: GWS-SA4E-735-U-AFL-W-GRSWH

### Luminous Intensity Polar Plot



— Vertical Plane Through 51-Deg Lateral    - - - Horizontal Cone Through 52.5-Deg Vertical

REPORT NUMBER: P638188

CATALOG NUMBER: GWS-SA4E-735-U-AFL-W-GRSWH

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5335.2	0.0	5335.2
	% Fixture	19.5	0.0	19.5
<b>Street Side</b>	Lumens	22047.0	0.0	22047.0
	% Fixture	80.5	0.0	80.5
<b>Total</b>	Lumens	27382.2	0.0	27382.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	760.8	2.8
10°-20°	1976.8	7.2
20°-30°	3214.2	11.7
30°-40°	5093.8	18.6
40°-50°	7682.5	28.1
50°-60°	6645.9	24.3
60°-70°	1506.7	5.5
70°-80°	444.3	1.6
80°-90°	57.2	0.2
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°	27382.2	100.0
0°-180°	27382.2	100.0

**Coefficient of Utilization**



REPORT NUMBER: P638188

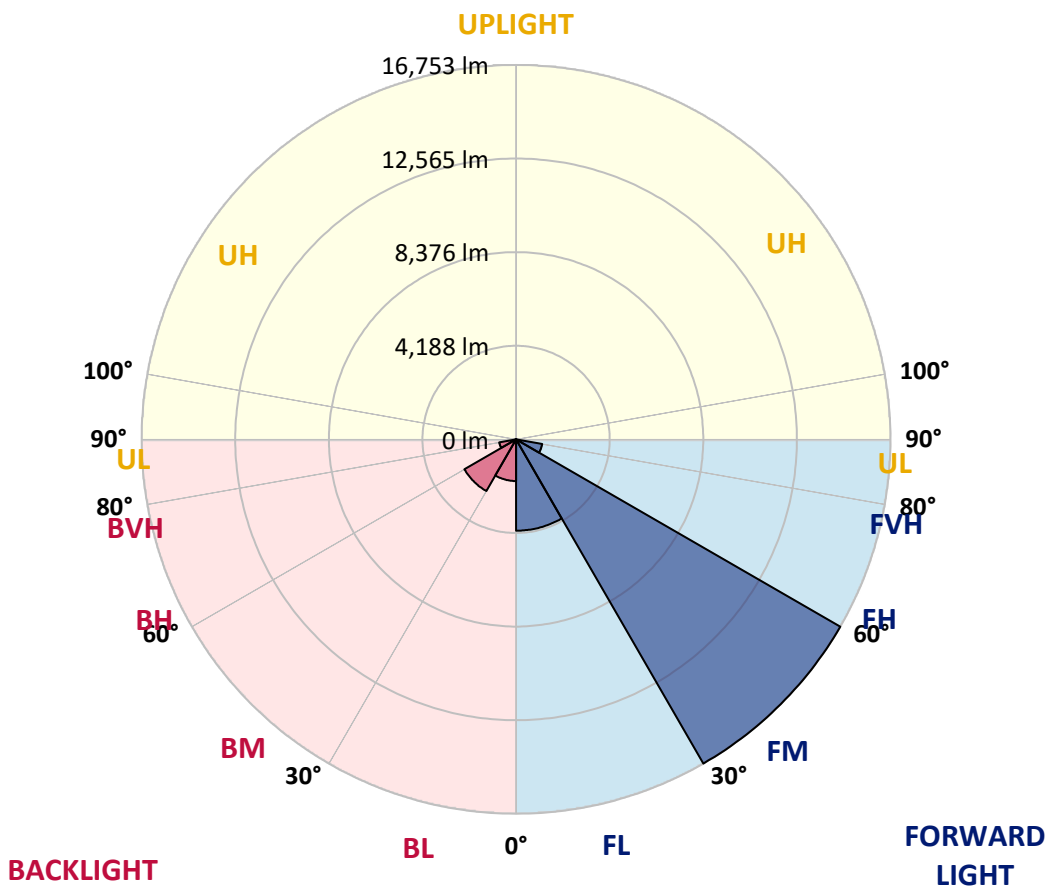
CATALOG NUMBER: GWS-SA4E-735-U-AFL-W-GRSWH

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4086.9	14.9			
FM (30°-60°)	16752.8	61.2			
FH (60°-80°)	1185.7	4.3			G1/1800
FVH (80°-90°)	21.6	0.1			G1/100
BL (0°-30°)	1865.0	6.8	B3/2500		
BM (30°-60°)	2669.4	9.7	B3/5000		
BH (60°-80°)	765.2	2.8	B2/1000		G2/1000
BVH (80°-90°)	35.7	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G2**

Type II Short





REPORT NUMBER: P638188

CATALOG NUMBER: GWS-SA4E-735-U-AFL-W-GRSWH

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	51°	55°	65°	75°	85°
0°	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0
2.5°	9085.6	9137.6	9057.5	9027.2	8977.4	8890.9	8791.4	8763.2	8549.0	8408.4	8250.4
5°	9998.7	10026.9	9962.0	9897.0	9773.7	9620.1	9427.5	9386.4	8996.9	8674.5	8339.1
7.5°	10202.1	10191.3	10247.6	10284.4	10269.2	10208.6	10037.7	9957.6	9492.4	8981.8	8486.3
10°	9397.2	9336.6	9544.3	9791.0	10087.4	10429.3	10409.8	10403.4	9998.7	9395.0	8674.5
12.5°	8330.5	8300.2	8469.0	8778.4	9338.8	10096.1	10379.6	10600.3	10455.3	9788.8	8884.4
15°	7720.3	7709.5	7824.2	8047.0	8492.8	9449.1	10055.0	10492.1	10846.9	10210.8	9107.3
17.5°	7609.9	7616.4	7655.4	7783.0	8103.3	8890.9	9591.9	10202.1	11152.0	10673.8	9386.4
20°	7932.3	7975.6	7908.5	7928.0	8101.1	8689.7	9276.0	9910.0	11346.8	11139.0	9687.2
22.5°	8648.5	8633.4	8486.3	8399.7	8401.9	8813.0	9241.4	9773.7	11474.4	11591.3	9959.8
25°	9460.0	9442.6	9267.4	9074.8	8953.6	9148.4	9490.3	9918.7	11589.1	12004.5	10178.3
27.5°	10418.5	10364.4	10169.7	9923.0	9654.7	9739.1	9970.6	10310.3	11766.5	12411.3	10323.3
30°	11346.8	11409.5	11130.4	10838.3	10554.8	10502.9	10637.0	10944.3	12127.9	12887.4	10496.4
32.5°	12577.9	12556.3	12246.9	11866.1	11461.4	11422.5	11528.5	11809.8	12777.0	13545.1	10760.4
35°	14068.8	14073.1	13633.9	13118.9	12543.3	12439.5	12616.9	12889.5	13744.2	14436.6	11178.0
37.5°	15618.0	15611.5	15228.5	14644.3	13858.9	13711.7	13915.1	14118.5	14953.7	15650.5	11827.1
40°	16704.2	16747.5	16567.9	16260.7	15516.3	15157.1	15336.7	15477.4	16269.3	17078.6	12681.8
42.5°	17320.9	17385.8	17424.8	17608.7	17217.0	16834.1	16769.1	16842.7	17444.2	18404.9	13484.6
45°	17452.9	17539.4	17822.9	18504.5	18655.9	18547.7	18335.7	18158.3	18320.6	19346.2	14010.3
47.5°	16870.8	17022.3	17628.2	18820.4	19705.4	20045.1	19809.2	19538.8	18826.9	19588.5	13956.3
50°	14564.3	14741.7	16107.0	18175.6	19854.7	21092.3	21114.0	20713.7	18766.3	18889.6	13276.8
52.5°	11530.7	11651.8	12433.0	15408.1	18389.8	21049.1	21914.6	21486.1	18474.2	18015.5	12426.5
55°	6891.6	7086.3	7815.5	10165.3	14326.3	18655.9	20499.5	20707.2	18331.4	17281.9	11846.6
57.5°	2326.0	2421.2	3118.0	4489.8	8443.0	13659.8	15838.7	16682.6	16641.5	16161.1	10714.9
60°	1107.8	1129.5	1270.1	1702.9	3379.8	7138.2	9375.6	10349.3	11236.4	11325.1	6666.5
62.5°	843.9	856.8	928.3	1021.3	1358.8	3007.6	4297.2	5041.6	5385.6	4621.8	2427.7
65°	705.4	716.2	770.3	828.7	923.9	1302.6	1648.8	1901.9	1713.7	1335.0	1157.6
67.5°	588.5	597.2	638.3	701.1	766.0	872.0	915.3	941.2	986.7	1107.8	1064.6
70°	460.9	469.5	512.8	566.9	629.7	655.6	696.7	722.7	813.6	969.4	965.0
72.5°	354.9	365.7	389.5	424.1	476.0	502.0	547.4	577.7	629.7	755.2	807.1
75°	259.7	266.1	287.8	298.6	305.1	298.6	344.0	378.7	447.9	495.5	508.5
77.5°	106.0	119.0	114.7	114.7	136.3	164.4	188.2	209.9	257.5	285.6	287.8
80°	43.3	47.6	56.3	62.7	75.7	97.4	112.5	121.2	142.8	160.1	173.1
82.5°	26.0	28.1	32.5	34.6	43.3	56.3	64.9	71.4	88.7	106.0	112.5
85°	13.0	13.0	15.1	17.3	21.6	26.0	30.3	34.6	45.4	56.3	62.7
87.5°	2.2	2.2	2.2	4.3	6.5	8.7	10.8	13.0	15.1	17.3	21.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P638188

CATALOG NUMBER: GWS-SA4E-735-U-AFL-W-GRSWH

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0	8153.0
2.5°	8157.4	8040.5	7904.2	7796.0	7670.5	7577.5	7445.5	7363.3	7285.4	7220.5	7172.9
5°	8166.0	7969.1	7685.7	7434.7	7175.0	6928.4	6675.2	6469.6	6285.7	6132.1	6119.1
7.5°	8215.8	7932.3	7488.8	7049.5	6543.2	6054.2	5565.2	5167.1	4864.1	4706.2	4673.7
10°	8300.2	7928.0	7287.5	6586.5	5723.1	4935.5	4355.6	4052.7	3877.5	3814.7	3793.1
12.5°	8388.9	7917.2	7030.1	5933.0	4734.3	4044.1	3726.0	3689.2	3721.7	3726.0	3723.8
15°	8497.1	7910.7	6705.5	5167.1	4011.6	3630.8	3652.4	3730.3	3806.1	3823.4	3823.4
17.5°	8629.1	7895.6	6264.1	4418.4	3559.4	3550.7	3665.4	3769.3	3840.7	3853.7	3853.7
20°	8767.6	7856.6	5721.0	3808.2	3375.5	3501.0	3624.3	3704.4	3754.1	3771.4	3773.6
22.5°	8862.8	7752.8	5095.7	3356.0	3260.8	3405.8	3494.5	3576.7	3576.7	3533.4	3520.4
25°	8882.2	7529.9	4418.4	3046.6	3124.5	3258.6	3349.5	3301.9	3213.2	3178.6	3176.4
27.5°	8810.8	7205.3	3749.8	2825.9	2960.0	3094.2	3079.0	3009.8	2970.8	2936.2	2949.2
30°	8724.3	6815.8	3169.9	2644.1	2769.6	2901.6	2849.7	2825.9	2797.7	2758.8	2767.4
32.5°	8665.9	6380.9	2724.2	2503.5	2642.0	2663.6	2700.4	2698.2	2672.2	2598.7	2594.3
35°	8683.2	5941.7	2425.6	2388.8	2535.9	2527.3	2596.5	2583.5	2403.9	2302.2	2295.7
37.5°	8821.6	5519.8	2250.3	2297.9	2367.2	2421.2	2481.8	2326.0	2263.3	2198.4	2202.7
40°	9085.6	5128.1	2155.1	2248.1	2265.5	2345.5	2204.9	2202.7	2174.6	2116.2	2114.0
42.5°	9384.2	4797.1	2090.2	2224.3	2200.5	2215.7	2066.4	2083.7	2081.5	2044.8	2033.9
45°	9566.0	4492.0	2038.3	2135.6	2142.1	1990.7	1945.2	1964.7	1975.5	1956.0	1953.9
47.5°	9377.7	4141.4	1984.2	1999.3	2055.6	1889.0	1832.7	1834.9	1854.3	1856.5	1847.9
50°	8849.8	3749.8	1919.3	1882.5	1845.7	1782.9	1731.0	1720.2	1739.7	1759.1	1765.6
52.5°	8168.2	3375.5	1811.1	1754.8	1668.3	1668.3	1644.5	1609.8	1635.8	1661.8	1670.4
55°	7668.4	3098.5	1657.4	1594.7	1499.5	1531.9	1527.6	1497.3	1531.9	1551.4	1557.9
57.5°	6644.9	2490.5	1458.4	1438.9	1358.8	1397.8	1406.4	1367.5	1350.2	1354.5	1361.0
60°	3944.5	1607.7	1315.6	1313.4	1242.0	1287.4	1313.4	1274.5	1222.5	1229.0	1237.7
62.5°	1770.0	1229.0	1136.0	1127.3	1125.2	1183.6	1211.7	1174.9	1101.4	1107.8	1116.5
65°	1114.3	1062.4	986.7	986.7	1021.3	1071.1	1092.7	1062.4	978.0	967.2	975.9
67.5°	1034.3	988.8	910.9	895.8	913.1	954.2	956.4	898.0	848.2	839.5	839.5
70°	928.3	893.6	817.9	787.6	781.1	779.0	772.5	757.3	724.9	716.2	720.5
72.5°	768.1	744.3	696.7	664.3	647.0	644.8	618.8	605.9	577.7	573.4	571.2
75°	508.5	515.0	515.0	510.6	495.5	489.0	460.9	447.9	415.4	402.5	400.3
77.5°	300.8	307.3	315.9	318.1	315.9	315.9	289.9	274.8	242.3	225.0	220.7
80°	183.9	188.2	192.6	199.1	190.4	183.9	160.1	145.0	129.8	119.0	116.8
82.5°	119.0	123.3	125.5	129.8	125.5	116.8	97.4	88.7	77.9	69.2	67.1
85°	67.1	69.2	73.6	73.6	67.1	60.6	49.8	43.3	36.8	32.5	32.5
87.5°	23.8	23.8	23.8	26.0	21.6	19.5	13.0	8.7	6.5	6.5	6.5
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)