

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: P638493

Luminaire Tested: GWS-SA4E-830-U-T2R-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638493  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-13)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4E-830-U-T2R-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (64) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

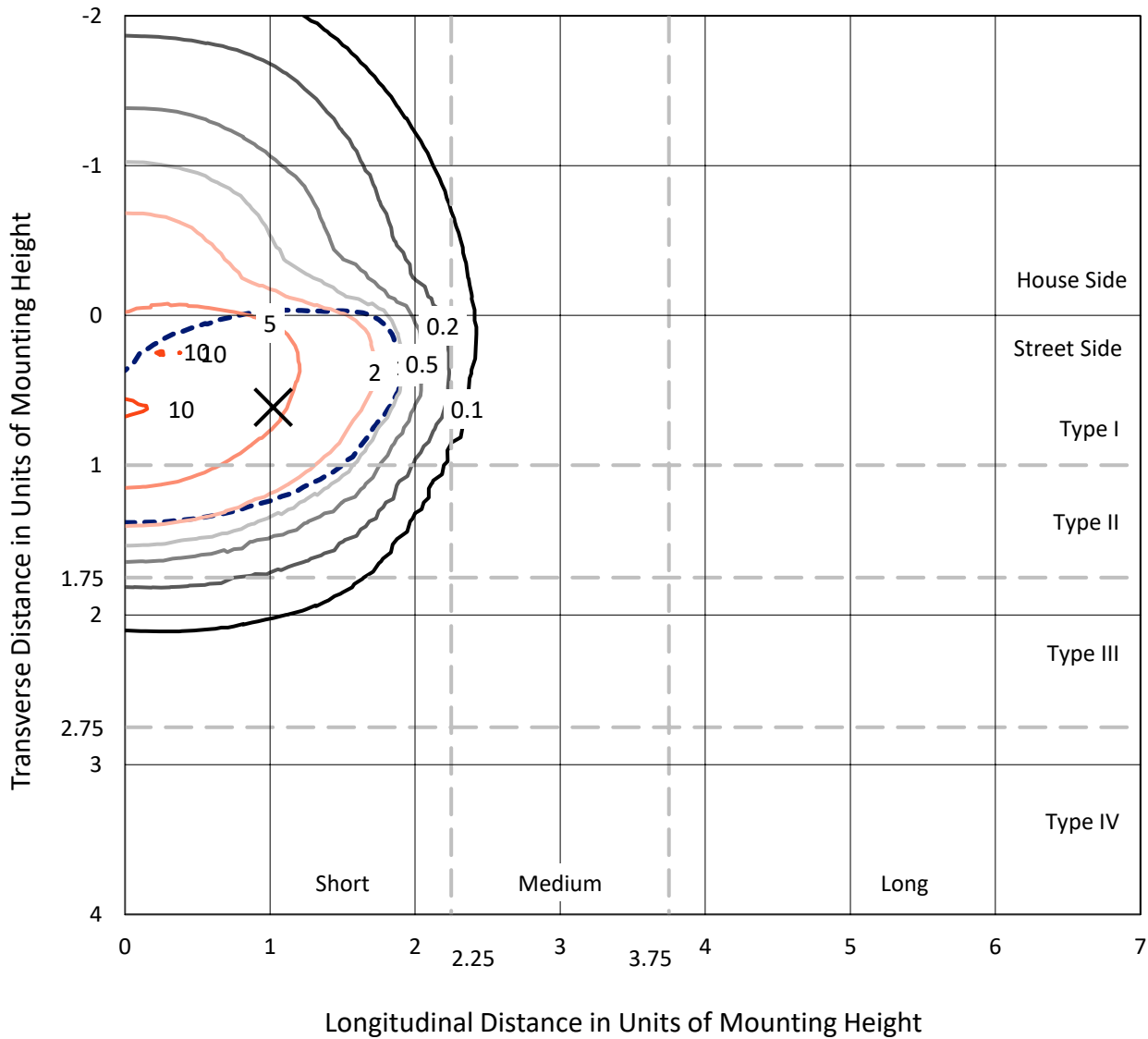
Lumens per Lamp: N/A  
Luminaire Lumens: 21395.6 lumens  
Efficiency: N/A  
Efficacy: 105.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2  
  
Input Watts (W): 202.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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



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### Iso-Footcandle Lines of Horizontal Illumination

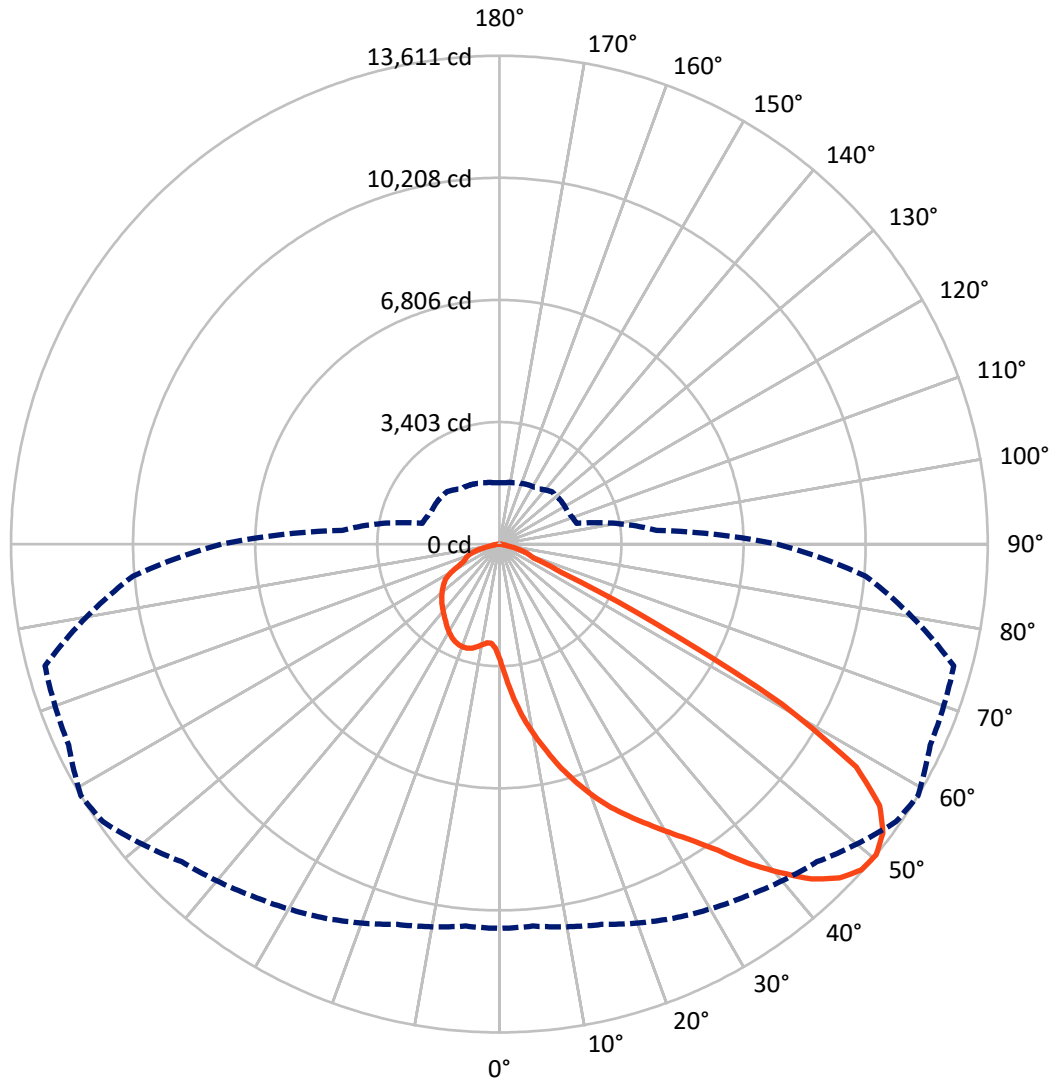
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.3 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral    - - - Horizontal Cone Through 50-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4921.4	0.0	4921.4
	% Fixture	23.0	0.0	23.0
<b>Street Side</b>	Lumens	16474.2	0.0	16474.2
	% Fixture	77.0	0.0	77.0
<b>Total</b>	Lumens	21395.6	0.0	21395.6
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	363.6	1.7
10°-20°	1320.1	6.2
20°-30°	2499.7	11.7
30°-40°	4145.4	19.4
40°-50°	5662.8	26.5
50°-60°	5140.4	24.0
60°-70°	1711.8	8.0
70°-80°	499.3	2.3
80°-90°	52.4	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°	21395.6	100.0
0°-180°	21395.6	100.0

**Coefficient of Utilization**



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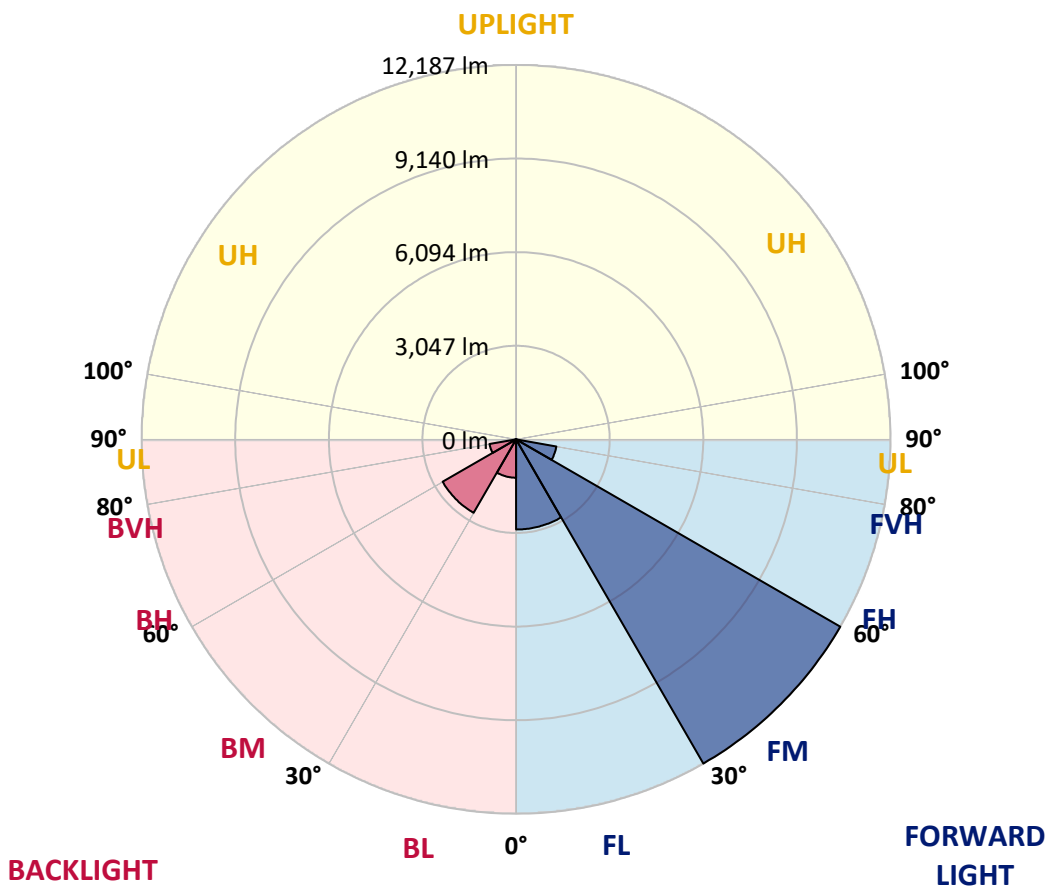
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2933.9	13.7			
FM (30°-60°)	12187.2	57.0			
FH (60°-80°)	1332.6	6.2			G1/1800
FVH (80°-90°)	20.5	0.1			G1/100
BL (0°-30°)	1249.7	5.8	B3/2500		
BM (30°-60°)	2761.4	12.9	B3/5000		
BH (60°-80°)	878.4	4.1	B2/1000		G2/1000
BVH (80°-90°)	31.9	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6
2.5°	4200.1	4231.5	4182.7	4186.2	4064.2	4008.4	3851.6	3759.2	3698.2	3527.4	3372.3
5°	5047.1	5010.5	4972.2	4949.5	4843.2	4693.3	4498.1	4343.0	4200.1	3865.5	3543.1
7.5°	5566.5	5547.3	5521.2	5507.2	5402.6	5245.8	5050.6	4918.1	4710.8	4257.6	3750.5
10°	6007.4	5984.7	5969.0	5979.5	5894.1	5793.0	5580.4	5428.8	5195.2	4672.4	4001.4
12.5°	6349.0	6361.2	6366.4	6422.2	6385.6	6324.6	6105.0	5944.6	5685.0	5109.9	4296.0
15°	6619.1	6615.6	6676.6	6782.9	6842.2	6803.8	6627.8	6493.6	6176.4	5540.3	4613.2
17.5°	6681.8	6685.3	6781.2	6967.7	7161.1	7255.2	7155.9	6995.5	6681.8	5965.6	4942.5
20°	6732.4	6739.4	6838.7	7051.3	7333.6	7596.8	7612.5	7497.5	7227.3	6425.7	5277.2
22.5°	7051.3	7067.0	7093.1	7227.3	7481.8	7814.7	7997.7	7973.3	7746.7	6908.4	5637.9
25°	7889.6	7842.5	7715.3	7677.0	7774.6	8044.7	8356.7	8403.7	8292.2	7440.0	6026.6
27.5°	8924.8	8874.3	8686.1	8487.4	8276.5	8370.6	8703.5	8844.6	8846.4	8025.5	6416.9
30°	9864.2	9824.1	9670.7	9386.7	9022.4	8886.5	9132.2	9322.2	9435.5	8701.7	6861.4
32.5°	10667.6	10631.0	10423.6	10191.8	9836.3	9562.7	9651.6	9834.5	10099.5	9576.6	7413.8
35°	11343.8	11307.2	11108.5	10875.0	10545.6	10381.8	10350.4	10475.9	10819.2	10489.8	8048.2
37.5°	11892.8	11856.2	11648.8	11429.2	11178.2	11188.7	11235.8	11296.7	11493.7	11467.5	8726.1
40°	12248.3	12210.0	12061.8	11905.0	11746.4	11871.9	12105.4	12032.2	12136.8	12257.0	9350.1
42.5°	12406.9	12358.1	12272.7	12237.9	12189.1	12384.2	12833.9	12760.7	12635.2	12783.3	9813.6
45°	12248.3	12206.5	12204.7	12311.1	12424.3	12675.3	13337.6	13278.3	12961.1	13037.8	10090.7
47.5°	11762.1	11725.5	11824.8	12103.7	12382.5	12748.5	13562.4	13572.8	13192.9	13144.1	10270.2
50°	10711.2	10686.8	10974.3	11502.4	11983.4	12520.2	13490.9	13611.2	13248.7	13111.0	10247.6
52.5°	8574.5	8687.8	9313.5	10195.3	11129.4	12119.3	13226.0	13382.9	12980.3	12893.1	10125.6
55°	5869.7	5922.0	6547.7	7835.6	9316.9	11251.4	12617.8	12860.0	12663.1	12856.5	10252.8
57.5°	3039.4	3081.2	3574.5	4717.7	6319.3	8891.7	10929.0	11723.7	12023.5	13041.3	10648.4
60°	1247.8	1282.7	1486.6	2039.1	3187.6	5177.8	7865.2	9043.3	9747.4	11910.2	9456.4
62.5°	906.2	923.7	1021.3	1216.5	1669.6	2537.5	4451.1	4885.0	5380.0	7464.4	6003.9
65°	763.3	782.5	860.9	979.4	1218.2	1556.3	1901.4	1911.8	2107.0	3041.2	2225.5
67.5°	639.6	657.0	726.7	827.8	984.7	1104.9	1021.3	1023.0	1019.5	1103.2	1066.6
70°	498.4	512.4	582.1	690.1	772.1	709.3	798.2	883.6	847.0	880.1	930.6
72.5°	364.2	379.9	440.9	522.8	501.9	505.4	646.6	733.7	712.8	749.4	796.5
75°	263.2	273.6	305.0	261.4	275.4	332.9	454.9	501.9	522.8	554.2	596.0
77.5°	85.4	85.4	95.9	120.3	149.9	184.7	231.8	251.0	282.3	317.2	346.8
80°	43.6	45.3	54.0	66.2	83.7	106.3	135.9	144.7	160.3	179.5	191.7
82.5°	20.9	22.7	26.1	33.1	43.6	55.8	74.9	83.7	94.1	106.3	115.0
85°	5.2	5.2	7.0	10.5	13.9	20.9	27.9	33.1	41.8	50.5	55.8
87.5°	0.0	0.0	0.0	0.0	0.0	1.7	5.2	7.0	8.7	10.5	13.9
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°	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6	3241.6
2.5°	3302.6	3205.0	3079.5	2973.2	2875.6	2800.7	2736.2	2704.8	2675.2	2654.3	2661.2
5°	3393.2	3225.9	2992.4	2830.3	2730.9	2680.4	2645.6	2628.1	2624.6	2610.7	2605.5
7.5°	3525.7	3286.9	2974.9	2811.1	2744.9	2718.7	2699.6	2689.1	2694.3	2680.4	2675.2
10°	3689.5	3388.0	3018.5	2873.9	2816.3	2797.2	2776.3	2762.3	2755.3	2734.4	2730.9
12.5°	3893.4	3513.5	3096.9	2954.0	2896.5	2863.4	2835.5	2811.1	2795.4	2769.3	2762.3
15°	4113.0	3652.9	3189.3	3032.5	2964.5	2915.7	2870.4	2833.8	2805.9	2771.0	2765.8
17.5°	4351.7	3799.3	3266.0	3086.5	2999.3	2934.9	2868.6	2814.6	2776.3	2730.9	2725.7
20°	4601.0	3947.4	3323.5	3112.6	3001.1	2913.9	2825.1	2753.6	2704.8	2659.5	2656.0
22.5°	4858.9	4083.4	3358.4	3105.6	2973.2	2865.1	2758.8	2678.7	2621.2	2567.1	2563.6
25°	5118.6	4214.1	3367.1	3077.8	2917.4	2791.9	2685.6	2591.5	2527.0	2466.0	2459.1
27.5°	5381.7	4323.9	3346.2	3022.0	2842.5	2706.5	2600.2	2507.9	2441.6	2380.6	2370.2
30°	5662.3	4418.0	3300.8	2948.8	2755.3	2615.9	2511.4	2441.6	2378.9	2317.9	2307.5
32.5°	5962.1	4499.9	3236.4	2859.9	2654.3	2525.3	2448.6	2385.9	2323.1	2269.1	2258.7
35°	6319.3	4553.9	3140.5	2744.9	2560.2	2459.1	2406.8	2333.6	2256.9	2197.7	2192.4
37.5°	6688.8	4595.7	3025.5	2635.1	2478.2	2420.7	2377.2	2277.8	2182.0	2110.5	2101.8
40°	7046.1	4630.6	2882.6	2532.3	2403.3	2392.8	2333.6	2209.9	2044.3	1964.1	1957.2
42.5°	7379.0	4641.0	2732.7	2422.5	2335.3	2330.1	2263.9	2072.2	1945.0	1894.4	1887.4
45°	7607.3	4632.3	2577.6	2319.7	2267.4	2239.5	2169.8	1972.8	1894.4	1849.1	1840.4
47.5°	7776.3	4587.0	2403.3	2211.6	2190.7	2152.3	2002.5	1910.1	1836.9	1791.6	1782.9
50°	7746.7	4398.8	2227.3	2107.0	2098.3	2065.2	1880.5	1831.7	1767.2	1718.4	1711.4
52.5°	7593.3	4041.5	2047.8	1992.0	2009.4	1945.0	1793.3	1737.6	1681.8	1626.0	1613.8
55°	7631.7	3783.6	1911.8	1880.5	1911.8	1765.4	1695.7	1636.5	1584.2	1530.2	1519.7
57.5°	7799.0	3529.1	1767.2	1760.2	1793.3	1627.8	1570.3	1495.3	1420.4	1376.8	1376.8
60°	6549.4	2572.4	1512.7	1530.2	1605.1	1516.2	1465.7	1389.0	1307.1	1268.7	1268.7
62.5°	3872.5	1613.8	1254.8	1235.6	1282.7	1338.5	1366.3	1303.6	1206.0	1155.5	1157.2
65°	1706.2	1174.6	1106.7	1091.0	1077.0	1115.4	1192.1	1197.3	1094.5	1035.2	1037.0
67.5°	1050.9	1063.1	1035.2	1023.0	1010.8	1003.8	996.9	1000.4	972.5	918.4	916.7
70°	948.1	981.2	962.0	951.6	935.9	923.7	881.9	813.9	766.8	752.9	768.6
72.5°	815.6	860.9	850.5	845.3	826.1	796.5	740.7	674.5	618.7	583.8	590.8
75°	615.2	651.8	657.0	658.8	637.9	610.0	552.5	496.7	447.9	411.3	420.0
77.5°	353.8	374.7	379.9	385.2	369.5	359.0	320.7	280.6	254.4	216.1	226.6
80°	196.9	205.6	205.6	207.4	198.7	186.5	160.3	137.7	125.5	108.1	109.8
82.5°	118.5	122.0	123.7	125.5	120.3	108.1	88.9	73.2	66.2	57.5	55.8
85°	57.5	61.0	61.0	62.7	54.0	47.1	36.6	27.9	24.4	17.4	19.2
87.5°	13.9	15.7	15.7	13.9	12.2	8.7	5.2	1.7	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)