

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: P638501

Luminaire Tested: GWS-SA4E-830-U-T3R-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638501  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4E-830-U-T3R-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (64) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

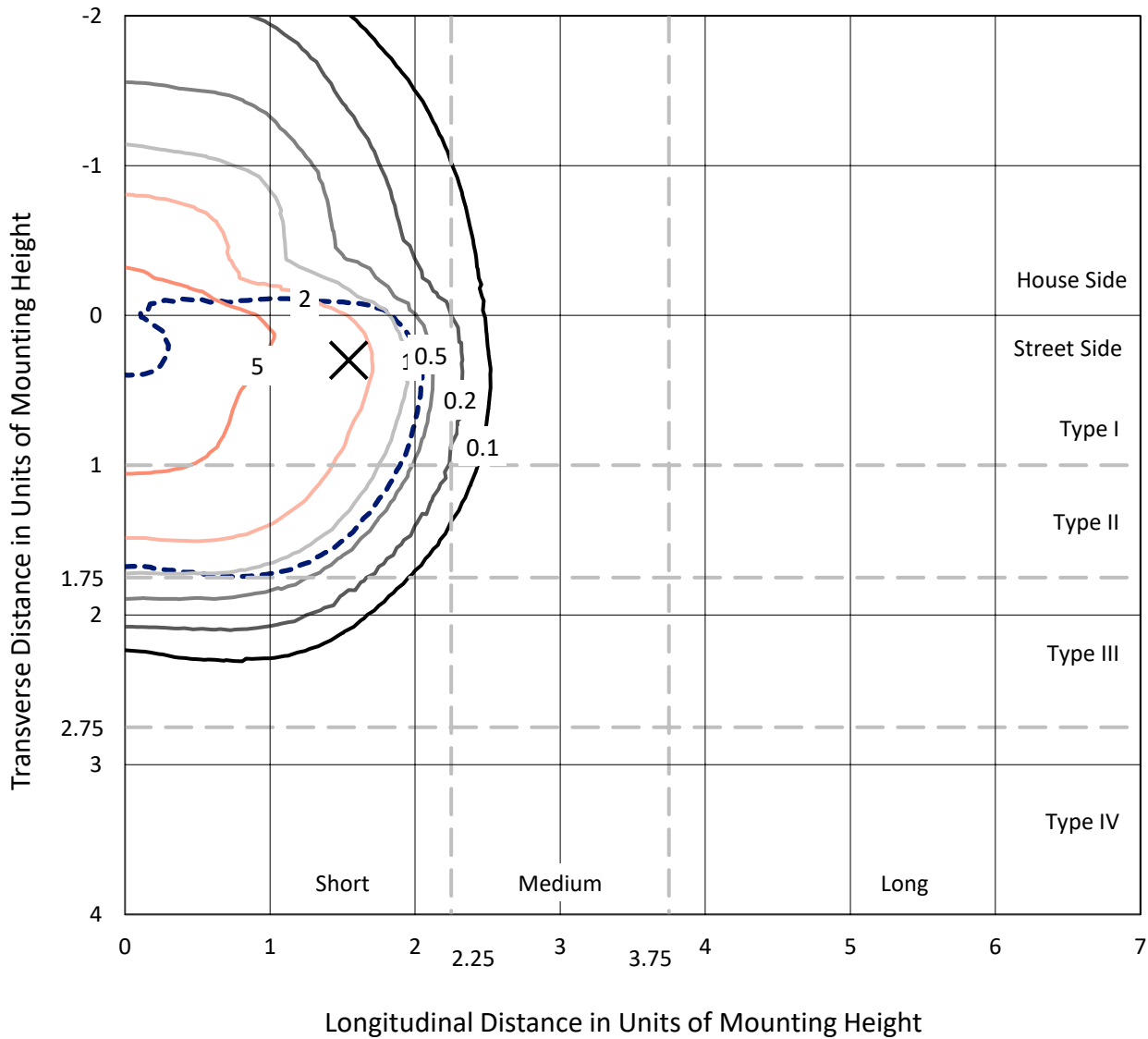
Lumens per Lamp: N/A  
Luminaire Lumens: 21313.7 lumens  
Efficiency: N/A  
Efficacy: 105.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 202.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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

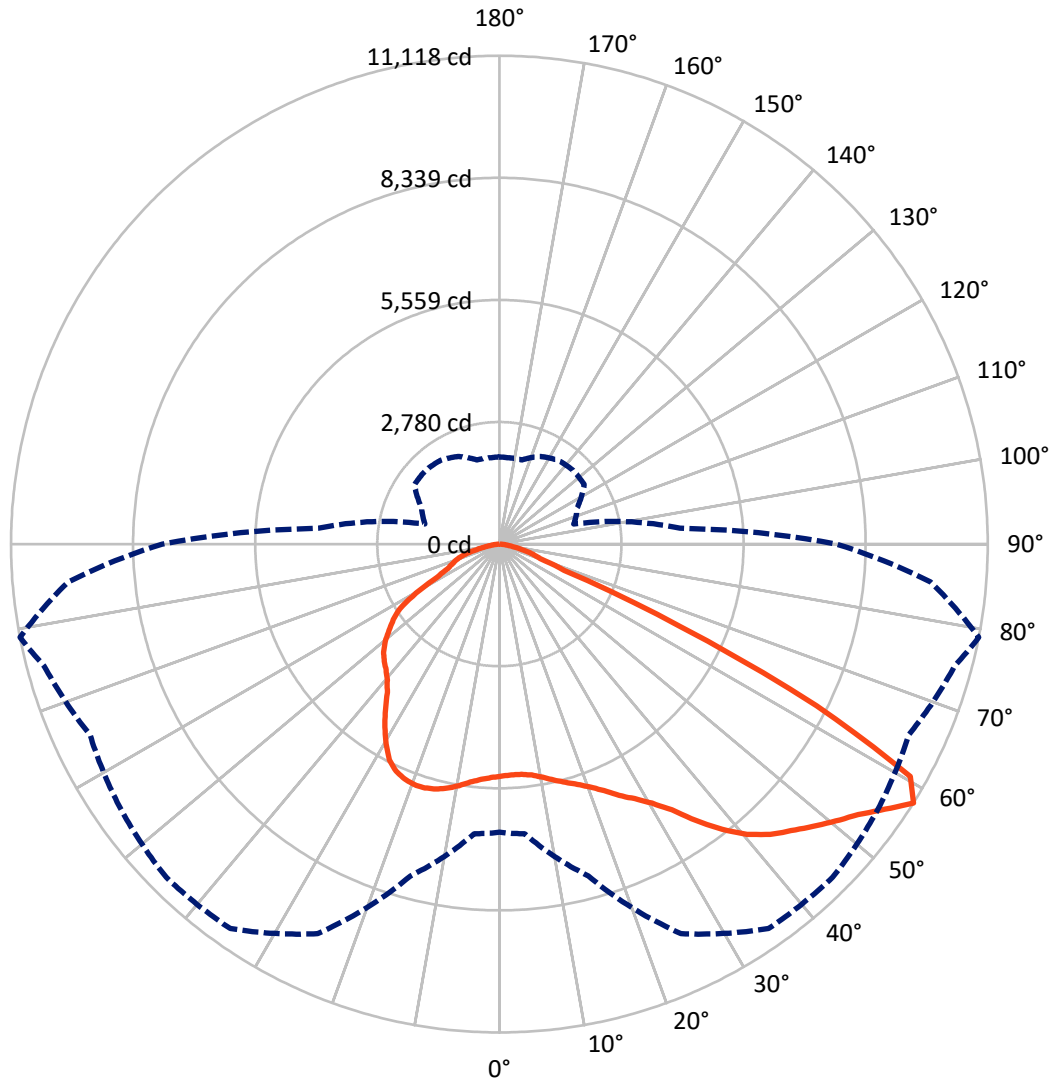
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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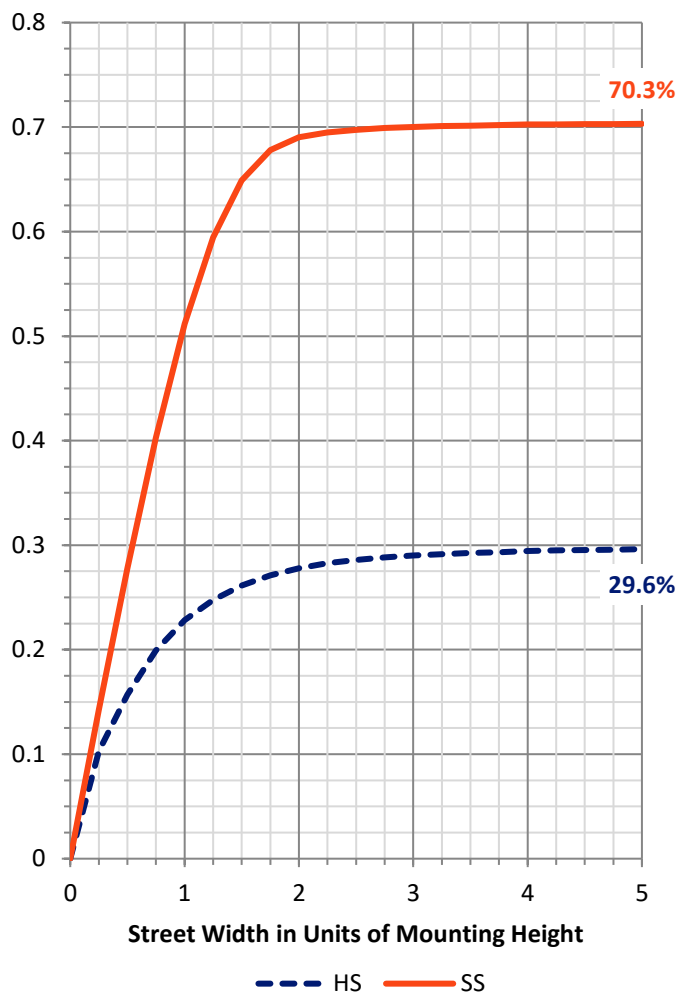
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6335.6	0.0	6335.6
	% Fixture	29.7	0.0	29.7
<b>Street Side</b>	Lumens	14978.1	0.0	14978.1
	% Fixture	70.3	0.0	70.3
<b>Total</b>	Lumens	21313.7	0.0	21313.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	489.2	2.3
10°-20°	1359.4	6.4
20°-30°	2304.2	10.8
30°-40°	3526.9	16.5
40°-50°	4702.8	22.1
50°-60°	5431.3	25.5
60°-70°	2822.3	13.2
70°-80°	599.9	2.8
80°-90°	77.7	0.4
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°	21313.7	100.0
0°-180°	21313.7	100.0

**Coefficient of Utilization**



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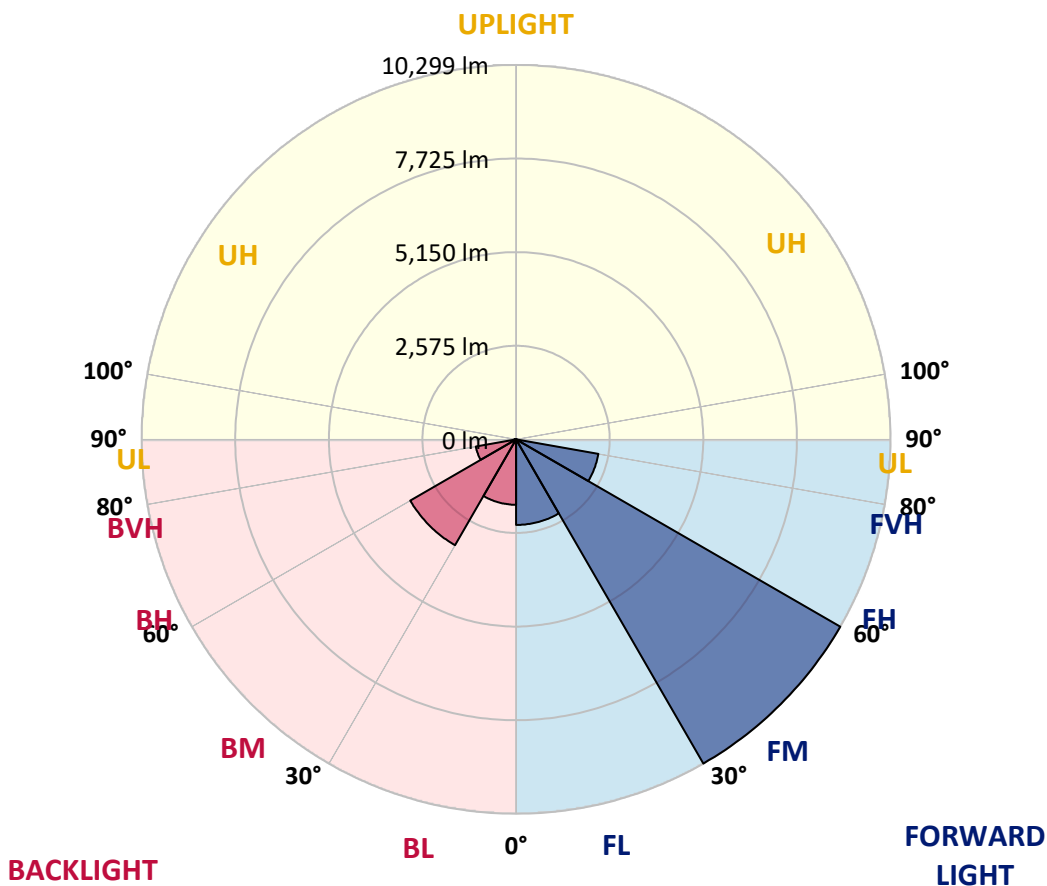
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2353.5	11.0			
FM (30°-60°)	10299.4	48.3			
FH (60°-80°)	2298.1	10.8			G2/5000
FVH (80°-90°)	27.1	0.1			G1/100
BL (0°-30°)	1799.2	8.4	B3/2500		
BM (30°-60°)	3361.6	15.8	B3/5000		
BH (60°-80°)	1124.1	5.3	B3/2500		G3/2500
BVH (80°-90°)	50.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0
2.5°	5041.5	5031.1	5034.6	5048.5	5100.8	5139.1	5179.2	5215.8	5250.7	5261.1	5269.8
5°	4862.0	4842.9	4848.1	4870.8	4931.8	4996.2	5067.7	5154.8	5238.5	5266.3	5302.9
7.5°	4734.8	4731.3	4740.1	4774.9	4839.4	4900.4	4992.7	5116.5	5261.1	5308.2	5372.6
10°	4565.8	4558.8	4593.7	4665.1	4771.4	4869.0	4978.8	5125.2	5327.3	5397.0	5496.4
12.5°	4431.6	4428.1	4464.7	4564.0	4700.0	4855.1	5006.7	5170.5	5416.2	5512.1	5634.0
15°	4510.0	4494.3	4496.1	4565.8	4687.8	4870.8	5076.4	5252.4	5505.1	5627.1	5783.9
17.5°	4738.3	4710.4	4689.5	4701.7	4771.4	4961.4	5182.7	5362.2	5607.9	5750.8	5942.5
20°	5053.7	5038.1	4980.5	4942.2	4957.9	5125.2	5350.0	5517.3	5742.1	5902.4	6108.1
22.5°	5477.2	5438.9	5360.4	5299.5	5252.4	5383.1	5590.5	5735.1	5928.6	6095.9	6310.2
25°	6001.7	5946.0	5822.3	5726.4	5625.3	5759.5	5944.2	6054.0	6184.7	6339.8	6543.7
27.5°	6536.7	6489.7	6352.0	6223.1	6097.6	6181.2	6400.8	6463.6	6449.6	6562.9	6737.2
30°	7106.6	7047.4	6916.7	6777.2	6615.2	6669.2	6866.1	6897.5	6749.4	6843.5	6962.0
32.5°	7707.8	7650.3	7537.0	7375.0	7192.0	7212.9	7266.9	7296.6	7155.4	7209.4	7300.0
35°	8319.5	8265.5	8150.5	7990.1	7855.9	7728.7	7592.8	7711.3	7629.4	7734.0	7727.0
37.5°	8878.9	8824.9	8753.4	8629.7	8399.7	8148.7	7835.0	7981.4	8108.6	8241.1	8218.4
40°	9257.1	9220.5	9237.9	9218.7	8922.5	8425.8	7953.5	8113.9	8460.7	8687.2	8675.0
42.5°	9582.9	9546.3	9647.4	9720.6	9372.1	8682.0	8011.0	8164.4	8685.5	9039.2	9021.8
45°	9727.6	9717.1	9884.4	10116.2	9783.3	8953.8	8159.2	8269.0	8856.2	9309.3	9243.1
47.5°	9555.1	9591.6	9921.0	10313.1	10124.9	9276.2	8462.4	8490.3	9079.3	9602.1	9415.6
50°	9211.7	9291.9	9736.3	10318.3	10374.1	9640.4	8882.4	8812.7	9379.0	9914.0	9506.3
52.5°	8711.6	8795.2	9520.2	10278.3	10517.0	10062.2	9441.8	9342.4	9757.2	10226.0	9521.9
55°	7563.2	7676.5	9025.3	10187.6	10656.4	10445.6	10072.6	9870.5	10245.1	10654.7	9677.0
57.5°	6561.1	6620.4	7819.4	9785.1	10684.3	10727.9	10522.2	10281.7	10729.6	11118.2	9851.3
60°	4815.0	4828.9	5907.6	8096.4	9828.6	10564.1	10485.6	10128.4	10499.6	10747.0	9053.2
62.5°	2720.3	2722.0	3582.9	5404.0	7341.9	8610.5	8659.3	8343.9	8032.0	8105.2	6301.5
65°	1021.2	1117.1	1636.4	2655.8	4232.9	5083.4	5285.5	5358.7	4839.4	4517.0	3379.0
67.5°	683.1	705.8	955.0	1366.3	1883.8	2174.9	2432.8	2439.7	1784.5	1591.1	1331.4
70°	521.1	543.7	751.1	977.6	955.0	881.8	953.2	927.1	958.5	984.6	1012.5
72.5°	388.6	411.3	582.1	690.1	573.3	564.6	639.6	711.0	777.2	805.1	848.7
75°	257.9	275.3	392.1	369.4	317.2	374.7	467.0	538.5	576.8	609.9	643.0
77.5°	163.8	176.0	209.1	169.0	176.0	219.6	271.9	336.3	372.9	406.0	423.5
80°	74.9	73.2	71.4	80.2	99.3	129.0	163.8	202.1	230.0	244.0	254.4
82.5°	29.6	33.1	36.6	43.6	54.0	69.7	92.4	118.5	141.2	144.6	153.4
85°	12.2	13.9	15.7	19.2	24.4	31.4	38.3	54.0	68.0	73.2	78.4
87.5°	0.0	0.0	0.0	0.0	1.7	3.5	5.2	8.7	15.7	17.4	19.2
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°	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0	5282.0
2.5°	5316.9	5294.2	5332.6	5358.7	5383.1	5357.0	5348.2	5325.6	5322.1	5322.1	5334.3
5°	5365.7	5350.0	5390.1	5405.8	5404.0	5346.5	5311.7	5266.3	5243.7	5243.7	5247.2
7.5°	5452.8	5444.1	5466.8	5442.4	5386.6	5269.8	5154.8	5059.0	4994.5	4961.4	4971.8
10°	5597.5	5587.0	5567.8	5477.2	5316.9	5074.7	4839.4	4665.1	4560.6	4501.3	4504.8
12.5°	5738.6	5721.2	5653.2	5452.8	5123.4	4738.3	4429.9	4234.7	4119.7	4050.0	4034.3
15°	5893.7	5848.4	5702.0	5327.3	4808.0	4327.0	4004.7	3793.8	3670.1	3628.2	3626.5
17.5°	6041.8	5961.7	5696.8	5104.3	4429.9	3896.6	3572.5	3441.8	3420.9	3440.0	3445.3
20°	6191.7	6062.7	5639.3	4795.8	3980.3	3467.9	3300.6	3354.6	3433.1	3485.3	3497.5
22.5°	6346.8	6146.4	5508.6	4398.5	3506.2	3178.6	3248.3	3366.8	3464.4	3534.1	3541.1
25°	6521.1	6224.8	5313.4	3912.3	3126.3	3098.5	3236.1	3361.6	3466.2	3546.3	3560.3
27.5°	6620.4	6226.6	5039.8	3412.1	2952.1	3067.1	3206.5	3325.0	3429.6	3516.7	3532.4
30°	6718.0	6179.5	4605.9	3006.1	2901.5	3030.5	3156.0	3265.8	3365.1	3450.5	3469.7
32.5°	6855.7	6135.9	4105.7	2772.6	2871.9	2995.6	3098.5	3196.1	3272.7	3311.1	3321.5
35°	7026.4	6080.2	3574.2	2671.5	2852.7	2967.8	3058.4	3110.7	3011.3	2990.4	3013.1
37.5°	7265.2	6027.9	3044.4	2627.9	2840.5	2957.3	3037.5	2903.3	2781.3	2732.5	2749.9
40°	7523.1	5998.3	2685.5	2593.1	2845.8	2967.8	2950.3	2751.7	2575.7	2472.8	2469.4
42.5°	7742.7	5953.0	2455.4	2570.4	2859.7	3007.8	2831.8	2617.5	2356.1	2295.1	2296.8
45°	7890.8	5837.9	2333.4	2546.0	2871.9	3016.6	2776.1	2432.8	2246.3	2208.0	2206.2
47.5°	7951.8	5628.8	2255.0	2507.7	2870.2	2945.1	2662.8	2356.1	2169.6	2159.2	2166.1
50°	7911.7	5285.5	2174.9	2432.8	2828.4	2870.2	2532.1	2288.1	2117.3	2174.9	2216.7
52.5°	7763.6	4841.1	2079.0	2329.9	2753.4	2784.8	2465.9	2246.3	2079.0	2155.7	2188.8
55°	7725.2	4480.4	1957.0	2195.8	2641.9	2633.2	2396.2	2225.4	2052.9	2023.2	2028.5
57.5°	7674.7	4128.4	1754.9	1955.3	2359.6	2373.5	2329.9	2201.0	1984.9	1976.2	1984.9
60°	6667.4	3164.7	1564.9	1686.9	1937.8	2012.8	2255.0	2155.7	1875.1	1838.5	1836.8
62.5°	4354.9	1916.9	1392.4	1470.8	1578.9	1666.0	2056.3	2025.0	1754.9	1732.2	1747.9
65°	2342.1	1366.3	1266.9	1314.0	1373.2	1439.4	1704.3	1803.7	1585.8	1505.7	1507.4
67.5°	1197.2	1162.4	1172.8	1205.9	1251.2	1284.3	1375.0	1462.1	1352.3	1284.3	1282.6
70°	1024.7	1052.6	1068.3	1087.4	1117.1	1111.8	1120.5	1136.2	1127.5	1094.4	1092.7
72.5°	873.1	916.6	920.1	923.6	934.1	909.7	894.0	867.8	869.6	874.8	876.6
75°	664.0	705.8	716.2	711.0	721.5	690.1	669.2	643.0	611.7	606.4	609.9
77.5°	432.2	465.3	481.0	477.5	482.7	458.3	447.9	420.0	383.4	369.4	369.4
80°	261.4	280.6	292.8	296.3	301.5	284.1	266.6	242.2	226.5	210.9	210.9
82.5°	158.6	170.8	179.5	179.5	184.7	165.6	151.6	134.2	127.2	113.3	113.3
85°	80.2	88.9	92.4	90.6	87.1	71.4	66.2	57.5	54.0	47.1	47.1
87.5°	19.2	24.4	24.4	17.4	17.4	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)