

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: P638505

Luminaire Tested: GWS-SA4E-830-U-T4FT-W

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638505  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-54)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4E-830-U-T4FT-W  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS  
Light Source: (64) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

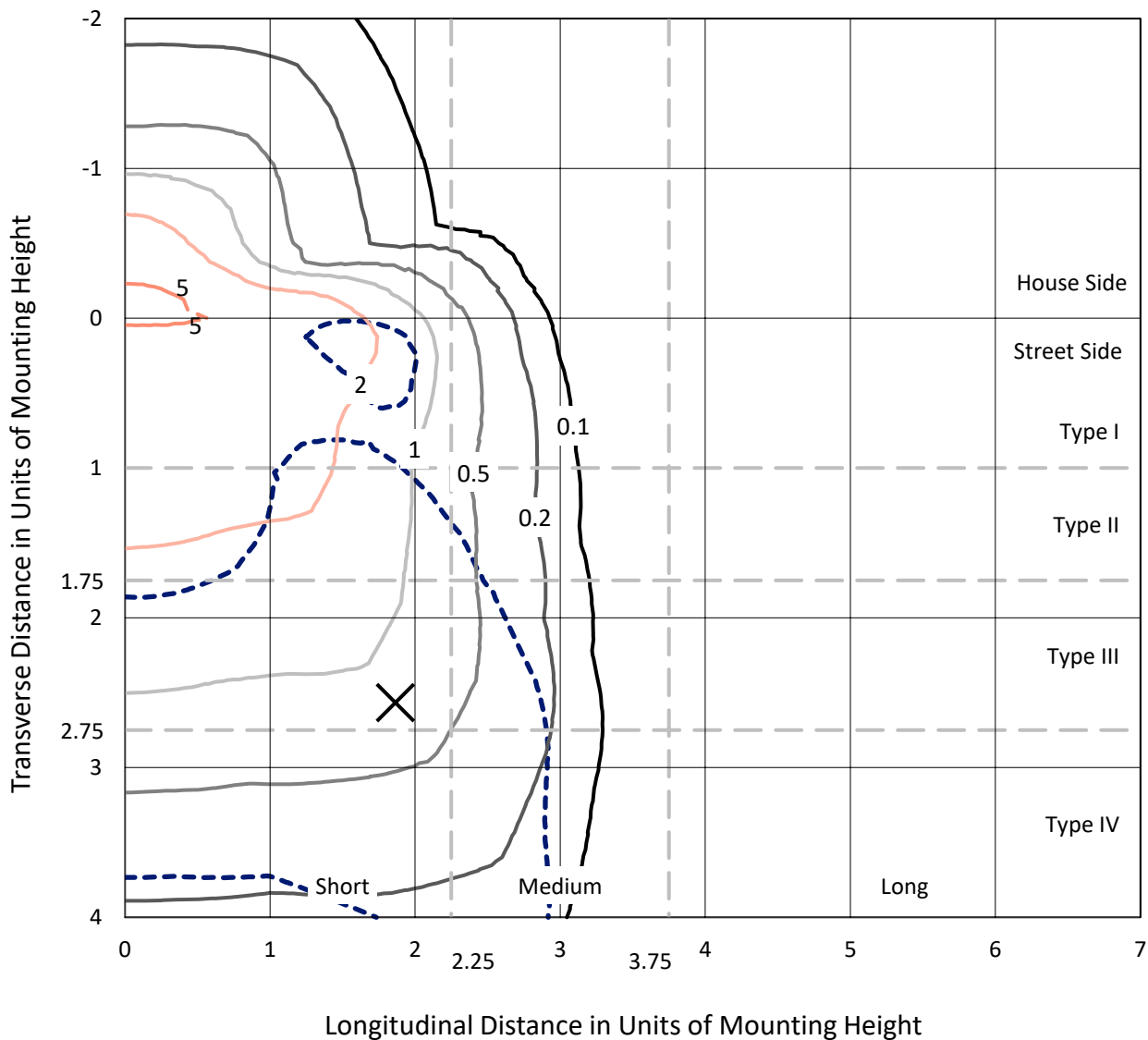
Lumens per Lamp: N/A  
Luminaire Lumens: 23481.7 lumens  
Efficiency: N/A  
Efficacy: 115.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 202.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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

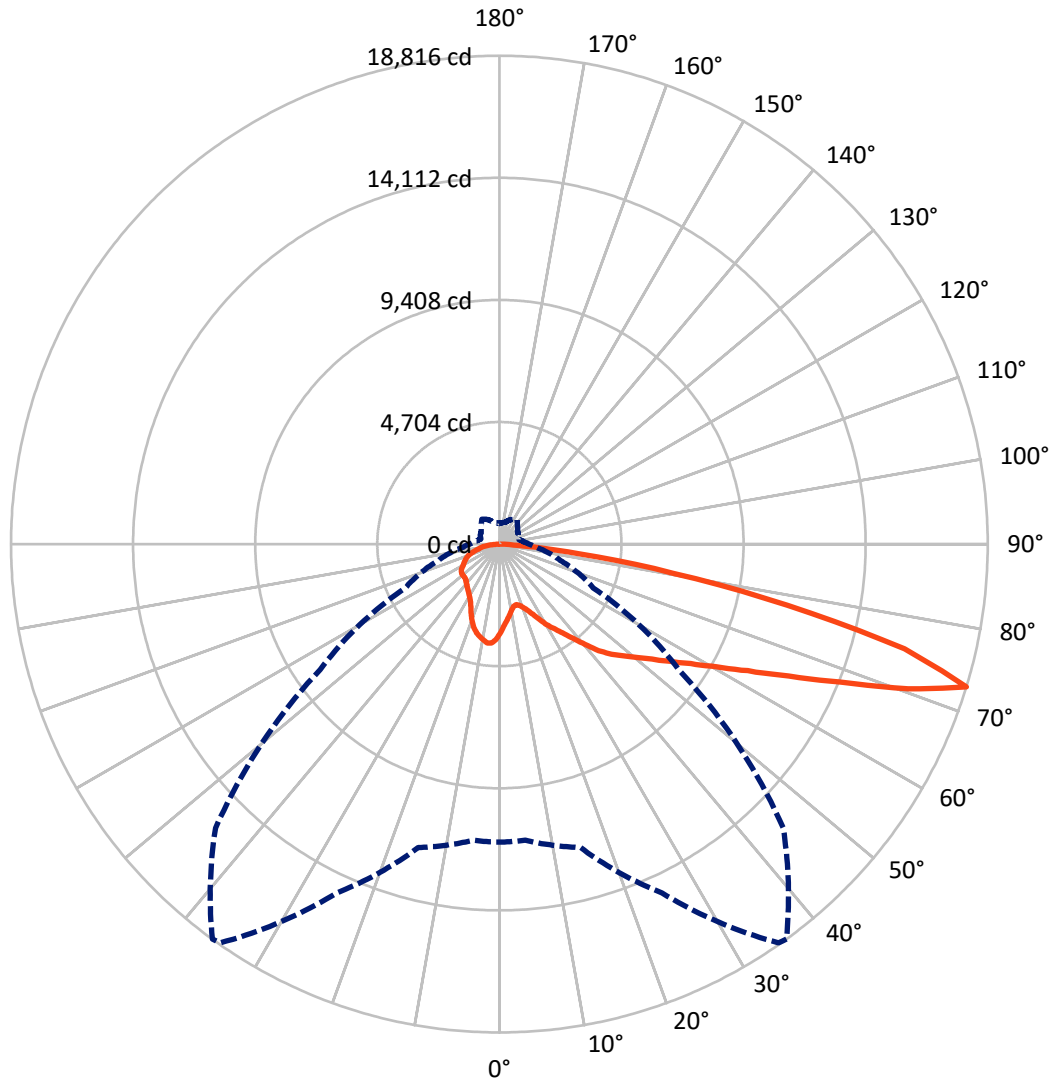
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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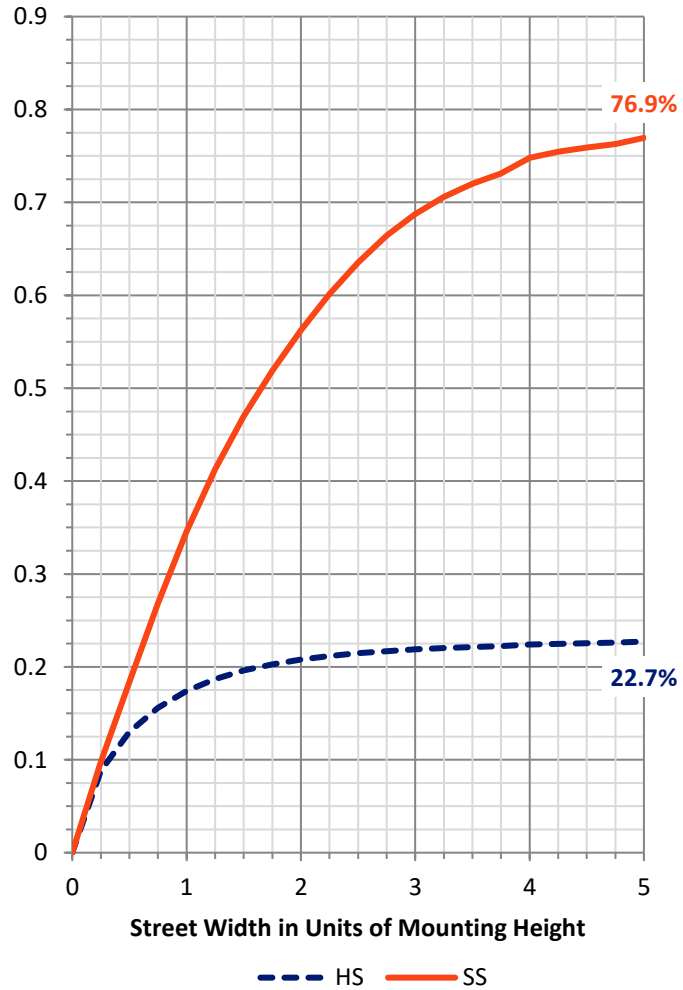
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5413.6	0.0	5413.6
	% Fixture	23.1	0.0	23.1
<b>Street Side</b>	Lumens	18068.2	0.0	18068.2
	% Fixture	76.9	0.0	76.9
<b>Total</b>	Lumens	23481.7	0.0	23481.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	321.2	1.4
10°-20°	906.3	3.9
20°-30°	1501.0	6.4
30°-40°	2247.9	9.6
40°-50°	3279.4	14.0
50°-60°	4667.6	19.9
60°-70°	5897.2	25.1
70°-80°	4202.3	17.9
80°-90°	458.7	2.0
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°	23481.7	100.0
0°-180°	23481.7	100.0

**Coefficient of Utilization**



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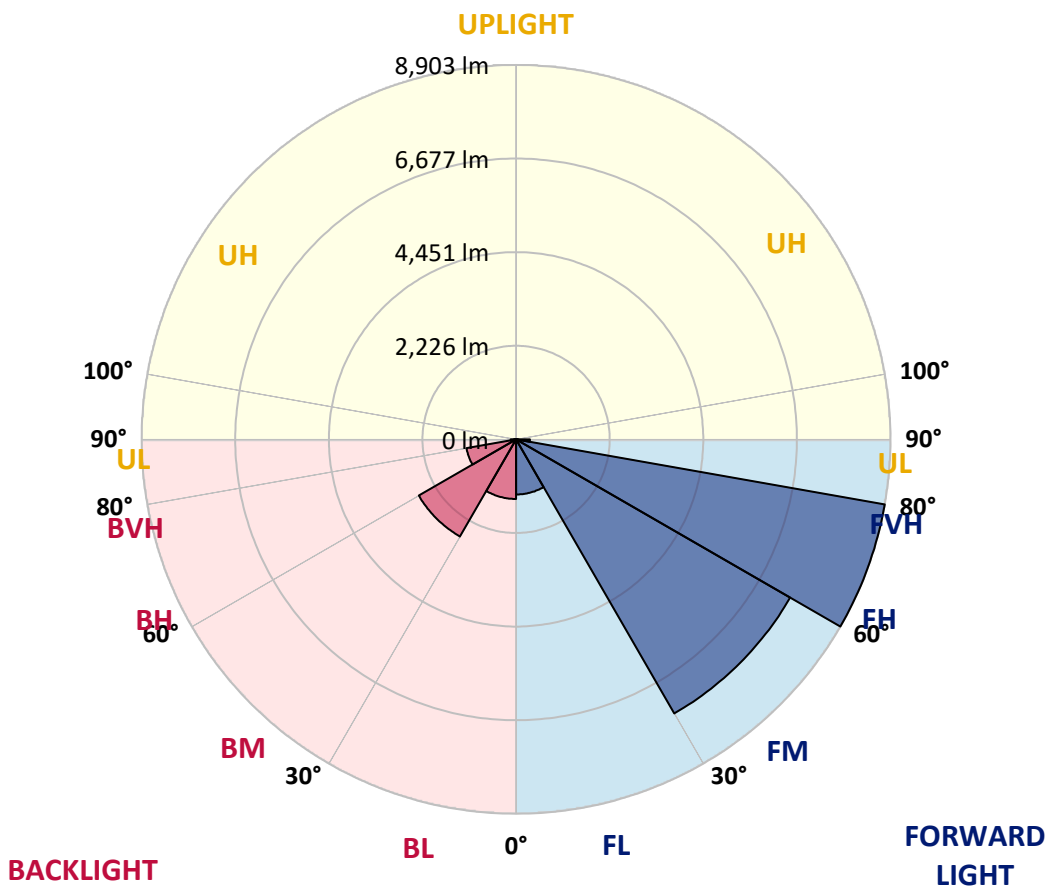
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1310.9	5.6			
FM (30°-60°)	7525.3	32.0			
FH (60°-80°)	8902.7	37.9			G4/12000
FVH (80°-90°)	329.3	1.4			G3/500
BL (0°-30°)	1417.6	6.0	B3/2500		
BM (30°-60°)	2669.6	11.4	B3/5000		
BH (60°-80°)	1196.8	5.1	B3/2500		G3/2500
BVH (80°-90°)	129.5	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7
2.5°	3135.2	3129.9	3119.5	3150.8	3182.2	3178.7	3222.3	3264.1	3309.4	3356.5	3419.2
5°	2884.2	2880.7	2872.0	2919.1	2966.1	2964.4	3035.8	3103.8	3196.2	3297.2	3422.7
7.5°	2633.3	2624.5	2636.7	2696.0	2762.2	2769.2	2866.8	2978.3	3112.5	3264.1	3441.9
10°	2411.9	2410.2	2415.4	2481.6	2581.0	2587.9	2713.4	2868.5	3046.3	3248.4	3485.4
12.5°	2354.4	2350.9	2337.0	2370.1	2445.0	2455.5	2593.2	2783.1	3001.0	3257.2	3544.7
15°	2448.5	2439.8	2391.0	2375.3	2411.9	2420.6	2537.4	2732.6	2974.8	3272.8	3619.6
17.5°	2610.6	2605.4	2513.0	2448.5	2472.9	2479.9	2567.0	2723.9	2967.9	3304.2	3712.0
20°	2847.6	2825.0	2680.3	2582.7	2582.7	2593.2	2645.5	2762.2	2976.6	3342.5	3816.6
22.5°	3161.3	3116.0	2912.1	2779.6	2744.8	2758.7	2781.4	2858.1	3013.2	3407.0	3947.3
25°	3513.3	3471.5	3229.3	3042.8	2994.0	2999.2	2980.1	2994.0	3093.3	3495.9	4109.3
27.5°	3888.0	3860.1	3602.2	3365.2	3288.5	3288.5	3220.6	3187.4	3204.9	3597.0	4290.6
30°	4222.6	4184.3	3966.4	3706.8	3605.7	3605.7	3476.7	3405.3	3363.5	3720.7	4532.8
32.5°	4398.6	4376.0	4231.3	4032.7	3908.9	3889.8	3778.2	3694.6	3597.0	3903.7	4860.5
35°	4628.7	4623.4	4536.3	4381.2	4224.4	4196.5	4119.8	4053.6	3884.5	4132.0	5296.1
37.5°	4918.0	4909.3	4895.3	4802.9	4614.7	4609.5	4541.5	4461.4	4241.8	4461.4	5824.2
40°	5242.1	5226.4	5209.0	5207.3	5094.0	5074.8	5069.6	4979.0	4672.2	4858.7	6374.9
42.5°	5688.3	5634.2	5470.4	5543.6	5627.3	5609.8	5676.1	5540.1	5209.0	5331.0	6896.0
45°	6237.2	6104.8	5780.6	5801.5	6012.4	6047.3	6277.3	6244.2	5799.8	5876.5	7444.9
47.5°	6566.6	6451.6	6150.1	6132.6	6395.8	6439.4	6939.5	7002.3	6435.9	6533.5	8122.8
50°	6836.7	6756.5	6509.1	6533.5	6812.3	6855.9	7596.5	7730.7	7035.4	7206.2	8910.5
52.5°	7162.6	7047.6	6855.9	6970.9	7312.5	7364.8	8326.7	8471.4	7575.6	7945.1	9726.1
55°	7345.6	7298.5	7302.0	7478.0	7906.7	7978.2	9091.8	9067.4	8070.6	8577.7	10339.6
57.5°	7767.3	7749.9	7910.2	7976.4	8600.3	8692.7	9856.8	9647.7	8520.2	9067.4	10634.1
60°	8511.5	8467.9	8607.3	8708.4	9457.8	9588.5	10710.8	10215.8	8825.2	9431.6	10534.8
62.5°	9557.1	9503.1	9508.3	9668.6	10606.2	10743.9	11660.6	10689.9	8919.3	9487.4	9905.6
65°	10857.2	10778.7	10689.9	10907.7	12131.1	12246.1	12694.0	11034.9	8694.5	8950.6	8591.6
67.5°	12228.7	12164.2	12059.7	12516.2	14105.6	14175.3	13852.9	11005.3	7981.7	7514.6	6026.3
70°	12308.9	12324.5	12819.5	14471.6	16683.1	16700.5	14949.1	10409.3	6463.8	4870.9	3002.7
72.5°	11482.8	11456.7	12101.5	14828.8	18756.9	18816.2	15466.7	8433.0	3994.3	2429.4	1408.1
75°	9327.1	9372.4	10050.3	12974.6	16076.6	16128.9	12608.6	4972.0	1897.8	1188.5	901.0
77.5°	4015.2	4267.9	5604.6	9140.6	11514.2	11352.1	6498.6	2014.6	1012.5	847.0	690.1
80°	1158.9	1258.2	1997.2	4346.4	6899.4	6777.5	2572.3	754.6	705.8	636.1	494.9
82.5°	374.7	414.8	731.9	1730.5	3091.6	3088.1	975.9	446.1	461.8	432.2	318.9
85°	104.6	120.2	224.8	524.6	956.8	937.6	282.3	210.9	245.7	249.2	158.6
87.5°	0.0	0.0	1.7	3.5	3.5	3.5	7.0	31.4	71.5	90.6	64.5
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°	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7	3436.7
2.5°	3457.6	3452.3	3523.8	3579.6	3631.8	3666.7	3677.1	3684.1	3698.1	3705.0	3698.1
5°	3482.0	3508.1	3626.6	3713.7	3783.5	3825.3	3827.0	3823.5	3834.0	3825.3	3820.1
7.5°	3534.2	3584.8	3734.7	3827.0	3872.3	3874.1	3832.3	3783.5	3759.1	3738.1	3731.2
10°	3604.0	3678.9	3842.7	3903.7	3889.8	3825.3	3732.9	3656.2	3612.7	3581.3	3574.3
12.5°	3699.8	3783.5	3938.6	3936.8	3849.7	3734.7	3626.6	3534.2	3471.5	3434.9	3422.7
15°	3790.4	3896.7	4008.3	3926.4	3788.7	3649.3	3509.8	3386.1	3302.5	3245.0	3234.5
17.5°	3902.0	4015.2	4058.8	3893.2	3712.0	3532.5	3346.0	3184.0	3070.7	3002.7	2997.5
20°	4030.9	4132.0	4083.2	3835.7	3612.7	3377.4	3124.7	2943.5	2821.5	2755.2	2760.5
22.5°	4180.8	4254.0	4090.2	3757.3	3475.0	3157.8	2875.5	2701.2	2619.3	2584.5	2586.2
25°	4341.1	4388.2	4078.0	3651.0	3264.1	2889.4	2619.3	2539.1	2532.2	2523.5	2526.9
27.5°	4531.1	4520.6	4041.4	3501.1	2980.1	2577.5	2439.8	2460.7	2488.6	2485.1	2488.6
30°	4785.5	4686.2	3994.3	3293.7	2642.0	2316.1	2333.5	2392.8	2429.4	2432.8	2443.3
32.5°	5076.6	4869.2	3919.4	3011.4	2319.6	2169.7	2234.2	2305.6	2349.2	2357.9	2371.8
35°	5423.4	5078.3	3786.9	2659.4	2087.8	2082.6	2141.8	2190.6	2237.7	2241.1	2241.1
37.5°	5822.4	5287.4	3576.1	2270.8	1944.9	2007.6	2063.4	2073.8	2086.0	2075.6	2080.8
40°	6188.4	5489.6	3276.3	1917.0	1828.1	1941.4	1988.4	1953.6	1915.3	1889.1	1894.3
42.5°	6495.1	5627.3	2879.0	1669.5	1709.6	1882.1	1918.7	1847.3	1772.4	1723.6	1730.5
45°	6840.2	5754.5	2411.9	1502.2	1608.5	1840.3	1864.7	1772.4	1676.5	1603.3	1592.8
47.5°	7316.0	6014.1	1997.2	1385.5	1537.1	1817.7	1857.7	1732.3	1606.8	1497.0	1484.8
50°	7903.3	6381.9	1650.4	1308.8	1504.0	1805.5	1856.0	1688.7	1538.8	1409.9	1401.2
52.5°	8544.6	6740.9	1394.2	1249.5	1470.9	1768.9	1847.3	1639.9	1467.4	1328.0	1317.5
55°	8971.5	6882.0	1221.6	1193.8	1416.8	1711.4	1812.4	1592.8	1359.3	1232.1	1216.4
57.5°	9097.0	6700.8	1101.4	1143.2	1347.1	1631.2	1746.2	1493.5	1293.1	1192.0	1179.8
60°	8880.9	6244.2	1026.5	1101.4	1270.4	1528.4	1631.2	1436.0	1240.8	1150.2	1141.5
62.5°	8271.0	5540.1	969.0	1057.8	1192.0	1420.3	1558.0	1366.3	1183.3	1111.9	1099.7
65°	7044.1	4543.3	921.9	1012.5	1117.1	1317.5	1477.8	1296.6	1120.6	1066.5	1052.6
67.5°	4926.7	3190.9	871.4	958.5	1042.1	1218.2	1394.2	1232.1	1056.1	1016.0	1002.1
70°	2408.4	1692.2	810.4	895.8	962.0	1117.1	1310.5	1153.7	970.7	948.0	928.9
72.5°	1146.7	946.3	738.9	810.4	852.2	982.9	1171.1	1040.4	869.6	820.8	787.7
75°	768.5	672.7	644.8	709.3	719.7	824.3	1003.8	897.5	766.8	711.0	683.1
77.5°	582.1	514.1	542.0	599.5	578.6	677.9	826.1	799.9	691.9	641.3	627.4
80°	409.5	374.7	430.5	465.3	449.6	576.8	744.1	684.9	569.9	514.1	503.6
82.5°	257.9	251.0	317.2	322.4	327.6	456.6	611.7	538.5	442.7	364.2	338.1
85°	129.0	142.9	190.0	190.0	188.2	235.3	348.5	303.2	238.8	190.0	184.7
87.5°	43.6	61.0	81.9	66.2	50.5	40.1	45.3	55.8	59.3	57.5	57.5
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)