

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: P638470

Luminaire Tested: GWS-SA4E-830-U-SL2-W-GRSWH

Issue Date: 1/10/2023

**Test Information**

Test Method: LM-79-2019  
Report Number: P638470  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-29)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: McGRAW-EDISON  
Catalog Number: GWS-SA4E-830-U-SL2-W-GRSWH  
Description: GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL LIGHT ELIMINATOR OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH  
Light Source: (64) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

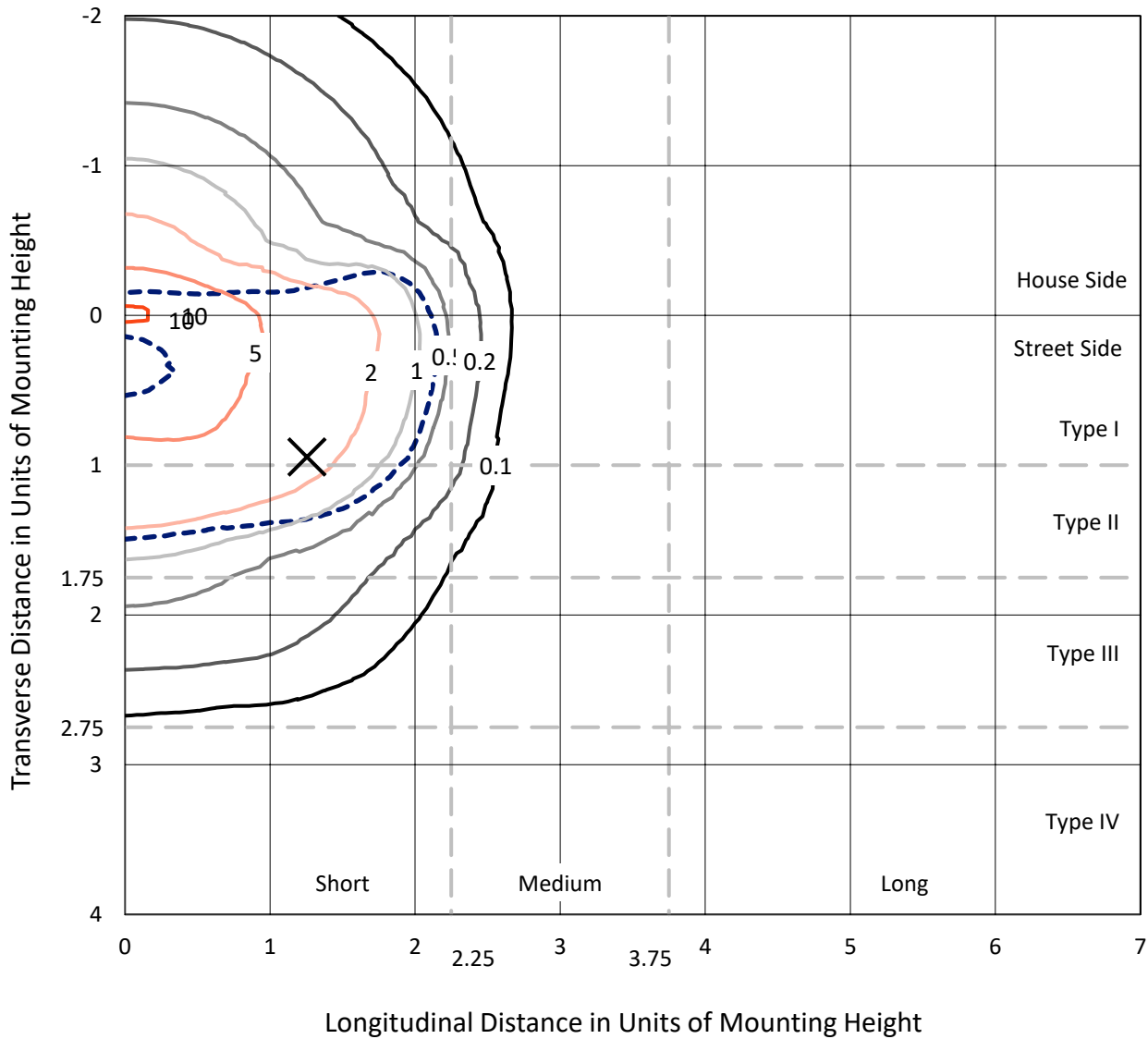
Lumens per Lamp: N/A  
Luminaire Lumens: 20705.5 lumens  
Efficiency: N/A  
Efficacy: 102.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3  
  
Input Watts (W): 202.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
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

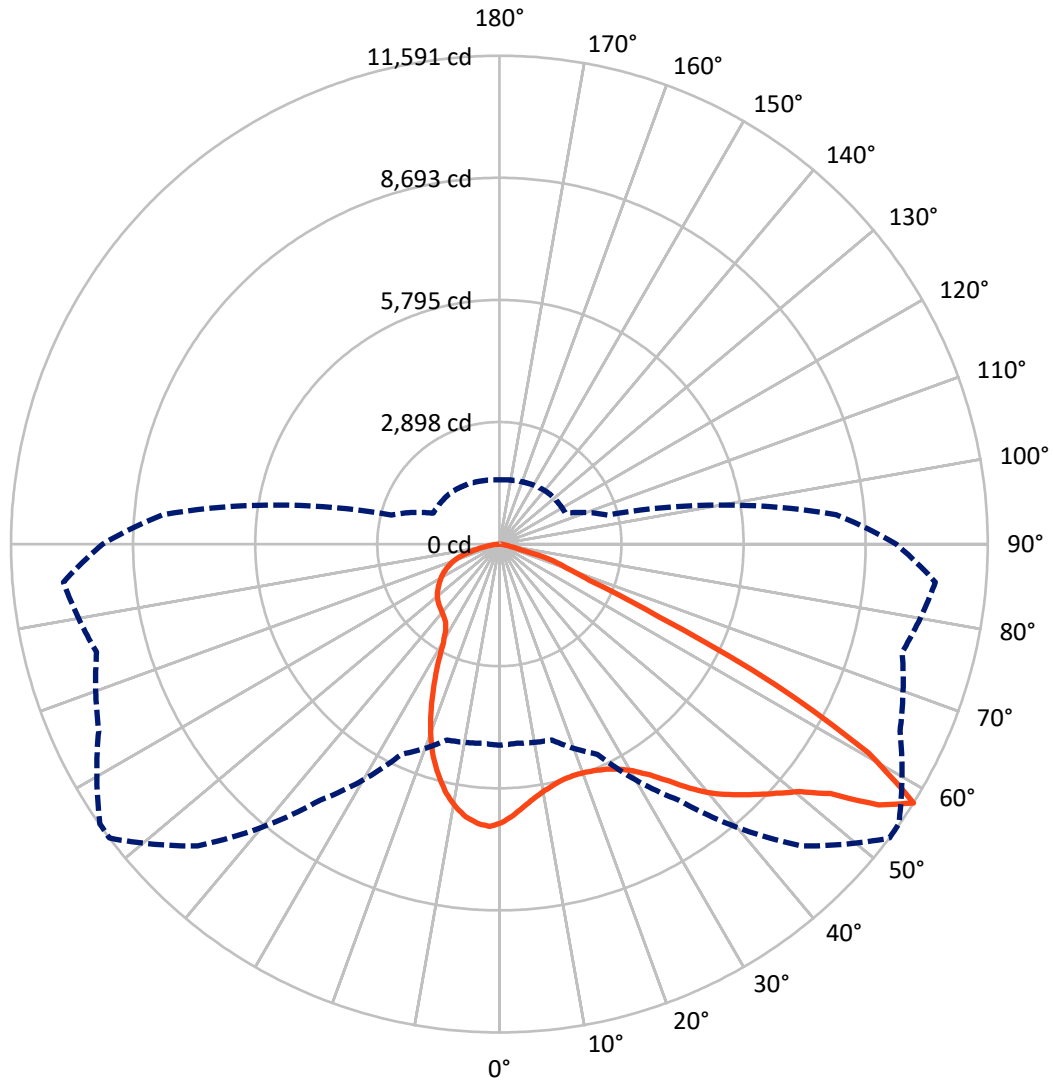
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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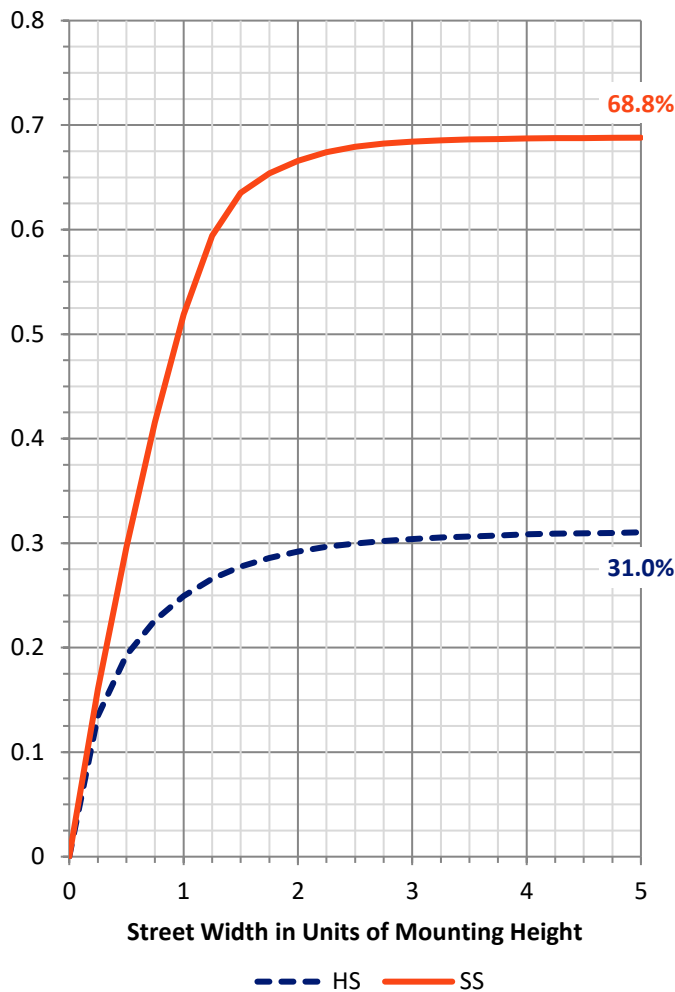
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6473.8	0.0	6473.8
	% Fixture	31.3	0.0	31.3
<b>Street Side</b>	Lumens	14231.6	0.0	14231.6
	% Fixture	68.7	0.0	68.7
<b>Total</b>	Lumens	20705.5	0.0	20705.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	597.9	2.9
10°-20°	1568.6	7.6
20°-30°	2311.2	11.2
30°-40°	3235.0	15.6
40°-50°	4252.7	20.5
50°-60°	4986.2	24.1
60°-70°	2937.4	14.2
70°-80°	730.7	3.5
80°-90°	85.7	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°	20705.5	100.0
0°-180°	20705.5	100.0

**Coefficient of Utilization**



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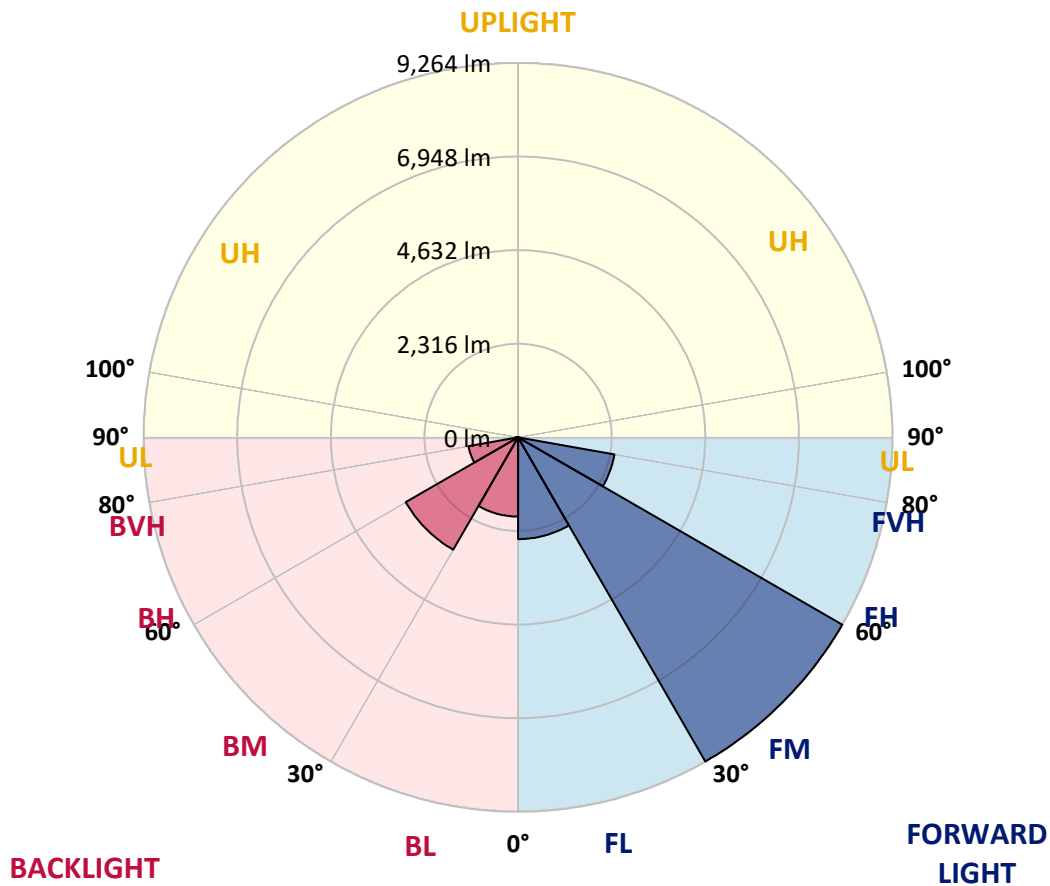
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2517.4	12.2			
FM (30°-60°)	9263.8	44.7			
FH (60°-80°)	2421.7	11.7			G2/5000
FVH (80°-90°)	28.7	0.1			G1/100
BL (0°-30°)	1960.3	9.5	B3/2500		
BM (30°-60°)	3210.1	15.5	B3/5000		
BH (60°-80°)	1246.4	6.0	B3/2500		G3/2500
BVH (80°-90°)	57.0	0.3			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°	53°	55°	65°	75°	85°
0°	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8
2.5°	6231.9	6249.3	6252.8	6306.9	6310.3	6388.8	6441.0	6430.6	6484.6	6550.8	6603.1
5°	5933.9	5935.7	5953.1	6017.6	6052.4	6155.2	6242.4	6242.4	6346.9	6482.9	6599.6
7.5°	5688.2	5686.4	5702.1	5773.6	5831.1	5954.8	6073.3	6087.3	6233.7	6432.3	6622.3
10°	5459.9	5472.1	5489.5	5576.7	5649.9	5803.2	5944.4	5967.0	6151.8	6397.5	6653.7
12.5°	5313.5	5315.3	5341.4	5439.0	5533.1	5696.9	5845.0	5872.9	6085.5	6364.4	6676.3
15°	5219.4	5221.1	5249.0	5357.1	5466.9	5632.4	5784.0	5815.4	6047.2	6359.1	6719.9
17.5°	5177.6	5175.8	5202.0	5310.0	5430.3	5602.8	5764.9	5803.2	6064.6	6399.2	6796.6
20°	5177.6	5179.3	5193.3	5290.9	5412.8	5595.8	5784.0	5831.1	6132.6	6489.8	6915.1
22.5°	5250.8	5257.7	5264.7	5330.9	5426.8	5606.3	5834.6	5897.3	6279.0	6641.5	7070.2
25°	5393.7	5395.4	5402.4	5456.4	5500.0	5635.9	5918.2	6012.3	6507.3	6862.8	7265.3
27.5°	5585.4	5609.8	5616.7	5651.6	5651.6	5709.1	6048.9	6184.9	6815.7	7181.7	7514.5
30°	5853.7	5862.5	5874.7	5913.0	5871.2	5846.8	6240.6	6414.9	7173.0	7566.8	7814.3
32.5°	6089.0	6108.2	6174.4	6237.1	6162.2	6085.5	6522.9	6728.6	7516.3	7967.7	8133.2
35°	6289.4	6336.5	6463.7	6603.1	6550.8	6474.2	6897.6	7112.0	7798.6	8255.2	8415.5
37.5°	6531.7	6568.3	6742.5	6969.1	7016.1	6979.5	7354.2	7507.6	7986.8	8328.4	8568.9
40°	6777.4	6833.1	7058.0	7371.6	7551.1	7577.3	7776.0	7878.8	8051.3	8185.5	8539.3
42.5°	7028.3	7124.2	7432.6	7798.6	8117.5	8176.8	8131.5	8175.0	8030.4	7988.6	8401.6
45°	7335.0	7448.3	7796.9	8263.9	8683.9	8776.3	8480.0	8439.9	8026.9	7913.6	8316.2
47.5°	7697.5	7810.8	8143.7	8687.4	9224.1	9292.1	8837.3	8764.1	8148.9	8028.6	8431.2
50°	8018.2	8096.6	8394.6	9002.8	9727.8	9767.9	9231.1	9142.2	8452.1	8347.6	8790.2
52.5°	7692.3	7683.6	7997.3	8746.6	9989.2	10471.9	9837.6	9752.2	9037.7	8877.3	9346.1
55°	6526.4	6427.1	6707.7	7444.8	9259.0	11097.6	10925.0	10754.2	9818.4	9410.6	9867.2
57.5°	4771.5	4743.6	4811.6	5503.5	7417.0	10128.6	11590.7	11575.1	10492.8	9898.6	10386.5
60°	3731.1	3689.3	3508.1	3527.2	5055.6	7911.9	10058.9	10520.7	10911.1	10191.3	10749.0
62.5°	3312.9	3281.5	3187.4	2927.7	3011.4	5304.8	7373.4	7796.9	9534.3	9001.1	9232.9
65°	2743.0	2734.3	2812.7	2802.3	2523.4	2929.5	4161.6	4588.5	5994.9	6069.8	5994.9
67.5°	1993.7	1978.0	2176.6	2568.7	2429.3	2211.5	2319.5	2467.7	3074.1	2760.4	2485.1
70°	1296.6	1273.9	1388.9	1856.0	2174.9	1927.4	1671.3	1646.9	1690.4	1050.9	1136.2
72.5°	869.6	843.5	841.7	1021.2	1314.0	1298.3	1294.8	1282.6	1145.0	829.5	920.1
75°	484.5	463.6	458.3	440.9	470.5	479.2	510.6	528.0	571.6	629.1	697.1
77.5°	81.9	80.2	101.1	129.0	177.8	228.3	282.3	298.0	367.7	435.7	479.2
80°	45.3	47.1	61.0	74.9	99.3	135.9	174.3	184.7	226.6	263.1	298.0
82.5°	24.4	24.4	31.4	40.1	54.0	71.5	94.1	102.8	130.7	153.4	177.8
85°	8.7	8.7	12.2	15.7	22.7	29.6	36.6	41.8	57.5	78.4	88.9
87.5°	0.0	0.0	0.0	0.0	1.7	3.5	7.0	7.0	8.7	15.7	22.7
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°	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8	6611.8
2.5°	6646.7	6599.6	6664.1	6693.7	6704.2	6711.2	6665.8	6634.5	6624.0	6590.9	6571.7
5°	6671.1	6639.7	6700.7	6700.7	6657.1	6611.8	6519.5	6455.0	6409.7	6355.6	6346.9
7.5°	6712.9	6690.2	6723.4	6655.4	6545.6	6423.6	6263.3	6137.8	6036.7	5970.5	5972.3
10°	6768.7	6740.8	6714.6	6563.0	6362.6	6137.8	5892.1	5709.1	5541.8	5465.1	5423.3
12.5°	6805.3	6765.2	6655.4	6404.4	6109.9	5808.4	5461.6	5189.8	4947.5	4837.8	4829.0
15°	6850.6	6777.4	6557.8	6198.8	5789.3	5378.0	4931.9	4553.7	4226.1	4055.3	4046.6
17.5°	6909.8	6789.6	6441.0	5963.5	5451.2	4844.7	4283.6	3807.8	3459.3	3326.8	3349.5
20°	6993.5	6803.5	6308.6	5702.1	5031.2	4238.3	3539.4	3102.0	2967.8	2959.1	2941.7
22.5°	7087.6	6812.2	6162.2	5409.4	4522.3	3591.7	2924.3	2737.8	2736.0	2779.6	2790.1
25°	7193.9	6819.2	5996.7	5067.8	3971.6	2946.9	2586.2	2530.4	2574.0	2655.9	2666.3
27.5°	7329.8	6833.1	5796.2	4693.1	3386.1	2546.1	2399.7	2385.8	2438.0	2514.7	2511.2
30°	7530.2	6883.7	5583.6	4262.7	2784.8	2356.1	2286.4	2288.2	2309.1	2345.7	2350.9
32.5°	7734.1	6962.1	5376.2	3778.2	2439.8	2248.1	2216.7	2213.2	2213.2	2228.9	2232.4
35°	7927.6	7051.0	5151.4	3272.8	2272.5	2185.4	2164.4	2154.0	2148.8	2145.3	2140.0
37.5°	8035.6	7094.6	4931.9	2774.4	2183.6	2143.5	2122.6	2108.7	2089.5	2075.6	2072.1
40°	7988.6	7044.0	4677.4	2401.4	2129.6	2103.4	2079.0	2059.9	2033.7	2021.5	2014.6
42.5°	7831.7	6887.2	4400.3	2225.4	2086.0	2059.9	2030.3	1998.9	1981.5	1971.0	1969.3
45°	7666.2	6697.2	4065.7	2122.6	2044.2	2012.8	1978.0	1943.1	1923.9	1918.7	1917.0
47.5°	7660.9	6603.1	3710.2	2040.7	1993.7	1962.3	1918.7	1883.9	1863.0	1856.0	1849.0
50°	7891.0	6699.0	3309.4	1969.3	1941.4	1908.3	1859.5	1821.1	1795.0	1786.3	1784.5
52.5°	8368.5	7059.7	2950.4	1897.8	1871.7	1833.3	1793.2	1754.9	1723.5	1707.9	1706.1
55°	8884.3	7518.0	2727.3	1824.6	1789.8	1756.6	1720.1	1678.2	1643.4	1619.0	1615.5
57.5°	9417.6	8018.2	2659.4	1732.2	1706.1	1683.5	1639.9	1594.6	1554.5	1531.8	1526.6
60°	9856.7	8448.6	2786.6	1634.7	1620.7	1591.1	1551.0	1507.4	1479.6	1462.1	1458.6
62.5°	8251.7	6878.5	2249.8	1528.4	1528.4	1497.0	1451.7	1420.3	1401.1	1388.9	1385.5
65°	5236.8	4259.2	1535.3	1422.0	1420.3	1378.5	1340.1	1319.2	1310.5	1291.3	1287.9
67.5°	2281.2	1946.6	1312.3	1314.0	1307.0	1261.7	1223.4	1207.7	1190.3	1169.4	1167.6
70°	1183.3	1206.0	1174.6	1193.8	1181.6	1127.5	1090.9	1066.5	1029.9	1009.0	1010.8
72.5°	955.0	979.4	1014.3	1043.9	1017.7	974.2	916.7	887.0	840.0	817.3	819.1
75°	728.5	754.6	787.7	819.1	798.2	744.1	707.5	677.9	623.9	597.7	603.0
77.5°	501.9	515.8	555.9	554.2	547.2	531.5	477.5	442.6	386.9	355.5	359.0
80°	311.9	320.7	339.8	348.5	345.1	324.1	280.6	254.4	221.3	202.2	203.9
82.5°	188.2	193.4	210.9	212.6	210.9	195.2	162.1	142.9	122.0	111.5	111.5
85°	95.8	99.3	109.8	109.8	99.3	83.6	74.9	66.2	54.0	48.8	48.8
87.5°	26.1	26.1	33.1	27.9	22.7	20.9	10.5	8.7	3.5	1.7	1.7
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)