

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: STREETWORKS

Report Number: P721858

Luminaire Tested: **CST-CA8-400-740-U-T2-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721858  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-400-740-U-T2-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 55281 lumens  
Efficiency: N/A  
Efficacy: 137.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

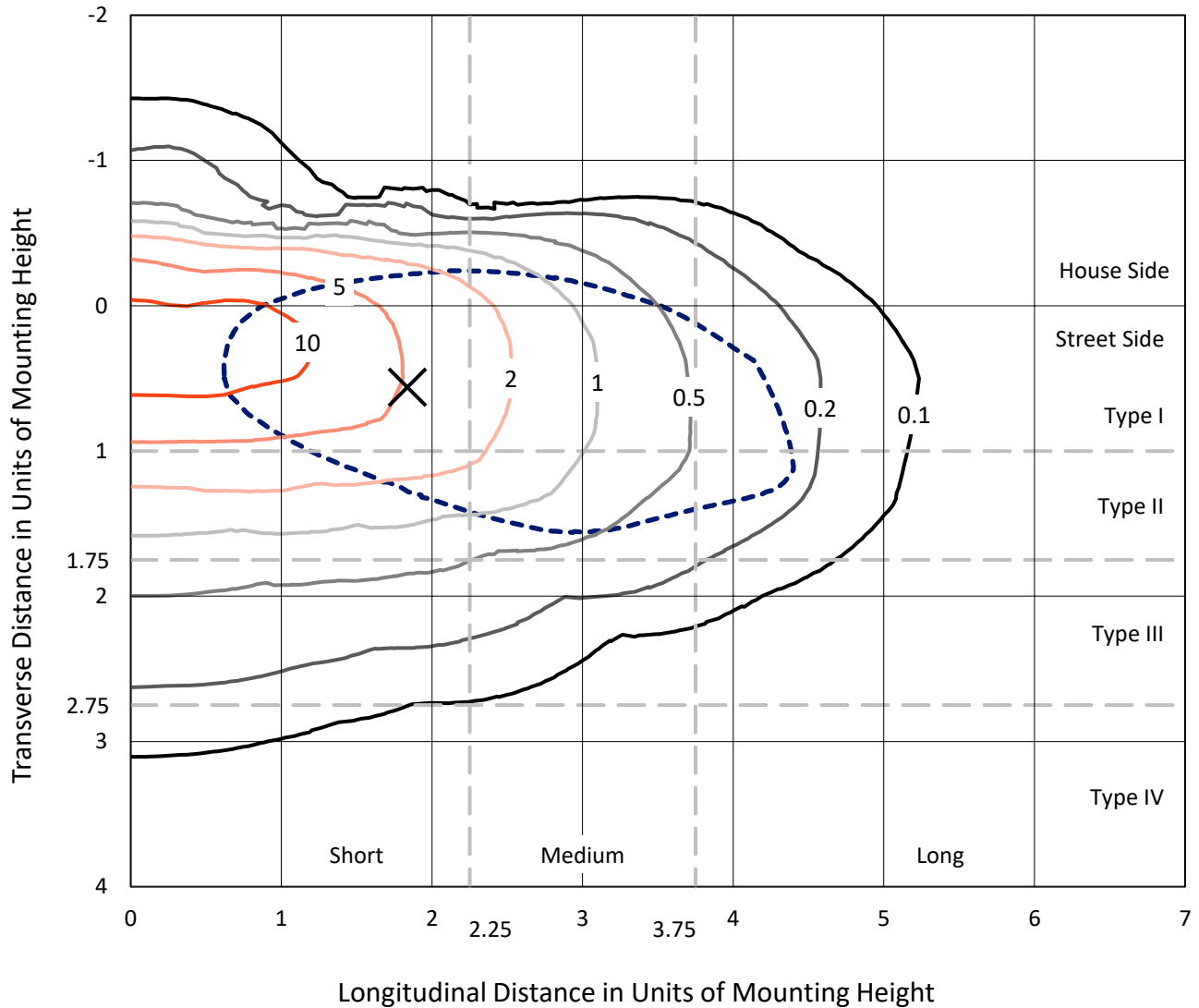
Input Watts (W): 400.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

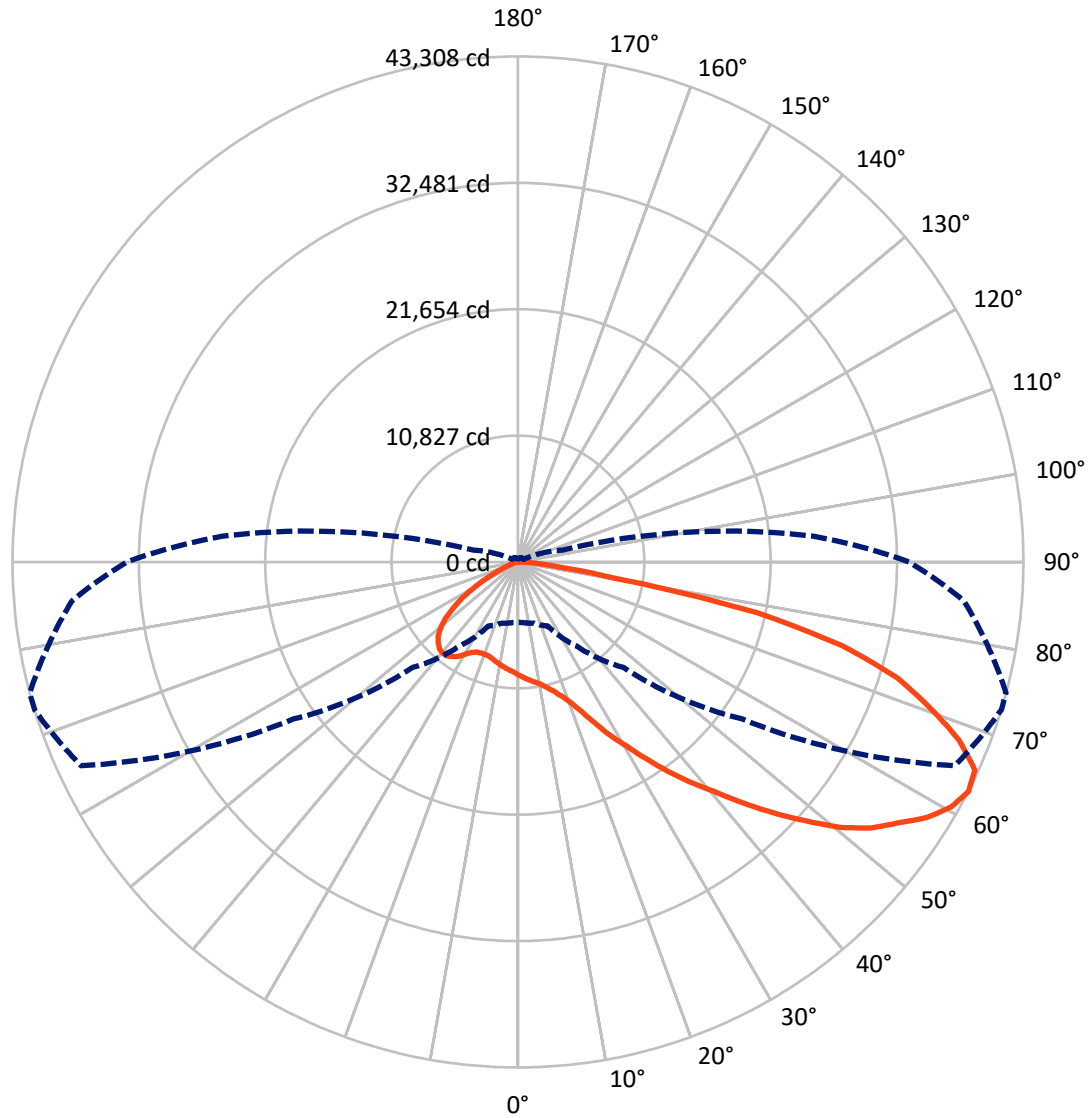
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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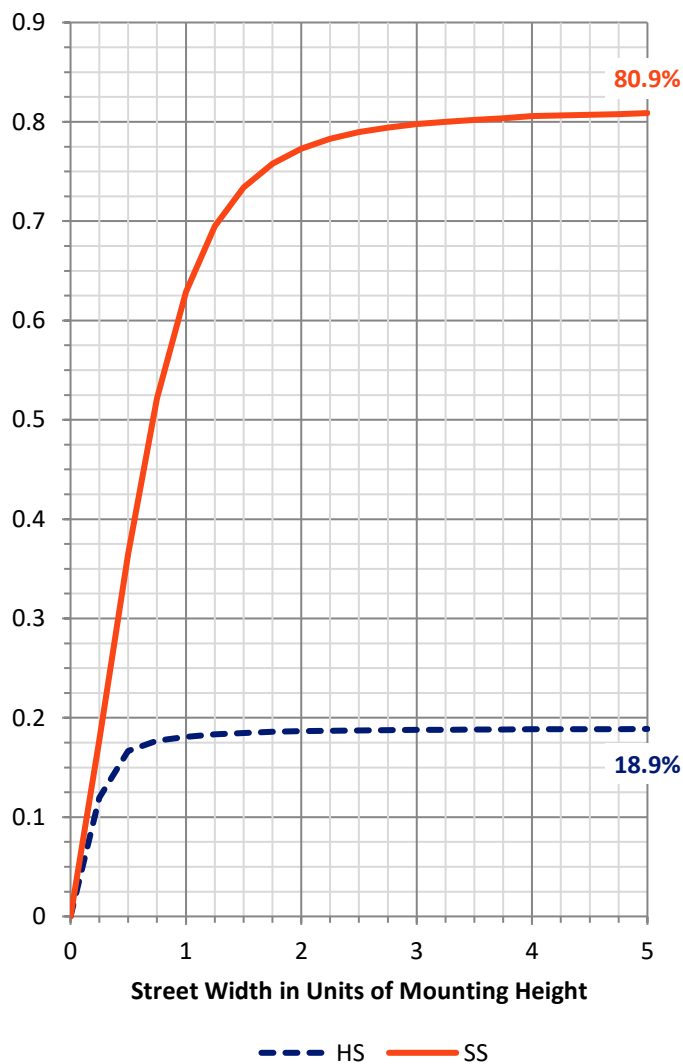
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10575.0	0.0	10575.0
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	44706.0	0.0	44706.0
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	55281.0	0.0	55281.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	926.0	1.7
10°-20°	2785.2	5.0
20°-30°	4812.3	8.7
30°-40°	7236.4	13.1
40°-50°	9649.1	17.5
50°-60°	11363.7	20.6
60°-70°	11297.5	20.4
70°-80°	6486.2	11.7
80°-90°	724.6	1.3
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°	55281.0	100.0
0°-180°	55281.0	100.0

**Coefficient of Utilization**

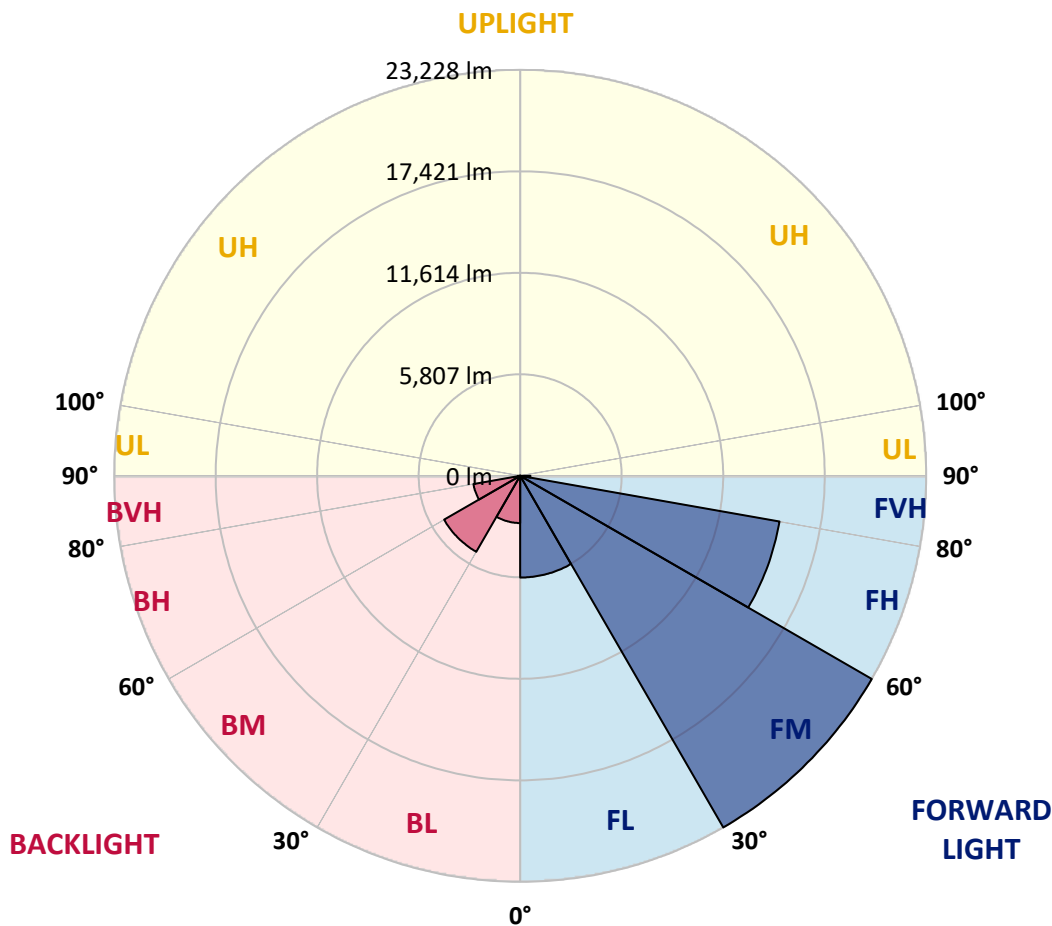


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5821.0	10.5			
FM (30°-60°)	23227.7	42.0			
FH (60°-80°)	15068.7	27.3			G5
FVH (80°-90°)	588.5	1.1			G4/750
BL (0°-30°)	2702.4	4.9	B4/5000		
BM (30°-60°)	5021.5	9.1	B4/8500		
BH (60°-80°)	2715.0	4.9	B4/5000		G4/5000
BVH (80°-90°)	136.1	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0
2.5°	10372.6	10398.6	10367.6	10353.9	10339.0	10242.3	10129.3	10013.9	9920.9	9906.0	9784.4
5°	11101.0	11114.6	11063.7	11005.4	10904.9	10744.8	10542.6	10342.8	10156.6	10107.0	9884.9
7.5°	11660.6	11634.5	11622.1	11572.5	11484.4	11308.2	11001.7	10674.1	10386.2	10316.7	9979.2
10°	12185.5	12174.3	12080.0	12018.0	11877.7	11715.2	11463.3	11047.6	10641.8	10530.1	10061.1
12.5°	12753.8	12729.0	12690.5	12556.5	12442.3	12168.1	11864.1	11485.6	11033.9	10885.0	10201.3
15°	13265.1	13198.0	13176.9	13036.7	12921.3	12711.6	12406.4	11967.1	11484.4	11356.6	10468.1
17.5°	13751.5	13720.5	13673.3	13577.8	13448.7	13287.4	13042.9	12572.6	12073.8	11887.7	10921.0
20°	14164.7	14126.2	14085.3	14111.3	14082.8	13979.8	13825.9	13425.1	12815.9	12635.9	11472.0
22.5°	14452.6	14451.3	14615.1	14710.7	14765.3	14761.6	14724.3	14497.3	13884.3	13701.8	12295.9
25°	14692.1	14710.7	14917.9	15281.5	15606.6	15636.4	15899.4	15791.5	15270.3	15080.5	13535.6
27.5°	14762.8	14800.0	15176.0	15748.1	16241.9	16716.0	17101.9	17299.2	16816.5	16589.4	14868.3
30°	14813.7	14828.6	15197.1	15882.1	16923.2	17673.9	18363.8	18697.6	18281.9	18115.7	16353.6
32.5°	14455.1	14460.0	15024.6	16062.0	17423.3	18724.9	19541.4	20170.6	20061.4	19841.7	17977.9
35°	13961.2	14053.0	14700.8	15888.3	17835.2	19690.4	20802.2	21740.3	21958.7	21801.1	19601.0
37.5°	13350.7	13422.6	14116.3	15630.2	17925.8	20354.2	21782.5	23336.1	23906.9	23880.8	21560.4
40°	12599.9	12688.0	13518.2	15074.3	17881.1	20836.9	22932.8	25103.1	25827.8	25745.9	23503.6
42.5°	11712.7	11841.8	12647.1	14359.5	17554.8	21132.3	23874.6	26902.4	28206.5	28153.2	25223.5
45°	10835.4	10904.9	11639.5	13364.3	16954.2	21227.8	24760.6	29381.7	30646.1	30586.6	27295.7
47.5°	9930.8	9991.6	10758.5	12315.8	15911.9	21035.5	25461.7	31511.0	33131.6	33072.0	29354.4
50°	7826.3	8055.8	9628.0	11393.8	14724.3	20490.7	26123.1	34164.0	35732.5	35479.4	31157.4
52.5°	6695.8	6779.0	7594.2	10464.4	13539.3	19561.3	26564.9	36622.2	37871.8	37507.0	33001.3
55°	6259.0	6314.9	6714.4	8750.7	12426.2	18155.4	27084.8	39086.6	39476.3	39383.2	34505.3
57.5°	5927.7	5989.7	6275.2	7308.8	11253.6	16184.9	26922.2	40820.1	41307.8	41010.0	36102.3
60°	5458.6	5534.3	5912.8	6561.8	9920.9	14184.5	25491.5	41529.9	42639.3	42304.2	37317.1
62.5°	5163.3	5213.0	5430.1	6059.2	8816.5	12777.4	23455.2	41301.6	43308.1	43295.7	38370.6
65°	4762.5	4835.7	5067.8	5577.8	7833.7	11686.6	21534.3	40173.6	43020.2	43031.4	38587.8
67.5°	4343.1	4372.9	4616.1	5025.6	6676.0	10687.7	19048.8	38244.1	40777.9	41033.6	37085.1
70°	3819.4	3804.6	4067.6	4366.7	5456.2	9074.6	15332.4	34811.8	37464.8	37570.3	34046.1
72.5°	3005.4	3019.1	3092.3	3299.5	4142.1	7141.3	11125.8	29411.4	34001.5	34188.8	30162.2
75°	2020.2	2042.5	2383.7	2586.0	2979.4	5132.3	6996.1	19852.9	28743.8	29272.5	24686.2
77.5°	1541.2	1554.8	1654.1	1875.0	2155.4	3658.1	3792.1	10818.0	20926.3	22180.8	19311.9
80°	1092.0	1096.9	998.9	888.5	1147.8	2481.8	2239.8	4607.4	8338.7	9853.9	11342.9
82.5°	488.9	481.5	567.1	471.5	661.4	960.4	1057.2	2236.1	3463.3	3722.7	4052.7
85°	227.1	254.4	291.6	244.5	393.4	371.0	412.0	953.0	1623.1	1791.8	1781.9
87.5°	55.8	60.8	76.9	98.0	142.7	126.6	124.1	280.4	362.3	361.1	554.7
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°	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0	9695.0
2.5°	9701.2	9636.7	9484.1	9336.4	9196.2	9103.1	8998.9	8889.7	8823.9	8792.9	8859.9
5°	9749.6	9626.8	9335.2	9042.3	8794.1	8582.0	8433.0	8306.5	8238.2	8244.4	8248.2
7.5°	9790.6	9618.1	9209.8	8796.6	8409.5	8146.4	7951.6	7815.1	7736.9	7677.4	7722.0
10°	9826.6	9582.1	9063.4	8512.5	8091.8	7702.2	7437.9	7272.8	7128.9	7048.2	7111.5
12.5°	9865.0	9568.5	8899.6	8258.1	7713.3	7277.8	6915.4	6751.7	6610.2	6549.4	6587.9
15°	10032.5	9620.6	8747.0	7959.0	7339.8	6776.5	6385.6	6184.6	6072.9	5999.7	6015.8
17.5°	10320.4	9758.3	8649.0	7646.3	6922.9	6327.3	5821.0	5586.5	5401.6	5349.5	5335.8
20°	10729.9	10020.1	8649.0	7382.0	6450.1	5828.4	5245.2	4849.4	4561.5	4453.5	4536.7
22.5°	11417.4	10465.6	8734.6	7142.5	6043.1	5311.0	4616.1	4011.8	3623.4	3465.8	3557.6
25°	12379.1	11154.3	8873.6	6932.8	5672.1	4715.4	3818.2	3123.3	2695.2	2507.8	2505.3
27.5°	13634.8	12207.8	9154.0	6761.6	5227.8	3944.8	2985.6	2316.7	1914.7	1801.8	1817.9
30°	15027.1	13349.4	9683.9	6513.4	4688.1	3082.4	2174.0	1702.5	1419.6	1270.7	1273.1
32.5°	16369.7	14532.0	10313.0	6352.1	3987.0	2324.2	1549.9	1214.8	1038.6	950.5	964.2
35°	17809.2	15552.0	10780.8	6081.6	3164.3	1680.2	1095.7	910.8	837.6	791.7	794.2
37.5°	19364.0	16673.8	11165.5	5719.2	2392.4	1154.0	809.1	780.5	749.5	691.2	686.2
40°	20988.3	17973.0	11395.0	5133.5	1662.8	799.1	687.4	719.7	702.3	626.6	620.4
42.5°	22365.7	18975.6	11452.1	4358.0	1075.8	647.7	622.9	672.6	676.3	599.3	589.4
45°	23688.5	19869.0	11340.4	3336.7	745.8	609.3	583.2	651.5	656.4	586.9	570.8
47.5°	25168.9	21091.3	11138.2	2226.1	616.7	575.8	569.6	616.7	634.1	577.0	557.2
50°	26966.9	22085.3	10538.8	1367.5	582.0	554.7	554.7	583.2	606.8	557.2	547.2
52.5°	28810.9	22951.4	9651.6	938.1	560.9	532.3	548.5	560.9	569.6	524.9	533.6
55°	30132.4	23719.5	8328.8	754.5	548.5	517.4	555.9	531.1	518.7	480.2	471.5
57.5°	31599.1	24632.8	6976.3	668.8	532.3	526.1	531.1	483.9	449.2	409.5	400.8
60°	32622.8	25124.2	5320.9	629.1	513.7	517.4	490.1	426.9	363.6	335.0	328.8
62.5°	33516.3	25404.6	3900.1	578.3	496.4	495.1	444.2	364.8	299.1	268.0	263.1
65°	33381.0	24966.6	2527.7	537.3	482.7	466.6	398.3	312.7	249.4	225.8	223.4
67.5°	31893.2	23028.3	1592.1	495.1	459.1	430.6	357.4	279.2	229.6	202.3	199.8
70°	28769.9	20351.7	974.1	440.5	408.3	381.0	316.4	261.8	217.2	184.9	178.7
72.5°	24452.9	17430.7	688.7	388.4	356.1	323.9	268.0	249.4	207.2	166.3	161.3
75°	20089.9	12839.4	577.0	338.8	304.0	260.6	228.3	232.0	194.8	151.4	147.7
77.5°	14147.3	8004.9	537.3	276.7	239.5	207.2	197.3	212.2	178.7	139.0	135.3
80°	8256.8	4495.7	444.2	218.4	179.9	160.1	165.0	179.9	156.4	125.3	120.4
82.5°	3333.0	1779.4	312.7	170.0	131.5	127.8	135.3	146.4	129.1	105.5	103.0
85°	1190.0	555.9	177.4	111.7	84.4	88.1	86.9	104.2	93.1	76.9	75.7
87.5°	312.7	110.4	79.4	44.7	36.0	36.0	33.5	48.4	44.7	34.7	38.5
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)