

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: P721932

Luminaire Tested: **CST-CA8-430-750-U-T4-HSS**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721932  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-430-750-U-T4-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 58765 lumens  
Efficiency: N/A  
Efficacy: 135.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

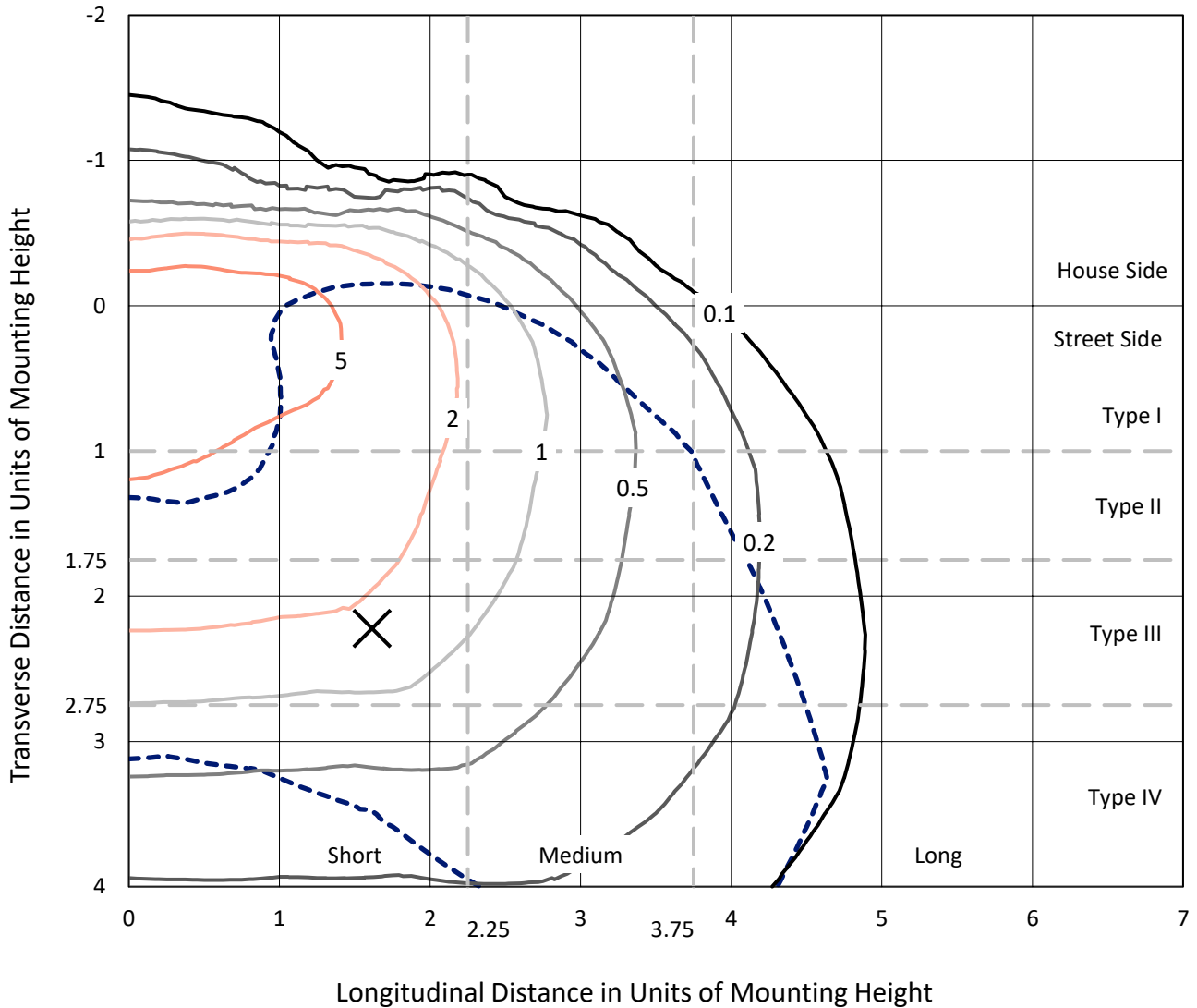
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

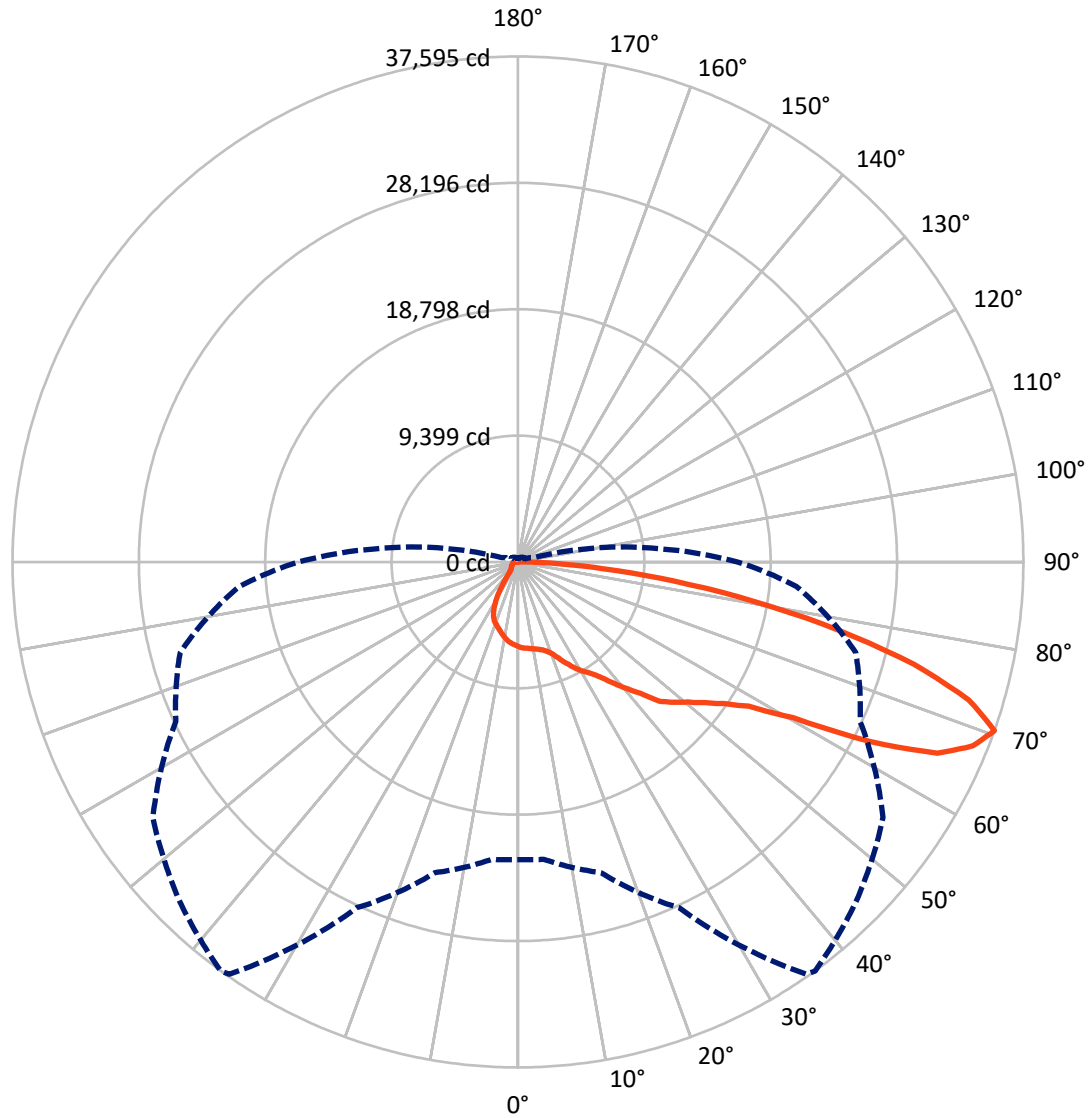
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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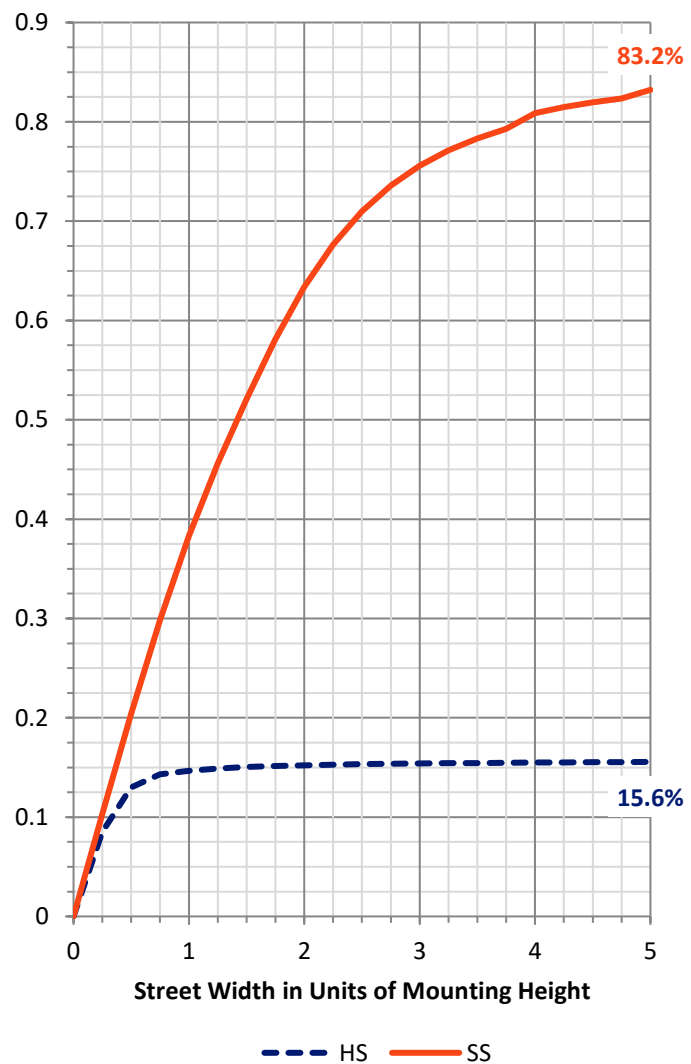
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9273.5	0.0	9273.5
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	49491.4	0.0	49491.4
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	58765.0	0.0	58765.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	597.1	1.0
10°-20°	1775.8	3.0
20°-30°	3193.4	5.4
30°-40°	5053.6	8.6
40°-50°	7897.8	13.4
50°-60°	11341.1	19.3
60°-70°	15383.2	26.2
70°-80°	11385.2	19.4
80°-90°	2137.8	3.6
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°	58765.0	100.0
0°-180°	58765.0	100.0



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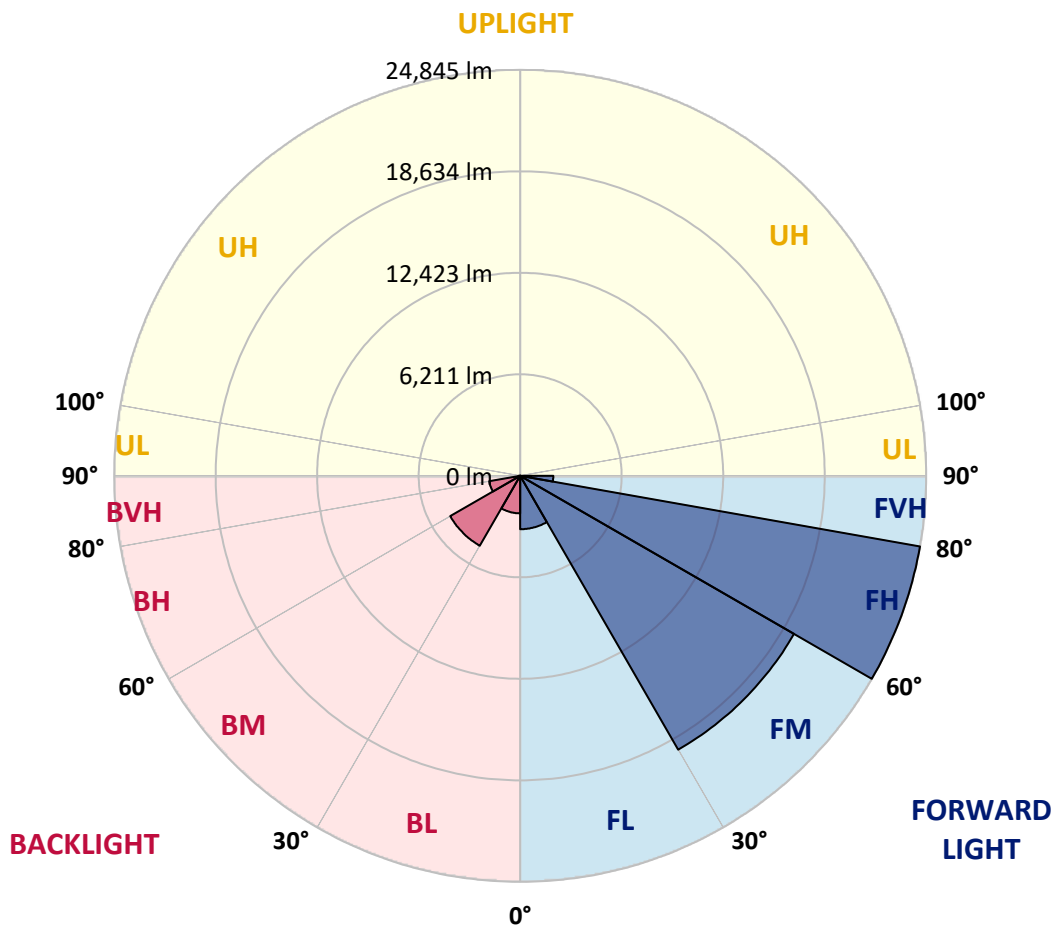
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3268.5	5.6			
FM (30°-60°)	19350.8	32.9			
FH (60°-80°)	24845.3	42.3			G5
FVH (80°-90°)	2026.9	3.4			G5
BL (0°-30°)	2297.9	3.9	B3/2500		
BM (30°-60°)	4941.7	8.4	B3/5000		
BH (60°-80°)	1923.1	3.3	B3/2500		G3/2500
BVH (80°-90°)	110.9	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4
2.5°	6423.9	6410.3	6399.5	6403.6	6395.4	6400.8	6388.6	6373.7	6338.4	6323.5	6316.7
5°	6480.9	6476.8	6466.0	6457.8	6442.9	6437.5	6423.9	6436.1	6417.1	6368.3	6339.8
7.5°	6514.8	6513.4	6501.2	6483.6	6491.7	6498.5	6512.1	6493.1	6468.7	6445.6	6387.3
10°	6529.7	6529.7	6514.8	6524.3	6566.4	6570.4	6577.2	6589.4	6566.4	6532.4	6474.1
12.5°	6567.7	6565.0	6570.4	6601.6	6645.0	6654.5	6688.5	6688.5	6691.2	6670.8	6603.0
15°	6662.7	6662.7	6674.9	6703.4	6778.0	6783.4	6833.6	6878.4	6883.8	6854.0	6802.4
17.5°	6882.5	6877.0	6870.3	6887.9	6967.9	6970.6	7057.5	7114.5	7129.4	7161.9	7153.8
20°	7300.3	7294.9	7293.5	7294.9	7289.5	7281.3	7366.8	7427.9	7503.8	7560.8	7589.3
22.5°	7898.6	7886.4	7886.4	7819.9	7768.4	7776.5	7790.1	7824.0	7924.4	8024.8	8132.0
25°	8543.0	8534.9	8541.7	8372.1	8302.9	8330.0	8312.4	8365.3	8496.9	8583.7	8697.7
27.5°	9069.4	9081.7	9043.7	8912.1	8867.3	8887.6	8846.9	8998.9	9144.1	9296.0	9468.3
30°	9724.7	9659.6	9566.0	9405.9	9389.6	9392.3	9389.6	9633.8	9935.0	10152.1	10390.9
32.5°	10580.8	10591.6	10381.4	10004.2	9865.8	9846.8	9901.1	10259.3	10666.3	11147.9	11462.6
35°	11446.4	11464.0	11310.7	10917.2	10522.5	10462.8	10382.7	10848.1	11435.5	12401.5	12876.3
37.5°	12364.8	12427.2	12245.4	11894.1	11426.0	11370.4	10991.9	11449.1	12317.3	13885.7	14508.4
40°	13594.0	13527.5	13307.7	12861.4	12425.9	12336.3	11896.8	12136.9	13451.5	15744.3	16196.1
42.5°	14500.3	14481.3	14295.4	13854.5	13416.3	13344.4	12990.3	13250.7	14880.1	17628.8	17830.9
45°	15219.3	15336.0	15331.9	15055.1	14808.2	14767.5	14558.6	14942.5	16607.2	19407.4	19308.3
47.5°	15858.3	15930.2	15814.9	15694.1	15578.8	15592.4	15747.0	16536.6	18372.2	20960.8	20522.6
50°	16904.3	16812.0	16295.1	16202.9	16365.7	16372.5	16843.2	18058.8	20316.4	22303.9	21550.9
52.5°	18299.0	18198.6	17136.3	16978.9	17364.2	17392.7	18175.5	19575.6	22321.5	23587.3	22573.9
55°	20374.7	20141.4	19003.1	18297.6	18474.0	18589.3	19537.6	21034.1	23891.2	24718.8	23348.6
57.5°	22923.9	23093.5	22510.1	20916.0	20182.1	20225.5	21096.5	22430.1	25276.4	25709.2	23801.7
60°	25618.3	25577.6	25821.8	25150.2	23744.7	23511.4	23067.7	23854.6	26349.5	26543.5	24268.4
62.5°	27094.4	27331.8	28145.8	28280.1	29548.6	29425.1	26401.1	25621.0	27589.6	27067.2	24395.9
65°	27086.2	27189.3	28704.7	30370.8	34333.6	34298.4	32892.8	28175.6	28513.5	27346.7	24140.9
67.5°	25336.1	25496.2	27268.0	30522.7	36545.0	36503.0	35531.6	31766.8	28803.8	27010.2	22951.0
70°	22145.2	22199.4	23927.9	28383.2	37433.7	37595.1	35622.5	33145.2	28082.0	26010.4	20781.7
72.5°	18269.1	18156.5	19847.0	24238.5	35170.7	35074.4	34116.6	31499.5	26866.4	24069.0	16949.1
75°	13451.5	13764.9	15281.7	19461.7	30113.0	30465.7	30890.4	28981.5	23861.4	19836.1	11720.4
77.5°	8882.2	9281.1	10814.1	14592.5	23839.7	24387.8	25488.0	24649.6	19411.5	14228.9	5581.4
80°	4589.7	4890.9	6270.6	9682.7	17090.2	17881.1	19898.5	18669.3	13762.2	6433.4	1249.5
82.5°	1736.6	1697.2	2809.7	5542.1	10957.9	11677.0	13143.6	11195.4	4897.6	1130.1	580.7
85°	762.5	807.2	1164.0	2527.5	6265.2	6358.8	7445.5	4364.5	717.7	540.0	394.8
87.5°	329.7	378.5	488.4	727.2	2113.7	2440.7	3020.0	1386.5	217.1	187.2	198.1
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°	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4	6296.4
2.5°	6304.5	6296.4	6282.8	6248.9	6193.3	6186.5	6181.1	6175.6	6164.8	6170.2	6201.4
5°	6318.1	6303.2	6254.3	6205.5	6156.6	6113.2	6060.3	6040.0	6012.8	5995.2	6027.8
7.5°	6364.2	6333.0	6261.1	6194.6	6061.7	5997.9	5930.1	5850.0	5793.0	5756.4	5789.0
10°	6441.5	6402.2	6312.7	6175.6	6019.6	5844.6	5725.2	5592.3	5483.7	5453.9	5483.7
12.5°	6567.7	6509.4	6404.9	6219.0	5942.3	5713.0	5486.4	5311.4	5136.4	5086.2	5101.1
15°	6772.6	6726.4	6566.4	6309.9	5943.6	5593.6	5257.2	4975.0	4745.7	4665.6	4660.2
17.5°	7100.9	7052.1	6867.5	6490.4	5992.5	5500.0	5031.9	4601.9	4254.6	4078.2	4049.7
20°	7571.7	7503.8	7224.3	6756.3	6098.3	5459.3	4823.0	4245.1	3705.1	3374.1	3323.9
22.5°	8095.3	8023.4	7611.0	6961.2	6174.3	5379.3	4623.6	3850.3	3139.4	2735.1	2678.1
25°	8746.6	8589.2	7981.4	7155.2	6156.6	5211.0	4299.3	3314.4	2543.8	2193.8	2155.8
27.5°	9389.6	9190.2	8358.5	7256.9	6079.3	4943.8	3824.5	2687.6	1991.6	1743.3	1712.1
30°	10187.4	9802.1	8693.6	7304.4	5883.9	4543.5	3188.2	2043.2	1491.0	1320.1	1290.2
32.5°	11135.7	10552.3	9008.4	7251.5	5558.3	3933.0	2478.7	1496.4	1108.4	1001.2	999.9
35°	12386.5	11472.1	9354.3	7077.8	5059.1	3275.0	1737.9	1022.9	864.2	827.6	834.4
37.5°	13849.0	12717.6	9705.7	6792.9	4494.7	2505.8	1158.6	788.2	759.7	761.1	762.5
40°	15391.6	14093.2	10179.2	6392.7	3809.6	1813.9	834.4	708.2	706.8	720.4	724.5
42.5°	16865.0	15429.6	10762.6	5859.5	3091.9	1199.3	723.1	675.6	658.0	663.4	667.5
45°	18233.9	16576.0	11259.1	5339.9	2322.6	856.1	709.5	637.6	610.5	607.8	610.5
47.5°	19336.8	17494.5	11561.7	4729.4	1655.2	710.9	681.1	602.4	564.4	556.2	552.2
50°	20176.6	18176.9	11671.6	4037.5	1119.3	678.3	643.1	561.7	515.5	516.9	516.9
52.5°	20996.1	18796.9	11544.0	3340.2	823.5	649.9	617.3	529.1	480.3	506.0	512.8
55°	21586.2	19057.4	11172.3	2585.8	686.5	614.6	588.8	491.1	457.2	499.3	512.8
57.5°	21930.8	19262.2	10489.9	1866.8	629.5	580.7	552.2	455.8	424.6	435.5	442.3
60°	22145.2	18976.0	9587.7	1276.6	599.7	553.5	515.5	432.8	390.7	364.9	360.9
62.5°	22027.1	18259.6	8399.2	877.8	568.5	523.7	484.3	411.1	355.5	321.5	318.8
65°	21065.3	16934.1	6448.3	710.9	549.5	510.1	465.3	390.7	331.0	298.5	294.4
67.5°	19281.2	14551.8	3766.2	632.2	541.3	496.5	450.4	371.7	317.5	282.2	276.8
70°	16349.4	10945.7	1261.7	564.4	540.0	495.2	438.2	358.2	302.5	265.9	260.5
72.5°	11795.0	6604.3	614.6	496.5	504.7	474.8	428.7	347.3	293.0	246.9	237.4
75°	6703.4	2150.3	554.9	428.7	469.4	453.1	423.3	348.7	297.1	223.9	213.0
77.5°	1907.5	628.1	535.9	364.9	443.6	468.1	396.2	314.8	303.9	207.6	194.0
80°	644.4	559.0	516.9	283.5	358.2	386.7	343.2	276.8	306.6	188.6	175.0
82.5°	516.9	561.7	434.1	226.6	272.7	293.0	272.7	248.3	248.3	168.2	157.4
85°	413.8	521.0	275.4	180.4	203.5	225.2	192.6	185.9	173.7	141.1	137.0
87.5°	240.1	162.8	114.0	92.3	85.5	86.8	74.6	89.5	109.9	96.3	95.0
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)