

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: P510839

Luminaire Tested: **CST-CA8-480-730-U-T3**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510839  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-730-U-T3  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 69922 lumens  
Efficiency: N/A  
Efficacy: 145.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

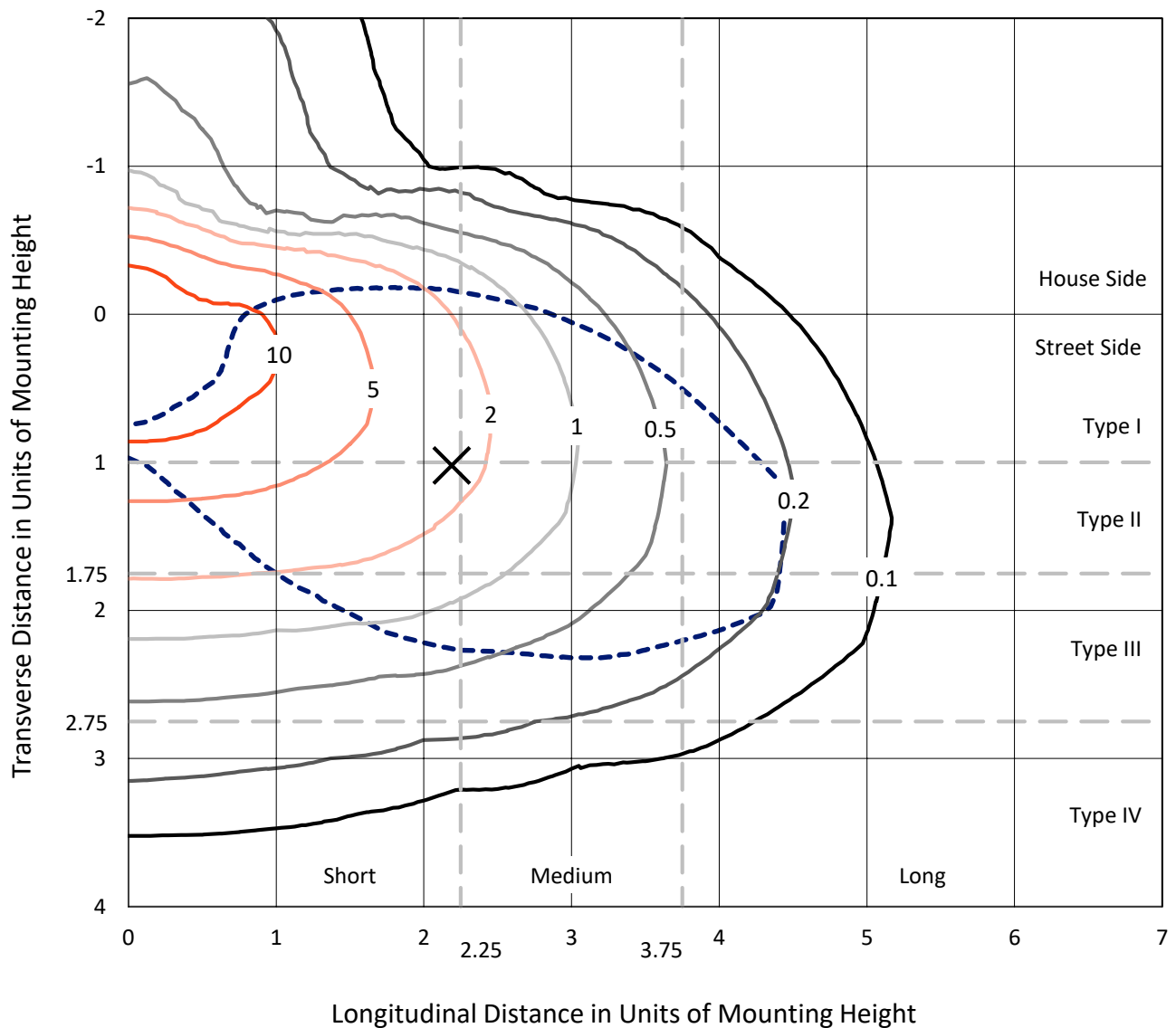
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P510839  
 CATALOG NUMBER: CST-CA8-480-730-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

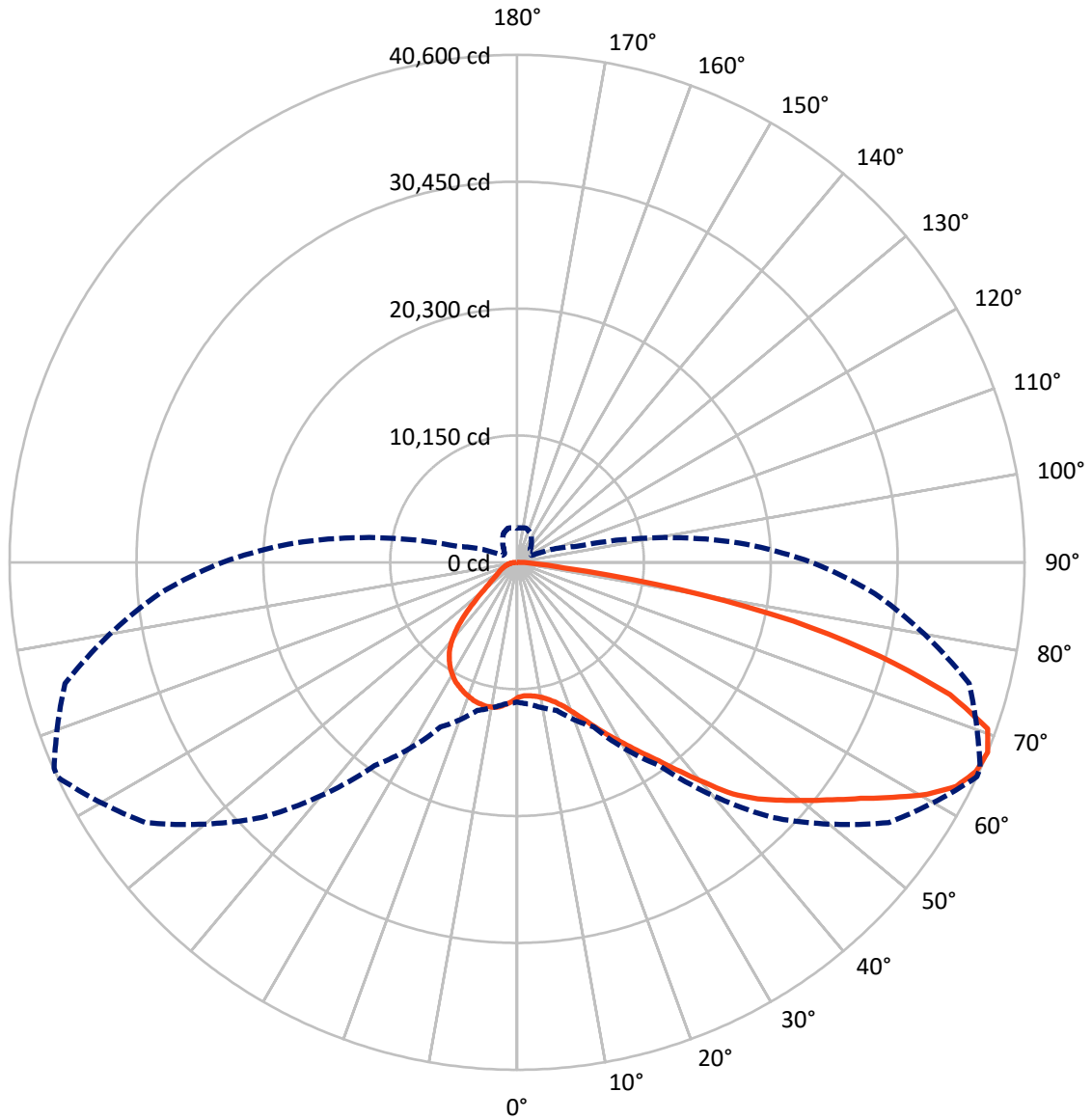
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.4 fc  
 Type III - Short - N/A

REPORT NUMBER: P510839  
CATALOG NUMBER: CST-CA8-480-730-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P510839  
 CATALOG NUMBER: CST-CA8-480-730-U-T3

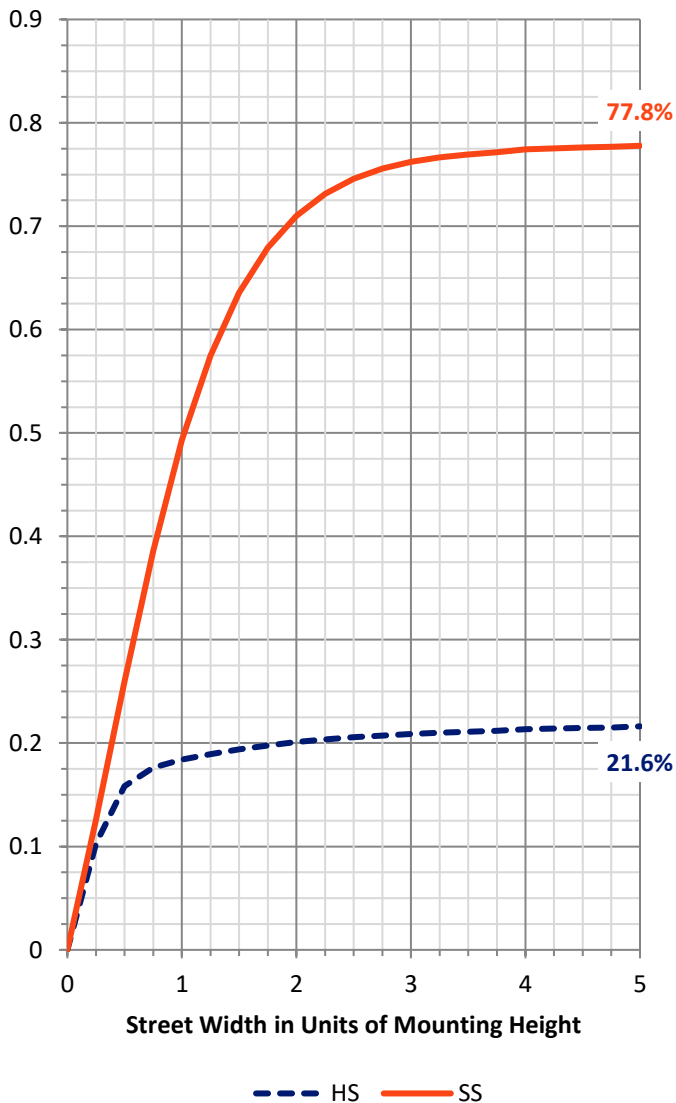
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	15444.9	0.0	15444.9
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	54477.1	0.0	54477.1
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	69922.0	0.0	69922.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1076.1	1.5
10°-20°	3362.1	4.8
20°-30°	5820.1	8.3
30°-40°	8552.1	12.2
40°-50°	11559.2	16.5
50°-60°	14214.4	20.3
60°-70°	15231.6	21.8
70°-80°	8983.5	12.8
80°-90°	1122.9	1.6
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°	69922.0	100.0
0°-180°	69922.0	100.0



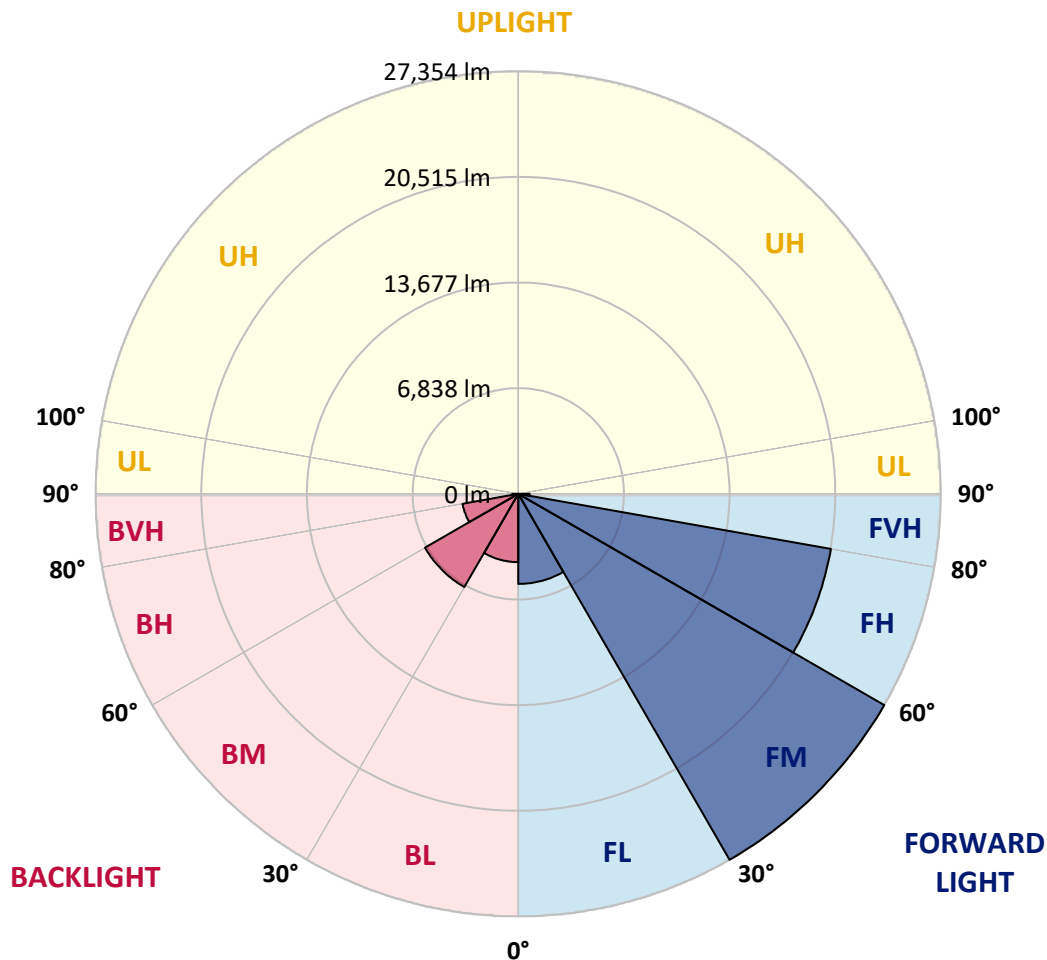
REPORT NUMBER: P510839  
 CATALOG NUMBER: CST-CA8-480-730-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5834.4	8.3			
FM (30°-60°)	27354.0	39.1			
FH (60°-80°)	20552.4	29.4			G5
FVH (80°-90°)	736.3	1.1			G4/750
BL (0°-30°)	4423.8	6.3	B4/5000		
BM (30°-60°)	6971.8	10.0	B4/8500		
BH (60°-80°)	3662.7	5.2	B4/5000		G4/5000
BVH (80°-90°)	386.6	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type III Short





REPORT NUMBER: P510839

CATALOG NUMBER: CST-CA8-480-730-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3
2.5°	10596.4	10576.5	10567.9	10595.0	10615.0	10637.8	10670.6	10701.9	10706.2	10747.6	10801.7
5°	10724.7	10707.6	10689.1	10684.8	10677.7	10676.3	10684.8	10720.5	10729.0	10768.9	10885.8
7.5°	11009.9	10992.8	10958.5	10945.7	10907.2	10838.8	10806.0	10824.5	10828.8	10877.3	11022.7
10°	11474.6	11421.9	11380.5	11337.7	11216.6	11108.2	11028.4	10994.2	10987.1	11034.1	11202.3
12.5°	12029.2	11985.0	11939.3	11826.7	11672.8	11477.5	11336.3	11257.9	11252.2	11292.1	11419.0
15°	12615.1	12615.1	12583.7	12449.7	12298.6	11975.0	11756.9	11625.7	11634.3	11665.6	11724.1
17.5°	13372.1	13309.3	13295.1	13142.5	12974.3	12679.2	12332.8	12123.2	12133.2	12147.5	12103.3
20°	14141.9	14123.4	14102.0	14000.8	13848.2	13469.0	13079.8	12804.7	12806.1	12754.8	12558.1
22.5°	15159.8	15098.5	15114.1	15000.1	14793.4	14404.2	13956.6	13630.1	13651.5	13577.4	13221.0
25°	16170.5	16109.2	16076.4	15999.4	15821.2	15452.0	14920.3	14620.9	14595.2	14461.2	13943.7
27.5°	17179.8	17144.2	17171.3	17078.6	16933.2	16521.2	16033.7	15701.5	15718.6	15625.9	14854.7
30°	18224.8	18184.9	18303.2	18153.5	18063.7	17663.1	17195.5	16804.9	16819.2	16853.4	15988.0
32.5°	19013.1	19060.2	19266.9	19249.8	19232.7	18786.5	18294.6	18078.0	18099.3	18219.1	17333.8
35°	19774.4	19778.7	20069.5	20289.1	20381.7	20008.2	19497.8	19490.7	19630.4	19995.4	19209.9
37.5°	20405.9	20391.7	20779.5	21120.2	21373.9	21084.5	20803.7	21241.3	21368.2	22125.2	21098.8
40°	20750.9	20780.9	21279.8	21704.7	22203.6	22066.8	22096.7	23215.8	23528.0	24190.9	22511.6
42.5°	20508.6	20599.8	21376.8	22243.5	22996.3	23178.7	23780.3	25348.5	25481.1	25600.8	23901.5
45°	20102.3	20197.8	21058.9	22458.8	23650.6	24421.8	25455.4	26989.3	27134.8	27000.7	25057.7
47.5°	19678.9	19777.3	20736.7	22371.8	24192.3	25670.7	26945.1	28440.6	28625.9	28211.1	26169.6
50°	19141.4	19294.0	20343.2	22187.9	24631.4	27017.9	28355.1	29934.6	30020.2	29421.4	27012.2
52.5°	18480.0	18648.2	19783.0	21872.9	24975.0	27958.7	29782.1	31555.5	31547.0	30835.6	27975.9
55°	17784.3	17936.8	19105.8	21376.8	25167.4	28682.9	30922.6	33341.8	33444.4	32848.5	28848.3
57.5°	16893.3	17031.6	18306.0	20709.6	24967.8	29297.4	32770.1	35464.5	35515.8	34249.9	29542.6
60°	15712.9	15916.8	17196.9	19861.4	24394.8	30008.7	34805.9	37697.0	37759.7	35628.4	29988.8
62.5°	14417.0	14498.3	15802.7	18555.5	23560.8	30557.6	36217.2	39443.3	39352.1	36706.2	30122.8
65°	12837.5	12901.6	14030.7	16876.2	22011.2	30256.8	36723.3	40341.5	40228.8	37383.3	29710.8
67.5°	11183.8	11381.9	12268.7	14546.8	19848.5	28868.3	36295.6	40599.5	40542.5	37434.7	28727.1
70°	9036.8	9106.7	9907.9	11851.0	16561.1	26088.4	34870.0	39938.0	39893.8	36288.5	26718.5
72.5°	6372.4	6304.0	6693.2	8217.1	11962.2	20752.4	29772.1	36221.5	36295.6	32462.2	23267.1
75°	3382.9	3514.1	4120.0	5030.9	6781.5	13340.7	23736.1	29977.4	29951.7	27144.7	18391.6
77.5°	1802.0	1799.1	2215.4	2604.6	3320.2	6130.1	15655.9	22607.1	22732.5	21031.8	12627.9
80°	865.3	898.1	923.8	1059.2	1655.1	2832.7	6549.2	13109.8	13965.1	12543.8	5998.9
82.5°	692.8	695.7	698.5	668.6	684.3	1153.3	2523.3	3793.5	3930.4	3159.1	1934.5
85°	513.2	481.9	477.6	404.9	457.6	692.8	1273.1	1619.5	1539.6	1498.3	1092.0
87.5°	206.7	193.9	188.2	176.8	176.8	260.9	449.1	585.9	584.5	533.2	366.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510839  
 CATALOG NUMBER: CST-CA8-480-730-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3	10800.3
2.5°	10844.5	10895.8	11015.6	11118.2	11156.7	11250.8	11339.2	11390.5	11426.1	11447.5	11544.5
5°	10957.1	11059.8	11250.8	11394.8	11534.5	11708.4	11821.0	11892.3	11932.2	11955.0	12024.9
7.5°	11129.6	11233.7	11436.1	11657.1	11785.4	11927.9	12000.6	12052.0	12077.6	12070.5	12126.1
10°	11283.6	11386.2	11588.7	11758.3	11831.0	11912.3	11950.8	11962.2	11963.6	11969.3	12024.9
12.5°	11493.1	11555.9	11664.2	11775.4	11759.7	11762.6	11795.4	11781.1	11748.3	11742.6	11779.7
15°	11718.4	11719.8	11728.4	11704.1	11605.8	11563.0	11517.4	11478.9	11389.1	11383.4	11441.8
17.5°	12000.6	11933.6	11778.3	11612.9	11379.1	11218.0	11055.5	10988.5	10878.7	10857.3	10885.8
20°	12364.2	12224.5	11846.7	11436.1	10998.5	10710.5	10513.8	10315.6	10163.1	10126.0	10153.1
22.5°	12885.9	12610.8	11933.6	11247.9	10570.8	10078.9	9696.9	9458.8	9202.2	9071.1	9083.9
25°	13516.1	13085.5	12084.8	11009.9	10067.5	9357.6	8737.5	8259.9	7970.5	7778.0	7829.4
27.5°	14341.5	13749.9	12265.8	10774.6	9441.7	8435.2	7535.7	6888.5	6593.4	6502.1	6442.3
30°	15298.0	14552.5	12456.8	10426.8	8766.0	7293.3	6141.5	5602.6	5264.7	5210.5	5164.9
32.5°	16578.2	15563.2	12814.7	10049.0	7959.1	6151.4	4901.2	4281.1	4204.1	4159.9	4149.9
35°	18229.1	16887.6	13189.6	9558.6	6907.0	4812.8	3708.0	3373.0	3335.9	3384.4	3388.6
37.5°	19981.1	18324.6	13638.7	9005.5	5696.7	3591.1	2836.9	2604.6	2645.9	2797.0	2831.2
40°	21167.2	19271.2	14046.4	8254.2	4201.2	2608.8	2064.3	2014.4	2242.5	2436.3	2476.3
42.5°	22304.8	19988.3	14211.7	7260.5	2996.6	1857.5	1666.5	1837.6	2156.9	2369.3	2397.8
45°	23275.7	20822.2	13795.5	6068.8	2031.5	1552.5	1596.7	1833.3	2188.3	2423.5	2444.9
47.5°	24199.5	21503.7	13226.7	4781.4	1602.4	1494.0	1595.2	1871.8	2258.1	2480.5	2493.4
50°	25081.9	22022.6	12255.8	3638.1	1501.2	1466.9	1608.1	1931.7	2296.6	2436.3	2430.6
52.5°	25736.2	22290.6	11222.3	2936.7	1461.2	1445.6	1642.3	2007.2	2303.8	2387.9	2382.2
55°	26216.7	22239.3	10543.7	2405.0	1428.4	1437.0	1697.9	2064.3	2372.2	2499.1	2494.8
57.5°	26260.9	22006.9	9772.4	2031.5	1388.5	1435.6	1757.8	2144.1	2714.3	2948.1	2876.8
60°	26208.1	21622.0	9002.6	1783.4	1344.3	1444.1	1820.5	2383.6	3207.6	3391.5	3341.6
62.5°	25948.7	20904.9	7849.3	1619.5	1305.8	1475.5	1867.5	2573.2	3183.4	3204.7	3133.5
65°	25147.5	19945.5	6335.3	1454.1	1267.4	1496.9	1906.0	2623.1	2923.9	2855.5	2819.8
67.5°	23562.2	17802.8	4886.9	1303.0	1217.5	1492.6	2020.1	2551.8	2825.5	2775.6	2730.0
70°	21309.8	15367.9	3392.9	1147.6	1133.3	1465.5	1991.6	2576.0	2778.5	2701.5	2640.2
72.5°	17802.8	12056.2	2158.3	1020.7	1007.9	1401.4	1920.3	2560.4	2747.1	2712.9	2628.8
75°	13404.9	8415.3	1371.4	882.4	896.7	1284.5	1806.2	2476.3	2731.4	2624.5	2463.4
77.5°	8439.5	4154.2	1066.3	749.9	771.2	1107.7	1561.0	2162.6	2621.7	2557.5	2350.8
80°	3191.9	1686.5	834.0	608.7	627.3	861.1	1280.2	1779.1	2413.5	2519.0	2430.6
82.5°	1469.8	1054.9	625.8	489.0	496.1	627.3	955.1	1317.2	2042.9	2312.3	2533.3
85°	858.2	691.4	417.7	326.5	339.3	370.7	537.4	804.0	1324.4	1763.5	1973.0
87.5°	292.2	240.9	162.5	138.3	134.0	152.5	129.7	263.7	393.5	692.8	791.2
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)