

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: P510527

Luminaire Tested: **CST-CA10-630-727-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510527
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-727-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 77558 lumens
Efficiency: N/A
Efficacy: 122.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B5 - U0 - G5

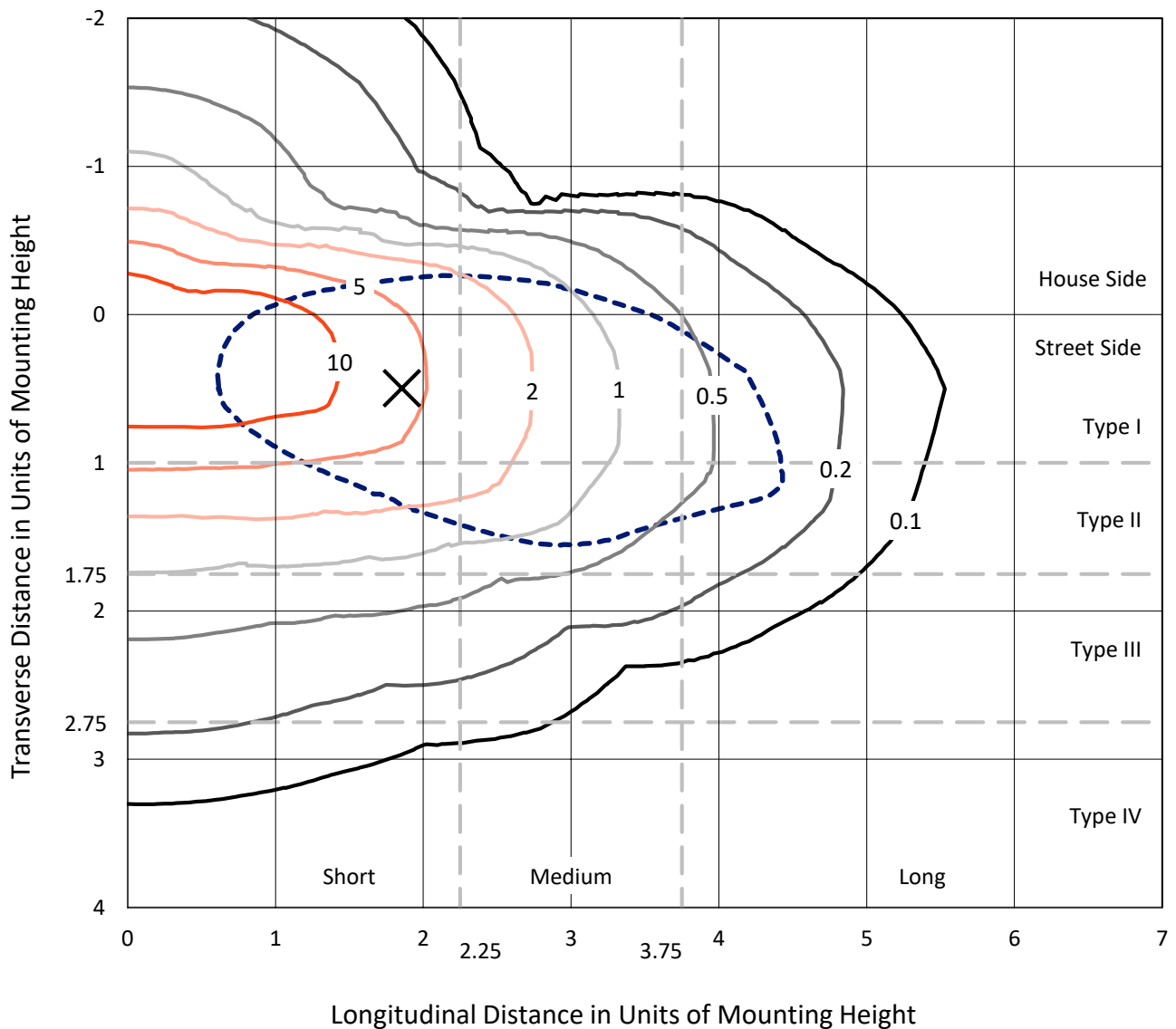
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510527
 CATALOG NUMBER: CST-CA10-630-727-U-T2

Iso-Footcandle Lines of Horizontal Illumination

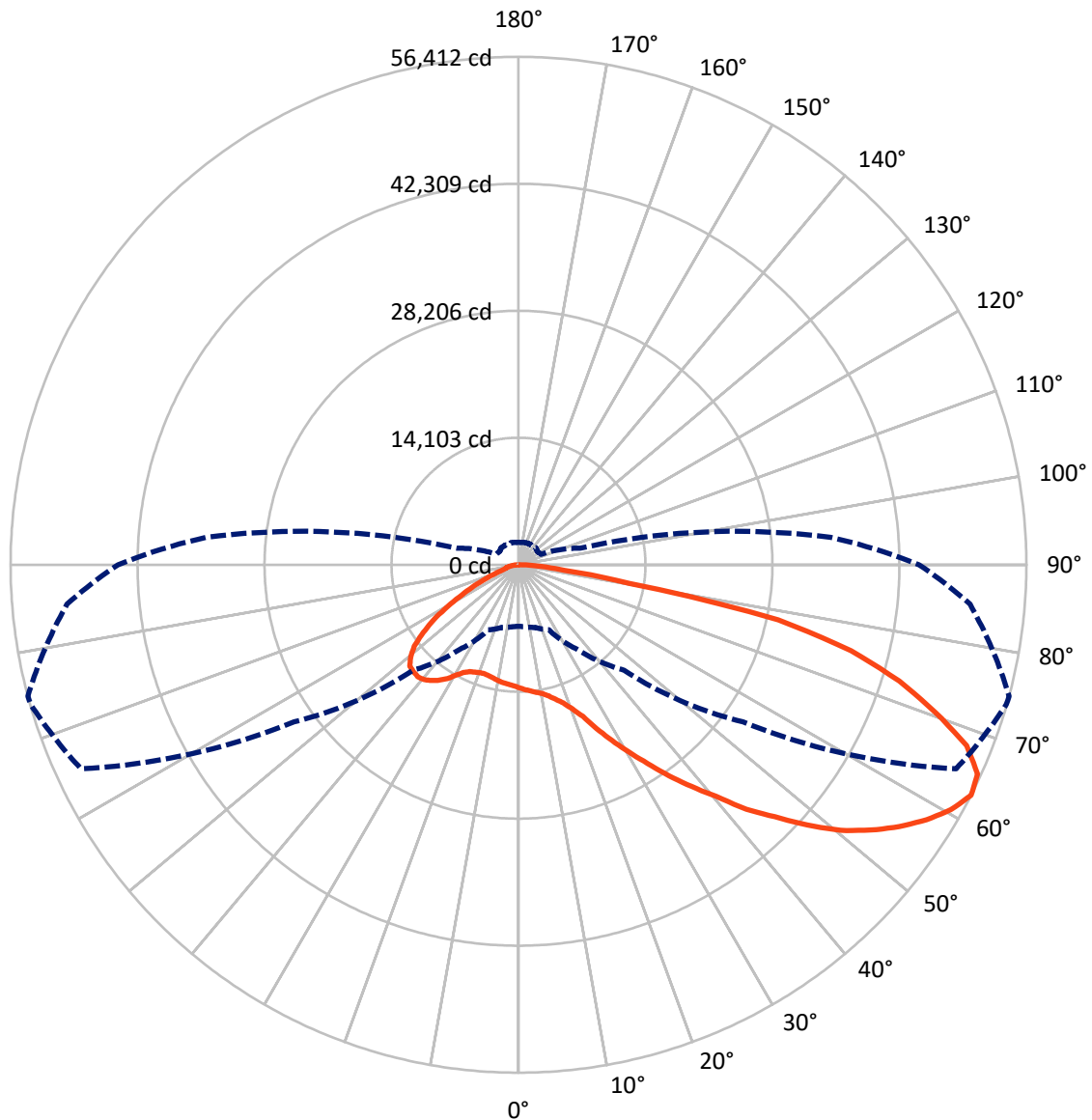
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 17.8 fc
 Type II - Short - N/A

REPORT NUMBER: P510527
CATALOG NUMBER: CST-CA10-630-727-U-T2

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P510527
 CATALOG NUMBER: CST-CA10-630-727-U-T2

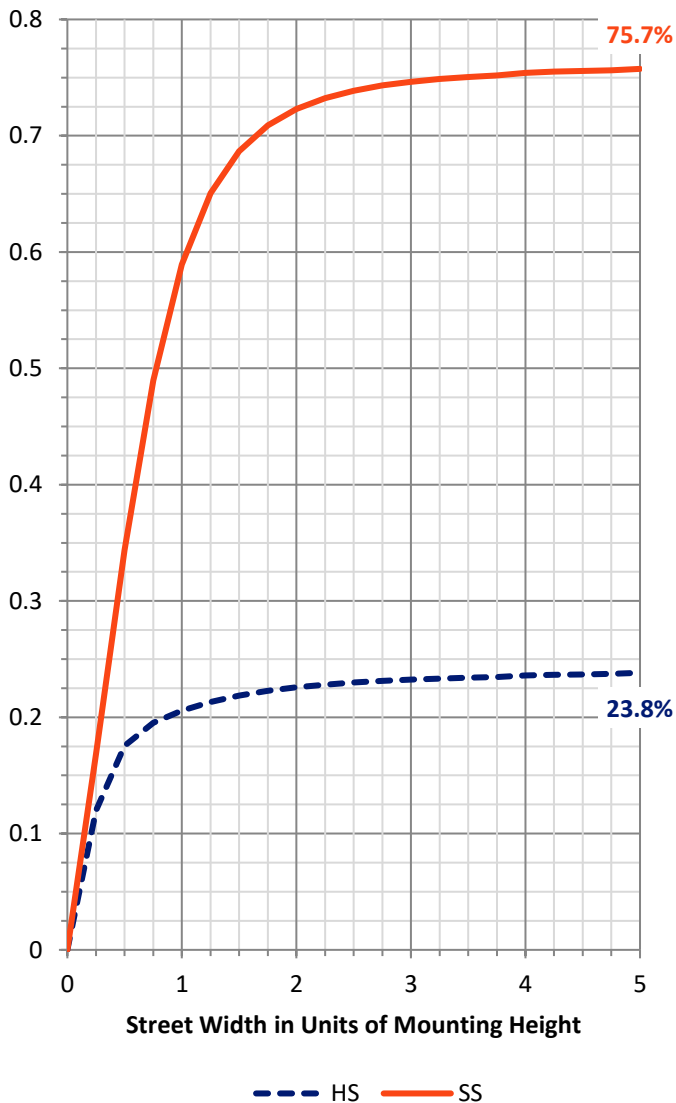
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	18790.9	0.0	18790.9
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	58767.1	0.0	58767.1
	% Fixture	75.8	0.0	75.8
Total	Lumens	77558.0	0.0	77558.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1315.3	1.7
10°-20°	3991.7	5.1
20°-30°	6884.7	8.9
30°-40°	10151.7	13.1
40°-50°	13382.1	17.3
50°-60°	15749.5	20.3
60°-70°	15669.2	20.2
70°-80°	9137.8	11.8
80°-90°	1275.9	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°	77558.0	100.0
0°-180°	77558.0	100.0

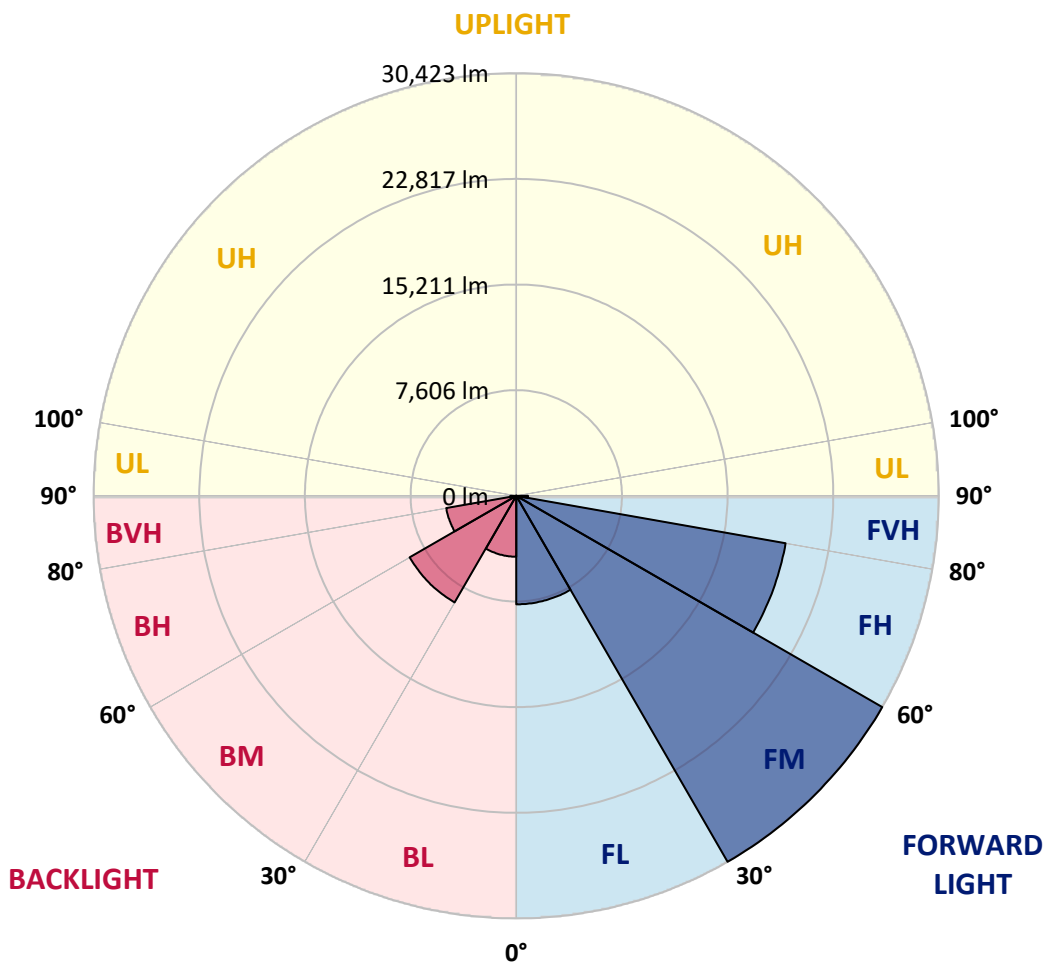


REPORT NUMBER: P510527
 CATALOG NUMBER: CST-CA10-630-727-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7809.8	10.1			
FM (30°-60°)	30422.8	39.2			
FH (60°-80°)	19687.8	25.4			G5
FVH (80°-90°)	846.7	1.1			G5
BL (0°-30°)	4382.0	5.6	B4/5000		
BM (30°-60°)	8860.5	11.4	B5		
BH (60°-80°)	5119.3	6.6	B5		G5
BVH (80°-90°)	429.2	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type II Short





REPORT NUMBER: P510527
 CATALOG NUMBER: CST-CA10-630-727-U-T2

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7
2.5°	14420.3	14361.3	14369.3	14327.8	14265.5	14219.2	14097.9	13967.0	13888.8	13882.4	13770.7
5°	15145.0	15164.2	15169.0	15036.5	14905.6	14757.1	14572.0	14319.8	14113.9	14081.9	13864.8
7.5°	15805.9	15804.3	15794.7	15721.3	15660.6	15440.3	15070.0	14674.1	14338.9	14308.6	13955.8
10°	16482.7	16477.9	16382.1	16259.2	16121.9	15919.2	15601.5	15127.5	14584.7	14544.8	14040.4
12.5°	17220.1	17167.4	17106.8	16958.3	16795.5	16444.4	16110.7	15595.2	15028.5	14956.7	14190.5
15°	17828.3	17774.0	17689.4	17588.9	17418.1	17149.9	16795.5	16184.2	15576.0	15505.8	14527.3
17.5°	18430.1	18404.5	18343.9	18236.9	18106.0	17874.6	17548.9	17030.2	16233.7	16147.5	15087.6
20°	18923.3	18862.6	18817.9	18867.4	18878.6	18707.8	18529.0	18093.3	17215.3	17082.8	15775.5
22.5°	19204.2	19191.5	19435.7	19617.7	19691.1	19729.4	19673.5	19322.4	18527.4	18296.0	16733.3
25°	19470.8	19450.1	19782.1	20237.0	20669.6	20889.9	21038.3	21084.6	20355.1	20146.0	18273.6
27.5°	19478.8	19536.3	20018.3	20781.3	21440.6	22112.6	22824.5	22905.9	22265.8	22099.8	20026.3
30°	19521.9	19547.4	20024.7	20901.0	22273.8	23351.2	24278.6	24736.8	24184.5	24107.9	21956.1
32.5°	18974.4	19007.9	19750.1	21110.1	22902.7	24633.0	25863.7	26543.7	26406.4	26309.1	24015.3
35°	18404.5	18433.3	19295.2	20813.2	23370.4	25796.7	27295.5	28631.6	28882.2	28808.7	26312.2
37.5°	17510.6	17606.4	18509.9	20458.9	23451.8	26652.2	28661.9	30711.5	31468.1	31247.8	28741.7
40°	16540.1	16610.4	17662.3	19716.6	23360.8	27214.1	30004.3	33013.2	33929.5	33811.3	31153.6
42.5°	15314.2	15502.6	16556.1	18768.5	22893.1	27563.7	31246.2	35623.1	36954.3	37112.3	33369.2
45°	14281.5	14276.7	15255.2	17395.7	22045.5	27646.7	32389.1	38261.6	40209.0	39912.1	36298.3
47.5°	13066.7	13116.2	14137.8	16029.3	20795.7	27383.3	33279.8	41380.6	43352.0	43190.8	38700.6
50°	10255.8	10611.7	12546.4	14854.5	19105.3	26649.0	34022.0	44418.3	46300.2	46373.7	40884.2
52.5°	8841.5	8978.8	10046.7	13671.7	17604.8	25416.8	34836.1	47835.8	49149.5	48962.7	43363.2
55°	8274.9	8348.3	8860.7	11547.1	16153.8	23509.3	35227.2	50956.4	51371.4	51341.1	45403.1
57.5°	7864.6	7920.5	8284.4	9636.4	14560.8	21060.6	34896.8	52986.8	53631.7	53433.8	47328.2
60°	7272.4	7317.1	7859.8	8683.5	12921.5	18588.1	32864.8	53907.9	55271.0	55197.6	49029.8
62.5°	6827.1	6903.7	7207.0	7979.6	11521.6	16551.3	30443.3	53620.5	56346.9	56412.3	50329.1
65°	6356.2	6424.8	6681.8	7357.0	10252.6	15212.1	27831.9	52180.7	55852.1	56026.1	50539.8
67.5°	5775.2	5827.8	6132.7	6716.9	8769.7	13872.8	24886.8	49634.8	53106.6	53666.8	48442.4
70°	5044.1	5063.2	5436.8	5834.2	7282.0	11853.6	19788.5	45467.0	49133.5	49144.7	44482.1
72.5°	4014.5	4030.5	4129.4	4431.1	5470.3	9381.0	14544.8	37990.3	44303.3	44221.9	39533.8
75°	2729.6	2870.0	3213.2	3500.5	3945.9	6587.6	9045.8	25595.5	37535.3	38173.8	32473.7
77.5°	2156.5	2169.3	2311.3	2574.7	2959.4	4921.2	5069.6	14161.7	27983.5	29501.5	25525.3
80°	1503.6	1526.0	1449.4	1513.2	2063.9	3368.0	2962.6	6163.0	11670.0	12460.2	15325.4
82.5°	716.7	742.2	852.4	791.7	1026.4	1431.8	1564.3	3184.5	5040.9	5173.4	5966.7
85°	472.5	472.5	474.1	448.5	598.6	624.1	710.3	1358.4	2461.4	2544.4	2530.0
87.5°	151.6	167.6	162.8	190.0	229.9	207.5	217.1	426.2	844.4	836.4	699.1
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: P510527
 CATALOG NUMBER: CST-CA10-630-727-U-T2

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7	13671.7
2.5°	13690.9	13625.4	13472.2	13338.1	13205.6	13105.0	13018.8	12903.9	12849.6	12800.2	12903.9
5°	13730.8	13614.2	13339.7	13065.1	12812.9	12627.8	12514.4	12431.4	12356.4	12356.4	12391.5
7.5°	13777.1	13619.0	13226.4	12836.9	12458.6	12247.9	12086.6	11981.3	11920.6	11923.8	11998.9
10°	13807.4	13564.8	13097.1	12571.9	12160.1	11821.7	11663.6	11512.0	11397.1	11328.4	11405.1
12.5°	13842.5	13547.2	12923.1	12330.9	11829.7	11446.6	11117.7	11004.4	10892.7	10806.5	10848.0
15°	14059.6	13614.2	12777.8	12024.4	11443.4	10966.1	10535.1	10327.6	10295.7	10236.6	10251.0
17.5°	14414.0	13794.6	12683.6	11649.3	10978.9	10415.4	9869.5	9601.3	9537.5	9507.1	9523.1
20°	14942.3	14137.8	12712.4	11385.9	10455.3	9824.8	9119.3	8804.8	8592.5	8605.3	8667.5
22.5°	15750.0	14691.7	12868.8	11097.0	9888.6	9061.8	8349.9	7922.1	7708.2	7661.9	7732.1
25°	17036.6	15584.0	13041.2	10820.8	9341.1	8238.1	7449.6	6986.7	6712.1	6694.6	6772.8
27.5°	18685.5	16952.0	13416.3	10581.4	8661.1	7248.5	6464.7	6068.9	5776.8	5741.6	5716.1
30°	20372.7	18471.6	14094.7	10217.5	7867.8	6226.9	5545.3	5235.6	4908.4	4775.9	4804.7
32.5°	22160.5	19887.4	14889.6	9962.1	6980.3	5328.2	4736.0	4440.7	4140.6	3949.1	3904.4
35°	23961.0	21295.3	15558.4	9580.6	6139.1	4614.7	4048.0	3743.2	3481.4	3324.9	3313.8
37.5°	26068.0	22760.6	16094.8	9175.1	5266.0	4056.0	3374.4	3198.8	3072.7	2935.5	2949.8
40°	28178.2	24468.6	16524.2	8504.7	4541.3	3455.8	2871.6	2906.7	2933.9	2818.9	2809.4
42.5°	29930.9	25903.6	16720.5	7636.4	3899.6	2933.9	2649.7	2809.4	2927.5	2852.5	2842.9
45°	31710.7	27112.0	16643.9	6558.9	3366.4	2684.9	2632.2	2795.0	2946.6	2929.1	2921.1
47.5°	33645.3	28695.4	16511.4	5331.4	2984.9	2660.9	2670.5	2747.1	2938.7	2970.6	2957.8
50°	36010.9	30152.8	15727.6	4151.8	2799.8	2699.2	2756.7	2716.8	2879.6	2945.0	2956.2
52.5°	38365.4	31274.9	14678.9	3597.9	2726.4	2735.9	2876.4	2740.7	2812.6	2870.0	2922.7
55°	40181.9	32417.8	12982.1	3264.3	2702.4	2753.5	2909.9	2791.8	2790.2	2790.2	2807.8
57.5°	42041.5	33948.6	11285.3	3048.8	2660.9	2772.7	2870.0	2801.4	2779.0	2747.1	2726.4
60°	43336.0	34515.3	9104.9	2906.7	2617.8	2745.5	2758.3	2748.7	2680.1	2649.7	2625.8
62.5°	44485.3	34823.3	7088.9	2743.9	2558.8	2681.7	2614.6	2593.9	2554.0	2480.5	2493.3
65°	44177.2	34162.5	5401.6	2560.4	2517.3	2605.0	2488.5	2439.0	2442.2	2365.6	2391.2
67.5°	42194.7	31198.3	3878.8	2279.4	2403.9	2453.4	2344.9	2308.1	2253.9	2215.6	2250.7
70°	38189.8	27656.3	2616.2	1891.5	2145.3	2252.3	2180.4	2116.6	2032.0	2006.5	2044.8
72.5°	32143.3	23086.3	1805.3	1521.2	1851.6	1990.5	1963.4	1897.9	1837.3	1899.5	1974.5
75°	26406.4	17079.7	1473.3	1246.7	1423.8	1658.5	1738.3	1757.4	1939.4	2546.0	2608.2
77.5°	19007.9	10587.8	1324.9	1013.6	1136.5	1326.5	1486.1	1551.5	2368.8	2268.2	2263.5
80°	11082.6	6171.0	1010.4	799.7	919.4	972.1	1162.1	1821.3	2043.2	1752.7	1709.6
82.5°	5056.9	2723.2	703.9	640.1	638.5	643.3	791.7	1752.7	1567.5	1380.7	1329.7
85°	1859.6	957.7	427.8	370.3	424.6	368.7	518.8	1285.0	908.3	893.9	745.4
87.5°	458.1	196.3	145.3	121.3	99.0	94.2	158.0	423.0	221.9	202.7	194.7
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)