

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: P510489

Luminaire Tested: **CST-CA10-310-740-U-T3**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510489  
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-CA10-310-740-U-T3  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 48551 lumens  
Efficiency: N/A  
Efficacy: 155.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

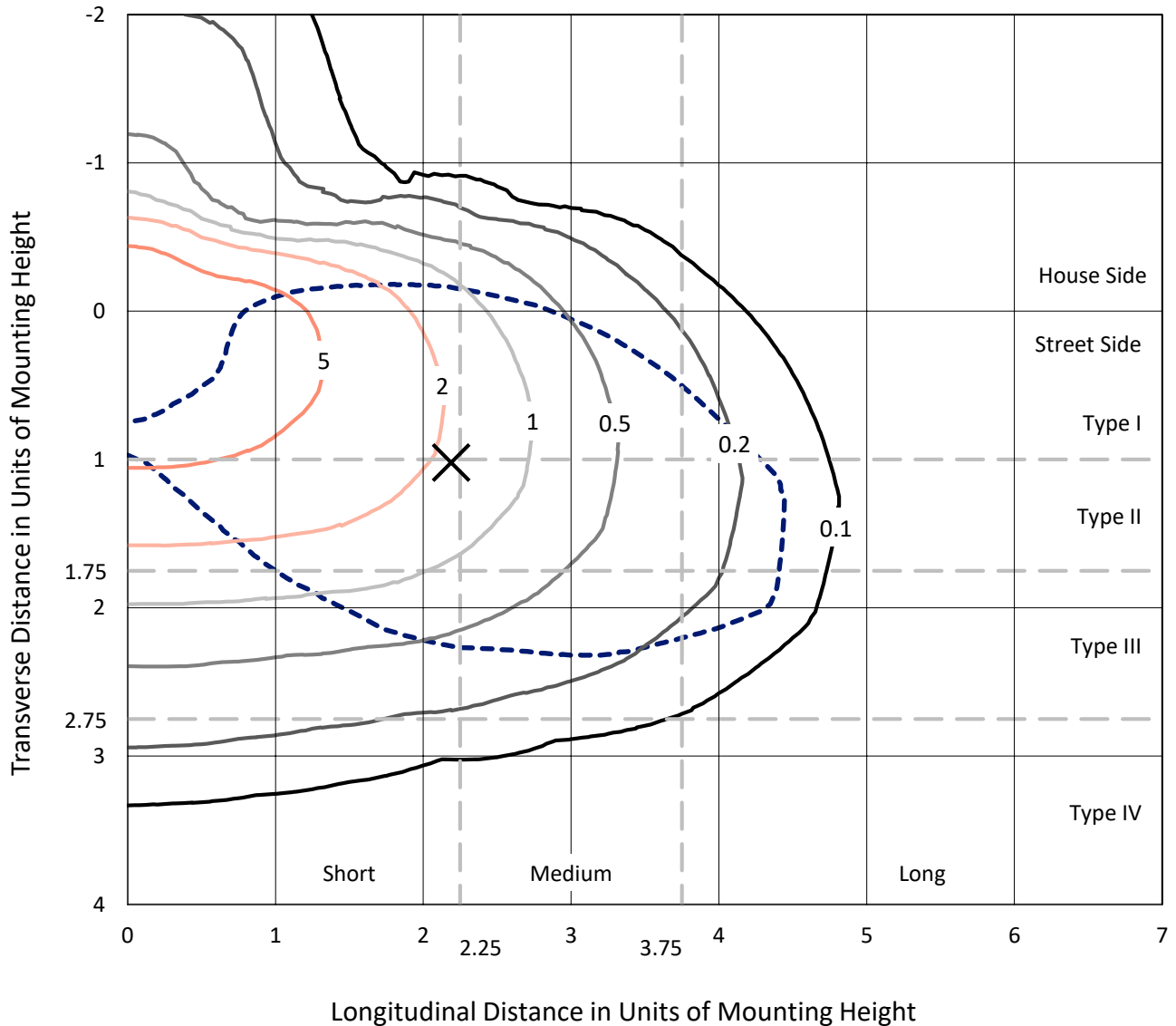
Input Watts (W): 312.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

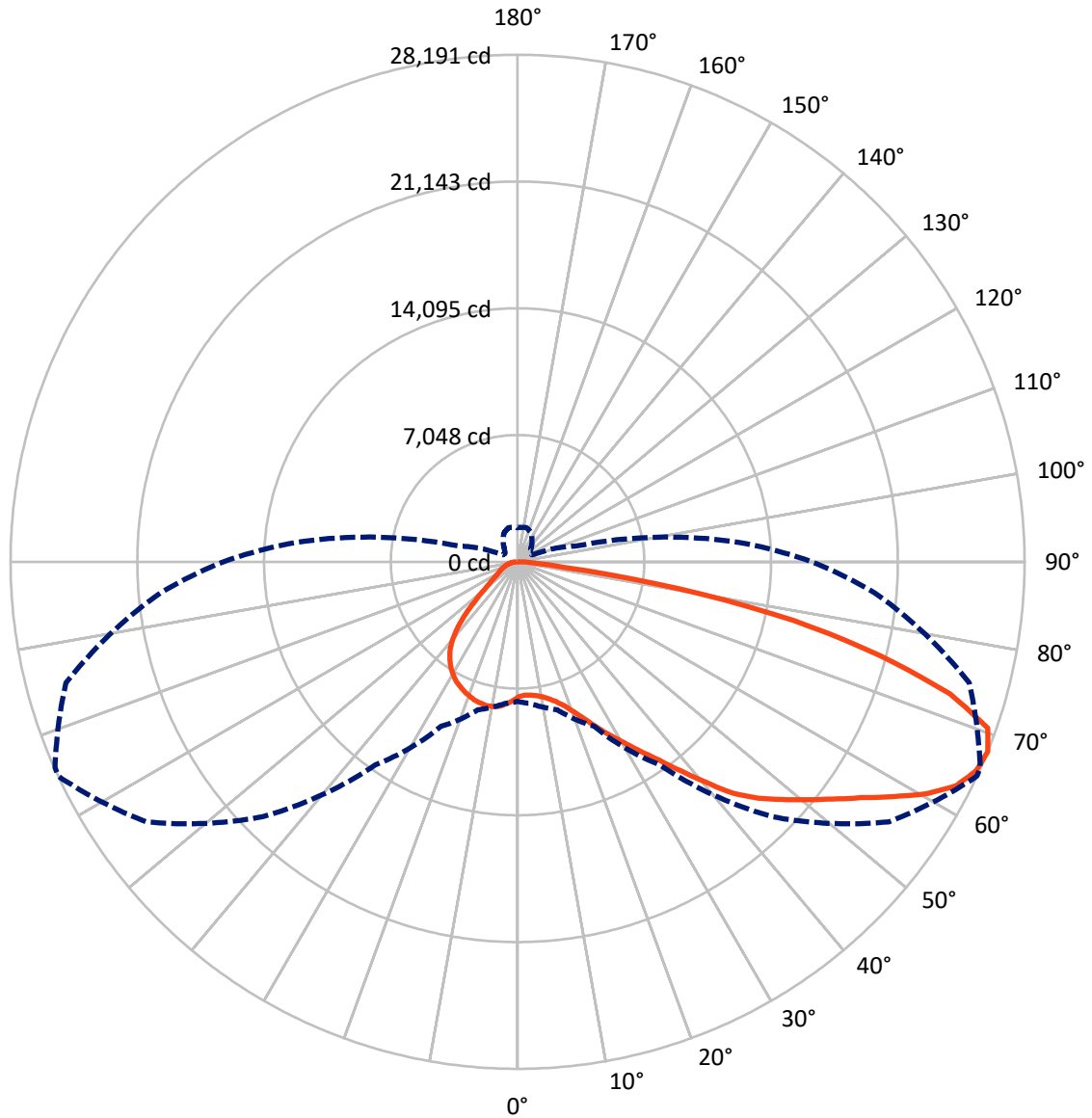
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.3 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



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

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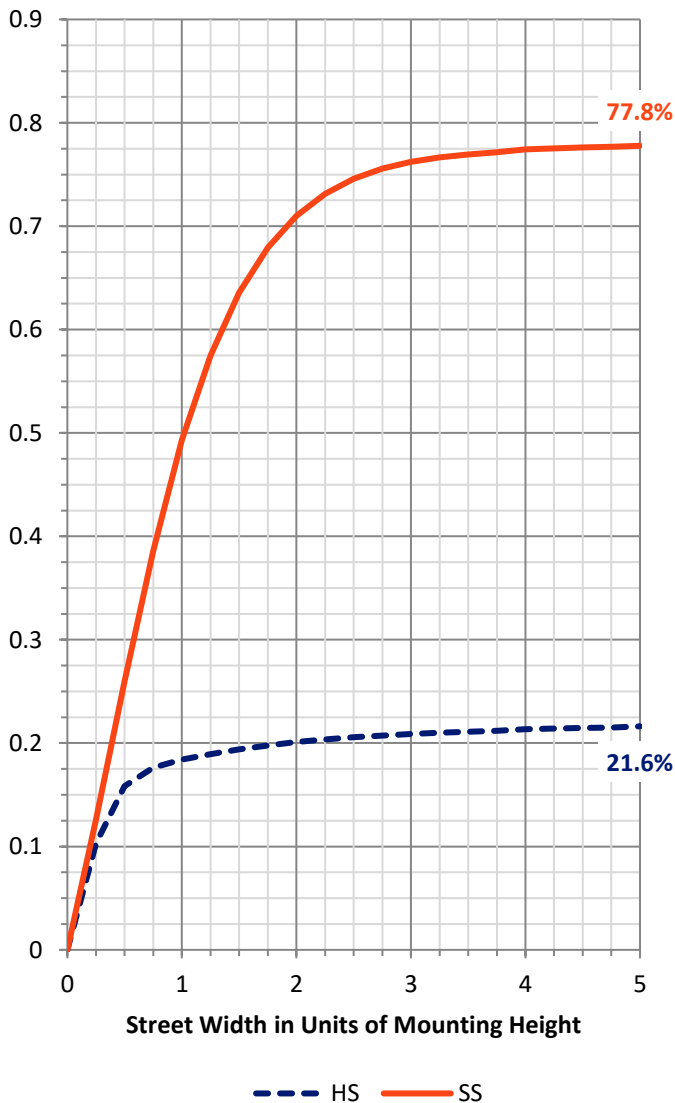
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10724.3	0.0	10724.3
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	37826.7	0.0	37826.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	48551.0	0.0	48551.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	747.2	1.5
10°-20°	2334.5	4.8
20°-30°	4041.3	8.3
30°-40°	5938.2	12.2
40°-50°	8026.3	16.5
50°-60°	9869.9	20.3
60°-70°	10576.2	21.8
70°-80°	6237.7	12.8
80°-90°	779.7	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°	48551.0	100.0
0°-180°	48551.0	100.0

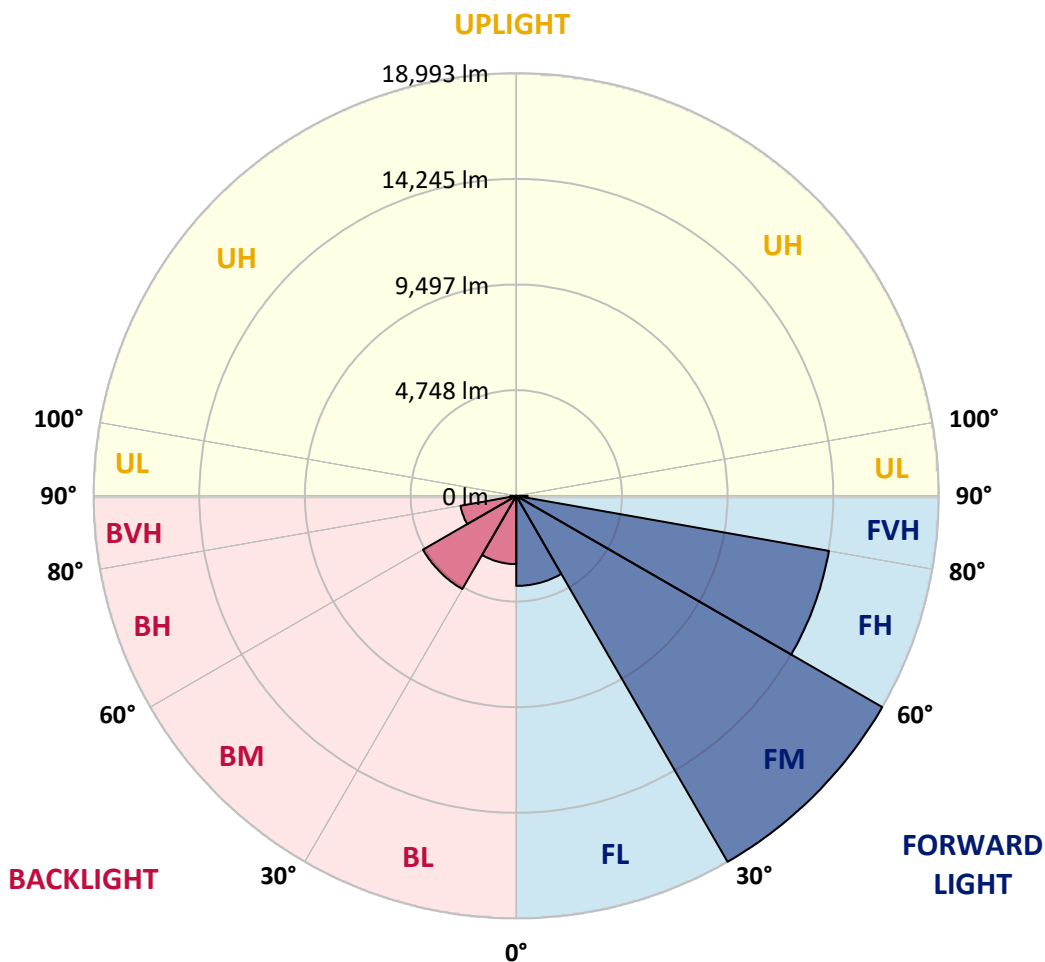


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4051.2	8.3			
FM (30°-60°)	18993.5	39.1			
FH (60°-80°)	14270.7	29.4			G5
FVH (80°-90°)	511.3	1.1			G4/750
BL (0°-30°)	3071.7	6.3	B4/5000		
BM (30°-60°)	4840.9	10.0	B3/5000		
BH (60°-80°)	2543.2	5.2	B4/5000		G4/5000
BVH (80°-90°)	268.4	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3
2.5°	7357.7	7343.9	7337.9	7356.7	7370.6	7386.4	7409.2	7431.0	7434.0	7462.7	7500.3
5°	7446.8	7434.9	7422.1	7419.1	7414.2	7413.2	7419.1	7443.9	7449.8	7477.5	7558.7
7.5°	7644.8	7632.9	7609.2	7600.3	7573.5	7526.0	7503.2	7516.1	7519.1	7552.7	7653.7
10°	7967.5	7930.9	7902.2	7872.5	7788.3	7713.1	7657.7	7633.9	7629.0	7661.6	7778.4
12.5°	8352.6	8321.9	8290.2	8212.0	8105.1	7969.5	7871.5	7817.0	7813.1	7840.8	7928.9
15°	8759.4	8759.4	8737.6	8644.6	8539.6	8314.9	8163.5	8072.4	8078.4	8100.1	8140.7
17.5°	9285.0	9241.5	9231.6	9125.7	9008.8	8803.9	8563.4	8417.9	8424.8	8434.7	8404.0
20°	9819.6	9806.7	9791.8	9721.6	9615.6	9352.3	9082.1	8891.1	8892.0	8856.4	8719.8
22.5°	10526.3	10483.8	10494.6	10415.5	10271.9	10001.7	9690.9	9464.2	9479.0	9427.6	9180.1
25°	11228.1	11185.6	11162.8	11109.4	10985.6	10729.2	10360.0	10152.2	10134.3	10041.3	9682.0
27.5°	11929.0	11904.2	11923.0	11858.7	11757.7	11471.7	11133.1	10902.5	10914.4	10850.0	10314.5
30°	12654.6	12626.8	12709.0	12605.1	12542.7	12264.5	11939.9	11668.6	11678.5	11702.3	11101.4
32.5°	13202.0	13234.6	13378.2	13366.3	13354.4	13044.6	12703.1	12552.6	12567.4	12650.6	12035.9
35°	13730.5	13733.5	13935.5	14087.9	14152.2	13892.9	13538.5	13533.6	13630.6	13884.0	13338.6
37.5°	14169.1	14159.2	14428.4	14665.0	14841.2	14640.2	14445.2	14749.1	14837.2	15362.9	14650.1
40°	14408.6	14429.4	14775.9	15070.8	15417.3	15322.3	15343.1	16120.1	16336.9	16797.2	15631.1
42.5°	14240.3	14303.7	14843.2	15445.0	15967.7	16094.4	16512.1	17601.0	17693.0	17776.2	16596.2
45°	13958.2	14024.5	14622.4	15594.5	16422.0	16957.5	17675.2	18740.3	18841.3	18748.2	17399.0
47.5°	13664.2	13732.5	14398.7	15534.1	16798.2	17824.7	18709.6	19748.0	19876.7	19588.6	18171.1
50°	13291.0	13397.0	14125.5	15406.4	17103.1	18760.1	19688.6	20785.4	20844.8	20429.0	18756.1
52.5°	12831.7	12948.5	13736.5	15187.6	17341.6	19413.4	20679.5	21910.9	21904.9	21411.0	19425.3
55°	12348.7	12454.6	13266.3	14843.2	17475.2	19916.3	21471.4	23151.2	23222.5	22808.7	20031.1
57.5°	11730.0	11826.0	12711.0	14379.9	17336.7	20342.9	22754.2	24625.1	24660.7	23781.7	20513.2
60°	10910.4	11051.9	11940.9	13790.9	16938.7	20836.9	24167.8	26175.3	26218.8	24738.9	20823.0
62.5°	10010.6	10067.0	10972.8	12884.2	16359.7	21218.0	25147.8	27387.8	27324.5	25487.3	20916.0
65°	8913.8	8958.4	9742.3	11718.1	15283.7	21009.1	25499.2	28011.5	27933.3	25957.5	20630.0
67.5°	7765.6	7903.2	8518.9	10100.7	13782.0	20045.0	25202.2	28190.6	28151.0	25993.1	19947.0
70°	6274.8	6323.3	6879.6	8228.8	11499.4	18114.7	24212.3	27731.3	27700.6	25197.3	18552.2
72.5°	4424.7	4377.2	4647.5	5705.6	8306.0	14409.6	20672.5	25150.7	25202.2	22540.4	16155.7
75°	2349.0	2440.0	2860.7	3493.3	4708.8	9263.2	16481.4	20815.1	20797.3	18848.2	12770.4
77.5°	1251.2	1249.2	1538.3	1808.5	2305.4	4256.5	10870.8	15697.4	15784.5	14603.6	8768.3
80°	600.9	623.6	641.4	735.5	1149.2	1966.9	4547.5	9102.9	9696.8	8709.9	4165.4
82.5°	481.1	483.1	485.0	464.3	475.1	800.8	1752.1	2634.1	2729.1	2193.6	1343.3
85°	356.4	334.6	331.6	281.1	317.7	481.1	884.0	1124.5	1069.1	1040.4	758.2
87.5°	143.5	134.6	130.7	122.7	122.7	181.1	311.8	406.8	405.8	370.2	254.4
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°	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3	7499.3
2.5°	7530.0	7565.6	7648.8	7720.0	7746.8	7812.1	7873.5	7909.1	7933.8	7948.7	8016.0
5°	7608.2	7679.4	7812.1	7912.1	8009.1	8129.8	8208.0	8257.5	8285.2	8301.1	8349.6
7.5°	7727.9	7800.2	7940.8	8094.2	8183.3	8282.3	8332.8	8368.4	8386.2	8381.3	8419.9
10°	7834.9	7906.1	8046.7	8164.5	8215.0	8271.4	8298.1	8306.0	8307.0	8311.0	8349.6
12.5°	7980.4	8023.9	8099.2	8176.4	8165.5	8167.5	8190.2	8180.3	8157.6	8153.6	8179.3
15°	8136.8	8137.8	8143.7	8126.9	8058.6	8028.9	7997.2	7970.5	7908.1	7904.1	7944.7
17.5°	8332.8	8286.2	8178.3	8063.5	7901.2	7789.3	7676.5	7630.0	7553.7	7538.9	7558.7
20°	8585.2	8488.2	8225.9	7940.8	7636.9	7436.9	7300.3	7162.7	7056.8	7031.1	7049.9
22.5°	8947.5	8756.4	8286.2	7810.1	7339.9	6998.4	6733.1	6567.8	6389.6	6298.6	6307.5
25°	9385.0	9086.1	8391.2	7644.8	6990.5	6497.5	6066.9	5735.3	5534.4	5400.8	5436.4
27.5°	9958.1	9547.3	8516.9	7481.5	6555.9	5857.1	5232.5	4783.1	4578.2	4514.8	4473.2
30°	10622.3	10104.6	8649.5	7239.9	6086.7	5064.2	4264.4	3890.2	3655.6	3618.0	3586.3
32.5°	11511.3	10806.5	8898.0	6977.6	5526.5	4271.3	3403.2	2972.6	2919.1	2888.5	2881.5
35°	12657.5	11726.1	9158.3	6637.1	4795.9	3341.8	2574.7	2342.0	2316.3	2350.0	2352.9
37.5°	13874.1	12723.8	9470.1	6253.0	3955.5	2493.5	1969.9	1808.5	1837.2	1942.1	1965.9
40°	14697.7	13381.1	9753.2	5731.4	2917.2	1811.5	1433.3	1398.7	1557.1	1691.7	1719.4
42.5°	15487.6	13879.0	9868.1	5041.4	2080.7	1289.8	1157.2	1275.9	1497.7	1645.2	1665.0
45°	16161.7	14458.1	9579.0	4213.9	1410.6	1078.0	1108.7	1273.0	1519.5	1682.8	1697.6
47.5°	16803.1	14931.3	9184.1	3320.0	1112.6	1037.4	1107.7	1299.7	1568.0	1722.4	1731.3
50°	17415.9	15291.6	8510.0	2526.2	1042.3	1018.6	1116.6	1341.3	1594.7	1691.7	1687.7
52.5°	17870.2	15477.7	7792.3	2039.1	1014.6	1003.7	1140.3	1393.7	1599.6	1658.0	1654.1
55°	18203.8	15442.0	7321.1	1669.9	991.9	997.8	1178.9	1433.3	1647.2	1735.2	1732.3
57.5°	18234.5	15280.7	6785.6	1410.6	964.1	996.8	1220.5	1488.8	1884.7	2047.1	1997.6
60°	18197.9	15013.4	6251.1	1238.3	933.5	1002.7	1264.1	1655.1	2227.2	2354.9	2320.3
62.5°	18017.7	14515.5	5450.2	1124.5	906.7	1024.5	1296.7	1786.7	2210.4	2225.2	2175.7
65°	17461.4	13849.3	4399.0	1009.7	880.0	1039.4	1323.5	1821.4	2030.2	1982.7	1958.0
67.5°	16360.6	12361.6	3393.3	904.7	845.4	1036.4	1402.7	1771.9	1961.9	1927.3	1895.6
70°	14796.6	10670.8	2355.9	796.8	787.0	1017.6	1382.9	1788.7	1929.3	1875.8	1833.2
72.5°	12361.6	8371.4	1498.7	708.8	699.8	973.0	1333.4	1777.8	1907.5	1883.7	1825.3
75°	9307.8	5843.2	952.3	612.7	622.6	891.9	1254.2	1719.4	1896.6	1822.4	1710.5
77.5°	5860.1	2884.5	740.4	520.7	535.5	769.1	1083.9	1501.6	1820.4	1775.8	1632.3
80°	2216.3	1171.0	579.1	422.7	435.5	597.9	888.9	1235.4	1675.9	1749.1	1687.7
82.5°	1020.6	732.5	434.6	339.5	344.5	435.5	663.2	914.6	1418.5	1605.6	1759.0
85°	595.9	480.1	290.0	226.7	235.6	257.4	373.2	558.3	919.6	1224.5	1370.0
87.5°	202.9	167.3	112.8	96.0	93.0	105.9	90.1	183.1	273.2	481.1	549.4
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)