

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: P510751

Luminaire Tested: **CST-CA8-230-760-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510751  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-230-760-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 35254 lumens  
Efficiency: N/A  
Efficacy: 154.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

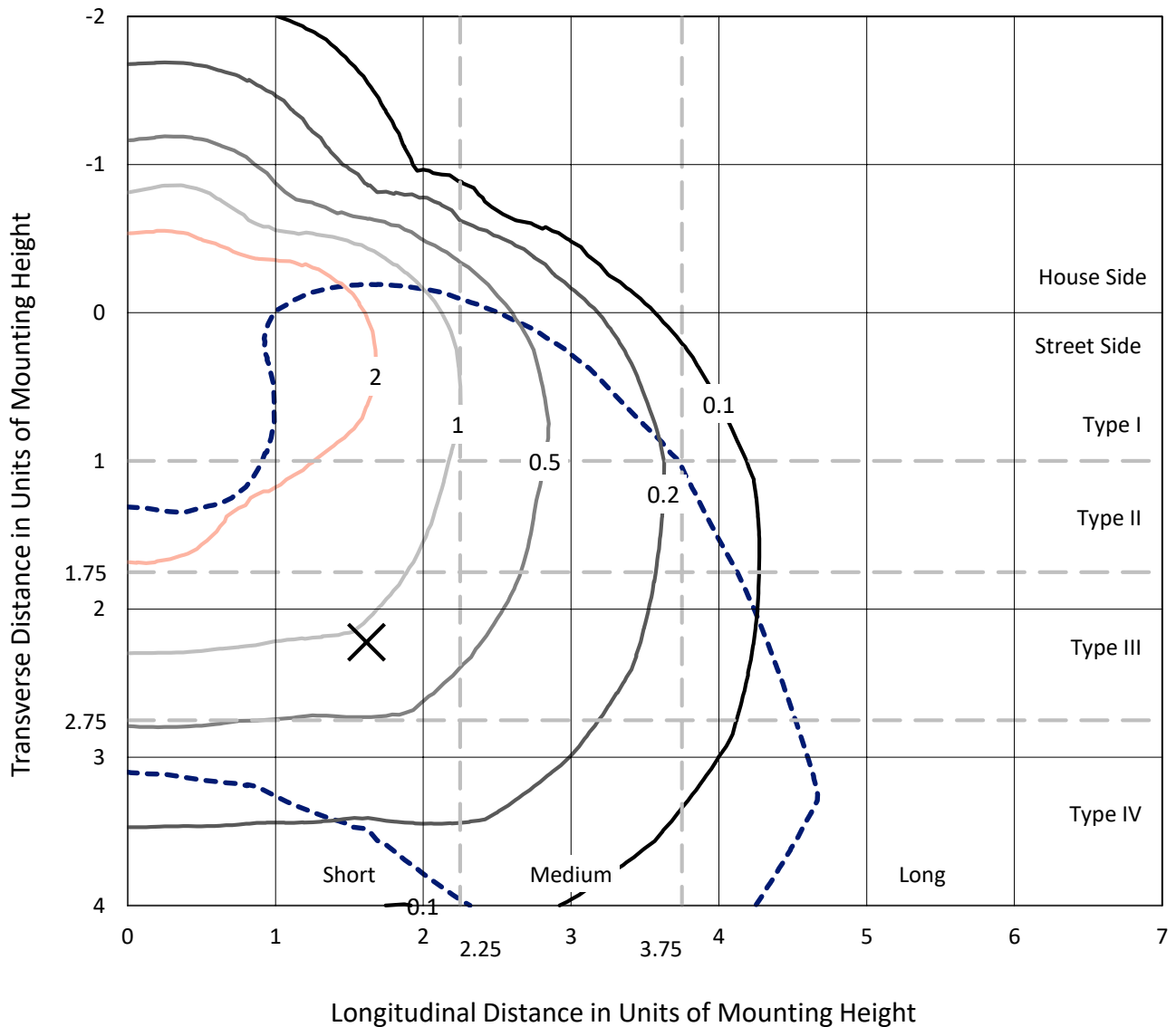
Input Watts (W): 228.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

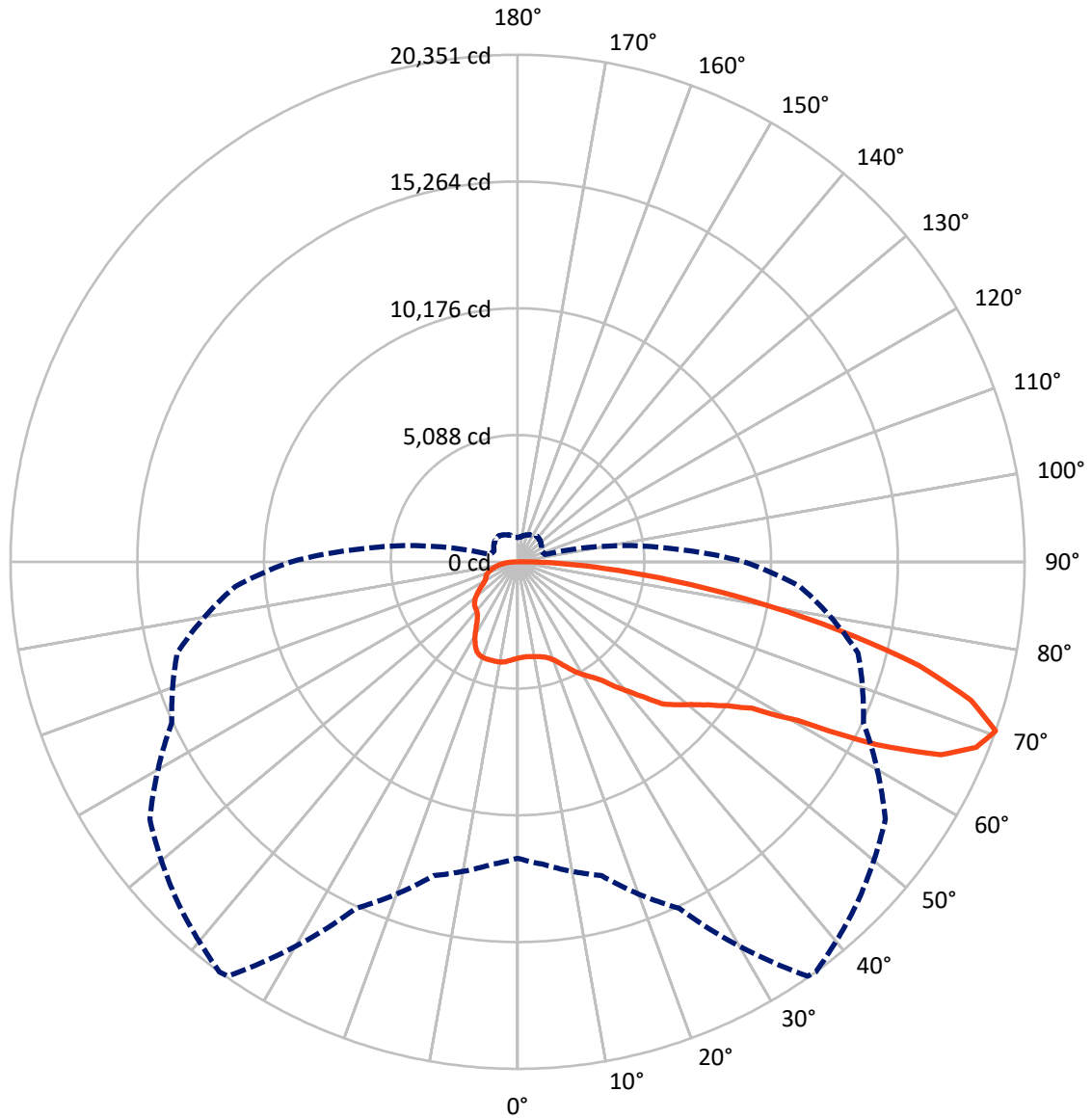
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.5 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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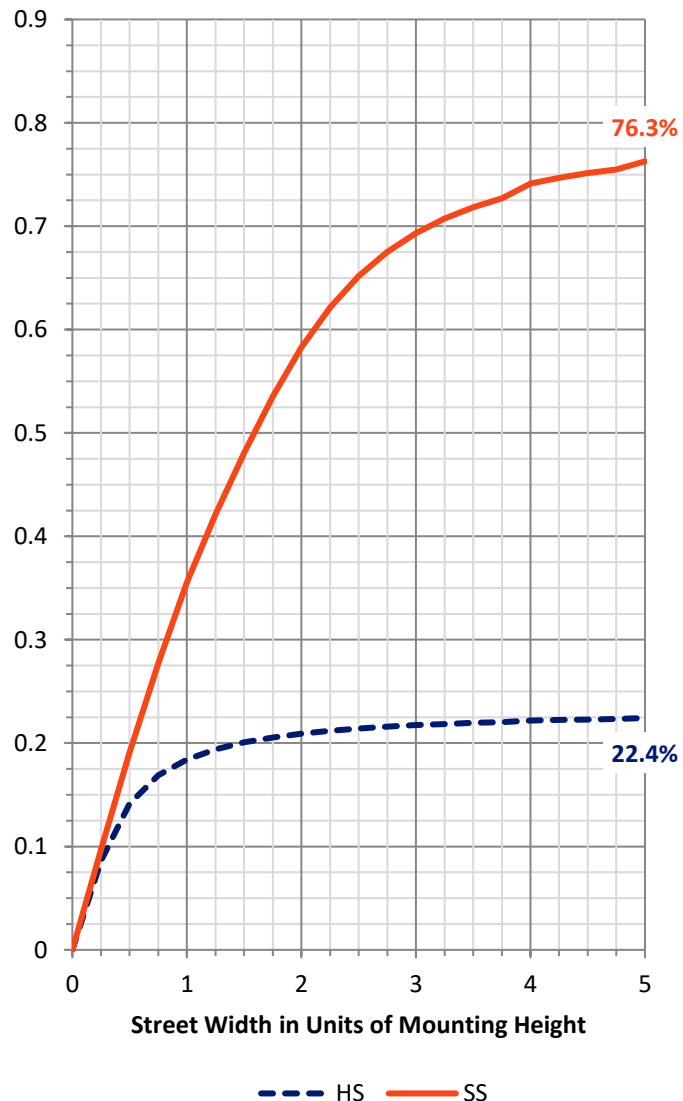
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8032.4	0.0	8032.4
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	27221.6	0.0	27221.6
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	35254.0	0.0	35254.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	374.1	1.1
10°-20°	1156.5	3.3
20°-30°	2086.1	5.9
30°-40°	3231.0	9.2
40°-50°	4907.9	13.9
50°-60°	6802.6	19.3
60°-70°	8845.8	25.1
70°-80°	6532.5	18.5
80°-90°	1317.5	3.7
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°	35254.0	100.0
0°-180°	35254.0	100.0

**Coefficient of Utilization**

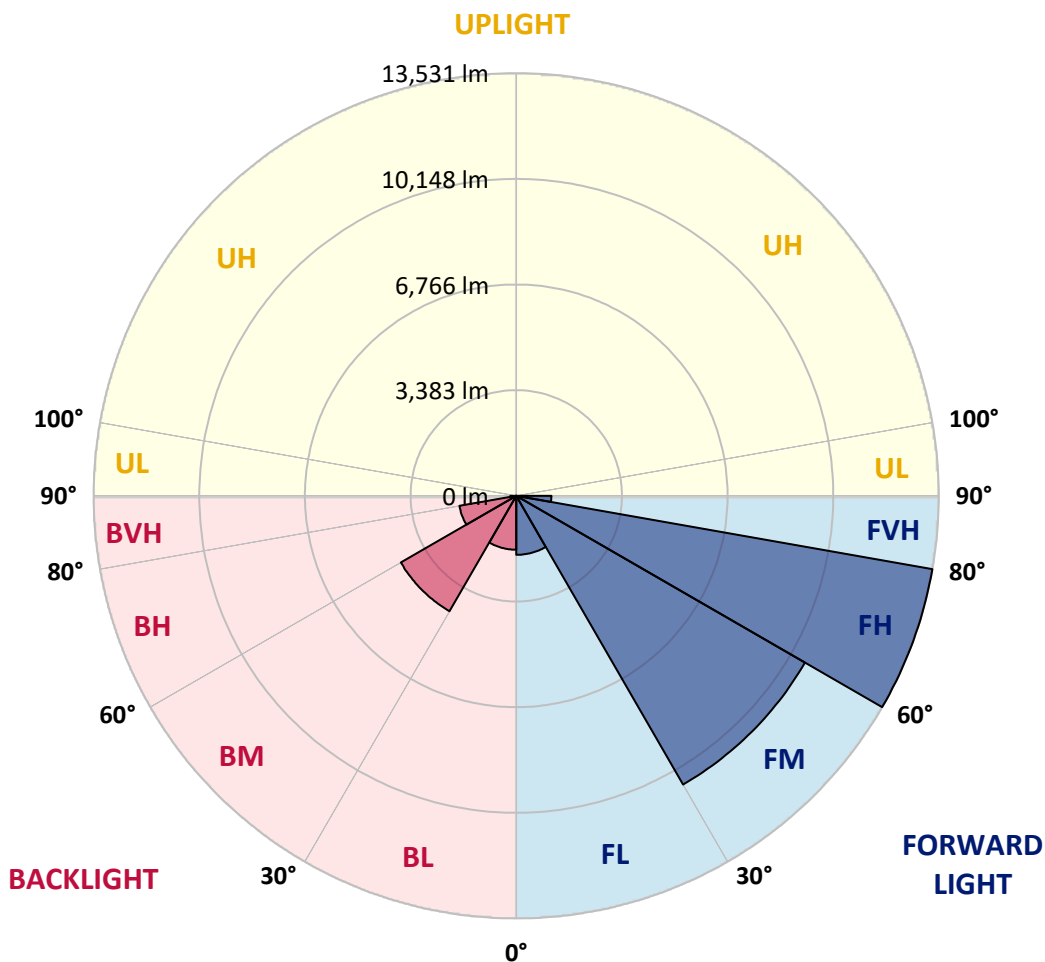


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1890.0	5.4			
FM (30°-60°)	10674.8	30.3			
FH (60°-80°)	13531.3	38.4			G5
FVH (80°-90°)	1125.5	3.2			G5
BL (0°-30°)	1726.8	4.9	B3/2500		
BM (30°-60°)	4266.7	12.1	B3/5000		
BH (60°-80°)	1847.0	5.2	B3/2500		G3/2500
BVH (80°-90°)	191.9	0.5			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°	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4
2.5°	3838.0	3832.9	3830.0	3835.8	3838.0	3838.7	3840.2	3838.7	3835.1	3848.2	3864.3
5°	3838.7	3835.8	3830.0	3824.9	3824.9	3824.9	3825.6	3842.4	3849.7	3848.2	3867.9
7.5°	3844.6	3842.4	3831.4	3827.8	3836.5	3839.5	3854.1	3849.0	3857.0	3870.1	3886.9
10°	3845.3	3842.4	3832.9	3840.9	3865.7	3870.1	3876.7	3891.3	3894.2	3910.3	3927.1
12.5°	3852.6	3852.6	3856.3	3873.8	3900.1	3905.2	3930.0	3941.7	3959.2	3967.2	3987.6
15°	3891.3	3890.6	3899.3	3919.0	3961.4	3964.3	3994.9	4030.0	4043.1	4062.8	4095.7
17.5°	3983.3	3987.6	3988.4	4003.0	4053.3	4054.8	4105.2	4138.0	4167.9	4203.0	4278.2
20°	4201.5	4193.5	4184.7	4184.7	4204.4	4214.7	4253.3	4305.9	4367.2	4429.3	4517.6
22.5°	4476.0	4492.0	4459.9	4443.1	4452.6	4440.9	4470.1	4512.5	4584.0	4676.7	4788.4
25°	4803.7	4805.2	4803.0	4735.1	4713.9	4721.2	4745.3	4784.7	4879.6	4953.3	5115.4
27.5°	5123.4	5116.9	5093.5	5022.0	5001.5	5011.7	5011.0	5119.8	5216.9	5311.0	5501.5
30°	5413.9	5431.5	5389.9	5269.4	5271.6	5270.1	5303.7	5443.9	5621.2	5796.4	5992.0
32.5°	5926.4	5873.1	5816.9	5578.9	5535.1	5530.0	5549.7	5758.5	6021.2	6316.9	6551.9
35°	6408.8	6395.7	6340.2	6098.6	5845.3	5841.0	5813.9	6068.0	6437.3	6984.8	7278.2
37.5°	6902.3	6883.3	6828.6	6622.7	6370.9	6346.8	6119.8	6397.9	6897.2	7765.8	8184.0
40°	7490.6	7478.9	7394.3	7130.7	6872.4	6835.9	6600.1	6744.6	7477.5	8806.0	9100.8
42.5°	8006.7	8004.5	7907.4	7662.9	7443.2	7406.7	7205.9	7356.3	8284.0	9824.9	9998.7
45°	8385.5	8443.2	8447.6	8308.1	8156.3	8124.2	8070.9	8278.2	9216.9	10749.8	10724.2
47.5°	8705.2	8754.9	8703.0	8631.5	8579.7	8581.9	8664.3	9076.0	10138.1	11555.6	11357.1
50°	9239.5	9208.9	8939.5	8897.2	8962.9	9001.6	9241.0	9937.4	11192.8	12311.8	11925.0
52.5°	10010.3	9892.8	9364.4	9278.2	9527.1	9541.7	9922.8	10707.4	12246.9	12960.8	12444.7
55°	11065.1	10968.0	10370.9	9973.1	10098.7	10197.2	10733.7	11496.5	13107.5	13571.0	12844.7
57.5°	12624.3	12631.6	12144.7	11403.1	10976.1	11081.2	11500.1	12263.7	13818.4	14081.9	13094.3
60°	13873.9	14105.3	13960.0	13621.3	13008.2	12936.7	12617.7	13062.9	14425.7	14516.2	13333.0
62.5°	14740.3	14845.4	15344.7	15416.3	16117.0	16146.9	14619.2	13999.5	15092.9	14800.9	13383.4
65°	14696.5	14761.5	15550.6	16511.2	18581.3	18674.0	17779.8	15416.3	15549.8	14927.9	13236.7
67.5°	13673.2	13771.0	14773.9	16569.6	19894.4	19859.4	19292.2	17388.5	15700.2	14724.3	12537.4
70°	11895.8	12197.2	13039.6	15338.2	20304.6	20351.4	19306.1	18018.5	15312.6	14148.4	11371.7
72.5°	9804.5	9899.4	10695.0	13267.3	19105.4	19036.7	18514.8	17187.1	14611.9	13106.7	9331.5
75°	7456.3	7456.3	8419.8	10573.1	16406.8	16647.7	16850.6	15566.6	12944.7	10682.6	6354.1
77.5°	4949.7	5127.1	5903.0	7945.4	12987.0	13165.1	13865.9	13268.8	10598.7	7833.7	2902.2
80°	2625.6	2647.5	3479.6	5279.6	9289.2	9624.9	10588.5	10233.7	7623.5	3670.1	733.6
82.5°	918.3	1002.2	1529.9	3059.9	6120.5	6330.0	7024.2	6081.1	2692.7	812.4	405.8
85°	456.2	472.3	673.7	1457.0	3446.0	3547.5	4103.7	2368.6	433.6	354.7	275.9
87.5°	219.7	224.8	258.4	521.2	1497.8	1567.2	1659.1	770.8	160.6	135.0	119.7
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°	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4	3861.4
2.5°	3867.9	3874.5	3886.9	3890.6	3881.8	3897.9	3913.2	3927.1	3926.3	3931.4	3949.7
5°	3876.7	3890.6	3903.7	3927.1	3949.7	3962.8	3975.2	3986.9	3990.6	4001.5	4012.5
7.5°	3903.7	3917.6	3947.5	3988.4	3989.8	4022.7	4043.8	4047.5	4050.4	4050.4	4076.0
10°	3945.3	3970.9	4019.0	4047.5	4073.0	4062.1	4084.0	4070.1	4059.9	4064.3	4081.8
12.5°	4016.8	4039.5	4108.8	4140.2	4116.8	4112.5	4090.6	4059.2	4023.4	4019.8	4035.8
15°	4129.3	4171.6	4233.6	4263.6	4205.2	4153.3	4079.6	4015.4	3946.0	3920.5	3930.7
17.5°	4310.3	4361.4	4429.3	4408.8	4302.2	4200.1	4078.2	3942.4	3808.1	3714.6	3738.7
20°	4575.2	4613.2	4668.7	4586.2	4430.7	4262.1	4062.1	3847.5	3620.5	3450.4	3430.7
22.5°	4853.3	4911.0	4877.4	4724.9	4521.2	4286.2	4028.5	3709.5	3358.4	3145.3	3113.2
25°	5188.4	5207.4	5091.3	4861.4	4546.8	4248.2	3919.8	3508.1	3090.6	2889.8	2880.3
27.5°	5543.9	5500.8	5284.7	4924.2	4518.3	4135.8	3701.5	3189.8	2848.2	2670.8	2643.1
30°	5945.3	5845.3	5444.6	4930.7	4411.0	3916.8	3425.6	2940.9	2651.1	2473.0	2444.6
32.5°	6462.1	6226.4	5592.8	4862.8	4184.7	3595.7	3094.2	2728.5	2473.8	2294.9	2269.4
35°	7122.7	6724.9	5749.7	4740.2	3905.9	3274.5	2819.7	2548.2	2330.0	2114.6	2080.3
37.5°	7884.0	7420.5	5937.3	4585.5	3600.0	2992.0	2634.3	2433.6	2223.4	1979.6	1938.7
40°	8768.7	8116.9	6226.4	4400.8	3325.6	2788.4	2544.6	2394.2	2164.3	1910.2	1863.5
42.5°	9535.2	8853.4	6570.2	4202.2	3066.5	2619.0	2504.4	2367.9	2127.0	1858.4	1805.1
45°	10243.9	9461.4	6905.9	3961.4	2793.5	2503.0	2456.2	2302.2	2061.3	1794.2	1738.7
47.5°	10819.8	9952.7	7197.9	3740.2	2575.2	2396.4	2351.1	2177.4	1951.1	1716.8	1675.9
50°	11262.2	10322.0	7357.8	3564.3	2344.6	2275.2	2215.4	2036.5	1819.0	1616.8	1581.8
52.5°	11714.8	10692.1	7436.6	3573.0	2130.0	2094.9	2033.6	1880.3	1713.9	1558.4	1520.5
55°	11978.3	10843.9	7353.4	3360.6	1932.9	1892.0	1838.7	1759.1	1659.9	1521.9	1486.2
57.5°	12132.3	10938.1	7100.1	2740.9	1695.6	1657.0	1665.7	1659.1	1577.4	1432.1	1399.3
60°	12243.2	10733.7	6581.1	2014.6	1493.5	1464.3	1536.5	1513.2	1442.4	1329.2	1301.5
62.5°	12153.4	10344.7	5646.8	1514.6	1328.5	1390.5	1454.0	1411.0	1314.6	1211.7	1179.6
65°	11606.0	9581.1	4292.0	1216.8	1275.2	1360.6	1411.7	1342.4	1244.5	1122.6	1108.0
67.5°	10609.6	8197.2	2531.4	1115.3	1235.1	1325.6	1367.9	1275.9	1189.8	1073.0	1055.5
70°	9089.2	6136.6	1130.7	1038.7	1165.0	1254.8	1282.5	1195.6	1102.2	992.7	975.2
72.5°	6765.1	3700.0	762.1	959.1	1061.3	1140.9	1171.5	1079.6	1013.2	963.5	958.4
75°	3757.0	1284.7	702.9	868.6	948.2	1019.7	1057.7	992.7	940.2	872.3	844.5
77.5°	1196.4	546.0	667.9	776.7	877.4	936.5	930.7	832.9	816.1	733.6	726.3
80°	477.4	475.9	617.5	635.8	748.9	798.6	785.4	662.1	684.0	635.8	616.8
82.5°	374.5	435.8	494.9	485.4	582.5	640.9	622.6	486.1	549.6	505.1	462.0
85°	284.7	381.8	317.5	316.1	406.6	475.9	487.6	373.7	374.5	340.9	303.7
87.5°	146.7	140.9	121.9	121.2	135.8	193.4	237.2	212.4	167.9	126.3	121.2
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)