

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: P721853

Luminaire Tested: **CST-CA8-400-730-U-T4**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721853
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-730-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 58846 lumens
Efficiency: N/A
Efficacy: 146.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

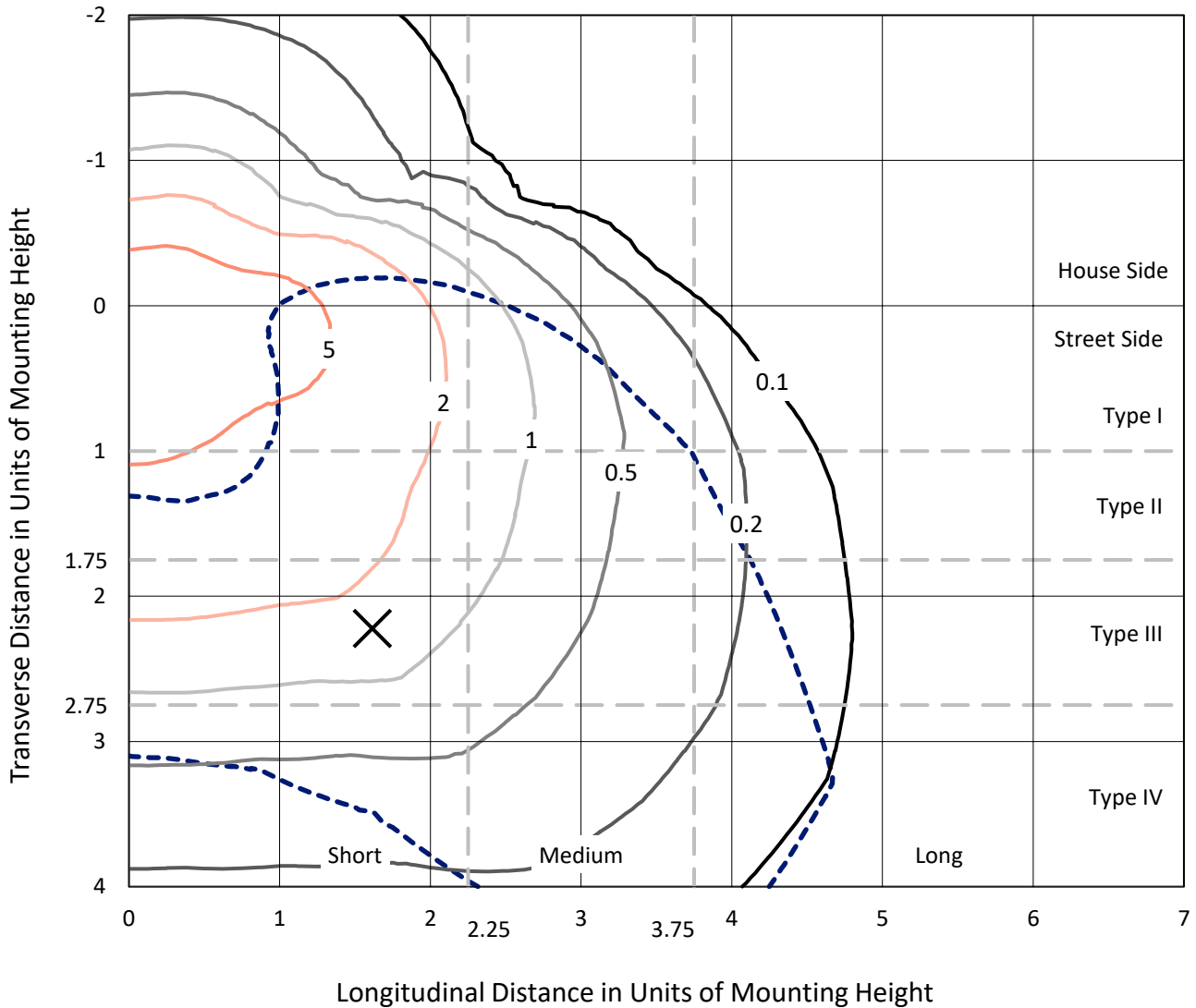
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

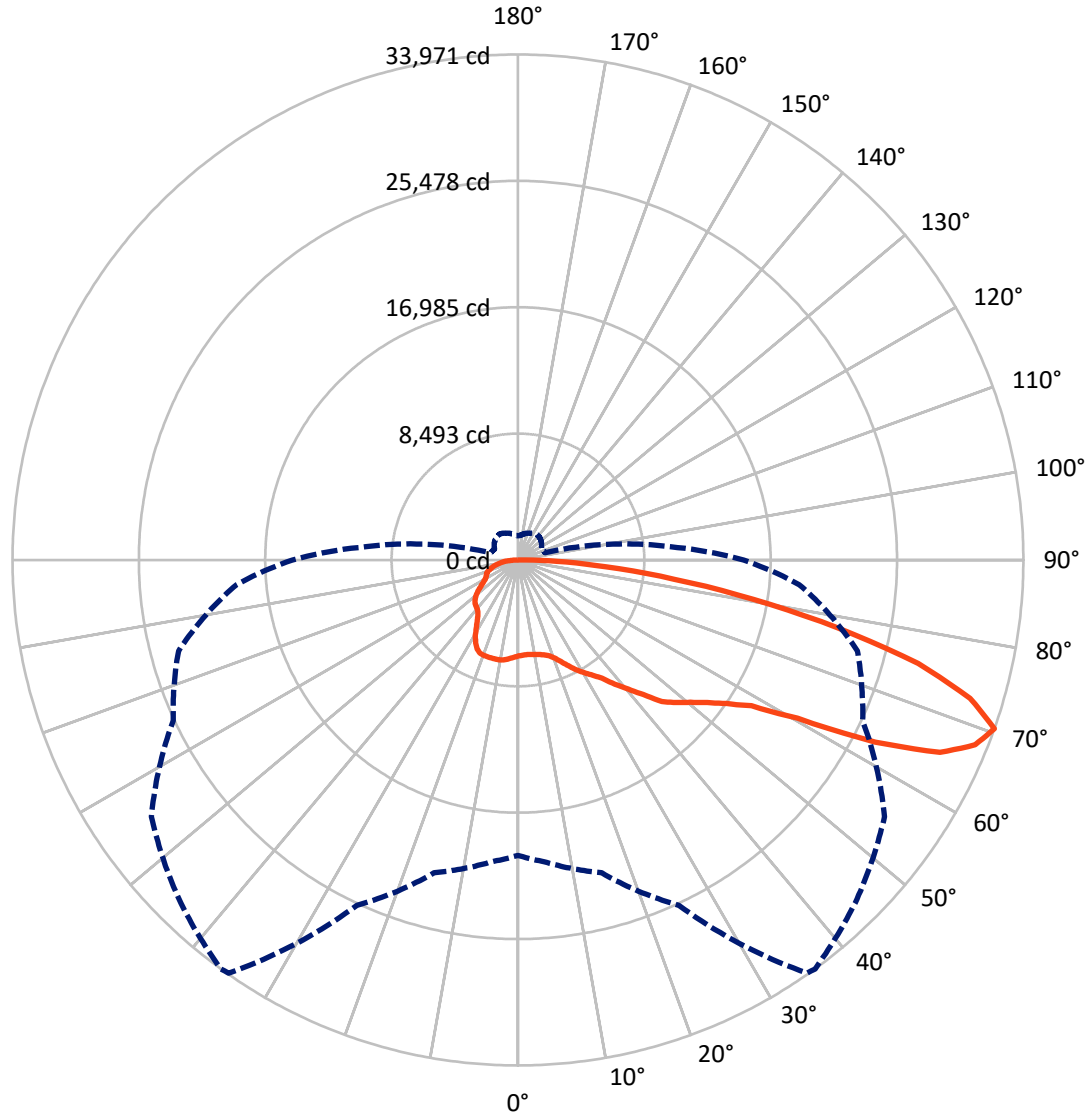
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.5 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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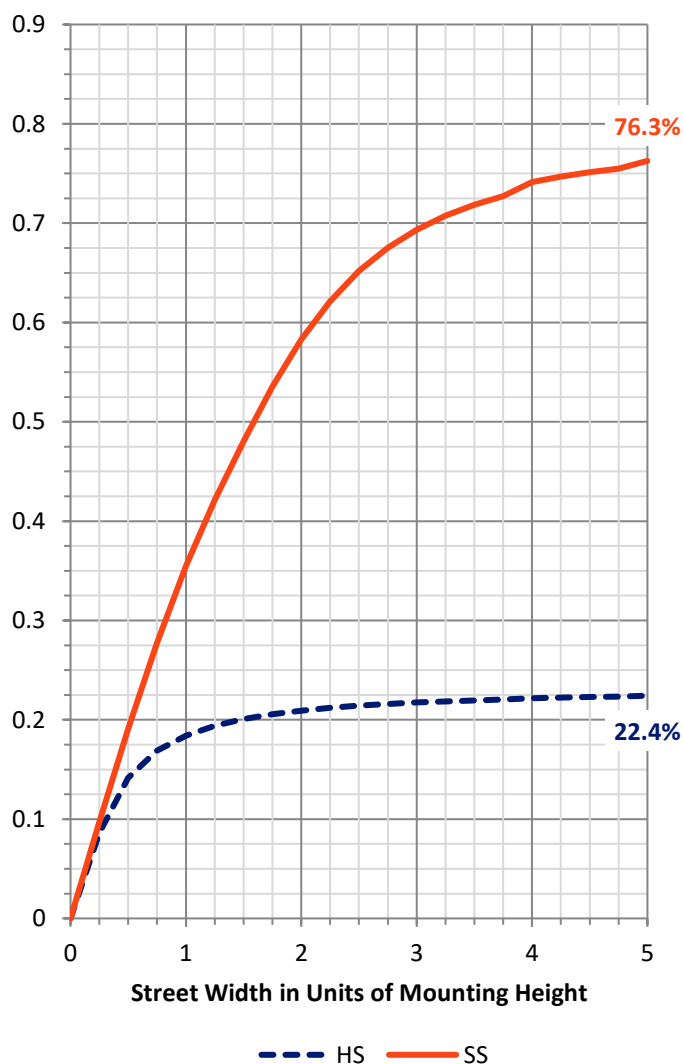
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13407.7	0.0	13407.7
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	45438.3	0.0	45438.3
	% Fixture	77.2	0.0	77.2
Total	Lumens	58846.0	0.0	58846.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	624.5	1.1
10°-20°	1930.4	3.3
20°-30°	3482.2	5.9
30°-40°	5393.2	9.2
40°-50°	8192.3	13.9
50°-60°	11355.0	19.3
60°-70°	14765.4	25.1
70°-80°	10904.1	18.5
80°-90°	2199.1	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°	58846.0	100.0
0°-180°	58846.0	100.0

Coefficient of Utilization

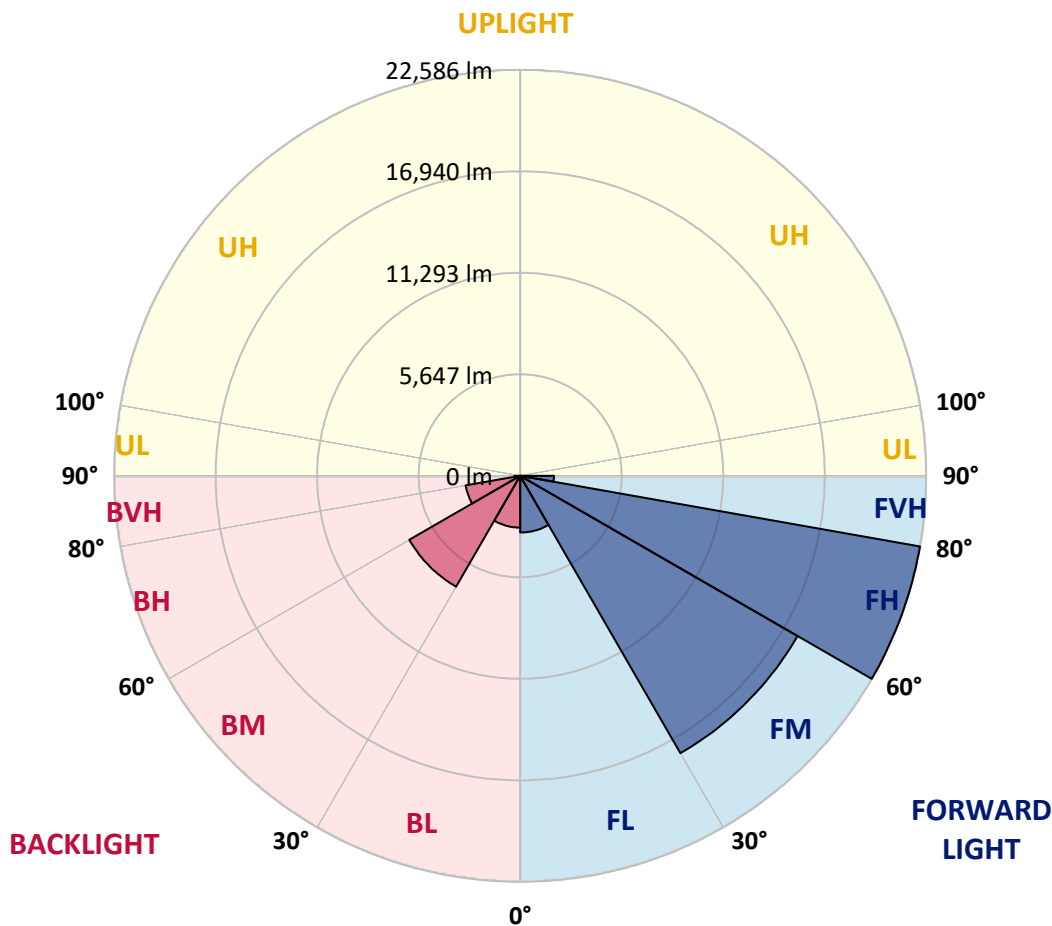


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3154.7	5.4			
FM (30°-60°)	17818.4	30.3			
FH (60°-80°)	22586.4	38.4			G5
FVH (80°-90°)	1878.7	3.2			G5
BL (0°-30°)	2882.3	4.9	B4/5000		
BM (30°-60°)	7122.0	12.1	B4/8500		
BH (60°-80°)	3083.1	5.2	B4/5000		G4/5000
BVH (80°-90°)	320.4	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4
2.5°	6406.4	6397.9	6393.0	6402.7	6406.4	6407.6	6410.1	6407.6	6401.5	6423.5	6450.3
5°	6407.6	6402.7	6393.0	6384.5	6384.5	6384.5	6385.7	6413.7	6425.9	6423.5	6456.4
7.5°	6417.4	6413.7	6395.4	6389.3	6404.0	6408.8	6433.2	6424.7	6438.1	6460.0	6488.0
10°	6418.6	6413.7	6397.9	6411.3	6452.7	6460.0	6471.0	6495.3	6500.2	6527.0	6555.0
12.5°	6430.8	6430.8	6436.9	6466.1	6510.0	6518.5	6559.9	6579.4	6608.7	6622.1	6656.2
15°	6495.3	6494.1	6508.7	6541.6	6612.3	6617.2	6668.4	6726.8	6748.8	6781.7	6836.5
17.5°	6648.9	6656.2	6657.4	6681.8	6765.8	6768.3	6852.3	6907.2	6957.1	7015.6	7141.1
20°	7013.2	6999.8	6985.1	6985.1	7018.0	7035.1	7099.7	7187.4	7289.7	7393.3	7540.7
22.5°	7471.3	7498.1	7444.5	7416.5	7432.3	7412.8	7461.5	7532.2	7651.6	7806.4	7992.8
25°	8018.4	8020.8	8017.1	7903.8	7868.5	7880.7	7920.9	7986.7	8145.1	8268.1	8538.6
27.5°	8552.0	8541.1	8502.1	8382.7	8348.5	8365.6	8364.4	8545.9	8708.0	8865.2	9183.2
30°	9037.0	9066.2	8996.7	8795.7	8799.4	8796.9	8853.0	9086.9	9383.0	9675.4	10001.9
32.5°	9892.3	9803.3	9709.5	9312.3	9239.2	9230.7	9263.6	9612.0	10050.7	10544.1	10936.5
35°	10697.6	10675.7	10583.1	10179.8	9757.0	9749.7	9704.6	10128.6	10745.2	11659.0	12148.8
37.5°	11521.3	11489.6	11398.2	11054.6	10634.3	10594.1	10215.2	10679.4	11512.8	12962.7	13660.8
40°	12503.3	12483.8	12342.5	11902.7	11471.3	11410.4	11016.9	11258.1	12481.4	14698.9	15191.1
42.5°	13364.7	13361.1	13199.0	12790.9	12424.1	12363.2	12028.1	12279.1	13827.7	16399.8	16689.8
45°	13997.1	14093.4	14100.7	13867.9	13614.5	13560.9	13472.0	13818.0	15384.9	17943.5	17900.9
47.5°	14530.8	14613.6	14527.1	14407.7	14321.2	14324.9	14462.5	15149.7	16922.5	19288.7	18957.2
50°	15422.6	15371.5	14921.9	14851.2	14960.9	15025.4	15425.1	16587.4	18683.1	20550.9	19905.2
52.5°	16709.3	16513.1	15631.0	15487.2	15902.7	15927.1	16563.1	17872.9	20442.5	21634.1	20772.7
55°	18469.9	18307.8	17311.2	16647.1	16856.7	17021.2	17916.7	19190.0	21879.0	22652.7	21440.4
57.5°	21072.4	21084.6	20271.9	19034.0	18321.2	18496.7	19196.1	20470.5	23065.7	23505.6	21857.1
60°	23158.3	23544.6	23302.1	22736.8	21713.3	21593.9	21061.4	21804.7	24079.4	24230.5	22255.5
62.5°	24604.6	24780.0	25613.4	25732.8	26902.5	26952.5	24402.3	23367.9	25193.1	24705.7	22339.6
65°	24531.5	24639.9	25957.0	27560.4	31015.9	31170.6	29678.0	25732.8	25955.8	24917.7	22094.7
67.5°	22823.3	22986.5	24660.6	27657.9	33207.8	33149.3	32202.6	29025.0	26206.8	24577.8	20927.4
70°	19856.4	20359.6	21765.7	25602.5	33892.5	33970.5	32225.7	30076.5	25559.8	23616.5	18981.6
72.5°	16365.7	16524.1	17852.2	22145.8	31890.7	31776.1	30905.0	28688.7	24390.1	21877.8	15576.2
75°	12446.1	12446.1	14054.4	17648.7	27386.2	27788.3	28127.0	25983.8	21607.3	17831.4	10606.3
77.5°	8262.0	8558.1	9853.3	13262.4	21678.0	21975.3	23144.9	22148.3	17691.3	13076.0	4844.4
80°	4382.6	4419.2	5808.2	8812.8	15505.5	16066.0	17674.3	17082.1	12725.1	6126.2	1224.5
82.5°	1532.8	1672.9	2553.8	5107.6	10216.4	10566.1	11724.8	10150.6	4494.7	1356.1	677.4
85°	761.5	788.3	1124.6	2431.9	5752.1	5921.5	6849.9	3953.7	723.7	592.1	460.6
87.5°	366.7	375.3	431.3	869.9	2500.2	2615.9	2769.4	1286.6	268.1	225.4	199.8
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°	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4	6445.4
2.5°	6456.4	6467.3	6488.0	6494.1	6479.5	6506.3	6531.9	6555.0	6553.8	6562.4	6592.8
5°	6471.0	6494.1	6516.1	6555.0	6592.8	6614.8	6635.5	6655.0	6661.1	6679.3	6697.6
7.5°	6516.1	6539.2	6589.2	6657.4	6659.8	6714.7	6750.0	6756.1	6761.0	6761.0	6803.6
10°	6585.5	6628.2	6708.6	6756.1	6798.7	6780.5	6817.0	6793.9	6776.8	6784.1	6813.4
12.5°	6704.9	6742.7	6858.4	6910.8	6871.8	6864.5	6828.0	6775.6	6715.9	6709.8	6736.6
15°	6892.5	6963.2	7066.8	7116.7	7019.3	6932.8	6809.7	6702.5	6586.7	6544.1	6561.1
17.5°	7194.7	7280.0	7393.3	7359.2	7181.3	7010.7	6807.3	6580.6	6356.4	6200.5	6240.7
20°	7637.0	7700.4	7793.0	7655.3	7395.8	7114.3	6780.5	6422.2	6043.3	5759.4	5726.5
22.5°	8101.2	8197.5	8141.4	7886.8	7546.8	7154.5	6724.4	6192.0	5605.9	5250.1	5196.5
25°	8660.5	8692.1	8498.4	8114.6	7589.5	7091.1	6542.9	5855.7	5158.7	4823.7	4807.8
27.5°	9253.8	9181.9	8821.3	8219.4	7542.0	6903.5	6178.6	5324.5	4754.2	4458.2	4411.9
30°	9924.0	9757.0	9088.1	8230.4	7362.9	6538.0	5718.0	4909.0	4425.3	4128.0	4080.5
32.5°	10786.6	10393.0	9335.5	8117.1	6985.1	6001.9	5164.8	4554.4	4129.2	3830.7	3788.0
35°	11889.2	11225.2	9597.4	7912.4	6519.7	5465.8	4706.7	4253.5	3889.2	3529.7	3472.5
37.5°	13160.1	12386.4	9910.6	7654.1	6009.2	4994.3	4397.2	4062.2	3711.3	3304.3	3236.1
40°	14636.8	13548.7	10393.0	7345.8	5551.1	4654.3	4247.4	3996.4	3612.6	3188.6	3110.6
42.5°	15916.1	14778.1	10966.9	7014.4	5118.5	4371.7	4180.4	3952.5	3550.4	3102.1	3013.1
45°	17099.2	15793.0	11527.4	6612.3	4662.9	4177.9	4100.0	3842.9	3440.8	2994.9	2902.3
47.5°	18060.5	16613.0	12014.7	6243.1	4298.6	4000.0	3924.5	3634.5	3256.8	2865.7	2797.5
50°	18798.9	17229.5	12281.6	5949.5	3913.5	3797.8	3697.9	3399.4	3036.3	2698.8	2640.3
52.5°	19554.3	17847.3	12413.2	5964.1	3555.3	3496.8	3394.5	3138.6	2860.8	2601.3	2537.9
55°	19994.1	18100.7	12274.3	5609.6	3226.4	3158.1	3069.2	2936.4	2770.7	2540.4	2480.7
57.5°	20251.2	18257.9	11851.5	4575.1	2830.4	2765.8	2780.4	2769.4	2633.0	2390.5	2335.7
60°	20436.4	17916.7	10985.2	3362.8	2492.9	2444.1	2564.8	2525.8	2407.6	2218.7	2172.4
62.5°	20286.5	17267.3	9425.6	2528.2	2217.5	2321.1	2427.1	2355.2	2194.4	2022.6	1969.0
65°	19372.7	15992.9	7164.3	2031.1	2128.6	2271.1	2356.4	2240.7	2077.4	1873.9	1849.5
67.5°	17709.6	13682.7	4225.4	1861.7	2061.6	2212.6	2283.3	2129.8	1986.0	1791.1	1761.8
70°	15171.6	10243.2	1887.3	1733.8	1944.6	2094.4	2140.7	1995.8	1839.8	1657.0	1627.8
72.5°	11292.2	6176.1	1272.0	1601.0	1771.6	1904.4	1955.5	1802.0	1691.2	1608.3	1599.8
75°	6271.2	2144.4	1173.3	1449.9	1582.7	1702.1	1765.5	1657.0	1569.3	1456.0	1409.7
77.5°	1997.0	911.4	1114.8	1296.4	1464.5	1563.2	1553.5	1390.2	1362.2	1224.5	1212.3
80°	796.8	794.4	1030.8	1061.2	1250.1	1332.9	1311.0	1105.1	1141.7	1061.2	1029.6
82.5°	625.0	727.4	826.1	810.2	972.3	1069.8	1039.3	811.5	917.5	843.1	771.3
85°	475.2	637.2	530.0	527.6	678.7	794.4	813.9	623.8	625.0	569.0	506.9
87.5°	244.9	235.2	203.5	202.3	226.6	322.9	396.0	354.6	280.2	210.8	202.3
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)