

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: P721863

Luminaire Tested: **CST-CA8-400-740-U-T4**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721863
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-CA8-400-740-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59931 lumens
Efficiency: N/A
Efficacy: 149.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U0 - G5

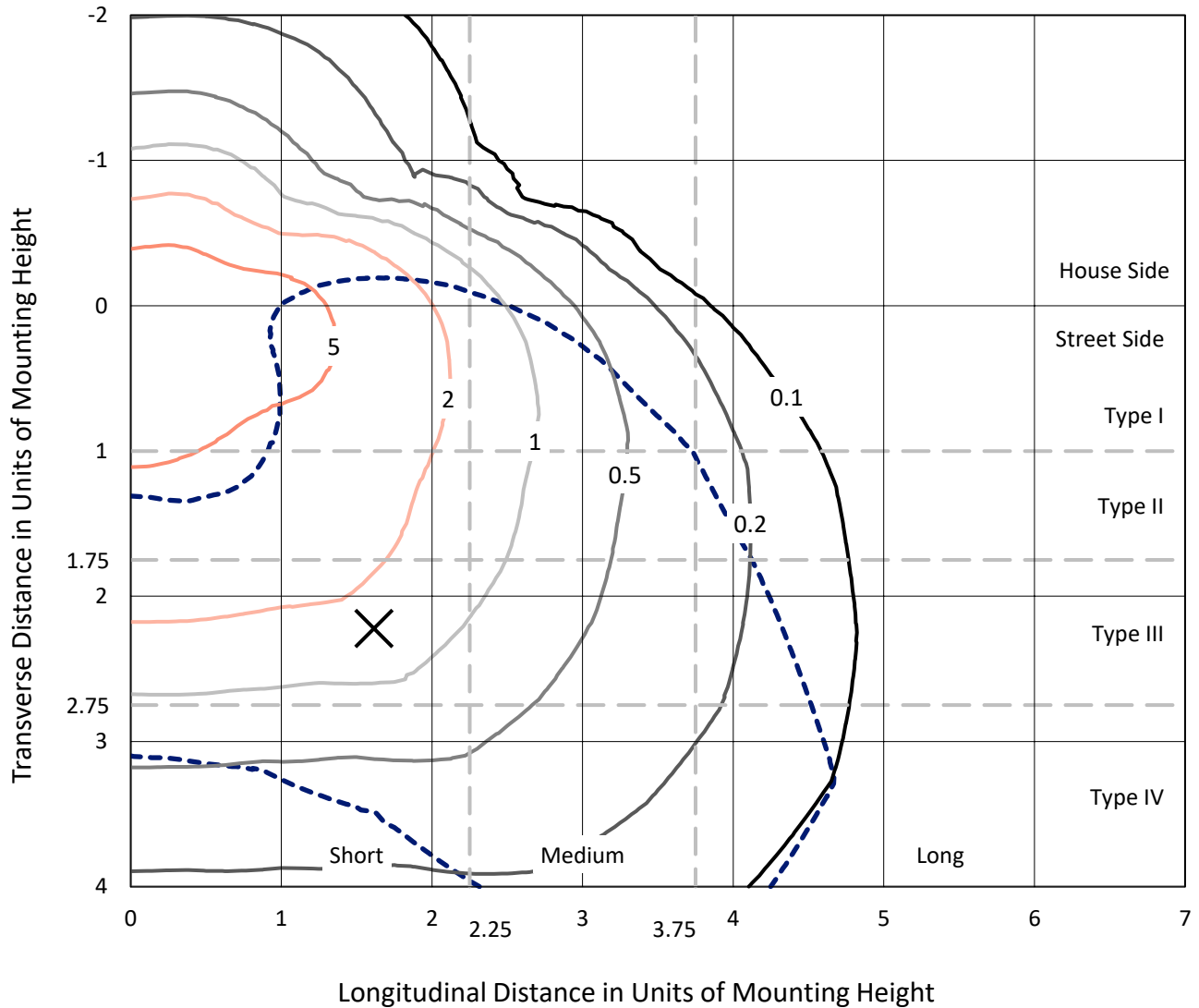
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

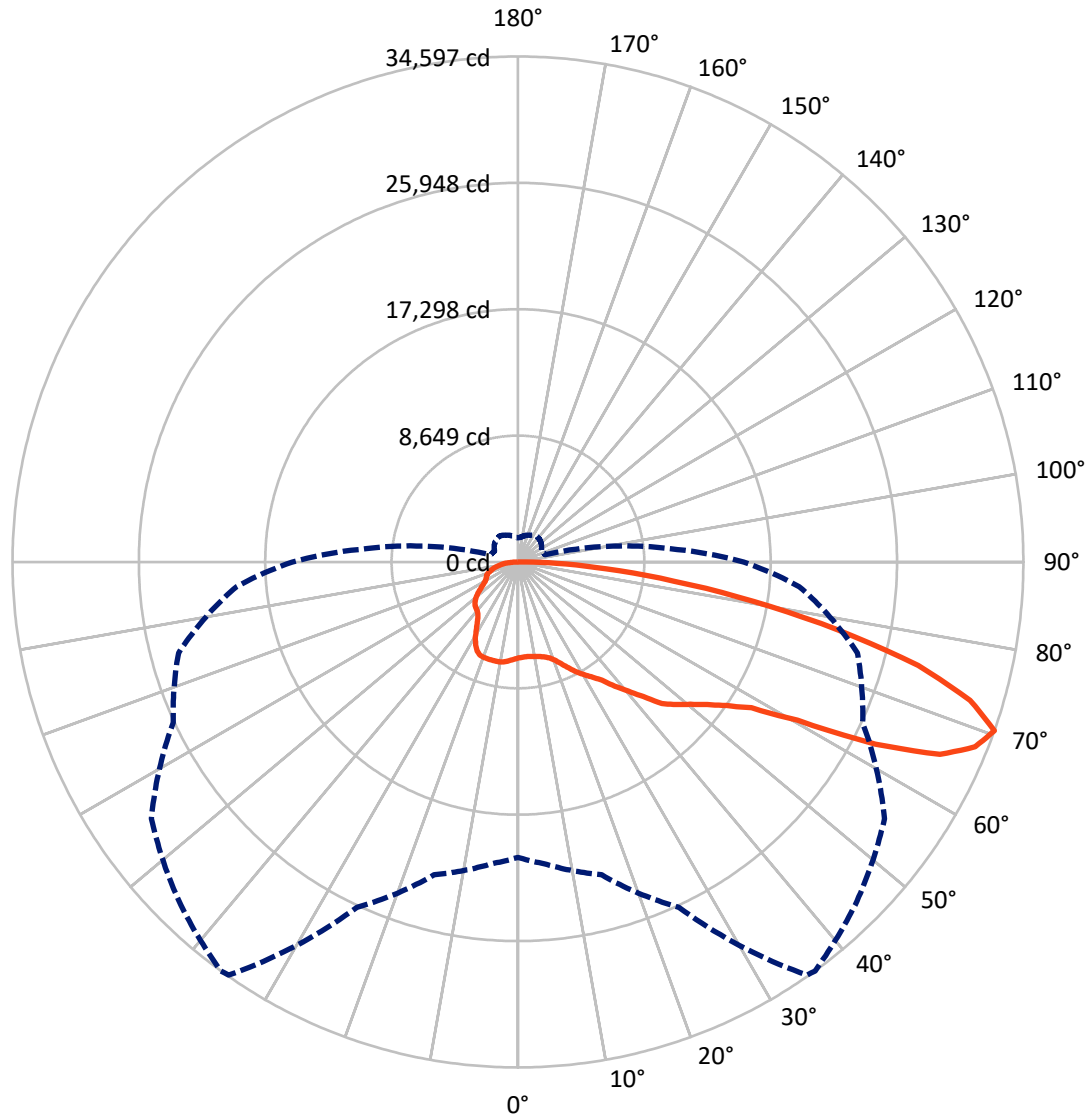
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.6 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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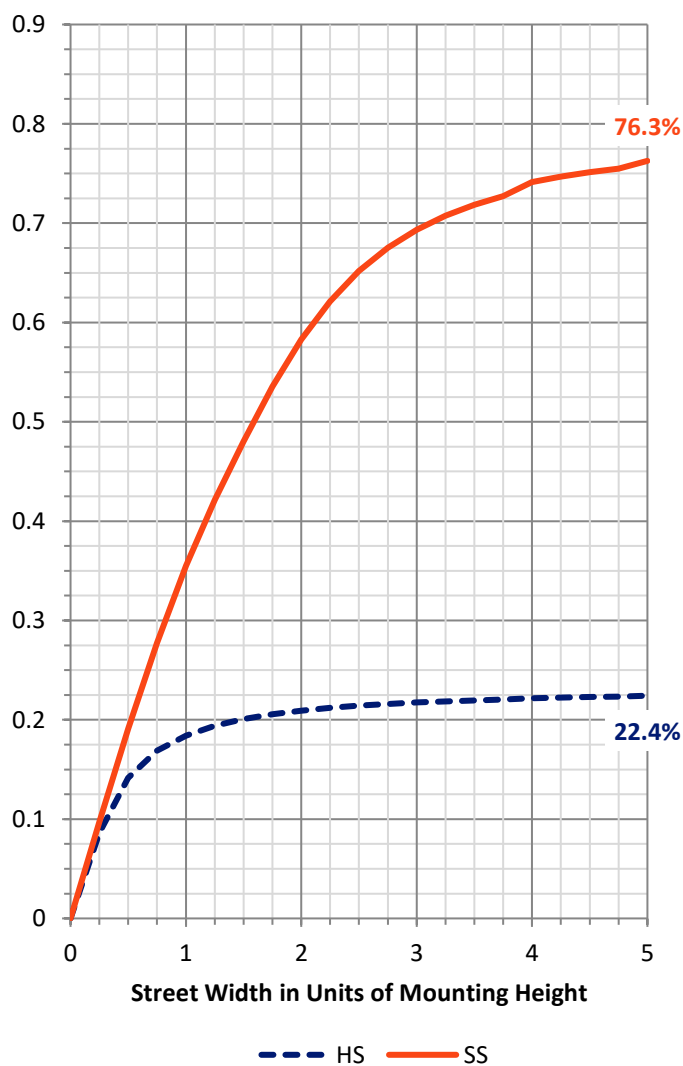
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13654.9	0.0	13654.9
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	46276.1	0.0	46276.1
	% Fixture	77.2	0.0	77.2
Total	Lumens	59931.0	0.0	59931.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	636.0	1.1
10°-20°	1966.0	3.3
20°-30°	3546.4	5.9
30°-40°	5492.6	9.2
40°-50°	8343.3	13.9
50°-60°	11564.3	19.3
60°-70°	15037.6	25.1
70°-80°	11105.1	18.5
80°-90°	2239.7	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°	59931.0	100.0
0°-180°	59931.0	100.0

Coefficient of Utilization



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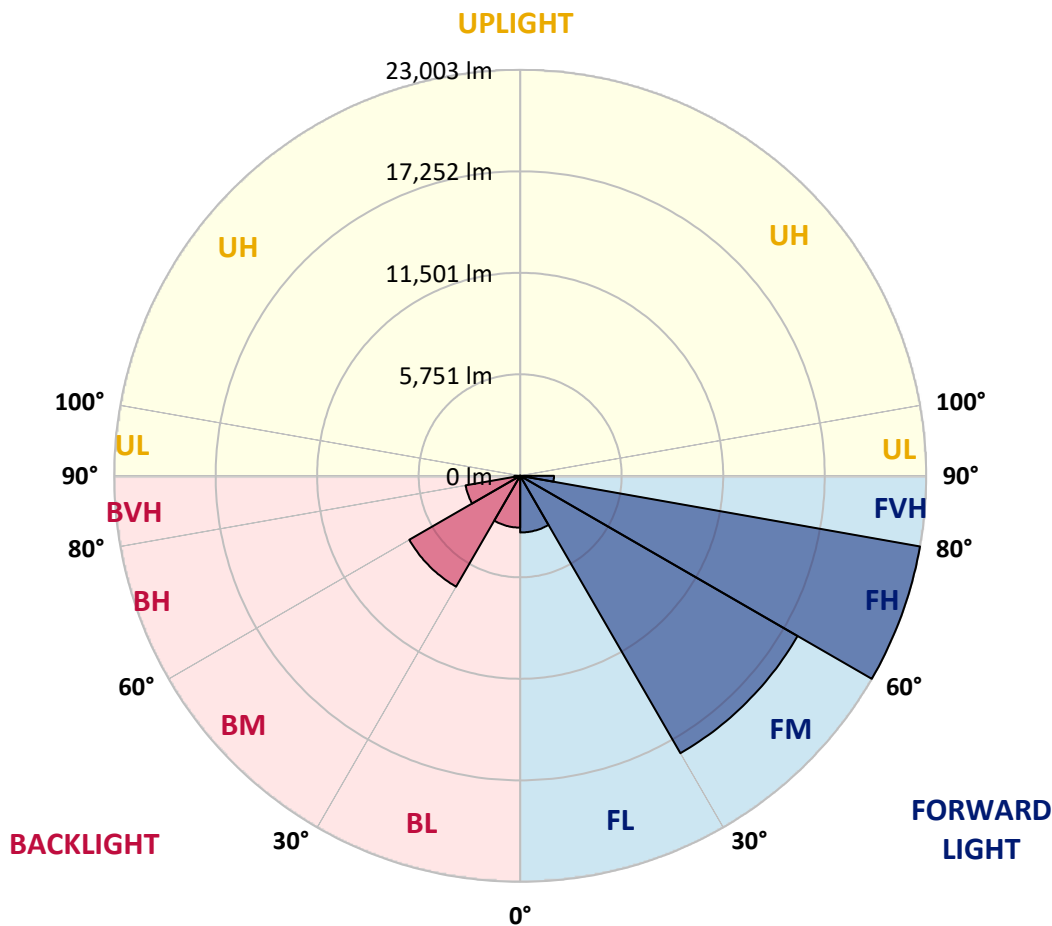
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3212.9	5.4			
FM (30°-60°)	18147.0	30.3			
FH (60°-80°)	23002.9	38.4			G5
FVH (80°-90°)	1913.4	3.2			G5
BL (0°-30°)	2935.4	4.9	B4/5000		
BM (30°-60°)	7253.3	12.1	B4/8500		
BH (60°-80°)	3139.9	5.2	B4/5000		G4/5000
BVH (80°-90°)	326.3	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°	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2
2.5°	6524.5	6515.8	6510.9	6520.8	6524.5	6525.8	6528.2	6525.8	6519.6	6541.9	6569.2
5°	6525.8	6520.8	6510.9	6502.2	6502.2	6502.2	6503.4	6532.0	6544.4	6541.9	6575.4
7.5°	6535.7	6532.0	6513.4	6507.2	6522.0	6527.0	6551.8	6543.1	6556.8	6579.1	6607.7
10°	6536.9	6532.0	6515.8	6529.5	6571.7	6579.1	6590.3	6615.1	6620.1	6647.4	6675.9
12.5°	6549.3	6549.3	6555.5	6585.3	6630.0	6638.7	6680.9	6700.7	6730.5	6744.2	6778.9
15°	6615.1	6613.9	6628.8	6662.3	6734.2	6739.2	6791.3	6850.9	6873.2	6906.7	6962.6
17.5°	6771.5	6778.9	6780.1	6805.0	6890.6	6893.1	6978.7	7034.5	7085.4	7145.0	7272.8
20°	7142.5	7128.8	7113.9	7113.9	7147.4	7164.8	7230.6	7319.9	7424.2	7529.6	7679.8
22.5°	7609.0	7636.3	7581.7	7553.2	7569.3	7549.5	7599.1	7671.1	7792.7	7950.3	8140.1
25°	8166.2	8168.7	8165.0	8049.6	8013.6	8026.0	8066.9	8133.9	8295.3	8420.6	8696.1
27.5°	8709.7	8698.5	8658.8	8537.2	8502.5	8519.9	8518.6	8703.5	8868.5	9028.6	9352.5
30°	9203.6	9233.4	9162.6	8957.9	8961.6	8959.1	9016.2	9254.4	9556.0	9853.8	10186.3
32.5°	10074.7	9984.1	9888.5	9484.0	9409.6	9400.9	9434.4	9789.3	10236.0	10738.5	11138.1
35°	10894.9	10872.6	10778.2	10367.5	9936.9	9929.5	9883.6	10315.4	10943.3	11873.9	12372.8
37.5°	11733.7	11701.5	11608.4	11258.5	10830.4	10789.4	10403.5	10876.3	11725.0	13201.7	13912.7
40°	12733.9	12714.0	12570.1	12122.1	11682.8	11620.8	11220.0	11465.7	12711.5	14969.9	15471.2
42.5°	13611.2	13607.4	13442.4	13026.7	12653.2	12591.2	12249.9	12505.5	14082.7	16702.2	16997.5
45°	14255.2	14353.2	14360.7	14123.6	13865.5	13810.9	13720.4	14072.8	15668.5	18274.4	18230.9
47.5°	14798.7	14883.1	14795.0	14673.4	14585.3	14589.0	14729.2	15429.0	17234.5	19644.3	19306.8
50°	15707.0	15654.9	15197.0	15125.0	15236.7	15302.5	15709.5	16893.3	19027.6	20929.8	20272.2
52.5°	17017.4	16817.6	15919.2	15772.8	16195.9	16220.7	16868.5	18202.4	20819.4	22033.0	21155.7
55°	18810.4	18645.4	17630.4	16954.1	17167.5	17335.0	18247.1	19543.8	22282.4	23070.4	21835.7
57.5°	21460.9	21473.4	20645.7	19385.0	18659.0	18837.7	19550.0	20847.9	23491.0	23939.0	22260.1
60°	23585.3	23978.7	23731.7	23156.0	22113.6	21992.0	21449.8	22206.7	24523.4	24677.3	22665.8
62.5°	25058.2	25236.9	26085.7	26207.3	27398.5	27449.4	24852.3	23798.8	25657.6	25161.2	22751.5
65°	24983.8	25094.2	26435.6	28068.6	31587.7	31745.3	30225.2	26207.3	26434.4	25377.1	22502.0
67.5°	23244.1	23410.4	25115.3	28167.9	33820.1	33760.5	32796.3	29560.1	26690.0	25030.9	21313.3
70°	20222.5	20735.0	22167.0	26074.5	34517.4	34596.8	32819.9	30631.0	26031.1	24051.9	19331.6
72.5°	16667.4	16828.8	18181.3	22554.2	32478.7	32362.0	31474.8	29217.7	24839.8	22281.2	15863.4
75°	12675.5	12675.5	14313.5	17974.1	27891.2	28300.6	28645.6	26462.9	22005.7	18160.2	10801.8
77.5°	8414.4	8715.9	10035.0	13506.9	22077.7	22380.4	23571.7	22556.6	18017.5	13317.1	4933.7
80°	4463.4	4500.7	5915.3	8975.3	15791.4	16362.2	18000.1	17397.1	12959.7	6239.1	1247.1
82.5°	1561.0	1703.7	2600.9	5201.8	10404.7	10760.9	11940.9	10337.7	4577.6	1381.1	689.9
85°	775.5	802.8	1145.3	2476.8	5858.2	6030.7	6976.2	4026.6	737.1	603.1	469.1
87.5°	373.5	382.2	439.3	886.0	2546.3	2664.2	2820.5	1310.4	273.0	229.6	203.5
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°	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2	6564.2
2.5°	6575.4	6586.6	6607.7	6613.9	6599.0	6626.3	6652.3	6675.9	6674.7	6683.4	6714.4
5°	6590.3	6613.9	6636.2	6675.9	6714.4	6736.7	6757.8	6777.7	6783.9	6802.5	6821.1
7.5°	6636.2	6659.8	6710.7	6780.1	6782.6	6838.5	6874.5	6880.7	6885.6	6885.6	6929.0
10°	6706.9	6750.4	6832.3	6880.7	6924.1	6905.5	6942.7	6919.1	6901.7	6909.2	6939.0
12.5°	6828.5	6867.0	6984.9	7038.2	6998.5	6991.1	6953.9	6900.5	6839.7	6833.5	6860.8
15°	7019.6	7091.6	7197.1	7248.0	7148.7	7060.6	6935.3	6826.1	6708.2	6664.7	6682.1
17.5°	7327.4	7414.2	7529.6	7494.9	7313.7	7140.0	6932.8	6702.0	6473.6	6314.8	6355.8
20°	7777.8	7842.3	7936.6	7796.4	7532.1	7245.5	6905.5	6540.7	6154.7	5865.6	5832.1
22.5°	8250.6	8348.6	8291.5	8032.2	7686.0	7286.4	6848.4	6306.1	5709.3	5346.9	5292.3
25°	8820.1	8852.4	8655.1	8264.2	7729.4	7221.9	6663.5	5963.6	5253.9	4912.6	4896.5
27.5°	9424.4	9351.2	8983.9	8370.9	7681.0	7030.8	6292.5	5422.6	4841.9	4540.4	4493.2
30°	10106.9	9936.9	9255.7	8382.1	7498.6	6658.5	5823.4	4999.5	4506.9	4204.1	4155.7
32.5°	10985.5	10584.7	9507.6	8266.7	7113.9	6112.6	5260.1	4638.4	4205.3	3901.3	3857.9
35°	12108.5	11432.2	9774.4	8058.2	6639.9	5566.6	4793.5	4331.9	3960.9	3594.8	3536.5
37.5°	13402.7	12614.7	10093.3	7795.2	6120.0	5086.3	4478.3	4137.1	3779.7	3365.3	3295.8
40°	14906.6	13798.5	10584.7	7481.2	5653.4	4740.1	4325.7	4070.1	3679.2	3247.4	3168.0
42.5°	16209.6	15050.6	11169.1	7143.7	5212.9	4452.3	4257.4	4025.4	3615.9	3159.3	3068.7
45°	17414.4	16084.2	11739.9	6734.2	4748.8	4255.0	4175.5	3913.7	3504.2	3050.1	2955.8
47.5°	18393.5	16919.3	12236.3	6358.2	4377.8	4073.8	3996.9	3701.5	3316.9	2918.5	2849.1
50°	19145.5	17547.2	12508.0	6059.2	3985.7	3867.8	3766.1	3462.0	3092.3	2748.5	2689.0
52.5°	19914.8	18176.3	12642.0	6074.1	3620.9	3561.3	3457.1	3196.5	2913.6	2649.3	2584.7
55°	20362.8	18434.4	12500.6	5713.0	3285.8	3216.3	3125.8	2990.5	2821.8	2587.2	2526.4
57.5°	20624.6	18594.5	12070.0	4659.5	2882.6	2816.8	2831.7	2820.5	2681.5	2434.6	2378.8
60°	20813.2	18247.1	11187.7	3424.8	2538.8	2489.2	2612.0	2572.3	2452.0	2259.6	2212.5
62.5°	20660.6	17585.7	9599.4	2574.8	2258.4	2363.9	2471.8	2398.6	2234.8	2059.9	2005.3
65°	19729.9	16287.7	7296.3	2068.5	2167.8	2313.0	2399.9	2282.0	2115.7	1908.5	1883.6
67.5°	18036.1	13935.0	4303.4	1896.1	2099.6	2253.4	2325.4	2169.1	2022.6	1824.1	1794.3
70°	15451.4	10432.0	1922.1	1765.8	1980.4	2133.1	2180.2	2032.6	1873.7	1687.6	1657.8
72.5°	11500.4	6290.0	1295.5	1630.5	1804.2	1939.5	1991.6	1835.3	1722.3	1638.0	1629.3
75°	6386.8	2183.9	1195.0	1476.6	1611.9	1733.5	1798.0	1687.6	1598.2	1482.8	1435.7
77.5°	2033.8	928.2	1135.4	1320.3	1491.5	1592.0	1582.1	1415.8	1387.3	1247.1	1234.7
80°	811.5	809.1	1049.8	1080.8	1273.1	1357.5	1335.2	1125.5	1162.7	1080.8	1048.5
82.5°	636.6	740.8	841.3	825.2	990.2	1089.5	1058.5	826.4	934.4	858.7	785.5
85°	483.9	649.0	539.8	537.3	691.2	809.1	828.9	635.3	636.6	579.5	516.2
87.5°	249.4	239.5	207.2	206.0	230.8	328.8	403.3	361.1	285.4	214.7	206.0
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)