

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: P721879

Luminaire Tested: **CST-CA8-400-760-U-T2**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721879
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-760-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60096 lumens
Efficiency: N/A
Efficacy: 149.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

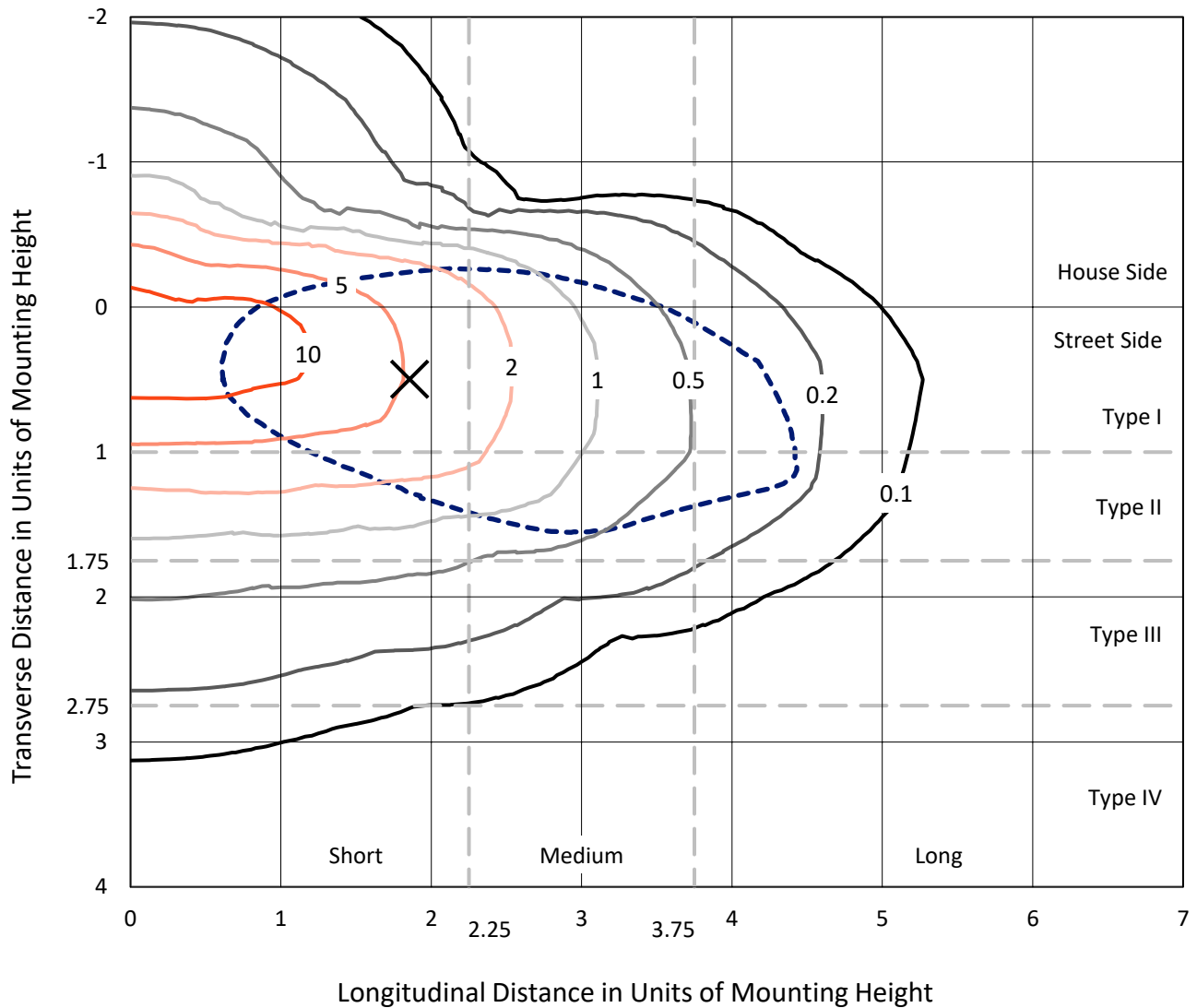
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

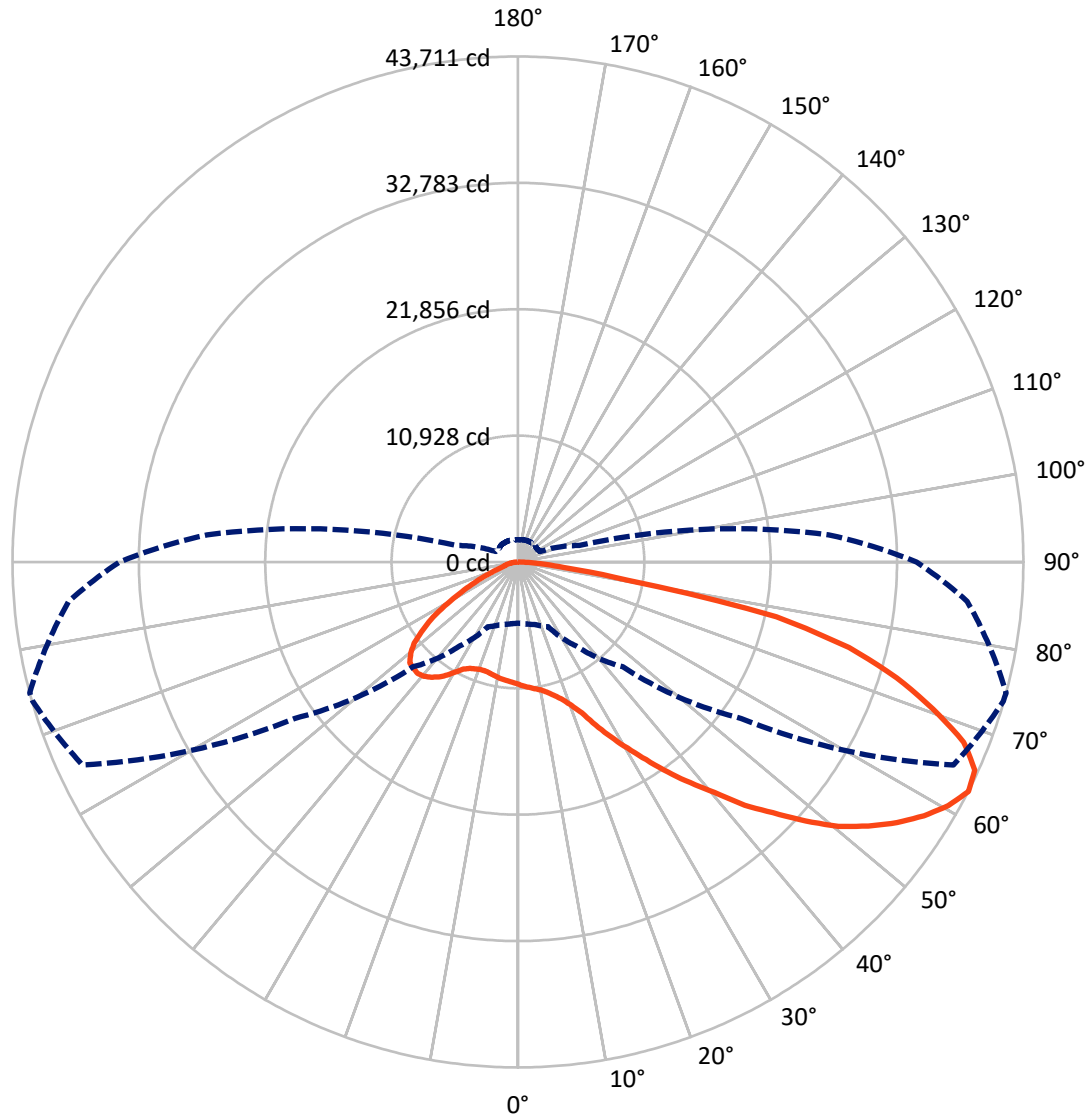
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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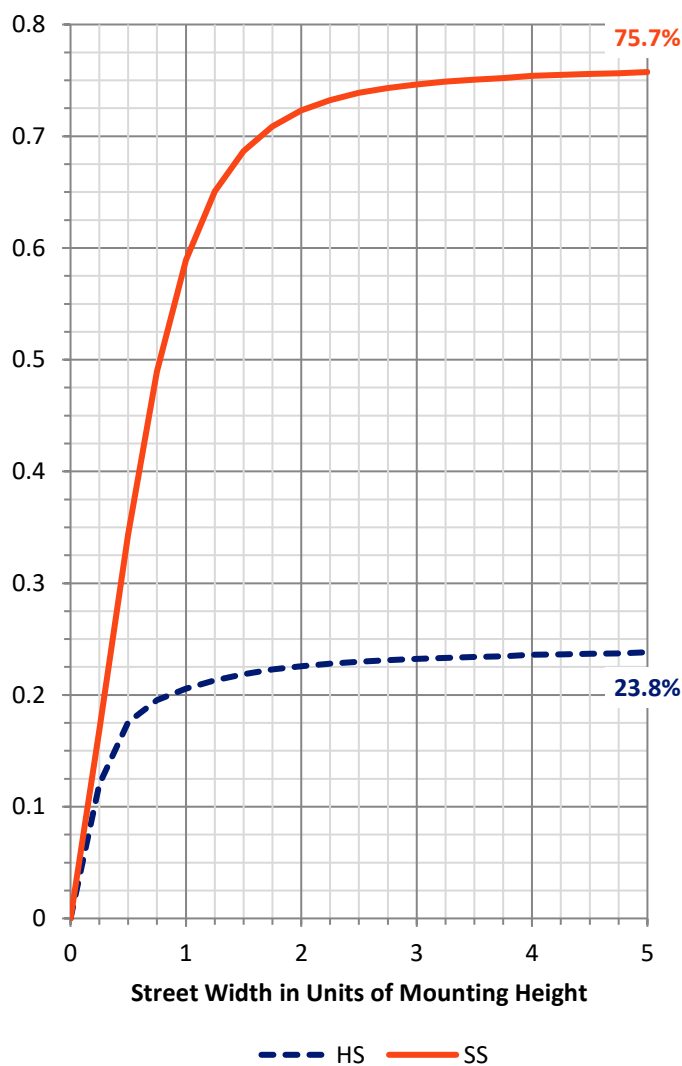
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14560.2	0.0	14560.2
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	45535.8	0.0	45535.8
	% Fixture	75.8	0.0	75.8
Total	Lumens	60096.0	0.0	60096.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1019.1	1.7
10°-20°	3093.0	5.1
20°-30°	5334.7	8.9
30°-40°	7866.0	13.1
40°-50°	10369.2	17.3
50°-60°	12203.6	20.3
60°-70°	12141.3	20.2
70°-80°	7080.5	11.8
80°-90°	988.6	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°	60096.0	100.0
0°-180°	60096.0	100.0

Coefficient of Utilization



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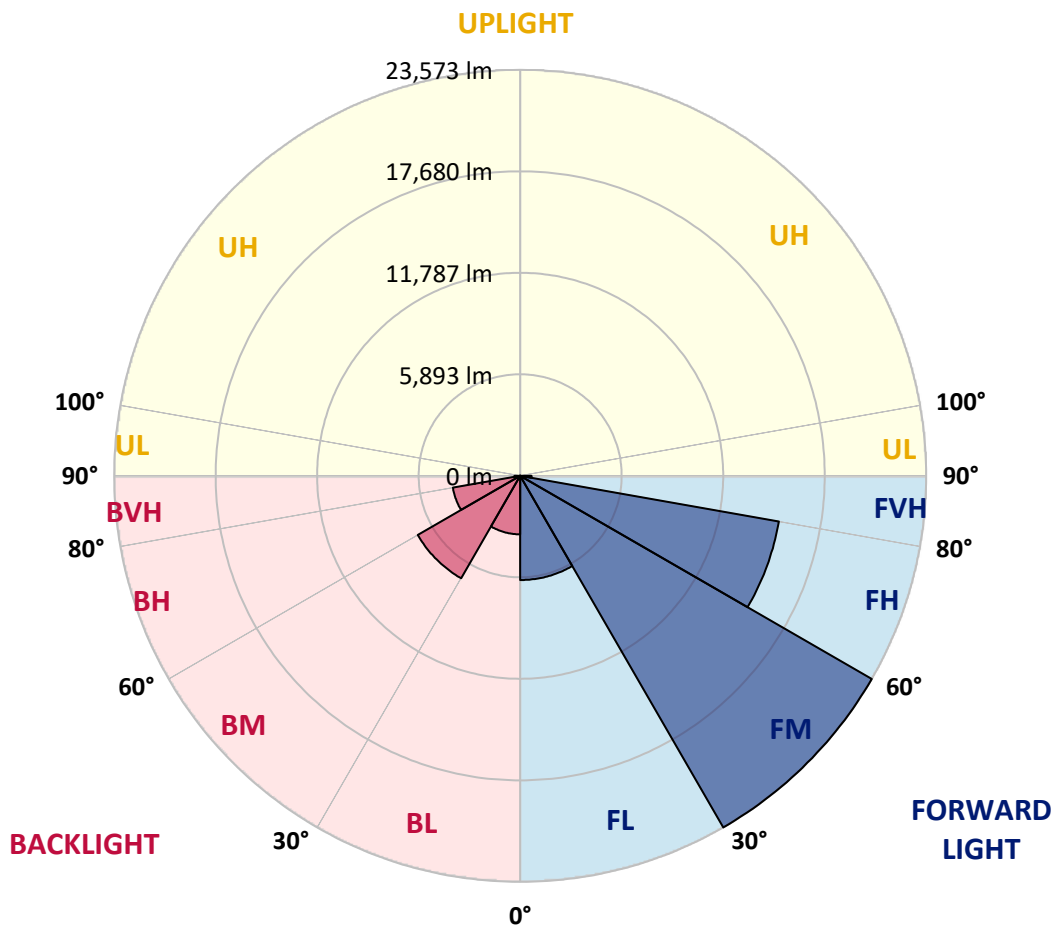
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6051.4	10.1			
FM (30°-60°)	23573.2	39.2			
FH (60°-80°)	15255.1	25.4			G5
FVH (80°-90°)	656.1	1.1			G4/750
BL (0°-30°)	3395.4	5.6	B4/5000		
BM (30°-60°)	6865.6	11.4	B4/8500		
BH (60°-80°)	3966.7	6.6	B4/5000		G4/5000
BVH (80°-90°)	332.6	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6
2.5°	11173.6	11127.9	11134.1	11101.9	11053.7	11017.8	10923.8	10822.4	10761.8	10756.8	10670.2
5°	11735.2	11750.0	11753.7	11651.1	11549.6	11434.6	11291.1	11095.7	10936.2	10911.4	10743.2
7.5°	12247.2	12246.0	12238.6	12181.7	12134.7	11964.0	11677.0	11370.3	11110.6	11087.1	10813.7
10°	12771.6	12767.9	12693.7	12598.5	12492.1	12335.0	12088.9	11721.6	11301.0	11270.1	10879.3
12.5°	13343.1	13302.2	13255.2	13140.2	13014.1	12741.9	12483.4	12083.9	11644.9	11589.2	10995.5
15°	13814.3	13772.2	13706.7	13628.8	13496.4	13288.6	13014.1	12540.3	12069.1	12014.7	11256.5
17.5°	14280.6	14260.8	14213.8	14130.9	14029.5	13850.2	13597.8	13195.9	12578.7	12511.9	11690.6
20°	14662.8	14615.8	14581.1	14619.5	14628.1	14495.8	14357.3	14019.6	13339.3	13236.7	12223.7
22.5°	14880.4	14870.6	15059.8	15200.8	15257.7	15287.4	15244.1	14972.0	14356.0	14176.7	12965.8
25°	15087.0	15070.9	15328.2	15680.7	16015.9	16186.6	16301.6	16337.4	15772.2	15610.2	14159.4
27.5°	15093.2	15137.7	15511.2	16102.4	16613.3	17134.0	17685.6	17748.7	17252.7	17124.1	15517.4
30°	15126.6	15146.4	15516.2	16195.2	17258.9	18093.8	18812.4	19167.3	18739.4	18680.0	17012.8
32.5°	14702.3	14728.3	15303.4	16357.2	17746.2	19086.9	20040.6	20567.4	20461.1	20385.6	18608.3
35°	14260.8	14283.1	14950.9	16127.2	18108.6	19988.6	21150.0	22185.2	22379.4	22322.5	20388.1
37.5°	13568.2	13642.4	14342.4	15852.6	18171.7	20651.6	22208.7	23796.8	24383.1	24212.4	22270.6
40°	12816.2	12870.6	13685.7	15277.5	18101.2	21086.9	23248.9	25580.4	26290.3	26198.8	24139.4
42.5°	11866.3	12012.2	12828.5	14542.8	17738.8	21357.8	24211.2	27602.6	28634.1	28756.6	25856.2
45°	11066.0	11062.3	11820.5	13479.1	17082.0	21422.1	25096.8	29647.1	31156.1	30926.0	28125.8
47.5°	10124.8	10163.1	10954.7	12420.4	16113.6	21218.0	25786.9	32063.9	33591.4	33466.5	29987.2
50°	7946.7	8222.5	9721.6	11510.1	14803.8	20649.1	26362.1	34417.6	35875.8	35932.7	31679.2
52.5°	6850.9	6957.2	7784.7	10593.6	13641.1	19694.2	26992.8	37065.7	38083.6	37938.9	33600.1
55°	6411.8	6468.7	6865.7	8947.3	12516.8	18216.2	27295.9	39483.7	39805.3	39781.8	35180.7
57.5°	6093.9	6137.2	6419.2	7466.8	11282.5	16318.9	27039.8	41057.0	41556.7	41403.3	36672.4
60°	5635.1	5669.7	6090.2	6728.4	10012.2	14403.0	25465.3	41770.6	42826.9	42770.0	37990.8
62.5°	5290.0	5349.3	5584.3	6183.0	8927.5	12824.8	23589.1	41548.0	43660.5	43711.2	38997.6
65°	4925.1	4978.3	5177.4	5700.6	7944.2	11787.1	21565.6	40432.4	43277.1	43411.9	39160.9
67.5°	4474.9	4515.7	4751.9	5204.6	6795.2	10749.4	19283.6	38459.6	41149.7	41583.9	37535.7
70°	3908.4	3923.3	4212.7	4520.7	5642.5	9184.8	15333.1	35230.2	38071.2	38079.9	34467.1
72.5°	3110.7	3123.0	3199.7	3433.5	4238.7	7268.9	11270.1	29436.8	34328.6	34265.5	30632.9
75°	2115.0	2223.8	2489.8	2712.4	3057.5	5104.4	7009.2	19832.8	29084.3	29579.1	25162.3
77.5°	1671.0	1680.9	1790.9	1995.0	2293.1	3813.2	3928.2	10973.3	21683.1	22859.3	19778.3
80°	1165.1	1182.4	1123.1	1172.5	1599.2	2609.7	2295.6	4775.4	9042.6	9654.8	11874.9
82.5°	555.3	575.1	660.5	613.5	795.3	1109.4	1212.1	2467.5	3905.9	4008.6	4623.3
85°	366.1	366.1	367.3	347.6	463.8	483.6	550.4	1052.6	1907.2	1971.5	1960.4
87.5°	117.5	129.9	126.2	147.2	178.1	160.8	168.2	330.2	654.3	648.1	541.7
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°	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6	10593.6
2.5°	10608.4	10557.7	10438.9	10335.1	10232.4	10154.5	10087.7	9998.6	9956.6	9918.2	9998.6
5°	10639.3	10549.0	10336.3	10123.6	9928.1	9784.7	9696.8	9632.5	9574.4	9574.4	9601.6
7.5°	10675.2	10552.7	10248.5	9946.7	9653.6	9490.3	9365.4	9283.7	9236.7	9239.2	9297.3
10°	10698.7	10510.7	10148.3	9741.4	9422.3	9160.1	9037.6	8920.1	8831.1	8777.9	8837.2
12.5°	10725.9	10497.1	10013.5	9554.6	9166.2	8869.4	8614.6	8526.8	8440.2	8373.4	8405.6
15°	10894.1	10549.0	9900.9	9317.1	8866.9	8497.1	8163.2	8002.4	7977.6	7931.9	7943.0
17.5°	11168.7	10688.8	9827.9	9026.5	8507.0	8070.4	7647.4	7439.6	7390.1	7366.6	7379.0
20°	11578.1	10954.7	9850.2	8822.4	8101.3	7612.8	7066.1	6822.4	6657.9	6667.8	6716.1
22.5°	12203.9	11383.9	9971.4	8598.5	7662.2	7021.6	6469.9	6138.4	5972.7	5936.8	5991.3
25°	13200.8	12075.3	10105.0	8384.6	7238.0	6383.3	5772.3	5413.7	5200.9	5187.3	5247.9
27.5°	14478.5	13135.3	10395.7	8199.0	6711.1	5616.5	5009.2	4702.5	4476.1	4448.9	4429.1
30°	15785.8	14312.7	10921.3	7917.0	6096.4	4824.9	4296.8	4056.8	3803.3	3700.6	3722.9
32.5°	17171.1	15409.8	11537.3	7719.1	5408.7	4128.6	3669.7	3440.9	3208.4	3059.9	3025.3
35°	18566.2	16500.7	12055.5	7423.5	4756.9	3575.7	3136.6	2900.4	2697.6	2576.3	2567.7
37.5°	20198.9	17636.1	12471.1	7109.4	4080.3	3142.8	2614.7	2478.6	2380.9	2274.6	2285.7
40°	21834.0	18959.6	12803.8	6589.9	3518.8	2677.8	2225.1	2252.3	2273.3	2184.3	2176.8
42.5°	23192.0	20071.5	12955.9	5917.1	3021.6	2273.3	2053.2	2176.8	2268.4	2210.2	2202.8
45°	24571.1	21007.8	12896.6	5082.2	2608.5	2080.4	2039.6	2165.7	2283.2	2269.6	2263.4
47.5°	26070.2	22234.7	12793.9	4131.1	2312.9	2061.8	2069.2	2128.6	2277.0	2301.8	2291.9
50°	27903.2	23363.9	12186.6	3217.0	2169.4	2091.5	2136.0	2105.1	2231.3	2282.0	2290.6
52.5°	29727.5	24233.4	11374.0	2787.8	2112.5	2119.9	2228.8	2123.7	2179.3	2223.8	2264.7
55°	31135.0	25119.0	10059.2	2529.3	2094.0	2133.6	2254.8	2163.2	2162.0	2162.0	2175.6
57.5°	32575.9	26305.2	8744.5	2362.4	2061.8	2148.4	2223.8	2170.7	2153.3	2128.6	2112.5
60°	33579.0	26744.2	7054.9	2252.3	2028.4	2127.4	2137.3	2129.8	2076.7	2053.2	2034.6
62.5°	34469.6	26982.9	5492.8	2126.1	1982.7	2077.9	2025.9	2009.9	1978.9	1922.1	1931.9
65°	34230.8	26470.9	4185.5	1983.9	1950.5	2018.5	1928.2	1889.9	1892.4	1833.0	1852.8
67.5°	32694.7	24174.1	3005.5	1766.2	1862.7	1901.0	1816.9	1788.5	1746.4	1716.7	1743.9
70°	29591.4	21429.5	2027.2	1465.7	1662.3	1745.2	1689.5	1640.1	1574.5	1554.7	1584.4
72.5°	24906.3	17888.4	1398.9	1178.7	1434.7	1542.3	1521.3	1470.6	1423.6	1471.8	1530.0
75°	20461.1	13234.2	1141.6	966.0	1103.3	1285.1	1346.9	1361.8	1502.8	1972.8	2021.0
77.5°	14728.3	8204.0	1026.6	785.4	880.6	1027.8	1151.5	1202.2	1835.5	1757.6	1753.8
80°	8587.4	4781.6	782.9	619.7	712.4	753.2	900.4	1411.2	1583.2	1358.1	1324.7
82.5°	3918.3	2110.1	545.4	496.0	494.7	498.4	613.5	1358.1	1214.6	1069.9	1030.3
85°	1440.9	742.1	331.5	286.9	329.0	285.7	402.0	995.7	703.8	692.6	577.6
87.5°	355.0	152.1	112.6	94.0	76.7	73.0	122.4	327.8	171.9	157.1	150.9
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)