

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: P721899

Luminaire Tested: **CST-CA8-430-727-U-T2**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721899
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-CA8-430-727-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54814 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

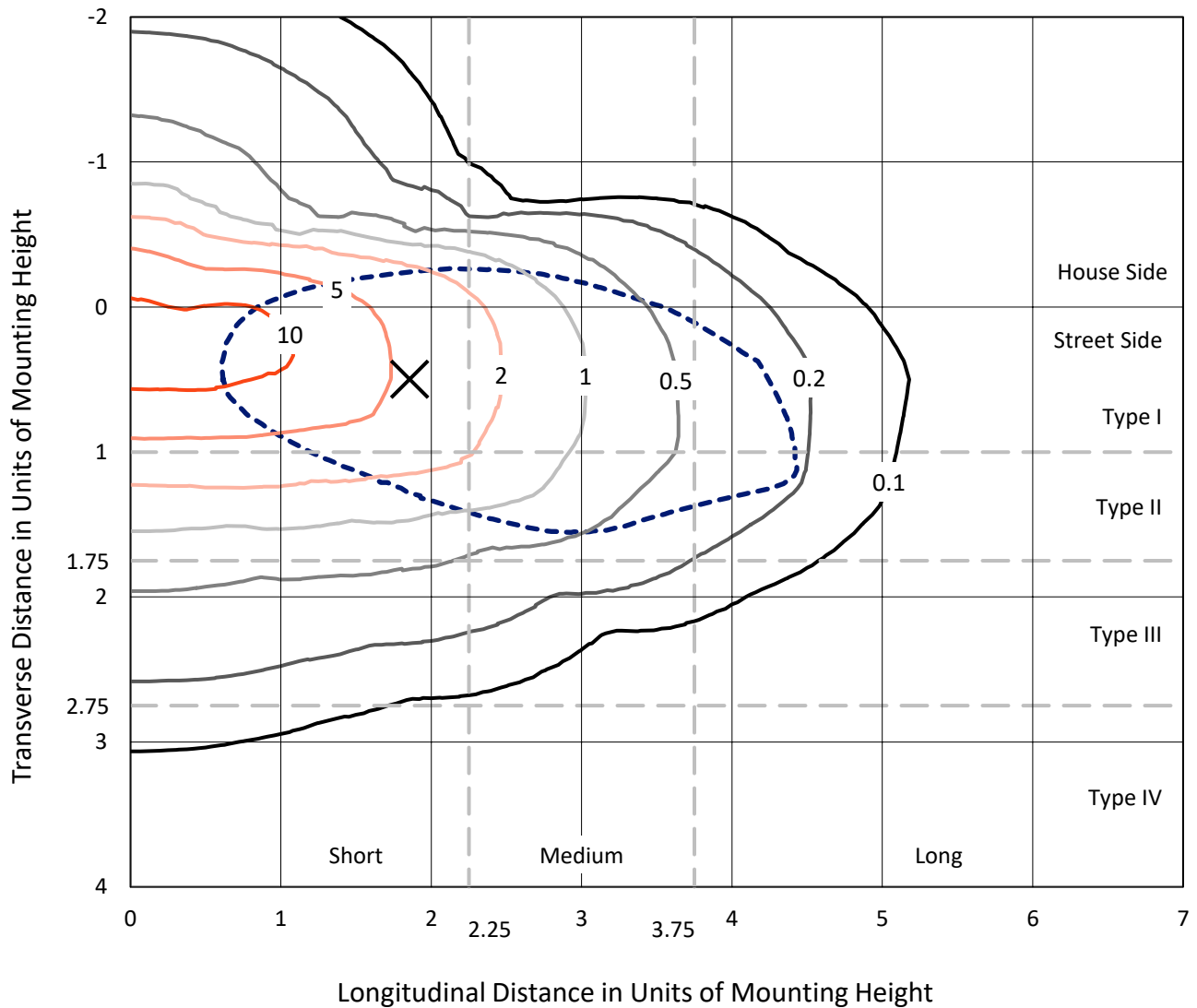
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

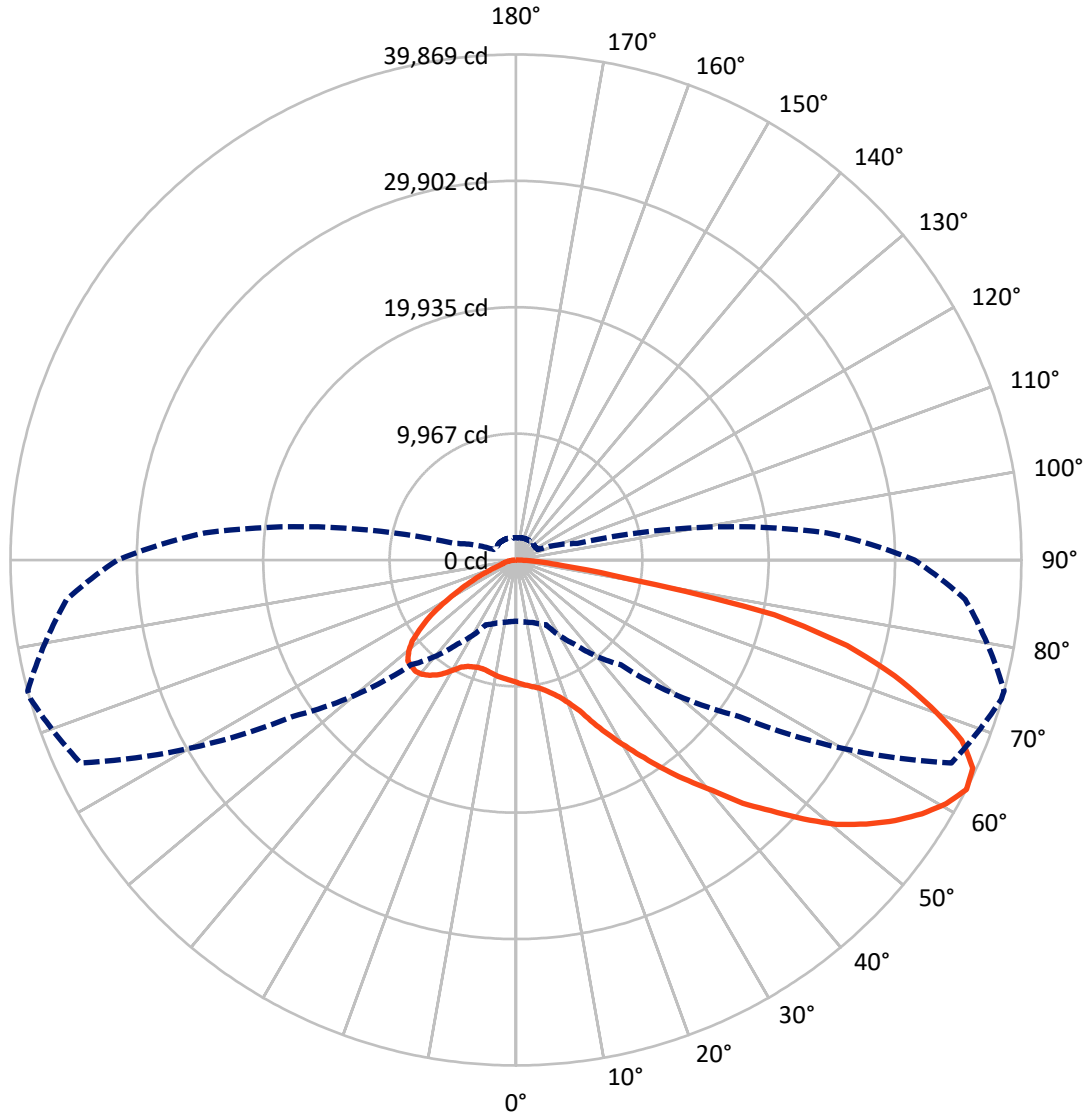
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.6 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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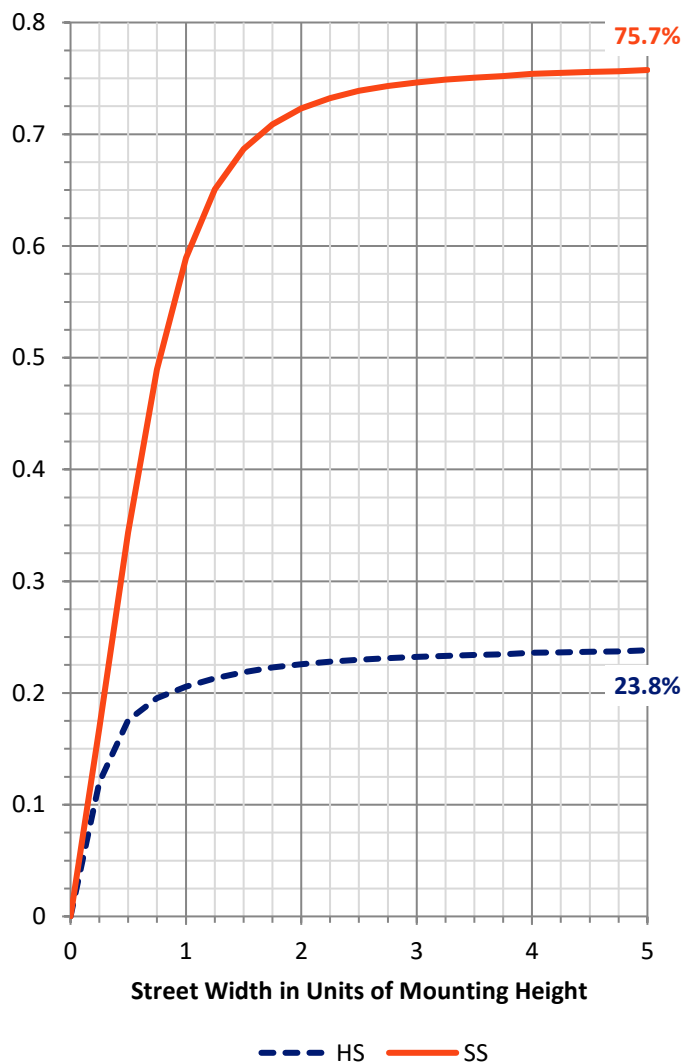
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13280.5	0.0	13280.5
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	41533.5	0.0	41533.5
	% Fixture	75.8	0.0	75.8
Total	Lumens	54814.0	0.0	54814.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	929.6	1.7
10°-20°	2821.1	5.1
20°-30°	4865.8	8.9
30°-40°	7174.7	13.1
40°-50°	9457.8	17.3
50°-60°	11131.0	20.3
60°-70°	11074.2	20.2
70°-80°	6458.2	11.8
80°-90°	901.7	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°	54814.0	100.0
0°-180°	54814.0	100.0

Coefficient of Utilization

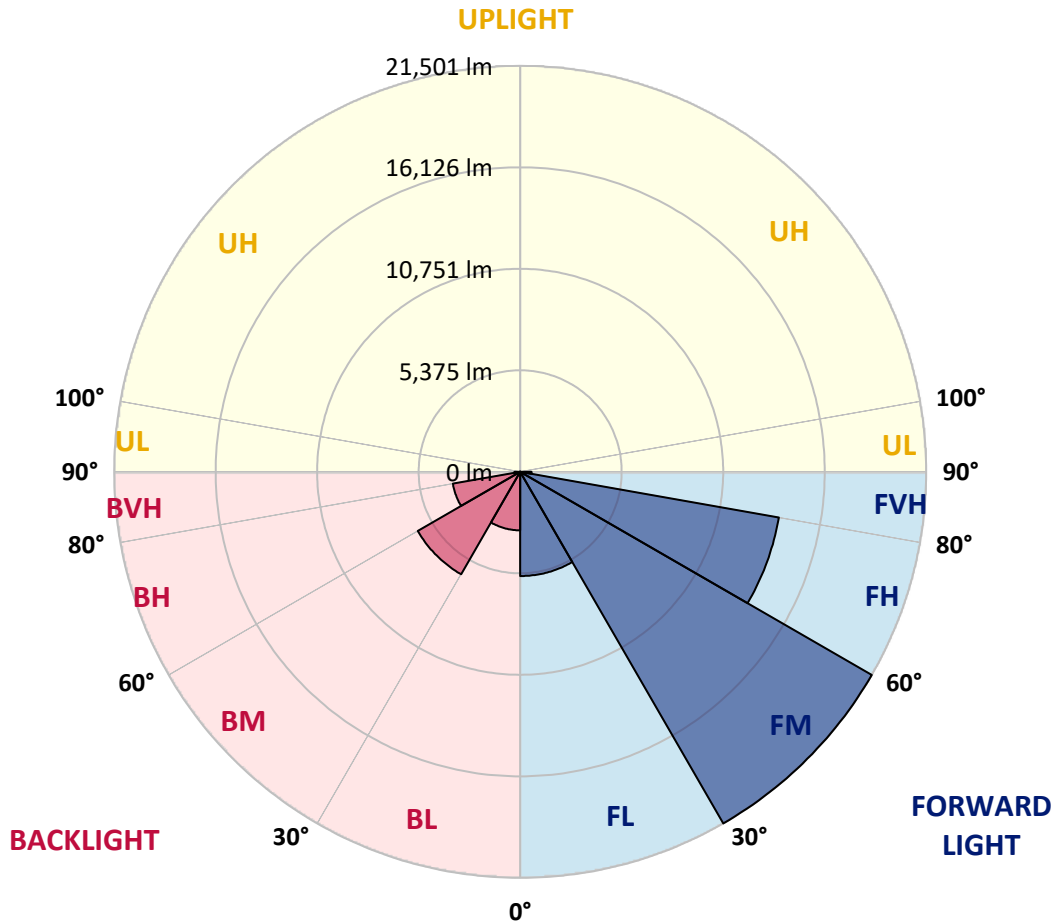


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5519.5	10.1			
FM (30°-60°)	21501.3	39.2			
FH (60°-80°)	13914.3	25.4			G5
FVH (80°-90°)	598.4	1.1			G4/750
BL (0°-30°)	3096.9	5.6	B4/5000		
BM (30°-60°)	6262.1	11.4	B4/8500		
BH (60°-80°)	3618.0	6.6	B4/5000		G4/5000
BVH (80°-90°)	303.4	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5
2.5°	10191.6	10149.8	10155.5	10126.1	10082.1	10049.4	9963.7	9871.2	9815.9	9811.4	9732.4
5°	10703.7	10717.3	10720.6	10627.0	10534.5	10429.6	10298.7	10120.5	9974.9	9952.4	9799.0
7.5°	11170.8	11169.6	11162.9	11111.0	11068.1	10912.4	10650.7	10370.9	10134.0	10112.6	9863.3
10°	11649.1	11645.7	11578.0	11491.2	11394.1	11250.9	11026.4	10691.3	10307.7	10279.5	9923.1
12.5°	12170.3	12133.1	12090.2	11985.3	11870.2	11622.0	11386.2	11021.9	10621.4	10570.6	10029.1
15°	12600.1	12561.8	12502.0	12430.9	12310.2	12120.7	11870.2	11438.1	11008.3	10958.7	10267.1
17.5°	13025.4	13007.4	12964.5	12888.9	12796.4	12632.8	12402.7	12036.0	11473.1	11412.2	10663.1
20°	13374.0	13331.1	13299.6	13334.5	13342.4	13221.7	13095.4	12787.4	12166.9	12073.3	11149.3
22.5°	13572.6	13563.5	13736.1	13864.8	13916.6	13943.7	13904.2	13656.0	13094.2	12930.7	11826.2
25°	13761.0	13746.3	13980.9	14302.5	14608.2	14763.9	14868.8	14901.5	14385.9	14238.2	12914.9
27.5°	13766.6	13807.2	14147.9	14687.2	15153.1	15628.0	16131.2	16188.7	15736.3	15619.0	14153.6
30°	13797.1	13815.1	14152.4	14771.8	15742.0	16503.5	17158.9	17482.7	17092.3	17038.2	15517.5
32.5°	13410.1	13433.8	13958.4	14919.6	16186.4	17409.3	18279.1	18759.7	18662.7	18593.9	16972.8
35°	13007.4	13027.7	13636.9	14709.7	16517.0	18231.8	19291.1	20235.3	20412.4	20360.5	18596.1
37.5°	12375.6	12443.3	13081.8	14459.3	16574.5	18836.4	20256.8	21705.3	22240.0	22084.3	20313.2
40°	11689.7	11739.3	12482.8	13934.7	16510.2	19233.5	21205.5	23332.0	23979.6	23896.1	22017.8
42.5°	10823.3	10956.4	11701.0	13264.6	16179.7	19480.6	22083.2	25176.5	26117.4	26229.1	23583.6
45°	10093.4	10090.0	10781.6	12294.4	15580.6	19539.3	22890.9	27041.3	28417.7	28207.8	25653.7
47.5°	9234.9	9269.9	9991.9	11328.7	14697.3	19353.1	23520.4	29245.7	30639.0	30525.0	27351.6
50°	7248.3	7499.8	8867.1	10498.4	13502.6	18834.2	24045.0	31392.5	32722.6	32774.5	28894.9
52.5°	6248.7	6345.7	7100.5	9662.5	12442.2	17963.3	24620.4	33807.9	34736.3	34604.3	30646.9
55°	5848.2	5900.1	6262.3	8160.9	11416.7	16615.1	24896.8	36013.4	36306.7	36285.3	32088.6
57.5°	5558.3	5597.8	5855.0	6810.5	10290.8	14884.6	24663.2	37448.4	37904.1	37764.2	33449.1
60°	5139.8	5171.4	5554.9	6137.0	9132.2	13137.1	23227.1	38099.3	39062.7	39010.8	34651.7
62.5°	4825.0	4879.2	5093.5	5639.5	8142.9	11697.6	21515.7	37896.2	39823.1	39869.3	35570.0
65°	4492.2	4540.7	4722.4	5199.6	7246.0	10751.1	19670.1	36878.7	39473.4	39596.3	35718.9
67.5°	4081.6	4118.8	4334.3	4747.2	6198.0	9804.6	17588.7	35079.3	37533.0	37928.9	34236.6
70°	3564.9	3578.4	3842.4	4123.3	5146.5	8377.5	13985.5	32133.7	34725.1	34732.9	31437.7
72.5°	2837.3	2848.5	2918.5	3131.7	3866.1	6630.0	10279.5	26849.6	31311.3	31253.8	27940.5
75°	1929.1	2028.4	2270.9	2474.0	2788.7	4655.8	6393.1	18089.6	26528.0	26979.3	22950.7
77.5°	1524.1	1533.1	1633.5	1819.7	2091.6	3478.0	3582.9	10008.8	19777.3	20850.1	18040.0
80°	1062.7	1078.5	1024.3	1069.5	1458.7	2380.4	2093.8	4355.7	8247.8	8806.2	10831.2
82.5°	506.5	524.6	602.4	559.6	725.4	1011.9	1105.6	2250.6	3562.6	3656.3	4217.0
85°	333.9	333.9	335.1	317.0	423.0	441.1	502.0	960.0	1739.6	1798.2	1788.1
87.5°	107.2	118.5	115.1	134.2	162.5	146.7	153.4	301.2	596.8	591.1	494.1
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°	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5	9662.5
2.5°	9676.0	9629.7	9521.4	9426.7	9333.0	9262.0	9201.1	9119.8	9081.5	9046.5	9119.8
5°	9704.2	9621.8	9427.8	9233.8	9055.5	8924.7	8844.6	8785.9	8732.9	8732.9	8757.7
7.5°	9736.9	9625.2	9347.7	9072.4	8805.1	8656.2	8542.2	8467.8	8424.9	8427.2	8480.2
10°	9758.3	9586.9	9256.3	8885.2	8594.1	8355.0	8243.3	8136.1	8054.9	8006.4	8060.5
12.5°	9783.2	9574.5	9133.4	8714.8	8360.6	8089.8	7857.4	7777.3	7698.4	7637.5	7666.8
15°	9936.6	9621.8	9030.7	8498.2	8087.6	7750.3	7445.7	7299.0	7276.5	7234.7	7244.9
17.5°	10187.0	9749.3	8964.1	8233.1	7759.3	7361.1	6975.2	6785.7	6740.6	6719.2	6730.4
20°	10560.5	9991.9	8984.4	8047.0	7389.3	6943.7	6445.0	6222.8	6072.7	6081.8	6125.8
22.5°	11131.3	10383.3	9095.0	7842.8	6988.8	6404.4	5901.3	5598.9	5447.8	5415.0	5464.7
25°	12040.6	11014.0	9216.8	7647.6	6601.8	5822.3	5265.0	4937.8	4743.8	4731.4	4786.7
27.5°	13205.9	11980.8	9482.0	7478.4	6121.2	5122.9	4568.9	4289.2	4082.7	4057.9	4039.8
30°	14398.4	13054.8	9961.4	7221.2	5560.6	4400.8	3919.1	3700.3	3469.0	3375.4	3395.7
32.5°	15661.9	14055.4	10523.2	7040.7	4933.3	3765.7	3347.2	3138.5	2926.4	2791.0	2759.4
35°	16934.4	15050.4	10995.9	6771.1	4338.8	3261.4	2860.9	2645.5	2460.5	2349.9	2342.0
37.5°	18423.5	16086.0	11375.0	6484.5	3721.7	2866.6	2384.9	2260.8	2171.7	2074.6	2084.8
40°	19914.9	17293.1	11678.4	6010.7	3209.5	2442.4	2029.5	2054.3	2073.5	1992.3	1985.5
42.5°	21153.6	18307.3	11817.2	5397.0	2756.0	2073.5	1872.7	1985.5	2069.0	2016.0	2009.2
45°	22411.5	19161.3	11763.0	4635.5	2379.2	1897.5	1860.3	1975.4	2082.5	2070.1	2064.5
47.5°	23778.8	20280.4	11669.4	3768.0	2109.6	1880.6	1887.4	1941.5	2076.9	2099.5	2090.4
50°	25450.7	21310.4	11115.5	2934.3	1978.7	1907.7	1948.3	1920.1	2035.2	2081.4	2089.3
52.5°	27114.7	22103.5	10374.3	2542.8	1926.9	1933.6	2032.9	1937.0	1987.8	2028.4	2065.6
55°	28398.5	22911.2	9175.1	2307.0	1909.9	1946.0	2056.6	1973.1	1972.0	1972.0	1984.4
57.5°	29712.8	23993.1	7975.9	2154.7	1880.6	1959.6	2028.4	1979.9	1964.1	1941.5	1926.9
60°	30627.7	24393.6	6434.9	2054.3	1850.1	1940.4	1949.4	1942.6	1894.1	1872.7	1855.8
62.5°	31439.9	24611.3	5010.0	1939.3	1808.4	1895.3	1847.9	1833.2	1805.0	1753.1	1762.1
65°	31222.2	24144.3	3817.6	1809.5	1779.1	1841.1	1758.8	1723.8	1726.0	1671.9	1689.9
67.5°	29821.1	22049.4	2741.4	1611.0	1699.0	1733.9	1657.2	1631.3	1592.9	1565.8	1590.7
70°	26990.6	19546.0	1849.0	1336.8	1516.2	1591.8	1541.0	1495.9	1436.1	1418.1	1445.1
72.5°	22717.2	16316.2	1275.9	1075.1	1308.6	1406.8	1387.6	1341.3	1298.5	1342.5	1395.5
75°	18662.7	12071.0	1041.3	881.1	1006.3	1172.1	1228.5	1242.1	1370.7	1799.4	1843.4
77.5°	13433.8	7482.9	936.4	716.4	803.2	937.5	1050.3	1096.5	1674.1	1603.1	1599.7
80°	7832.6	4361.4	714.1	565.2	649.8	687.0	821.3	1287.2	1444.0	1238.7	1208.2
82.5°	3573.9	1924.6	497.5	452.4	451.3	454.6	559.6	1238.7	1107.8	975.8	939.7
85°	1314.3	676.9	302.3	261.7	300.1	260.6	366.6	908.1	641.9	631.8	526.8
87.5°	323.8	138.8	102.7	85.7	69.9	66.6	111.7	299.0	156.8	143.3	137.6
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)