

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: P721901

Luminaire Tested: **CST-CA8-430-727-U-T3**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721901
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)
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-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55333 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

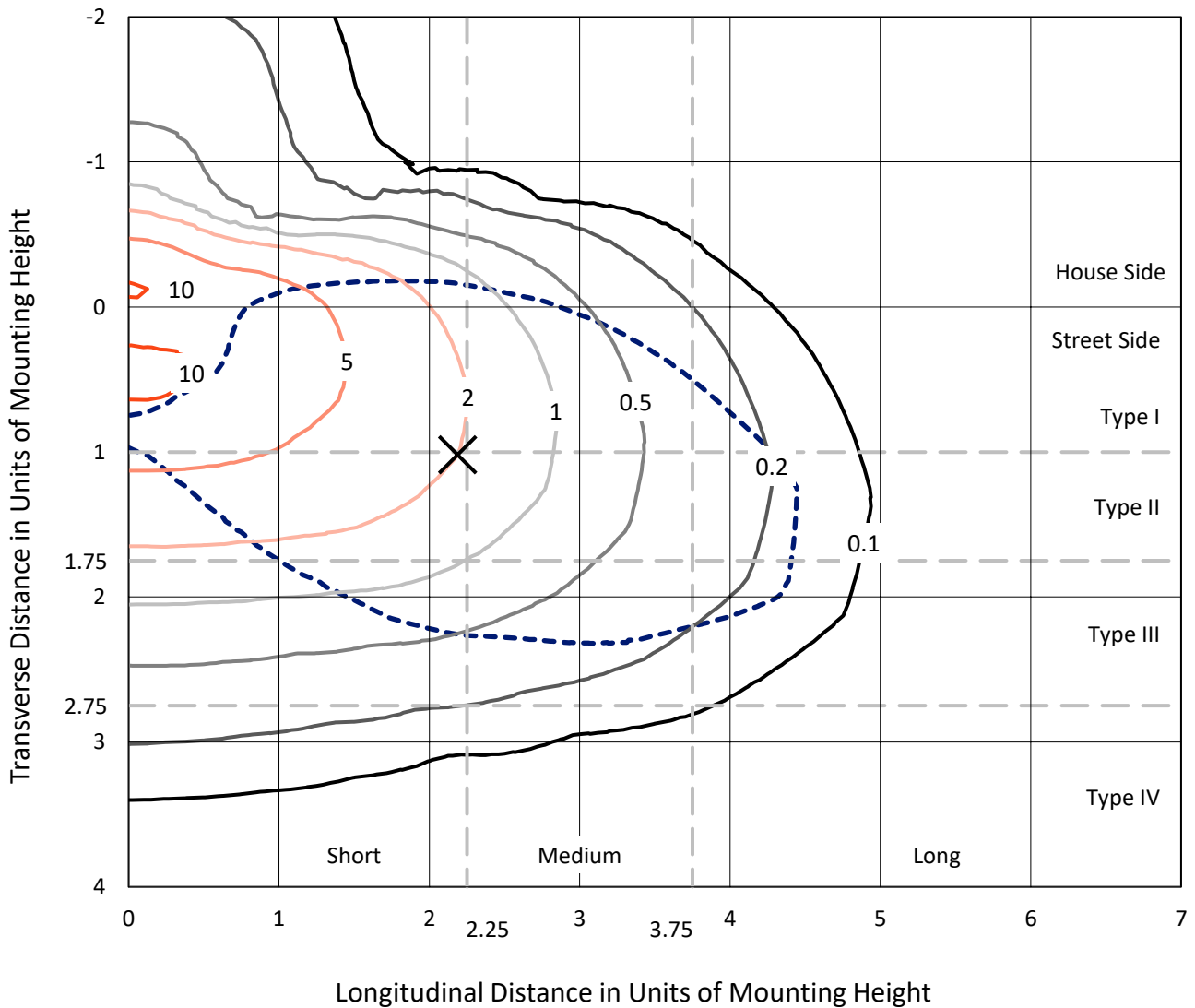
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

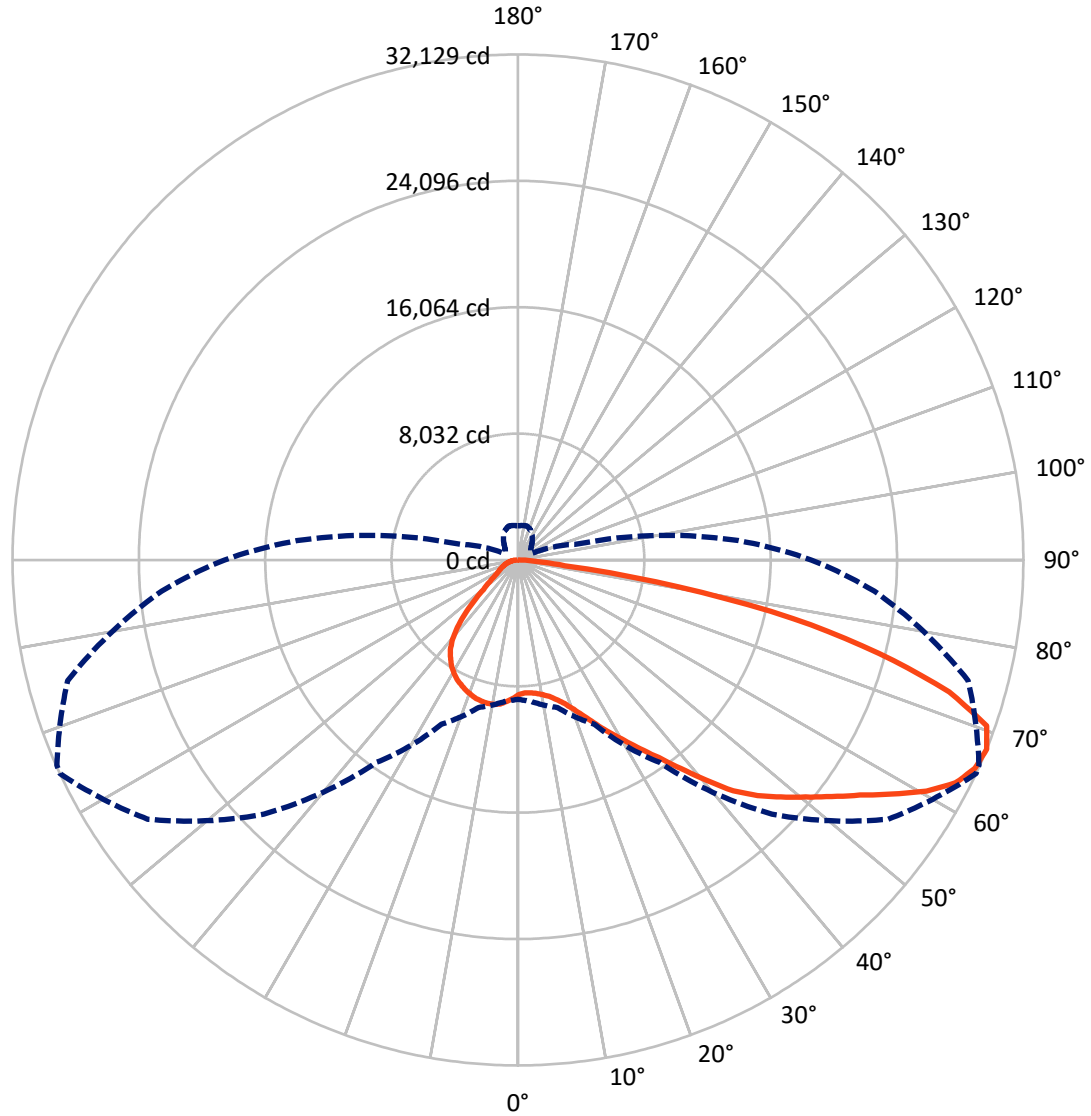
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.6 fc
 Type III - Short - N/A

REPORT NUMBER: P721901
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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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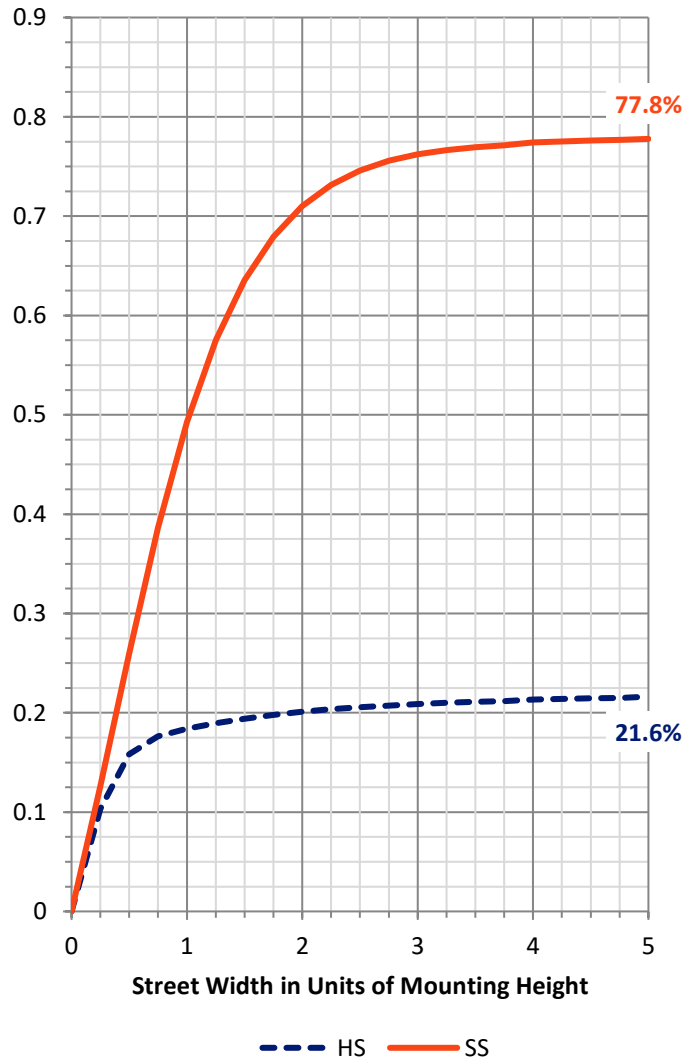
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12222.4	0.0	12222.4
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	43110.6	0.0	43110.6
	% Fixture	77.9	0.0	77.9
Total	Lumens	55333.0	0.0	55333.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	851.6	1.5
10°-20°	2660.6	4.8
20°-30°	4605.8	8.3
30°-40°	6767.7	12.2
40°-50°	9147.4	16.5
50°-60°	11248.6	20.3
60°-70°	12053.6	21.8
70°-80°	7109.1	12.8
80°-90°	888.6	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°	55333.0	100.0
0°-180°	55333.0	100.0

Coefficient of Utilization

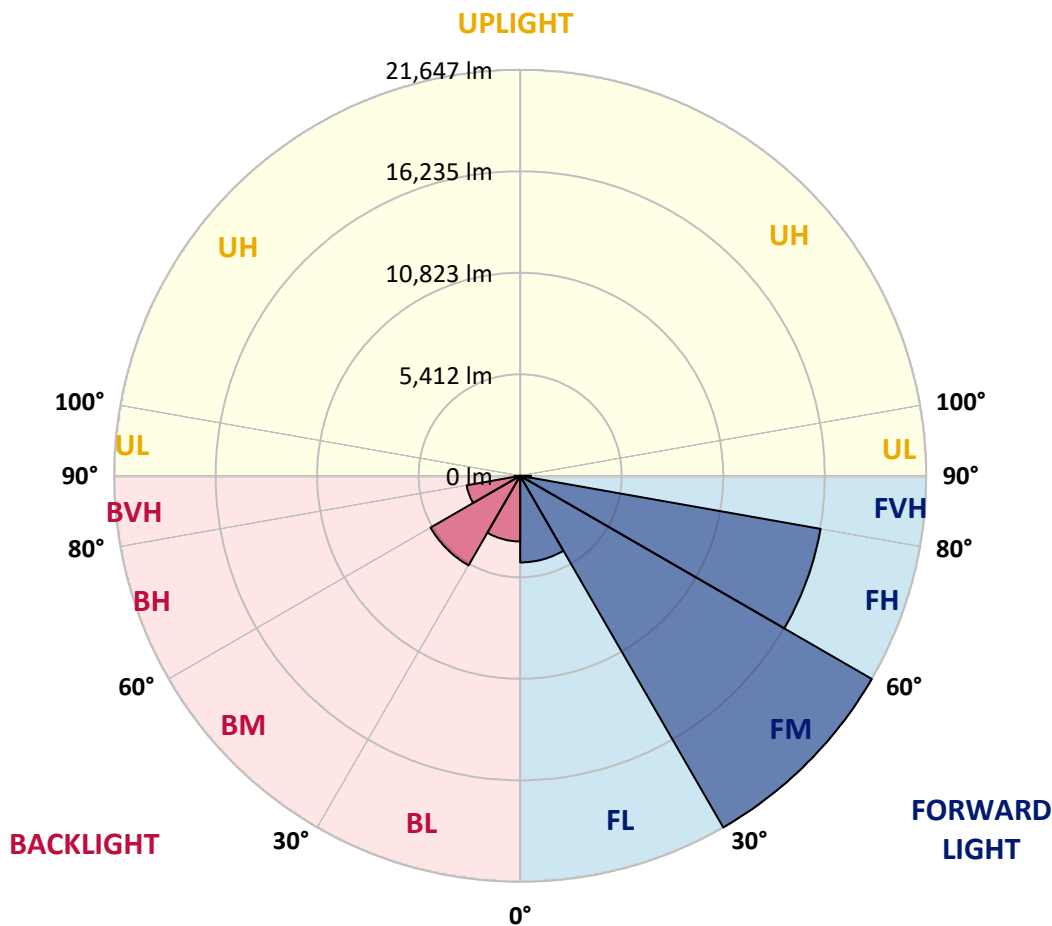


REPORT NUMBER: P721901
 CATALOG NUMBER: CST-CA8-430-727-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4617.1	8.3			
FM (30°-60°)	21646.6	39.1			
FH (60°-80°)	16264.2	29.4			G5
FVH (80°-90°)	582.7	1.1			G4/750
BL (0°-30°)	3500.8	6.3	B4/5000		
BM (30°-60°)	5517.1	10.0	B4/8500		
BH (60°-80°)	2898.5	5.2	B4/5000		G4/5000
BVH (80°-90°)	305.9	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9
2.5°	8385.5	8369.7	8363.0	8384.4	8400.2	8418.2	8444.2	8469.0	8472.4	8505.1	8548.0
5°	8487.1	8473.5	8458.9	8455.5	8449.8	8448.7	8455.5	8483.7	8490.4	8522.0	8614.5
7.5°	8712.7	8699.2	8672.1	8661.9	8631.5	8577.3	8551.4	8566.0	8569.4	8607.8	8722.8
10°	9080.5	9038.7	9006.0	8972.2	8876.3	8790.5	8727.4	8700.3	8694.6	8731.9	8865.0
12.5°	9519.3	9484.3	9448.2	9359.1	9237.3	9082.7	8971.0	8909.0	8904.5	8936.1	9036.5
15°	9983.0	9983.0	9958.2	9852.1	9732.5	9476.4	9303.8	9200.0	9206.8	9231.6	9277.9
17.5°	10582.0	10532.4	10521.1	10400.4	10267.3	10033.8	9759.6	9593.8	9601.7	9613.0	9578.0
20°	11191.2	11176.6	11159.6	11079.5	10958.8	10658.7	10350.8	10133.0	10134.2	10093.5	9937.9
22.5°	11996.7	11948.2	11960.6	11870.4	11706.8	11398.8	11044.6	10786.2	10803.1	10744.5	10462.4
25°	12796.6	12748.1	12722.1	12661.2	12520.2	12228.0	11807.2	11570.3	11550.0	11443.9	11034.4
27.5°	13595.3	13567.1	13588.5	13515.2	13400.1	13074.1	12688.3	12425.4	12439.0	12365.6	11755.3
30°	14422.2	14390.7	14484.3	14365.8	14294.8	13977.8	13607.7	13298.6	13309.9	13337.0	12652.2
32.5°	15046.1	15083.3	15246.9	15233.4	15219.8	14866.7	14477.5	14306.0	14323.0	14417.7	13717.2
35°	15648.5	15651.9	15882.1	16055.8	16129.1	15833.6	15429.7	15424.0	15534.6	15823.4	15201.8
37.5°	16148.3	16137.0	16443.9	16713.5	16914.3	16685.3	16463.1	16809.4	16909.8	17508.9	16696.6
40°	16421.3	16445.0	16839.9	17176.1	17570.9	17462.6	17486.3	18371.9	18619.0	19143.5	17814.6
42.5°	16229.5	16301.7	16916.6	17602.5	18198.2	18342.6	18818.6	20059.6	20164.5	20259.3	18914.5
45°	15908.0	15983.6	16665.0	17772.8	18716.0	19326.3	20144.2	21358.1	21473.2	21367.1	19829.5
47.5°	15573.0	15650.8	16410.0	17704.0	19144.7	20314.6	21323.1	22506.6	22653.2	22324.9	20709.4
50°	15147.6	15268.4	16098.7	17558.5	19492.1	21380.7	22438.9	23688.9	23756.5	23282.7	21376.2
52.5°	14624.2	14757.3	15655.3	17309.2	19764.0	22125.2	23568.1	24971.6	24964.8	24401.8	22138.8
55°	14073.6	14194.4	15119.4	16916.6	19916.3	22698.3	24470.7	26385.1	26466.4	25994.8	22829.2
57.5°	13368.6	13478.0	14486.6	16388.6	19758.4	23184.6	25932.7	28064.9	28105.6	27103.8	23378.6
60°	12434.4	12595.8	13608.9	15717.4	19304.9	23747.5	27543.7	29831.6	29881.3	28194.7	23731.7
62.5°	11409.0	11473.3	12505.5	14684.0	18644.9	24181.9	28660.6	31213.6	31141.4	29047.6	23837.8
65°	10159.0	10209.7	11103.2	13355.0	17418.6	23943.8	29061.1	31924.3	31835.2	29583.4	23511.7
67.5°	8850.3	9007.1	9708.8	11511.6	15707.2	22845.0	28722.7	32128.5	32083.4	29624.0	22733.3
70°	7151.3	7206.6	7840.6	9378.3	13105.7	20645.1	27594.5	31605.1	31570.1	28717.0	21143.8
72.5°	5042.8	4988.7	5296.7	6502.6	9466.3	16422.5	23560.2	28664.0	28722.7	25689.1	18412.5
75°	2677.1	2780.9	3260.3	3981.2	5366.6	10557.2	18783.7	23722.7	23702.4	21481.1	14554.2
77.5°	1426.0	1423.7	1753.1	2061.1	2627.5	4851.0	12389.3	17890.2	17989.5	16643.6	9993.1
80°	684.8	710.7	731.0	838.2	1309.8	2241.6	5182.7	10374.5	11051.3	9926.6	4747.2
82.5°	548.3	550.5	552.8	529.1	541.5	912.7	1996.8	3002.0	3110.3	2500.0	1530.9
85°	406.1	381.3	377.9	320.4	362.1	548.3	1007.4	1281.6	1218.4	1185.7	864.2
87.5°	163.6	153.4	148.9	139.9	139.9	206.5	355.4	463.7	462.5	421.9	289.9
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°	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9	8546.9
2.5°	8581.8	8622.4	8717.2	8798.4	8828.9	8903.3	8973.3	9013.9	9042.1	9059.0	9135.7
5°	8670.9	8752.2	8903.3	9017.3	9127.8	9265.5	9354.6	9411.0	9442.6	9460.7	9515.9
7.5°	8807.5	8889.8	9050.0	9224.9	9326.4	9439.2	9496.8	9537.4	9557.7	9552.0	9596.0
10°	8929.3	9010.5	9170.7	9305.0	9362.5	9426.8	9457.3	9466.3	9467.4	9471.9	9515.9
12.5°	9095.1	9144.8	9230.5	9318.5	9306.1	9308.4	9334.3	9323.0	9297.1	9292.6	9321.9
15°	9273.4	9274.5	9281.3	9262.1	9184.3	9150.4	9114.3	9083.8	9012.8	9008.3	9054.5
17.5°	9496.8	9443.7	9320.8	9189.9	9004.9	8877.4	8748.8	8695.8	8608.9	8592.0	8614.5
20°	9784.4	9673.9	9374.9	9050.0	8703.7	8475.8	8320.1	8163.3	8042.6	8013.2	8034.7
22.5°	10197.3	9979.6	9443.7	8901.1	8365.2	7976.0	7673.7	7485.3	7282.2	7178.4	7188.6
25°	10696.0	10355.3	9563.3	8712.7	7967.0	7405.2	6914.4	6536.5	6307.5	6155.2	6195.8
27.5°	11349.2	10881.0	9706.6	8526.5	7471.7	6675.3	5963.4	5451.2	5217.7	5145.5	5098.1
30°	12106.2	11516.1	9857.8	8251.3	6937.0	5771.6	4860.1	4433.6	4166.3	4123.4	4087.3
32.5°	13119.2	12316.0	10140.9	7952.3	6298.5	4868.0	3878.6	3387.8	3326.9	3291.9	3284.0
35°	14425.6	13364.0	10437.6	7564.2	5465.9	3808.6	2934.3	2669.2	2639.9	2678.2	2681.6
37.5°	15812.1	14501.2	10793.0	7126.5	4508.1	2841.8	2245.0	2061.1	2093.8	2213.4	2240.5
40°	16750.7	15250.3	11115.6	6532.0	3324.7	2064.5	1633.6	1594.1	1774.6	1928.0	1959.6
42.5°	17651.0	15817.8	11246.5	5745.7	2371.4	1470.0	1318.8	1454.2	1706.9	1875.0	1897.5
45°	18419.3	16477.7	10917.1	4802.5	1607.6	1228.6	1263.5	1450.8	1731.7	1917.9	1934.8
47.5°	19150.3	17017.0	10467.0	3783.8	1268.0	1182.3	1262.4	1481.3	1787.0	1963.0	1973.1
50°	19848.6	17427.6	9698.7	2879.0	1187.9	1160.9	1272.6	1528.6	1817.4	1928.0	1923.5
52.5°	20366.5	17639.7	8880.8	2324.0	1156.4	1143.9	1299.6	1588.4	1823.1	1889.6	1885.1
55°	20746.6	17599.1	8343.8	1903.2	1130.4	1137.2	1343.6	1633.6	1877.2	1977.6	1974.3
57.5°	20781.6	17415.2	7733.5	1607.6	1098.8	1136.0	1391.0	1696.7	2148.0	2333.0	2276.6
60°	20739.9	17110.6	7124.3	1411.3	1063.8	1142.8	1440.6	1886.3	2538.3	2683.9	2644.4
62.5°	20534.6	16543.2	6211.6	1281.6	1033.4	1167.6	1477.9	2036.3	2519.2	2536.1	2479.7
65°	19900.5	15783.9	5013.5	1150.7	1002.9	1184.6	1508.3	2075.8	2313.8	2259.7	2231.5
67.5°	18646.0	14088.3	3867.3	1031.1	963.4	1181.2	1598.6	2019.4	2236.0	2196.5	2160.4
70°	16863.6	12161.4	2685.0	908.2	896.9	1159.7	1576.0	2038.6	2198.8	2137.8	2089.3
72.5°	14088.3	9540.7	1708.0	807.8	797.6	1109.0	1519.6	2026.2	2173.9	2146.9	2080.3
75°	10608.0	6659.5	1085.3	698.3	709.6	1016.5	1429.4	1959.6	2161.5	2076.9	1949.4
77.5°	6678.6	3287.4	843.9	593.4	610.3	876.6	1235.3	1711.4	2074.7	2023.9	1860.3
80°	2525.9	1334.6	660.0	481.7	496.4	681.4	1013.1	1407.9	1910.0	1993.4	1923.5
82.5°	1163.1	834.8	495.3	387.0	392.6	496.4	755.9	1042.4	1616.6	1829.9	2004.7
85°	679.1	547.2	330.5	258.3	268.5	293.3	425.3	636.3	1048.0	1395.5	1561.4
87.5°	231.3	190.7	128.6	109.4	106.0	120.7	102.7	208.7	311.4	548.3	626.1
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)