

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: P721831

Luminaire Tested: **CST-CA8-400-722-U-T3**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721831
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-CA8-400-722-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 49603 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

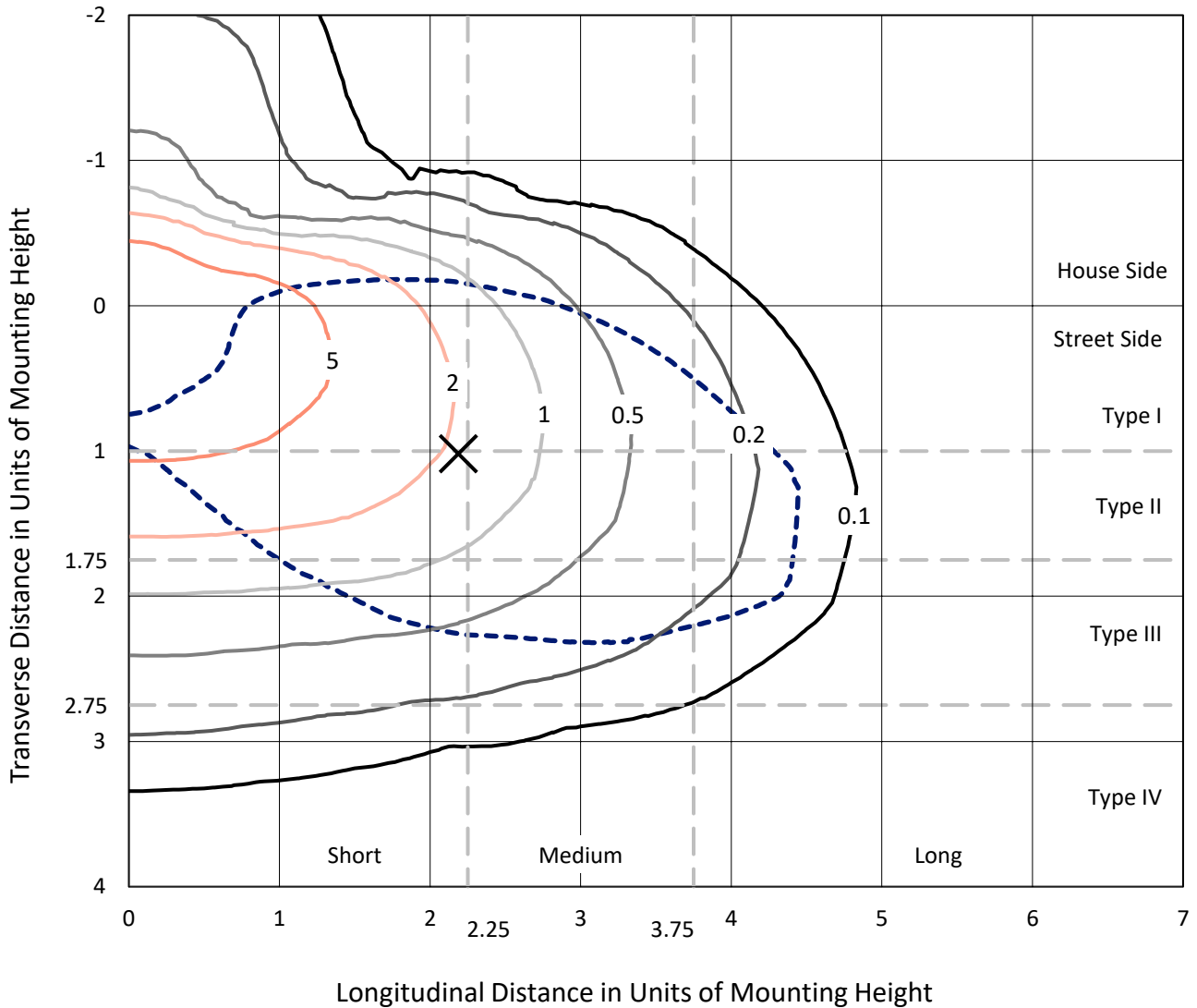
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

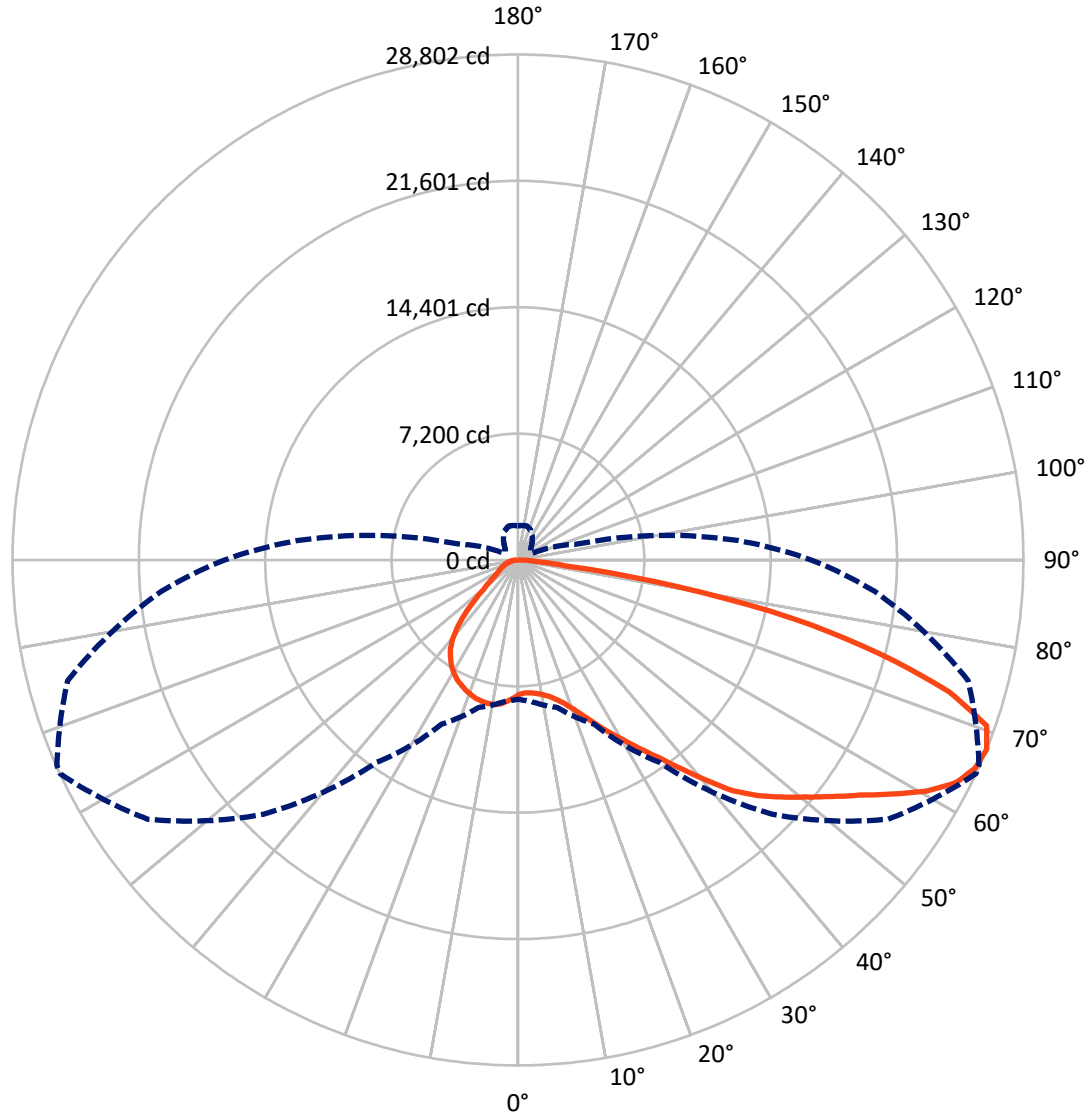
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.5 fc
 Type III - Short - N/A

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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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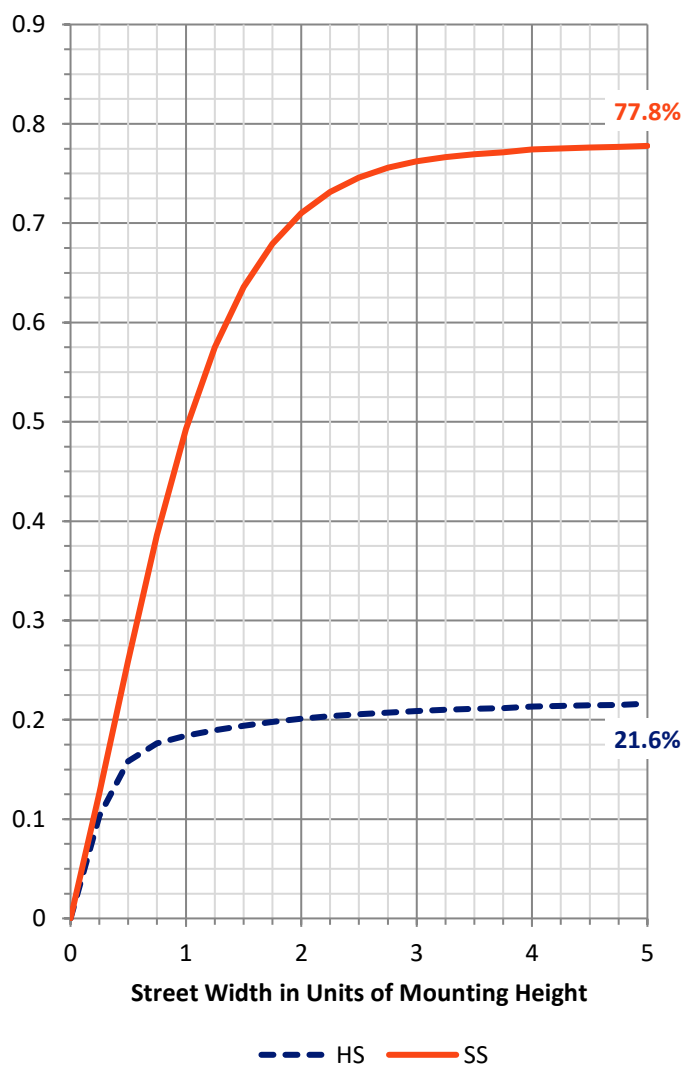
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10956.7	0.0	10956.7
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	38646.3	0.0	38646.3
	% Fixture	77.9	0.0	77.9
Total	Lumens	49603.0	0.0	49603.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	763.4	1.5
10°-20°	2385.1	4.8
20°-30°	4128.8	8.3
30°-40°	6066.9	12.2
40°-50°	8200.2	16.5
50°-60°	10083.8	20.3
60°-70°	10805.4	21.8
70°-80°	6372.9	12.8
80°-90°	796.6	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°	49603.0	100.0
0°-180°	49603.0	100.0

Coefficient of Utilization



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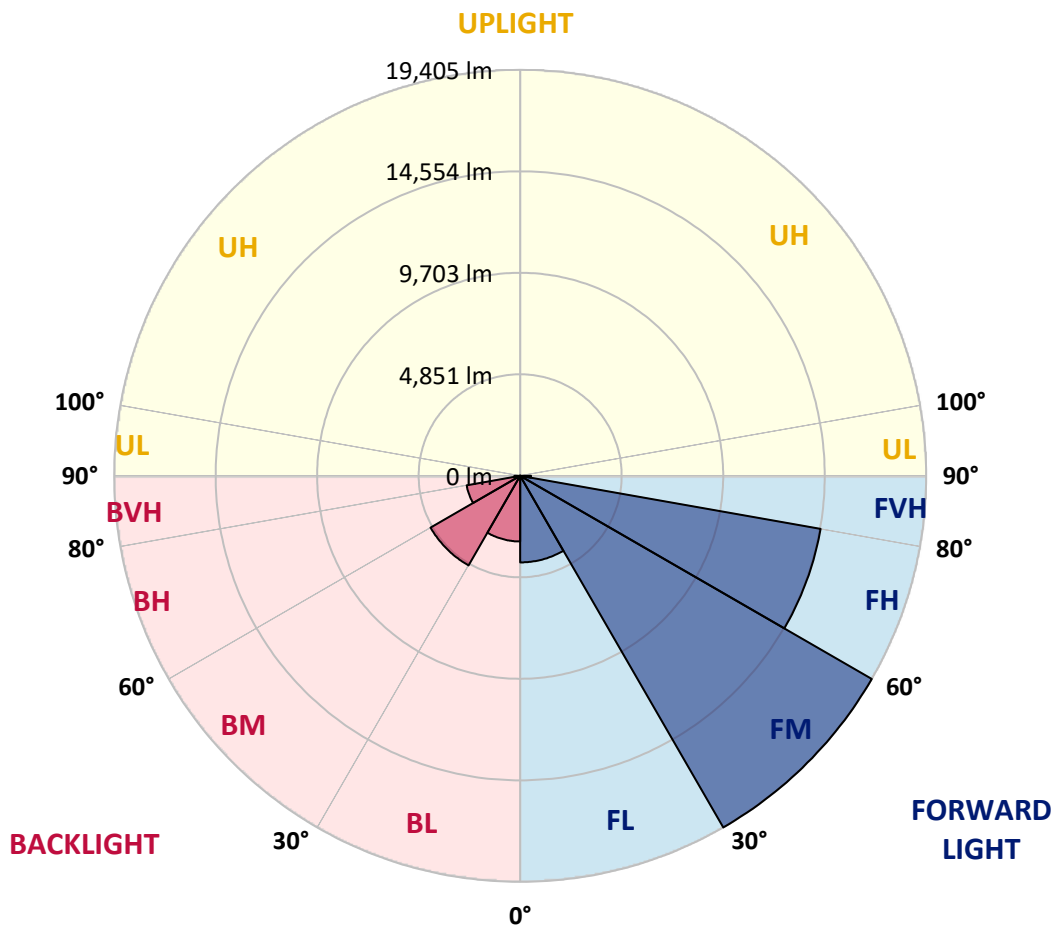
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4139.0	8.3			
FM (30°-60°)	19405.0	39.1			
FH (60°-80°)	14579.9	29.4			G5
FVH (80°-90°)	522.4	1.1			G4/750
BL (0°-30°)	3138.3	6.3	B4/5000		
BM (30°-60°)	4945.8	10.0	B3/5000		
BH (60°-80°)	2598.3	5.2	B4/5000		G4/5000
BVH (80°-90°)	274.2	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°	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8
2.5°	7517.2	7503.0	7496.9	7516.2	7530.3	7546.5	7569.8	7592.0	7595.0	7624.4	7662.8
5°	7608.2	7596.0	7582.9	7579.9	7574.8	7573.8	7579.9	7605.1	7611.2	7639.5	7722.5
7.5°	7810.4	7798.3	7774.0	7764.9	7737.6	7689.1	7665.8	7679.0	7682.0	7716.4	7819.5
10°	8140.1	8102.7	8073.4	8043.1	7957.1	7880.2	7823.6	7799.3	7794.3	7827.6	7947.0
12.5°	8533.5	8502.2	8469.8	8389.9	8280.7	8142.2	8042.0	7986.4	7982.4	8010.7	8100.7
15°	8949.2	8949.2	8926.9	8831.9	8724.7	8495.1	8340.4	8247.3	8253.4	8275.7	8317.1
17.5°	9486.2	9441.7	9431.6	9323.4	9204.1	8994.7	8749.0	8600.3	8607.4	8617.5	8586.1
20°	10032.3	10019.2	10004.0	9932.2	9824.0	9555.0	9278.9	9083.7	9084.7	9048.3	8908.7
22.5°	10754.4	10710.9	10722.0	10641.1	10494.5	10218.4	9900.9	9669.3	9684.4	9631.8	9379.0
25°	11471.4	11427.9	11404.7	11350.1	11223.7	10961.7	10584.5	10372.1	10353.9	10258.9	9891.8
27.5°	12187.5	12162.2	12181.4	12115.6	12012.5	11720.2	11374.3	11138.7	11150.8	11085.1	10538.0
30°	12928.8	12900.4	12984.4	12878.2	12814.5	12530.3	12198.6	11921.5	11931.6	11955.9	11342.0
32.5°	13488.0	13521.4	13668.0	13655.9	13643.8	13327.2	12978.3	12824.6	12839.8	12924.7	12296.7
35°	14028.1	14031.1	14237.4	14393.1	14458.9	14193.9	13831.9	13826.8	13925.9	14184.8	13627.6
37.5°	14476.1	14466.0	14741.0	14982.8	15162.8	14957.5	14758.2	15068.7	15158.7	15695.7	14967.6
40°	14720.8	14742.1	15096.0	15397.4	15751.4	15654.3	15675.5	16469.4	16690.9	17161.1	15969.8
42.5°	14548.9	14613.6	15164.8	15779.7	16313.7	16443.1	16869.9	17982.3	18076.4	18161.3	16955.8
45°	14260.7	14328.4	14939.3	15932.4	16777.8	17325.0	18058.2	19146.4	19249.5	19154.5	17776.0
47.5°	13960.3	14030.1	14710.7	15870.7	17162.2	18210.9	19115.0	20175.9	20307.4	20013.1	18564.9
50°	13579.0	13687.2	14431.6	15740.2	17473.6	19166.6	20115.2	21235.8	21296.4	20871.7	19162.5
52.5°	13109.8	13229.1	14034.1	15516.7	17717.4	19834.1	21127.5	22385.6	22379.6	21874.9	19846.2
55°	12616.3	12724.5	13553.8	15164.8	17853.9	20347.8	21936.6	23652.8	23725.6	23302.9	20465.1
57.5°	11984.2	12082.3	12986.4	14691.5	17712.3	20783.7	23247.3	25158.7	25195.1	24297.0	20957.6
60°	11146.8	11291.4	12199.6	14089.8	17305.8	21288.3	24691.5	26742.4	26786.9	25275.0	21274.2
62.5°	10227.5	10285.2	11210.5	13163.4	16714.1	21677.7	25692.7	27981.3	27916.6	26039.5	21369.3
65°	9107.0	9152.5	9953.4	11972.0	15614.8	21464.3	26051.7	28618.4	28538.5	26519.9	21077.0
67.5°	7933.8	8074.4	8703.4	10319.5	14080.7	20479.3	25748.3	28801.5	28761.0	26556.3	20379.2
70°	6410.8	6460.3	7028.7	8407.1	11748.5	18507.2	24737.0	28332.2	28300.9	25743.2	18954.2
72.5°	4520.6	4472.1	4748.2	5829.3	8486.0	14721.8	21120.5	25695.7	25748.3	23028.8	16505.8
75°	2399.9	2492.9	2922.7	3569.0	4810.9	9464.0	16838.5	21266.1	21247.9	19256.6	13047.1
77.5°	1278.3	1276.3	1571.6	1847.7	2355.4	4348.7	11106.3	16037.6	16126.6	14920.0	8958.3
80°	613.9	637.1	655.3	751.4	1174.1	2009.5	4646.0	9300.1	9906.9	8898.6	4255.6
82.5°	491.5	493.5	495.5	474.3	485.4	818.2	1790.0	2691.1	2788.2	2241.1	1372.4
85°	364.1	341.8	338.8	287.2	324.6	491.5	903.1	1148.9	1092.2	1062.9	774.7
87.5°	146.6	137.5	133.5	125.4	125.4	185.1	318.6	415.7	414.6	378.2	259.9
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°	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8	7661.8
2.5°	7693.1	7729.5	7814.5	7887.3	7914.6	7981.4	8044.1	8080.5	8105.8	8120.9	8189.7
5°	7773.0	7845.8	7981.4	8083.5	8182.6	8306.0	8385.9	8436.5	8464.8	8481.0	8530.5
7.5°	7895.4	7969.2	8112.8	8269.6	8360.6	8461.7	8513.3	8549.7	8567.9	8562.9	8602.3
10°	8004.6	8077.4	8221.0	8341.4	8393.0	8450.6	8477.9	8486.0	8487.0	8491.1	8530.5
12.5°	8153.3	8197.8	8274.6	8353.5	8342.4	8344.4	8367.7	8357.6	8334.3	8330.3	8356.6
15°	8313.1	8314.1	8320.2	8303.0	8233.2	8202.8	8170.5	8143.2	8079.5	8075.4	8116.9
17.5°	8513.3	8465.8	8355.6	8238.2	8072.4	7958.1	7842.8	7795.3	7717.4	7702.2	7722.5
20°	8771.2	8672.1	8404.1	8112.8	7802.4	7598.1	7458.5	7317.9	7209.7	7183.4	7202.6
22.5°	9141.3	8946.2	8465.8	7979.3	7499.0	7150.1	6879.0	6710.1	6528.1	6435.0	6444.2
25°	9588.4	9282.9	8573.0	7810.4	7142.0	6638.3	6198.4	5859.6	5654.3	5517.8	5554.2
27.5°	10173.9	9754.2	8701.4	7643.6	6698.0	5984.0	5345.9	4886.7	4677.4	4612.6	4570.2
30°	10852.5	10323.6	8836.9	7396.8	6218.6	5173.9	4356.8	3974.5	3734.8	3696.4	3664.0
32.5°	11760.7	11040.6	9090.8	7128.8	5646.2	4363.9	3476.9	3037.0	2982.4	2951.0	2944.0
35°	12931.8	11980.1	9356.8	6780.9	4899.9	3414.2	2630.5	2392.8	2366.5	2400.9	2403.9
37.5°	14174.7	12999.5	9675.3	6388.5	4041.2	2547.5	2012.5	1847.7	1877.0	1984.2	2008.5
40°	15016.1	13671.1	9964.6	5855.6	2980.4	1850.7	1464.4	1429.0	1590.8	1728.4	1756.7
42.5°	15823.2	14179.8	10081.9	5150.7	2125.8	1317.8	1182.2	1303.6	1530.1	1680.8	1701.0
45°	16511.9	14771.4	9786.6	4305.2	1441.1	1101.3	1132.7	1300.6	1552.4	1719.2	1734.4
47.5°	17167.2	15254.8	9383.1	3392.0	1136.7	1059.9	1131.7	1327.9	1601.9	1759.7	1768.8
50°	17793.2	15622.9	8694.3	2580.9	1064.9	1040.7	1140.8	1370.3	1629.2	1728.4	1724.3
52.5°	18257.4	15813.0	7961.1	2083.3	1036.6	1025.5	1165.0	1423.9	1634.3	1694.0	1689.9
55°	18598.2	15776.6	7479.7	1706.1	1013.3	1019.4	1204.5	1464.4	1682.8	1772.8	1769.8
57.5°	18629.6	15611.8	6932.6	1441.1	985.0	1018.4	1247.0	1521.0	1925.6	2091.4	2040.8
60°	18592.2	15338.7	6386.5	1265.2	953.7	1024.5	1291.5	1690.9	2275.5	2405.9	2370.5
62.5°	18408.1	14830.0	5568.3	1148.9	926.4	1046.7	1324.8	1825.4	2258.3	2273.5	2222.9
65°	17839.7	14149.4	4494.3	1031.5	899.1	1061.9	1352.1	1860.8	2074.2	2025.7	2000.4
67.5°	16715.1	12629.4	3466.8	924.3	863.7	1058.9	1433.0	1810.3	2004.4	1969.0	1936.7
70°	15117.3	10902.1	2406.9	814.1	804.0	1039.6	1412.8	1827.5	1971.1	1916.5	1873.0
72.5°	12629.4	8552.8	1531.1	724.1	715.0	994.1	1362.3	1816.3	1948.8	1924.5	1864.9
75°	9509.5	5969.8	972.9	626.0	636.1	911.2	1281.3	1756.7	1937.7	1861.8	1747.6
77.5°	5987.0	2947.0	756.5	532.0	547.1	785.8	1107.4	1534.2	1859.8	1814.3	1667.7
80°	2264.4	1196.4	591.6	431.8	445.0	610.8	908.2	1262.1	1712.2	1787.0	1724.3
82.5°	1042.7	748.4	444.0	346.9	351.9	445.0	677.6	934.5	1449.2	1640.4	1797.1
85°	608.8	490.5	296.3	231.6	240.7	262.9	381.3	570.4	939.5	1251.0	1399.7
87.5°	207.3	170.9	115.3	98.1	95.1	108.2	92.0	187.1	279.1	491.5	561.3
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)