

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: P510797

Luminaire Tested: **CST-CA8-330-750-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510797
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-330-750-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 49479 lumens
Efficiency: N/A
Efficacy: 149.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

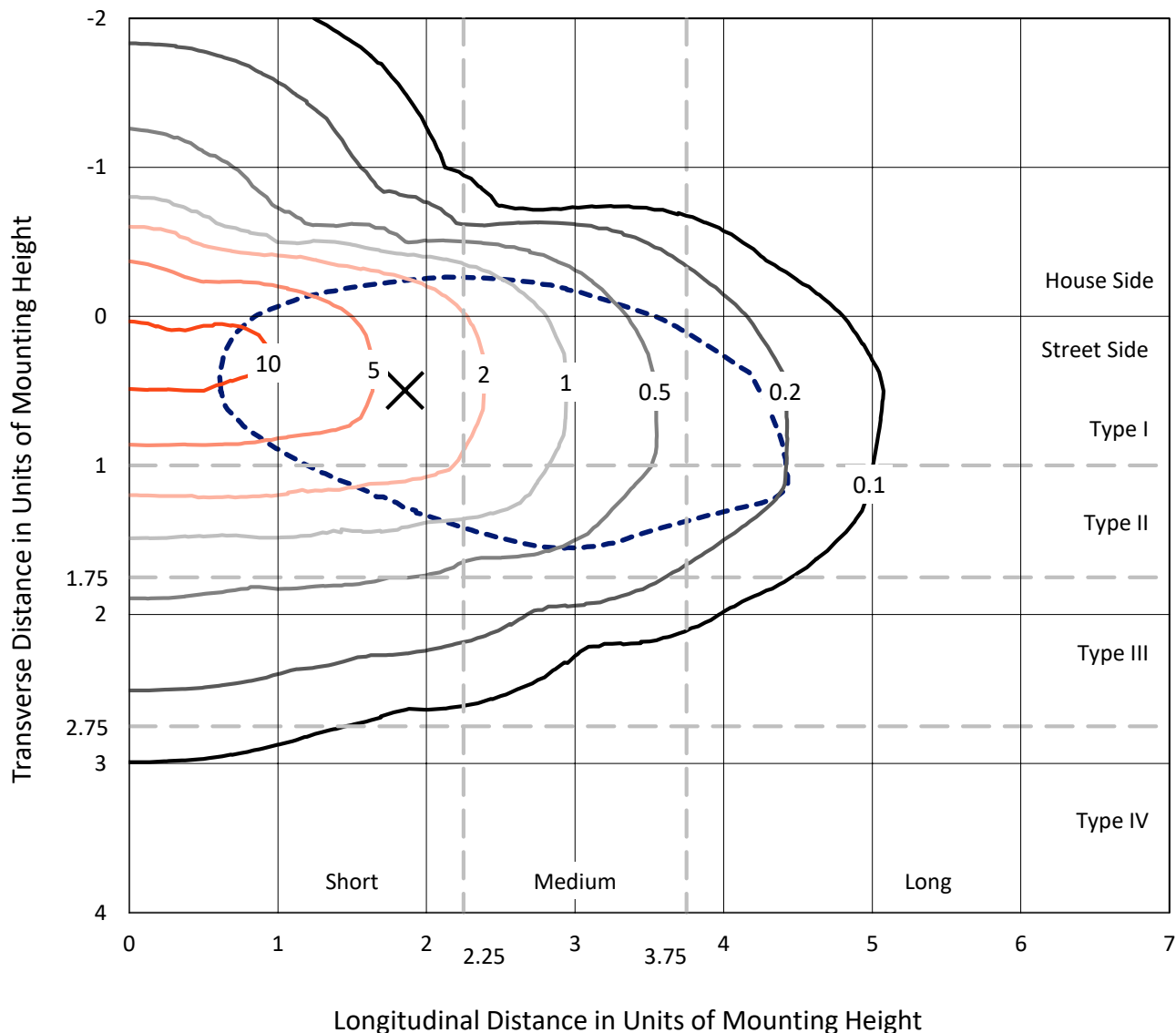
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

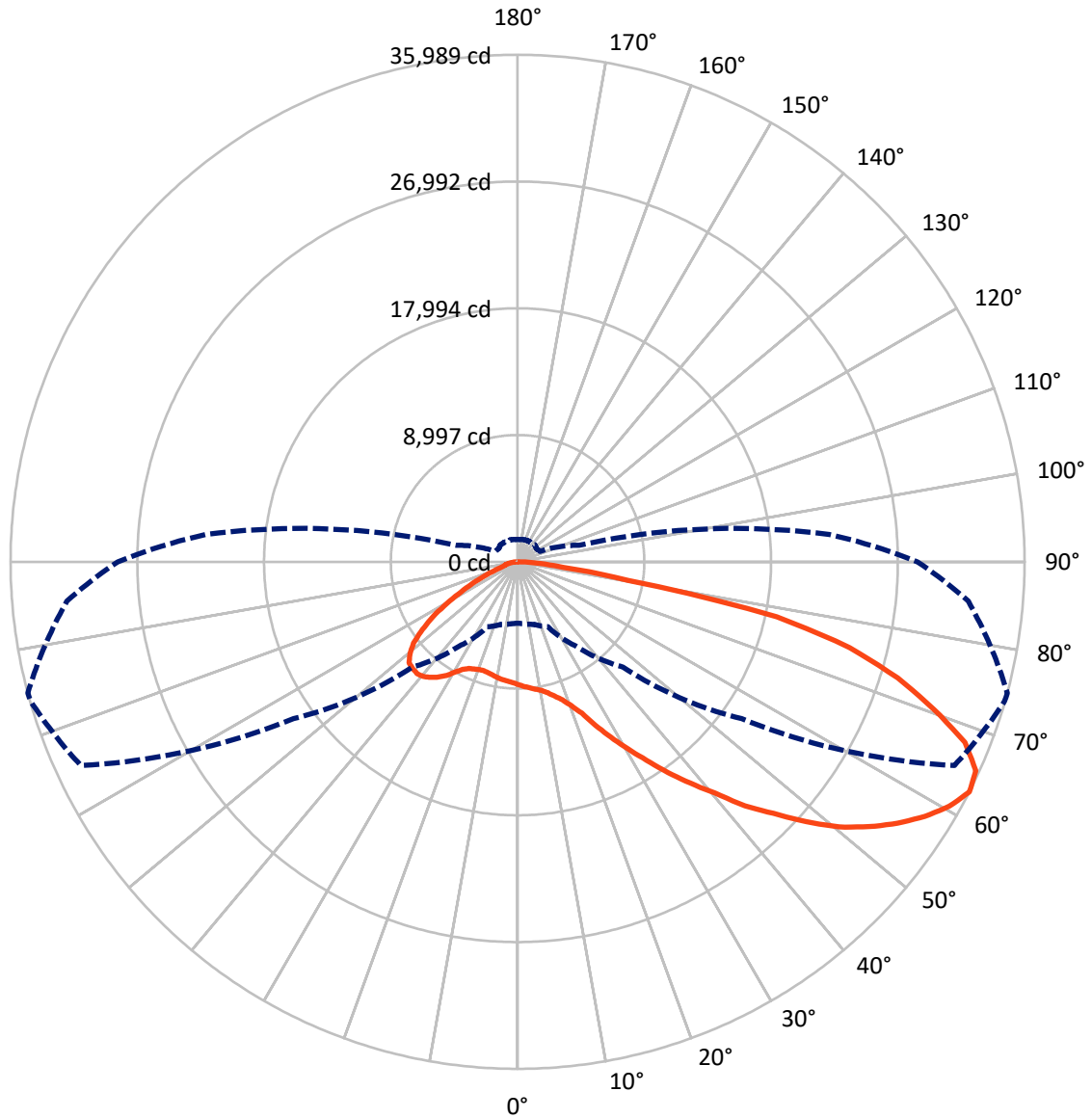
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.4 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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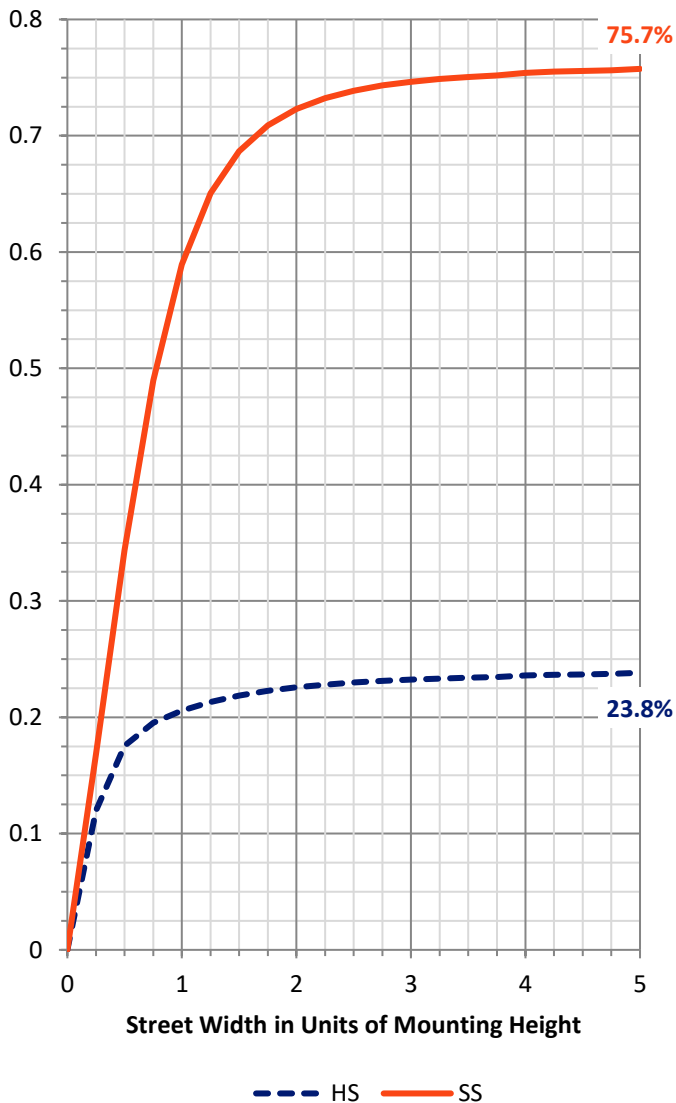
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11987.9	0.0	11987.9
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	37491.1	0.0	37491.1
	% Fixture	75.8	0.0	75.8
Total	Lumens	49479.0	0.0	49479.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	839.1	1.7
10°-20°	2546.6	5.1
20°-30°	4392.2	8.9
30°-40°	6476.4	13.1
40°-50°	8537.3	17.3
50°-60°	10047.6	20.3
60°-70°	9996.4	20.2
70°-80°	5829.6	11.8
80°-90°	814.0	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°	49479.0	100.0
0°-180°	49479.0	100.0

Coefficient of Utilization

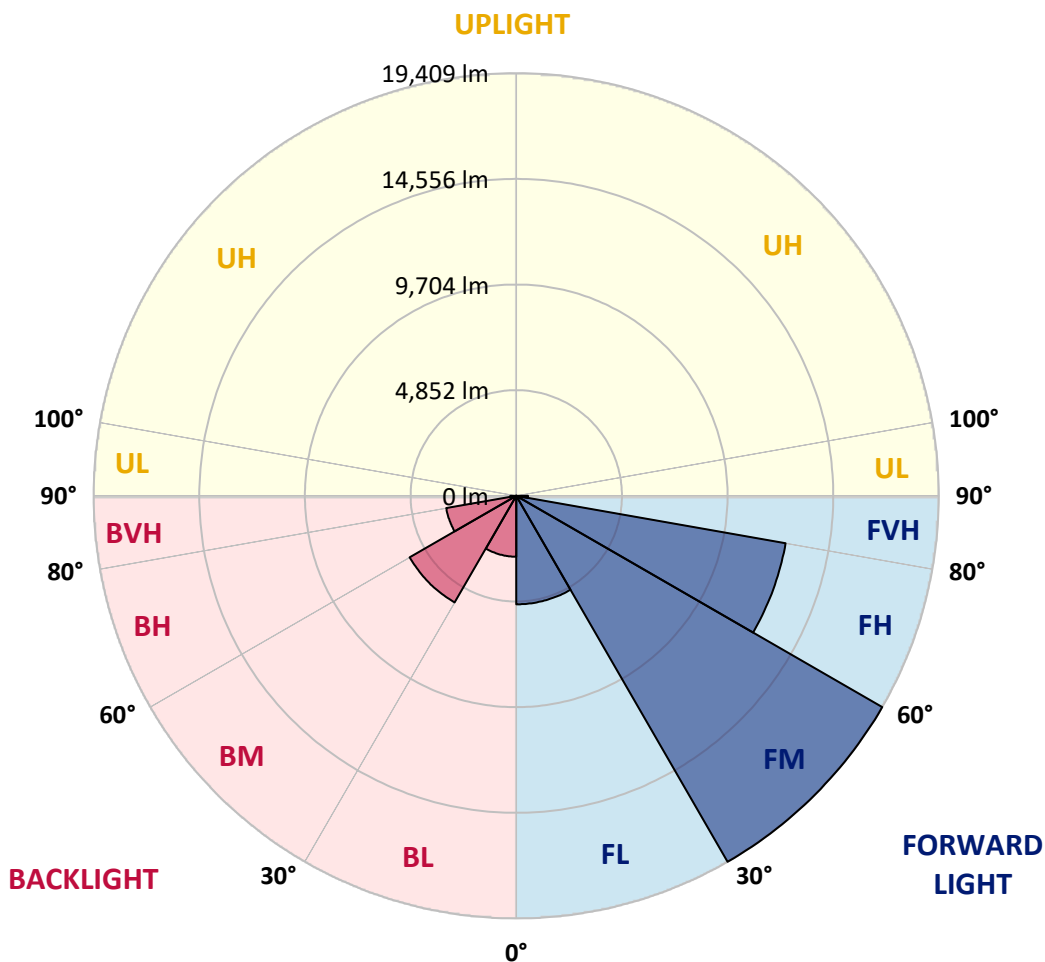


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4982.3	10.1			
FM (30°-60°)	19408.6	39.2			
FH (60°-80°)	12560.0	25.4			G5
FVH (80°-90°)	540.2	1.1			G4/750
BL (0°-30°)	2795.5	5.6	B4/5000		
BM (30°-60°)	5652.6	11.4	B4/8500		
BH (60°-80°)	3265.9	6.6	B4/5000		G4/5000
BVH (80°-90°)	273.8	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°	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0
2.5°	9199.6	9161.9	9167.0	9140.6	9100.8	9071.3	8993.9	8910.4	8860.5	8856.4	8785.2
5°	9661.9	9674.2	9677.2	9592.7	9509.2	9414.5	9296.4	9135.5	9004.1	8983.7	8845.2
7.5°	10083.5	10082.5	10076.4	10029.6	9990.9	9850.3	9614.1	9361.5	9147.7	9128.3	8903.3
10°	10515.3	10512.2	10451.1	10372.7	10285.2	10155.8	9953.2	9650.7	9304.5	9279.0	8957.3
12.5°	10985.8	10952.2	10913.5	10818.8	10714.9	10490.9	10278.0	9949.1	9587.6	9541.8	9053.0
15°	11373.8	11339.1	11285.2	11221.0	11112.0	10941.0	10714.9	10324.9	9936.9	9892.1	9267.8
17.5°	11757.7	11741.4	11702.7	11634.4	11550.9	11403.3	11195.5	10864.6	10356.4	10301.5	9625.3
20°	12072.3	12033.6	12005.1	12036.7	12043.8	11934.9	11820.8	11542.8	10982.7	10898.2	10064.2
22.5°	12251.6	12243.4	12399.2	12515.3	12562.1	12586.6	12550.9	12326.9	11819.8	11672.1	10675.2
25°	12421.6	12408.4	12620.2	12910.4	13186.4	13326.9	13421.6	13451.2	12985.8	12852.4	11657.9
27.5°	12426.7	12463.4	12770.9	13257.7	13678.2	14107.0	14561.1	14613.1	14204.7	14098.8	12776.0
30°	12454.2	12470.5	12775.0	13334.0	14209.8	14897.2	15488.8	15781.1	15428.8	15379.9	14007.2
32.5°	12104.9	12126.3	12599.8	13467.4	14611.0	15714.9	16500.0	16933.9	16846.3	16784.2	15320.8
35°	11741.4	11759.7	12309.6	13278.0	14909.4	16457.3	17413.5	18265.8	18425.7	18378.9	16786.2
37.5°	11171.1	11232.2	11808.6	13052.0	14961.3	17003.1	18285.2	19592.7	20075.4	19934.9	18336.1
40°	10552.0	10596.8	11267.8	12578.4	14903.3	17361.6	19141.6	21061.2	21645.7	21570.3	19874.8
42.5°	9769.9	9890.0	10562.1	11973.6	14604.9	17584.6	19933.9	22726.1	23575.4	23676.2	21288.2
45°	9111.0	9108.0	9732.2	11097.8	14064.2	17637.5	20663.0	24409.4	25651.8	25462.4	23156.9
47.5°	8336.1	8367.6	9019.4	10226.1	13266.8	17469.5	21231.2	26399.3	27656.9	27554.0	24689.5
50°	6542.8	6769.9	8004.1	9476.6	12188.4	17001.1	21704.7	28337.1	29537.8	29584.6	26082.6
52.5°	5640.5	5728.1	6409.4	8722.0	11231.2	16214.9	22224.1	30517.4	31355.5	31236.3	27664.0
55°	5279.0	5325.9	5652.8	7366.6	10305.5	14998.0	22473.6	32508.2	32773.0	32753.6	28965.4
57.5°	5017.3	5053.0	5285.1	6147.7	9289.2	13435.9	22262.8	33803.5	34215.0	34088.7	30193.6
60°	4639.5	4668.0	5014.3	5539.7	8243.4	11858.5	20966.4	34391.1	35260.8	35213.9	31279.1
62.5°	4355.4	4404.3	4597.8	5090.6	7350.3	10559.1	19421.6	34207.8	35947.1	35988.9	32108.0
65°	4055.0	4098.8	4262.7	4693.5	6540.7	9704.7	17755.6	33289.3	35631.5	35742.5	32242.4
67.5°	3684.3	3717.9	3912.4	4285.1	5594.7	8850.3	15876.8	31665.0	33879.9	34237.4	30904.4
70°	3217.9	3230.2	3468.4	3722.0	4645.6	7562.1	12624.3	29006.2	31345.3	31352.4	28377.9
72.5°	2561.1	2571.3	2634.4	2826.9	3489.8	5984.7	9279.0	24236.3	28263.8	28211.9	25221.0
75°	1741.3	1831.0	2049.9	2233.2	2517.3	4202.7	5770.9	16329.0	23946.1	24353.4	20717.0
77.5°	1375.8	1383.9	1474.5	1642.6	1888.0	3139.5	3234.2	9034.6	17852.4	18820.8	16284.2
80°	959.3	973.5	924.6	965.4	1316.7	2148.7	1890.0	3931.8	7445.0	7949.1	9777.0
82.5°	457.2	473.5	543.8	505.1	654.8	913.4	998.0	2031.6	3215.9	3300.4	3806.5
85°	301.4	301.4	302.4	286.2	381.9	398.2	453.2	866.6	1570.3	1623.2	1614.1
87.5°	96.7	106.9	103.9	121.2	146.6	132.4	138.5	271.9	538.7	533.6	446.0
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°	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0	8722.0
2.5°	8734.2	8692.5	8594.7	8509.2	8424.7	8360.5	8305.5	8232.2	8197.6	8166.0	8232.2
5°	8759.7	8685.4	8510.2	8335.1	8174.2	8056.0	7983.7	7930.8	7882.9	7882.9	7905.3
7.5°	8789.2	8688.4	8437.9	8189.4	7948.1	7813.7	7710.8	7643.6	7604.9	7606.9	7654.8
10°	8808.6	8653.8	8355.4	8020.4	7757.7	7541.8	7441.0	7344.2	7270.9	7227.1	7276.0
12.5°	8831.0	8642.6	8244.4	7866.6	7546.9	7302.5	7092.7	7020.4	6949.1	6894.1	6920.6
15°	8969.5	8685.4	8151.8	7671.1	7300.4	6995.9	6721.0	6588.6	6568.2	6530.6	6539.7
17.5°	9195.5	8800.4	8091.7	7431.8	7004.1	6644.6	6296.3	6125.3	6084.5	6065.2	6075.4
20°	9532.6	9019.4	8110.0	7263.8	6670.1	6267.8	5817.7	5617.1	5481.7	5489.8	5529.5
22.5°	10047.9	9372.7	8209.8	7079.4	6308.6	5781.1	5326.9	5054.0	4917.5	4888.0	4932.8
25°	10868.7	9942.0	8319.8	6903.3	5959.3	5255.6	4752.6	4457.2	4282.1	4270.9	4320.8
27.5°	11920.6	10814.7	8559.1	6750.5	5525.5	4624.2	4124.2	3871.7	3685.3	3662.9	3646.6
30°	12997.0	11784.1	8991.9	6518.3	5019.4	3972.5	3537.7	3340.1	3131.4	3046.9	3065.2
32.5°	14137.5	12687.4	9499.0	6355.4	4453.2	3399.2	3021.4	2833.0	2641.6	2519.4	2490.8
35°	15286.2	13585.6	9925.7	6112.0	3916.5	2944.0	2582.5	2388.0	2221.0	2121.2	2114.1
37.5°	16630.4	14520.4	10267.8	5853.4	3359.5	2587.6	2152.8	2040.7	1960.3	1872.7	1881.9
40°	17976.6	15610.0	10541.8	5425.7	2897.2	2204.7	1832.0	1854.4	1871.7	1798.4	1792.3
42.5°	19094.8	16525.5	10667.0	4871.7	2487.8	1871.7	1690.4	1792.3	1867.6	1819.8	1813.7
45°	20230.2	17296.4	10618.2	4184.3	2147.7	1712.8	1679.2	1783.1	1879.8	1868.6	1863.5
47.5°	21464.4	18306.6	10533.6	3401.2	1904.3	1697.6	1703.7	1752.6	1874.8	1895.1	1887.0
50°	22973.6	19236.3	10033.6	2648.7	1786.2	1722.0	1758.7	1733.2	1837.1	1878.8	1886.0
52.5°	24475.6	19952.2	9364.6	2295.3	1739.3	1745.4	1835.0	1748.5	1794.3	1831.0	1864.6
55°	25634.5	20681.3	8282.1	2082.5	1724.0	1756.6	1856.4	1781.1	1780.0	1780.0	1791.2
57.5°	26820.8	21657.9	7199.6	1945.0	1697.6	1768.8	1831.0	1787.2	1772.9	1752.6	1739.3
60°	27646.7	22019.4	5808.6	1854.4	1670.1	1751.5	1759.7	1753.6	1709.8	1690.4	1675.2
62.5°	28379.9	22215.9	4522.4	1750.5	1632.4	1710.8	1668.0	1654.8	1629.3	1582.5	1590.6
65°	28183.4	21794.4	3446.0	1633.4	1605.9	1661.9	1587.6	1556.0	1558.0	1509.2	1525.5
67.5°	26918.6	19903.3	2474.5	1454.2	1533.6	1565.2	1495.9	1472.5	1437.9	1413.4	1435.8
70°	24363.6	17643.6	1669.0	1206.7	1368.6	1436.9	1391.0	1350.3	1296.3	1280.0	1304.5
72.5°	20506.2	14728.1	1151.7	970.5	1181.3	1269.9	1252.5	1210.8	1172.1	1211.8	1259.7
75°	16846.3	10896.2	939.9	795.3	908.4	1058.0	1109.0	1121.2	1237.3	1624.2	1664.0
77.5°	12126.3	6754.6	845.2	646.6	725.1	846.2	948.1	989.8	1511.2	1447.1	1444.0
80°	7070.3	3936.9	644.6	510.2	586.6	620.2	741.3	1161.9	1303.5	1118.1	1090.6
82.5°	3226.1	1737.3	449.1	408.4	407.3	410.4	505.1	1118.1	1000.0	880.9	848.3
85°	1186.4	611.0	272.9	236.3	270.9	235.2	331.0	819.8	579.4	570.3	475.6
87.5°	292.3	125.3	92.7	77.4	63.1	60.1	100.8	269.9	141.5	129.3	124.2
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)