

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: P510507

Luminaire Tested: **CST-CA10-310-760-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510507
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-CA10-310-760-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47939 lumens
Efficiency: N/A
Efficacy: 153.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

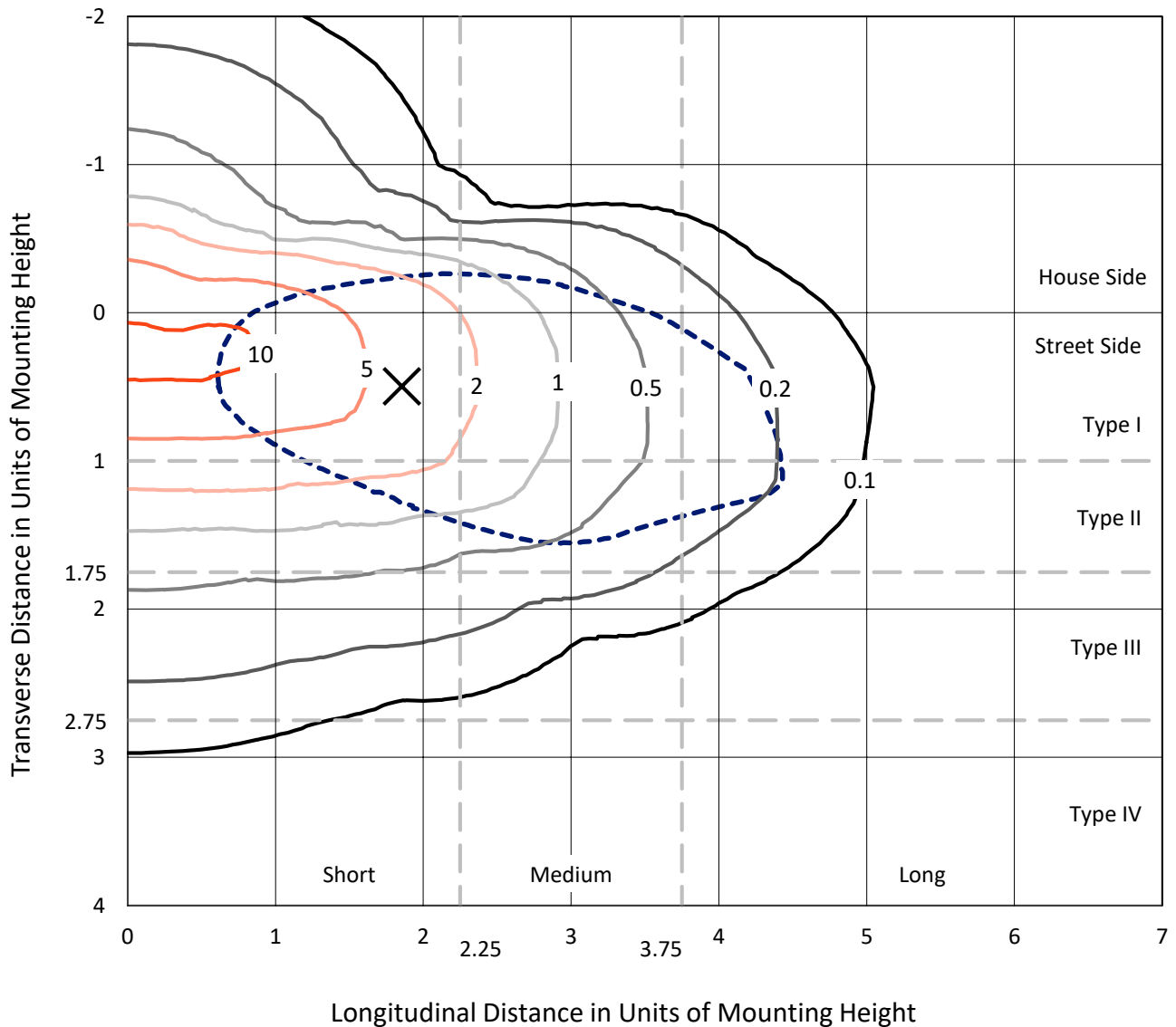
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: CST-CA10-310-760-U-T2

Iso-Footcandle Lines of Horizontal Illumination

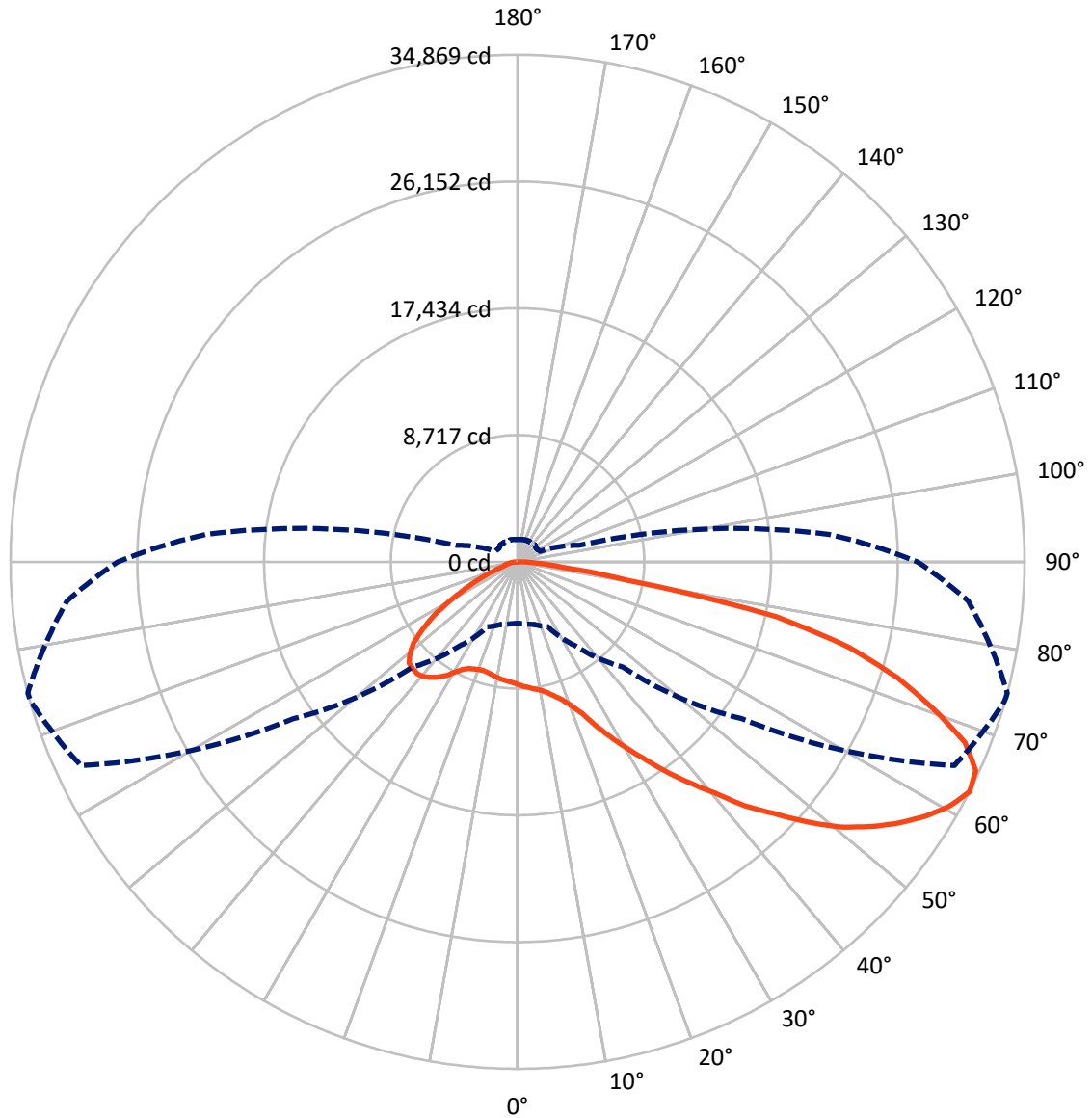
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11 fc
 Type II - Short - N/A

REPORT NUMBER: P510507
CATALOG NUMBER: CST-CA10-310-760-U-T2

Luminous Intensity Polar Plot



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

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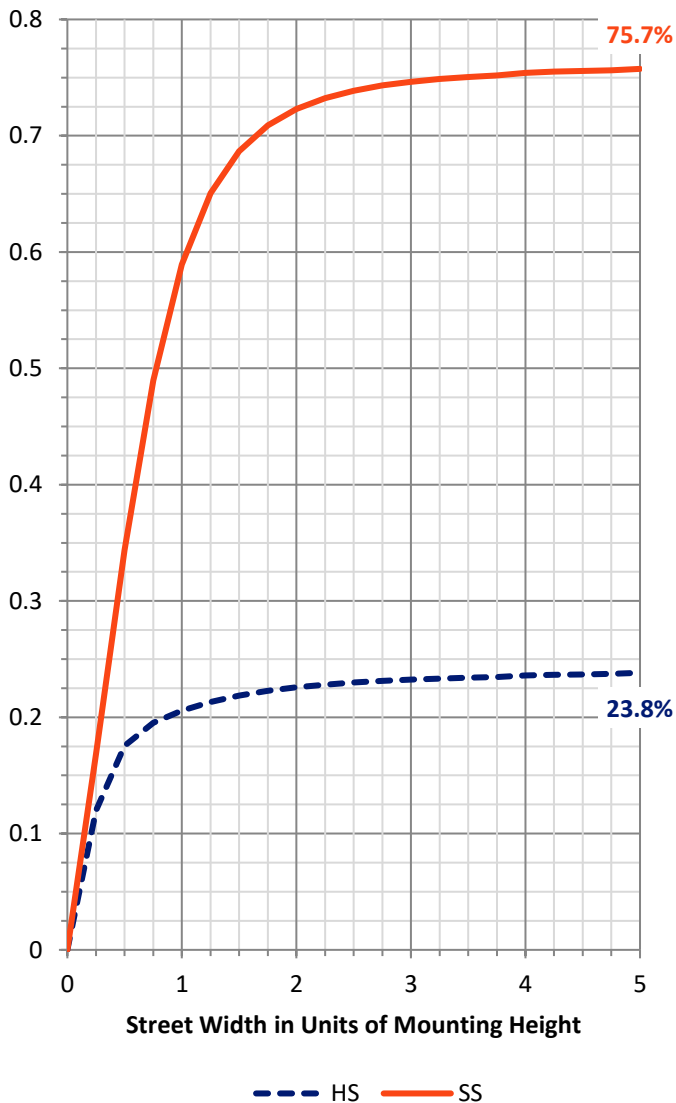
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11614.8	0.0	11614.8
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	36324.2	0.0	36324.2
	% Fixture	75.8	0.0	75.8
Total	Lumens	47939.0	0.0	47939.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	813.0	1.7
10°-20°	2467.3	5.1
20°-30°	4255.5	8.9
30°-40°	6274.8	13.1
40°-50°	8271.5	17.3
50°-60°	9734.9	20.3
60°-70°	9685.2	20.2
70°-80°	5648.2	11.8
80°-90°	788.6	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°	47939.0	100.0
0°-180°	47939.0	100.0

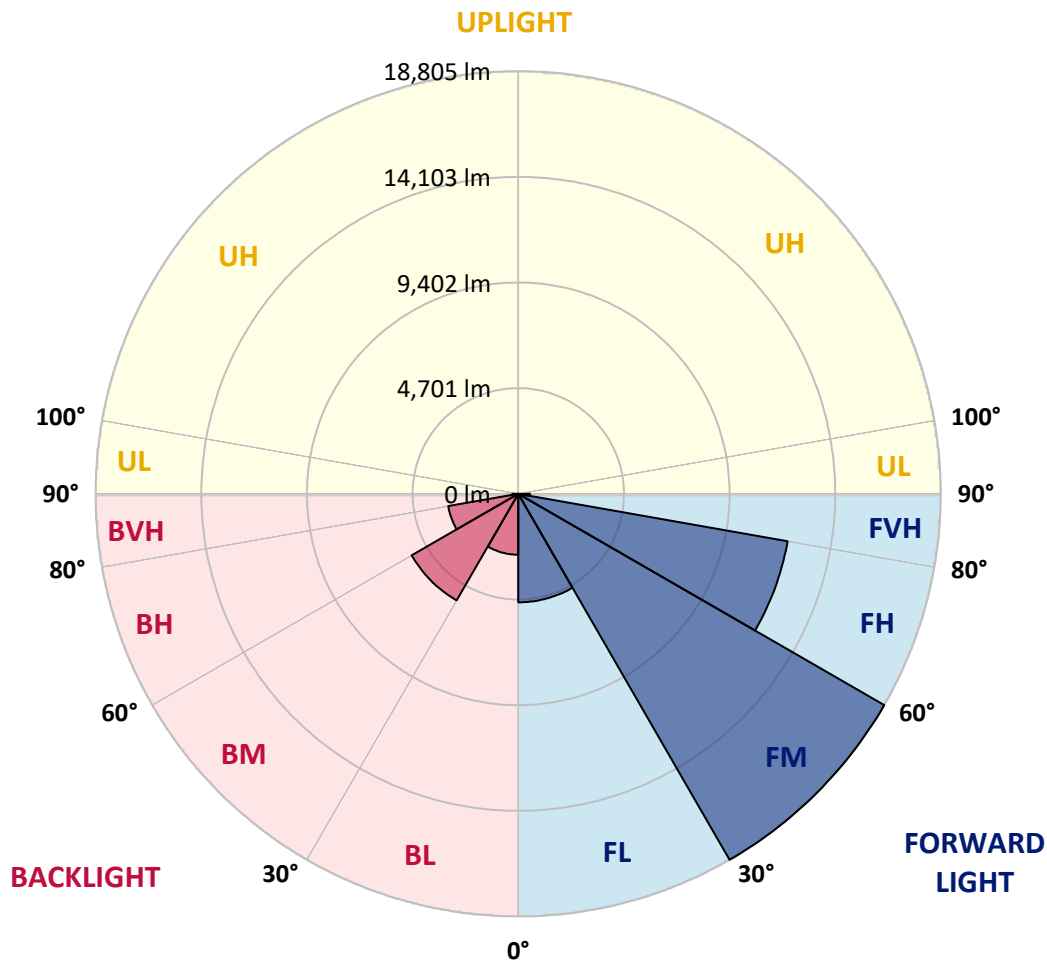


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 CATALOG NUMBER: CST-CA10-310-760-U-T2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4827.3	10.1			
FM (30°-60°)	18804.5	39.2			
FH (60°-80°)	12169.1	25.4			G5
FVH (80°-90°)	523.3	1.1			G4/750
BL (0°-30°)	2708.5	5.6	B4/5000		
BM (30°-60°)	5476.7	11.4	B4/8500		
BH (60°-80°)	3164.3	6.6	B4/5000		G4/5000
BVH (80°-90°)	265.3	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°	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6
2.5°	8913.3	8876.8	8881.7	8856.1	8817.6	8789.0	8714.0	8633.1	8584.7	8580.8	8511.7
5°	9361.2	9373.1	9376.0	9294.1	9213.2	9121.5	9007.0	8851.1	8723.8	8704.1	8569.9
7.5°	9769.7	9768.7	9762.8	9717.4	9679.9	9543.7	9314.8	9070.2	8863.0	8844.2	8626.2
10°	10188.0	10185.1	10125.9	10049.9	9965.0	9839.7	9643.4	9350.4	9014.9	8990.2	8678.5
12.5°	10643.8	10611.3	10573.8	10482.0	10381.4	10164.3	9958.1	9639.4	9289.2	9244.8	8771.2
15°	11019.8	10986.2	10933.9	10871.8	10766.2	10600.4	10381.4	10003.5	9627.6	9584.2	8979.4
17.5°	11391.7	11375.9	11338.4	11272.3	11191.4	11048.4	10847.1	10526.4	10034.1	9980.8	9325.7
20°	11696.6	11659.1	11631.5	11662.1	11669.0	11563.4	11452.9	11183.5	10640.9	10559.0	9750.9
22.5°	11870.2	11862.3	12013.3	12125.8	12171.2	12194.8	12160.3	11943.2	11451.9	11308.8	10342.9
25°	12035.0	12022.2	12227.4	12508.6	12776.0	12912.1	13003.9	13032.5	12581.6	12452.4	11295.0
27.5°	12039.9	12075.5	12373.4	12845.0	13252.5	13667.9	14107.9	14158.2	13762.6	13660.0	12378.4
30°	12066.6	12082.4	12377.4	12919.0	13767.5	14433.5	15006.8	15289.9	14948.5	14901.2	13571.2
32.5°	11728.2	11748.9	12207.7	13048.3	14156.3	15225.8	15986.5	16406.8	16321.9	16261.8	14844.0
35°	11375.9	11393.7	11926.5	12864.8	14445.4	15945.1	16871.5	17697.3	17852.2	17806.8	16263.7
37.5°	10823.4	10882.6	11441.0	12645.7	14495.7	16473.9	17716.1	18982.9	19450.6	19314.4	17765.4
40°	10223.5	10267.0	10917.1	12186.9	14439.4	16821.2	18545.8	20405.6	20972.0	20899.0	19256.2
42.5°	9465.8	9582.2	10233.4	11600.9	14150.4	17037.3	19313.4	22018.8	22841.6	22939.3	20625.7
45°	8827.4	8824.5	9429.3	10752.4	13626.5	17088.6	20019.9	23649.7	24853.4	24669.9	22436.1
47.5°	8076.6	8107.2	8738.6	9907.8	12853.9	16925.8	20570.4	25577.6	26796.1	26696.4	23921.0
50°	6339.1	6559.2	7755.0	9181.6	11809.1	16471.9	21029.2	27455.2	28618.4	28663.8	25270.7
52.5°	5465.0	5549.8	6209.9	8450.6	10881.6	15710.2	21532.4	29567.6	30379.6	30264.1	26803.0
55°	5114.7	5160.1	5476.8	7137.3	9984.8	14531.2	21774.1	31496.4	31753.0	31734.2	28063.9
57.5°	4861.2	4895.7	5120.6	5956.3	9000.1	13017.7	21569.9	32751.4	33150.0	33027.7	29253.8
60°	4495.1	4522.7	4858.2	5367.3	7986.8	11489.4	20313.9	33320.7	34163.3	34117.9	30305.6
62.5°	4219.8	4267.2	4454.7	4932.2	7121.6	10230.4	18817.2	33143.1	34828.3	34868.8	31108.7
65°	3928.8	3971.2	4130.1	4547.4	6337.2	9402.7	17203.0	32253.2	34522.4	34630.0	31238.9
67.5°	3569.7	3602.2	3790.7	4151.8	5420.6	8574.9	15382.7	30679.5	32825.4	33171.7	29942.5
70°	3117.8	3129.6	3360.5	3606.2	4501.0	7326.8	12231.3	28103.4	30369.7	30376.6	27494.6
72.5°	2481.4	2491.3	2552.4	2738.9	3381.2	5798.5	8990.2	23482.0	27384.1	27333.8	24436.1
75°	1687.2	1774.0	1986.1	2163.7	2439.0	4071.9	5591.3	15820.7	23200.8	23595.4	20072.2
77.5°	1332.9	1340.8	1428.7	1591.4	1829.2	3041.8	3133.6	8753.4	17296.7	18235.0	15777.3
80°	929.4	943.2	895.9	935.3	1275.7	2081.8	1831.2	3809.4	7213.3	7701.7	9472.7
82.5°	443.0	458.8	526.9	489.4	634.4	885.0	966.9	1968.3	3115.8	3197.7	3688.1
85°	292.0	292.0	293.0	277.2	370.0	385.8	439.1	839.6	1521.4	1572.7	1563.8
87.5°	93.7	103.6	100.6	117.4	142.1	128.3	134.2	263.4	521.9	517.0	432.1
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°	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6	8450.6
2.5°	8462.4	8421.9	8327.2	8244.3	8162.5	8100.3	8047.0	7976.0	7942.4	7911.8	7976.0
5°	8487.1	8415.0	8245.3	8075.6	7919.7	7805.3	7735.2	7683.9	7637.6	7637.6	7659.3
7.5°	8515.7	8418.0	8175.3	7934.5	7700.7	7570.5	7470.8	7405.7	7368.2	7370.2	7416.6
10°	8534.4	8384.4	8095.4	7770.8	7516.2	7307.0	7209.4	7115.6	7044.6	7002.2	7049.5
12.5°	8556.1	8373.6	7987.8	7621.8	7312.0	7075.2	6871.9	6801.9	6732.8	6679.5	6705.2
15°	8690.3	8415.0	7898.0	7432.3	7073.2	6778.2	6511.8	6383.5	6363.8	6327.3	6336.2
17.5°	8909.3	8526.5	7839.8	7200.5	6786.1	6437.8	6100.4	5934.6	5895.2	5876.4	5886.3
20°	9235.9	8738.6	7857.6	7037.7	6462.5	6072.8	5636.7	5442.3	5311.1	5319.0	5357.4
22.5°	9735.2	9081.0	7954.3	6859.1	6112.2	5601.1	5161.1	4896.7	4764.5	4735.9	4779.3
25°	10530.4	9632.5	8060.8	6688.4	5773.8	5092.0	4604.6	4318.5	4148.8	4138.0	4186.3
27.5°	11549.6	10478.1	8292.7	6540.4	5353.5	4480.3	3995.9	3751.2	3570.6	3548.9	3533.1
30°	12592.5	11417.4	8712.0	6315.5	4863.1	3848.9	3427.6	3236.2	3033.9	2952.0	2969.8
32.5°	13697.5	12292.5	9203.4	6157.6	4314.6	3293.4	2927.4	2744.8	2559.3	2440.9	2413.3
35°	14810.4	13162.7	9616.8	5921.8	3794.6	2852.4	2502.1	2313.7	2151.9	2055.2	2048.3
37.5°	16112.8	14068.5	9948.3	5671.2	3254.9	2507.0	2085.8	1977.2	1899.3	1814.4	1823.3
40°	17417.1	15124.2	10213.7	5256.8	2807.0	2136.1	1775.0	1796.7	1813.4	1742.4	1736.5
42.5°	18500.4	16011.2	10335.0	4720.1	2410.4	1813.4	1637.8	1736.5	1809.5	1763.1	1757.2
45°	19600.5	16758.0	10287.7	4054.1	2080.8	1659.5	1627.0	1727.6	1821.3	1810.5	1805.5
47.5°	20796.3	17736.8	10205.8	3295.4	1845.0	1644.7	1650.6	1698.0	1816.4	1836.1	1828.2
50°	22258.5	18637.6	9721.3	2566.2	1730.6	1668.4	1703.9	1679.3	1779.9	1820.3	1827.3
52.5°	23713.8	19331.2	9073.1	2223.9	1685.2	1691.1	1777.9	1694.1	1738.5	1774.0	1806.5
55°	24836.6	20037.6	8024.3	2017.7	1670.4	1701.9	1798.6	1725.6	1724.6	1724.6	1735.5
57.5°	25986.1	20983.8	6975.5	1884.5	1644.7	1713.8	1774.0	1731.5	1717.7	1698.0	1685.2
60°	26786.2	21334.1	5627.8	1796.7	1618.1	1697.0	1704.9	1699.0	1656.6	1637.8	1623.0
62.5°	27496.6	21524.5	4381.7	1696.0	1581.6	1657.6	1616.1	1603.3	1578.6	1533.2	1541.1
65°	27306.2	21116.0	3338.8	1582.6	1555.9	1610.2	1538.2	1507.6	1509.6	1462.2	1478.0
67.5°	26080.8	19283.8	2397.5	1408.9	1485.9	1516.5	1449.4	1426.7	1393.1	1369.5	1391.2
70°	23605.3	17094.5	1617.1	1169.2	1326.0	1392.1	1347.7	1308.3	1256.0	1240.2	1263.9
72.5°	19867.9	14269.7	1115.9	940.3	1144.5	1230.3	1213.6	1173.1	1135.6	1174.1	1220.5
75°	16321.9	10557.0	910.7	770.6	880.1	1025.1	1074.4	1086.3	1198.8	1573.7	1612.2
77.5°	11748.9	6544.4	818.9	626.5	702.5	819.9	918.6	959.0	1464.2	1402.0	1399.1
80°	6850.2	3814.3	624.5	494.3	568.3	600.9	718.3	1125.8	1262.9	1083.3	1056.7
82.5°	3125.7	1683.2	435.1	395.6	394.7	397.6	489.4	1083.3	968.9	853.4	821.9
85°	1149.4	592.0	264.4	228.9	262.4	227.9	320.7	794.2	561.4	552.5	460.8
87.5°	283.2	121.4	89.8	75.0	61.2	58.2	97.7	261.5	137.1	125.3	120.4
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)