

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: P510487

Luminaire Tested: **CST-CA10-310-740-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510487
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-CA10-310-740-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48095 lumens
Efficiency: N/A
Efficacy: 154.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

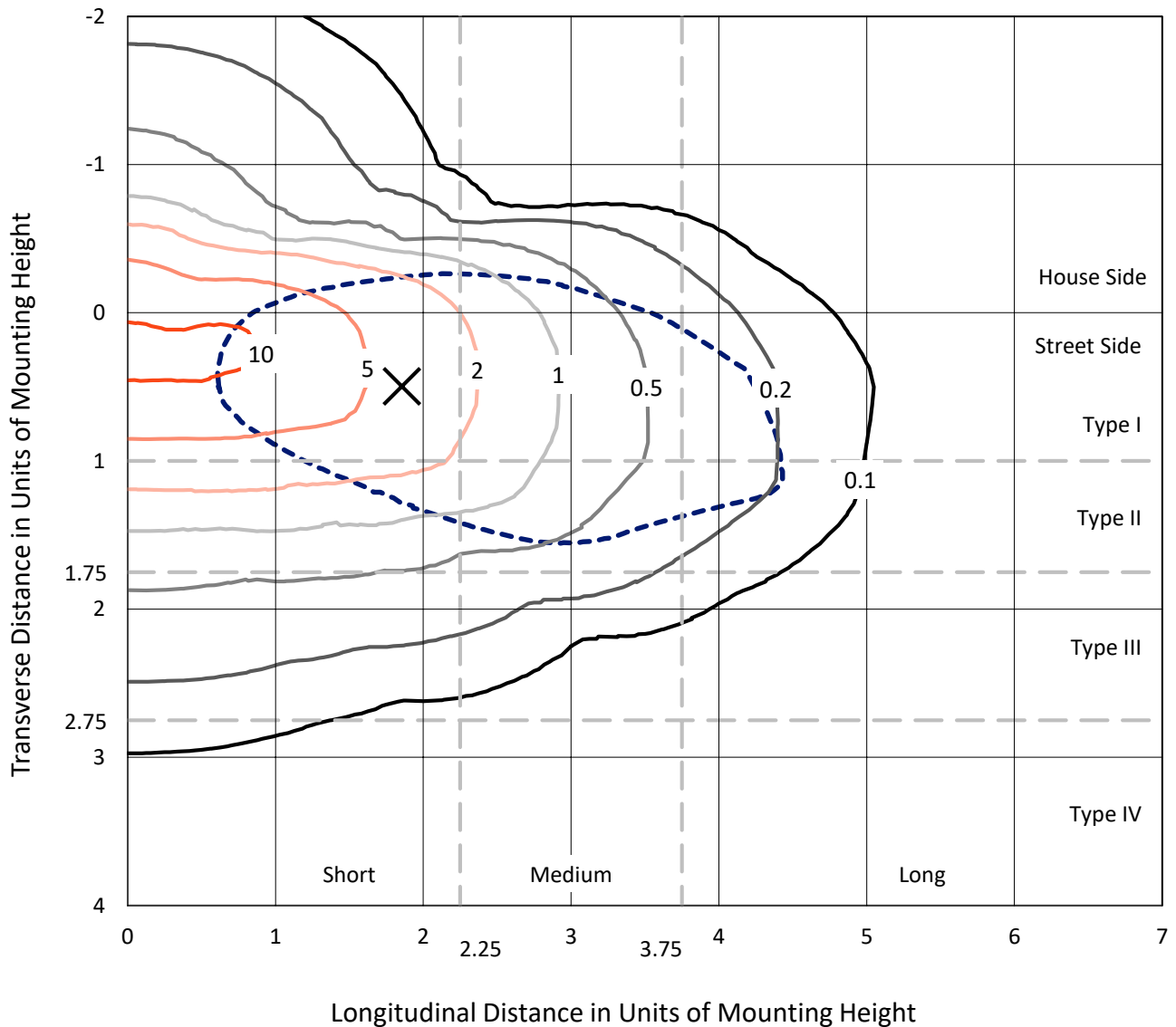
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

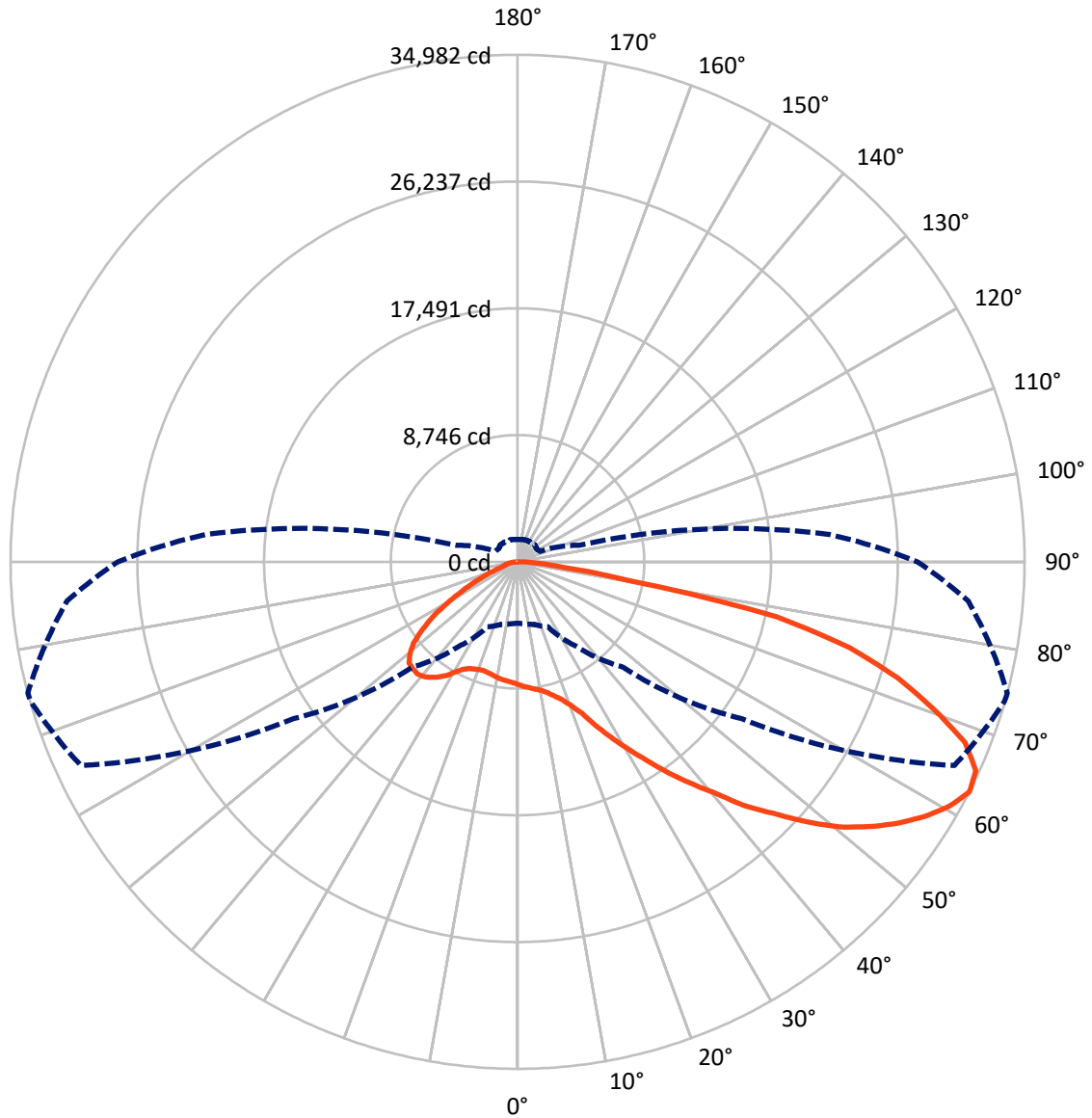
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.1 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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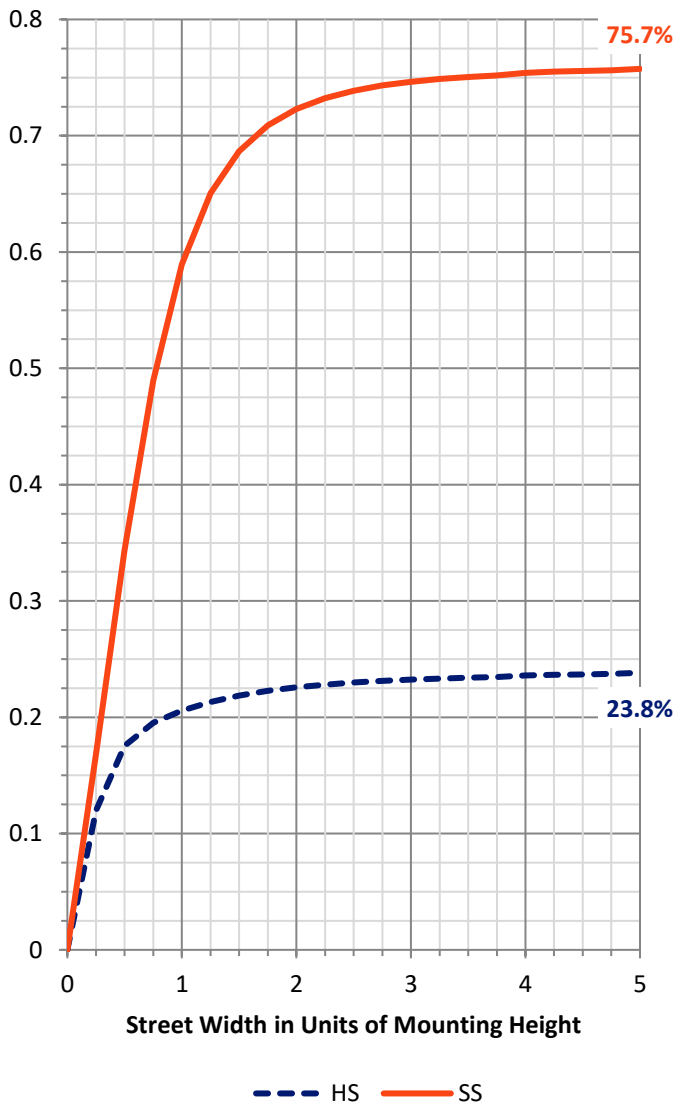
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11652.6	0.0	11652.6
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	36442.4	0.0	36442.4
	% Fixture	75.8	0.0	75.8
Total	Lumens	48095.0	0.0	48095.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	815.6	1.7
10°-20°	2475.3	5.1
20°-30°	4269.3	8.9
30°-40°	6295.2	13.1
40°-50°	8298.5	17.3
50°-60°	9766.5	20.3
60°-70°	9716.7	20.2
70°-80°	5666.5	11.8
80°-90°	791.2	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°	48095.0	100.0
0°-180°	48095.0	100.0

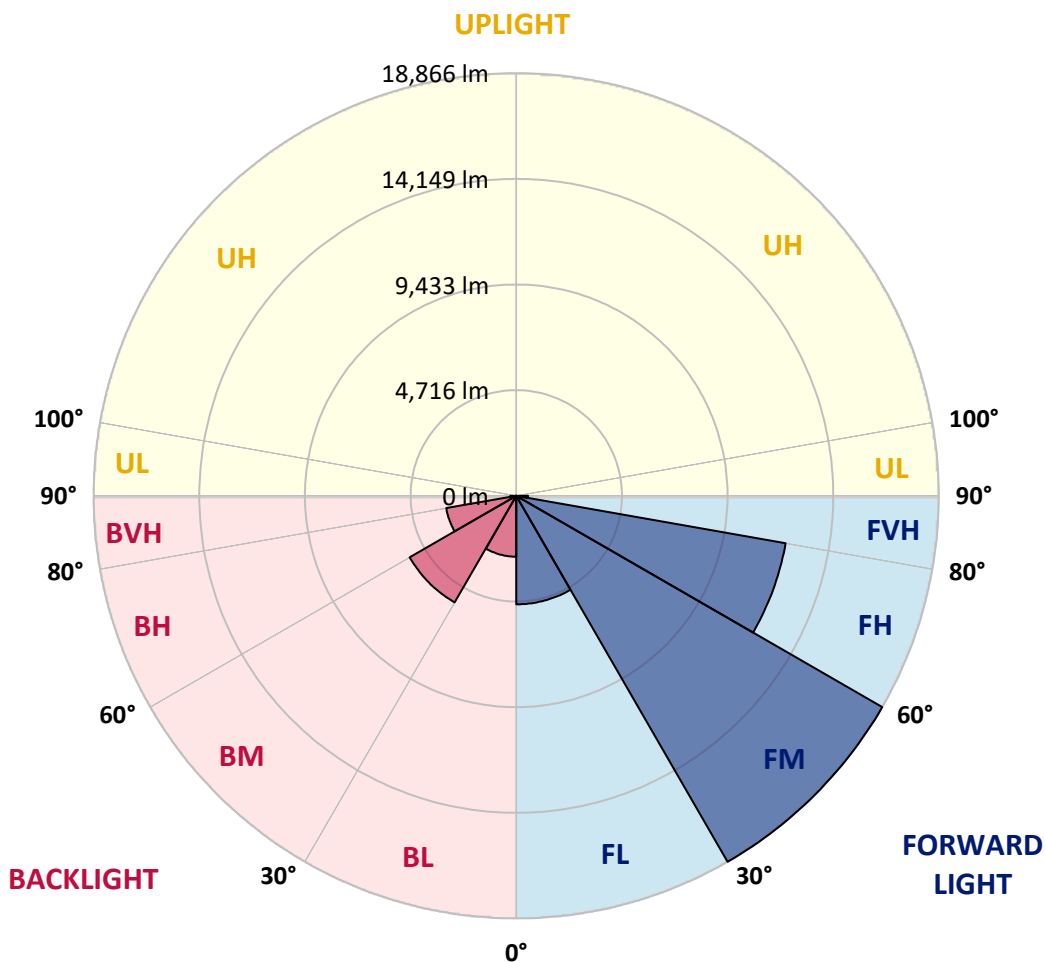


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4843.0	10.1			
FM (30°-60°)	18865.7	39.2			
FH (60°-80°)	12208.7	25.4			G5
FVH (80°-90°)	525.0	1.1			G4/750
BL (0°-30°)	2717.3	5.6	B4/5000		
BM (30°-60°)	5494.5	11.4	B4/8500		
BH (60°-80°)	3174.6	6.6	B4/5000		G4/5000
BVH (80°-90°)	266.2	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1
2.5°	8942.3	8905.7	8910.6	8884.9	8846.3	8817.6	8742.3	8661.2	8612.7	8608.7	8539.4
5°	9391.7	9403.6	9406.5	9324.4	9243.2	9151.1	9036.3	8879.9	8752.2	8732.4	8597.8
7.5°	9801.5	9800.5	9794.5	9749.0	9711.4	9574.8	9345.2	9099.7	8891.8	8873.0	8654.2
10°	10221.2	10218.2	10158.8	10082.6	9997.5	9871.8	9674.8	9380.8	9044.2	9019.5	8706.7
12.5°	10678.5	10645.8	10608.2	10516.1	10415.2	10197.4	9990.5	9670.8	9319.4	9274.9	8799.8
15°	11055.6	11022.0	10969.5	10907.1	10801.2	10634.9	10415.2	10036.1	9658.9	9615.4	9008.6
17.5°	11428.8	11413.0	11375.3	11309.0	11227.8	11084.3	10882.4	10560.7	10066.8	10013.3	9356.0
20°	11734.7	11697.0	11669.3	11700.0	11706.9	11601.0	11490.2	11219.9	10675.5	10593.4	9782.7
22.5°	11908.9	11900.9	12052.4	12165.2	12210.8	12234.5	12199.9	11982.1	11489.2	11345.6	10376.6
25°	12074.2	12061.3	12267.2	12549.3	12817.5	12954.1	13046.2	13074.9	12622.5	12492.9	11331.8
27.5°	12079.1	12114.8	12413.7	12886.8	13295.6	13712.4	14153.8	14204.3	13807.4	13704.4	12418.6
30°	12105.8	12121.7	12417.6	12961.1	13812.3	14480.5	15055.6	15339.7	14997.2	14949.7	13615.4
32.5°	11766.3	11787.1	12247.4	13090.7	14202.3	15275.3	16038.5	16460.2	16375.1	16314.7	14892.3
35°	11413.0	11430.8	11965.3	12906.6	14492.4	15996.9	16926.4	17754.9	17910.3	17864.8	16316.7
37.5°	10858.6	10918.0	11478.3	12686.9	14542.9	16527.5	17773.7	19044.7	19513.9	19377.3	17823.2
40°	10256.8	10300.4	10952.7	12226.6	14486.4	16875.9	18606.2	20472.0	21040.2	20967.0	19318.9
42.5°	9496.6	9613.4	10266.7	11638.6	14196.4	17092.7	19376.3	22090.4	22916.0	23014.0	20692.8
45°	8856.2	8853.2	9460.0	10787.4	13670.8	17144.2	20085.0	23726.7	24934.3	24750.2	22509.1
47.5°	8102.9	8133.6	8767.1	9940.1	12895.7	16980.8	20637.3	25660.8	26883.3	26783.3	23998.9
50°	6359.8	6580.5	7780.2	9211.5	11847.5	16525.5	21097.6	27544.5	28711.5	28757.1	25353.0
52.5°	5482.8	5567.9	6230.1	8478.1	10917.0	15761.4	21602.4	29663.8	30478.4	30362.6	26890.2
55°	5131.4	5176.9	5494.6	7160.6	10017.3	14578.5	21845.0	31598.9	31856.3	31837.5	28155.2
57.5°	4877.0	4911.6	5137.3	5975.7	9029.4	13060.1	21640.1	32858.0	33257.9	33135.2	29349.0
60°	4509.7	4537.5	4874.0	5384.8	8012.8	11526.8	20380.0	33429.2	34274.5	34229.0	30404.2
62.5°	4233.6	4281.1	4469.2	4948.3	7144.7	10263.7	18878.4	33251.0	34941.6	34982.2	31209.9
65°	3941.6	3984.1	4143.5	4562.2	6357.8	9433.3	17259.0	32358.1	34634.8	34742.7	31340.6
67.5°	3581.3	3613.9	3803.0	4165.3	5438.2	8602.8	15432.7	30779.3	32932.3	33279.7	30039.9
70°	3127.9	3139.8	3371.4	3617.9	4515.7	7350.6	12271.1	28194.8	30468.5	30475.4	27584.1
72.5°	2489.5	2499.4	2560.7	2747.8	3392.2	5817.3	9019.5	23558.4	27473.2	27422.8	24515.6
75°	1692.6	1779.7	1992.6	2170.7	2446.9	4085.1	5609.5	15872.2	23276.3	23672.2	20137.5
77.5°	1337.3	1345.2	1433.3	1596.6	1835.2	3051.7	3143.8	8781.9	17353.0	18294.4	15828.7
80°	932.4	946.3	898.8	938.4	1279.9	2088.6	1837.2	3821.8	7236.8	7726.8	9503.5
82.5°	444.4	460.3	528.6	491.0	636.5	887.9	970.1	1974.7	3125.9	3208.1	3700.1
85°	293.0	293.0	294.0	278.1	371.2	387.0	440.5	842.4	1526.3	1577.8	1568.9
87.5°	94.0	103.9	101.0	117.8	142.5	128.7	134.6	264.3	523.6	518.7	433.6
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°	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1	8478.1
2.5°	8489.9	8449.3	8354.3	8271.2	8189.0	8126.7	8073.2	8001.9	7968.3	7937.6	8001.9
5°	8514.7	8442.4	8272.2	8101.9	7945.5	7830.7	7760.4	7708.9	7662.4	7662.4	7684.2
7.5°	8543.4	8445.4	8201.9	7960.4	7725.8	7595.1	7495.1	7429.8	7392.2	7394.2	7440.7
10°	8562.2	8411.7	8121.7	7796.0	7540.7	7330.8	7232.8	7138.8	7067.5	7025.0	7072.5
12.5°	8584.0	8400.8	8013.8	7646.6	7335.8	7098.2	6894.3	6824.0	6754.7	6701.3	6727.0
15°	8718.6	8442.4	7923.7	7456.5	7096.2	6800.3	6533.0	6404.3	6384.5	6347.9	6356.8
17.5°	8938.3	8554.3	7865.3	7223.9	6808.2	6458.8	6120.2	5953.9	5914.3	5895.5	5905.4
20°	9266.0	8767.1	7883.2	7060.6	6483.5	6092.5	5655.0	5460.0	5328.4	5336.3	5374.9
22.5°	9766.8	9110.6	7980.2	6881.4	6132.1	5619.4	5177.9	4912.6	4780.0	4751.3	4794.8
25°	10564.7	9663.9	8087.1	6710.2	5792.6	5108.6	4619.6	4332.6	4162.3	4151.4	4199.9
27.5°	11587.2	10512.2	8319.7	6561.7	5370.9	4494.9	4008.9	3763.4	3582.3	3560.5	3544.6
30°	12633.4	11454.5	8740.4	6336.0	4879.0	3861.4	3438.7	3246.7	3043.8	2961.6	2979.4
32.5°	13742.1	12332.5	9233.3	6177.6	4328.6	3304.1	2936.9	2753.8	2567.7	2448.9	2421.2
35°	14858.6	13205.6	9648.1	5941.1	3807.0	2861.7	2510.3	2321.2	2158.9	2061.9	2054.9
37.5°	16165.2	14114.2	9980.6	5689.6	3265.5	2515.2	2092.5	1983.7	1905.5	1820.3	1829.2
40°	17473.8	15173.4	10246.9	5273.9	2816.1	2143.0	1780.7	1802.5	1819.3	1748.1	1742.1
42.5°	18560.6	16063.3	10368.7	4735.4	2418.2	1819.3	1643.1	1742.1	1815.4	1768.9	1762.9
45°	19664.3	16812.6	10321.1	4067.3	2087.6	1664.9	1632.3	1733.2	1827.3	1816.4	1811.4
47.5°	20864.0	17794.5	10239.0	3306.1	1851.0	1650.1	1656.0	1703.5	1822.3	1842.1	1834.2
50°	22331.0	18698.2	9753.0	2574.6	1736.2	1673.8	1709.5	1684.7	1785.7	1826.3	1833.2
52.5°	23791.0	19394.1	9102.6	2231.1	1690.7	1696.6	1783.7	1699.6	1744.1	1779.7	1812.4
55°	24917.4	20102.8	8050.4	2024.2	1675.8	1707.5	1804.5	1731.2	1730.3	1730.3	1741.1
57.5°	26070.6	21052.1	6998.2	1890.6	1650.1	1719.4	1779.7	1737.2	1723.3	1703.5	1690.7
60°	26873.4	21403.5	5646.1	1802.5	1623.4	1702.5	1710.5	1704.5	1662.0	1643.1	1628.3
62.5°	27586.1	21594.5	4395.9	1701.5	1586.7	1662.9	1621.4	1608.5	1583.8	1538.2	1546.1
65°	27395.0	21184.7	3349.6	1587.7	1561.0	1615.4	1543.2	1512.5	1514.5	1467.0	1482.8
67.5°	26165.6	19346.6	2405.3	1413.5	1490.7	1521.4	1454.1	1431.3	1397.7	1373.9	1395.7
70°	23682.1	17150.1	1622.4	1173.0	1330.4	1396.7	1352.1	1312.5	1260.1	1244.2	1268.0
72.5°	19932.6	14316.2	1119.5	943.3	1148.2	1234.3	1217.5	1176.9	1139.3	1177.9	1224.4
75°	16375.1	10591.4	913.6	773.1	882.9	1028.5	1077.9	1089.8	1202.7	1578.8	1617.4
77.5°	11787.1	6565.7	821.6	628.6	704.8	822.6	921.5	962.1	1468.9	1406.6	1403.6
80°	6872.5	3826.8	626.6	495.9	570.2	602.8	720.6	1129.4	1267.0	1086.9	1060.1
82.5°	3135.8	1688.7	436.5	396.9	395.9	398.9	491.0	1086.9	972.0	856.2	824.5
85°	1153.2	593.9	265.3	229.6	263.3	228.7	321.7	796.8	563.2	554.3	462.3
87.5°	284.1	121.8	90.1	75.2	61.4	58.4	98.0	262.3	137.6	125.7	120.8
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)