

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: McGRAW-EDISON

Report Number: P591314

Luminaire Tested: **CTN-CA10-630-730-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591314
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-630-730-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55489 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B5 - U0 - G5

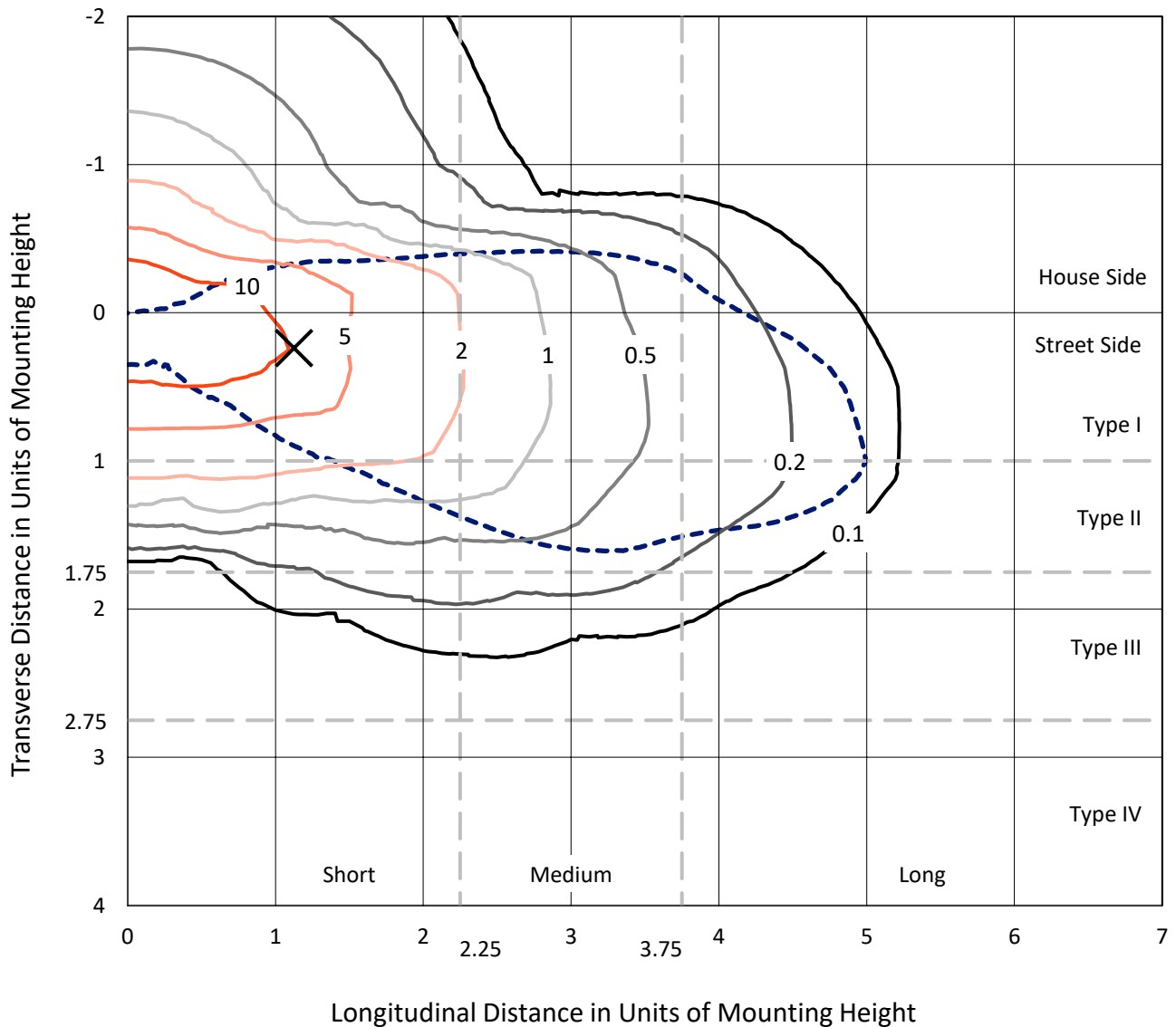
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

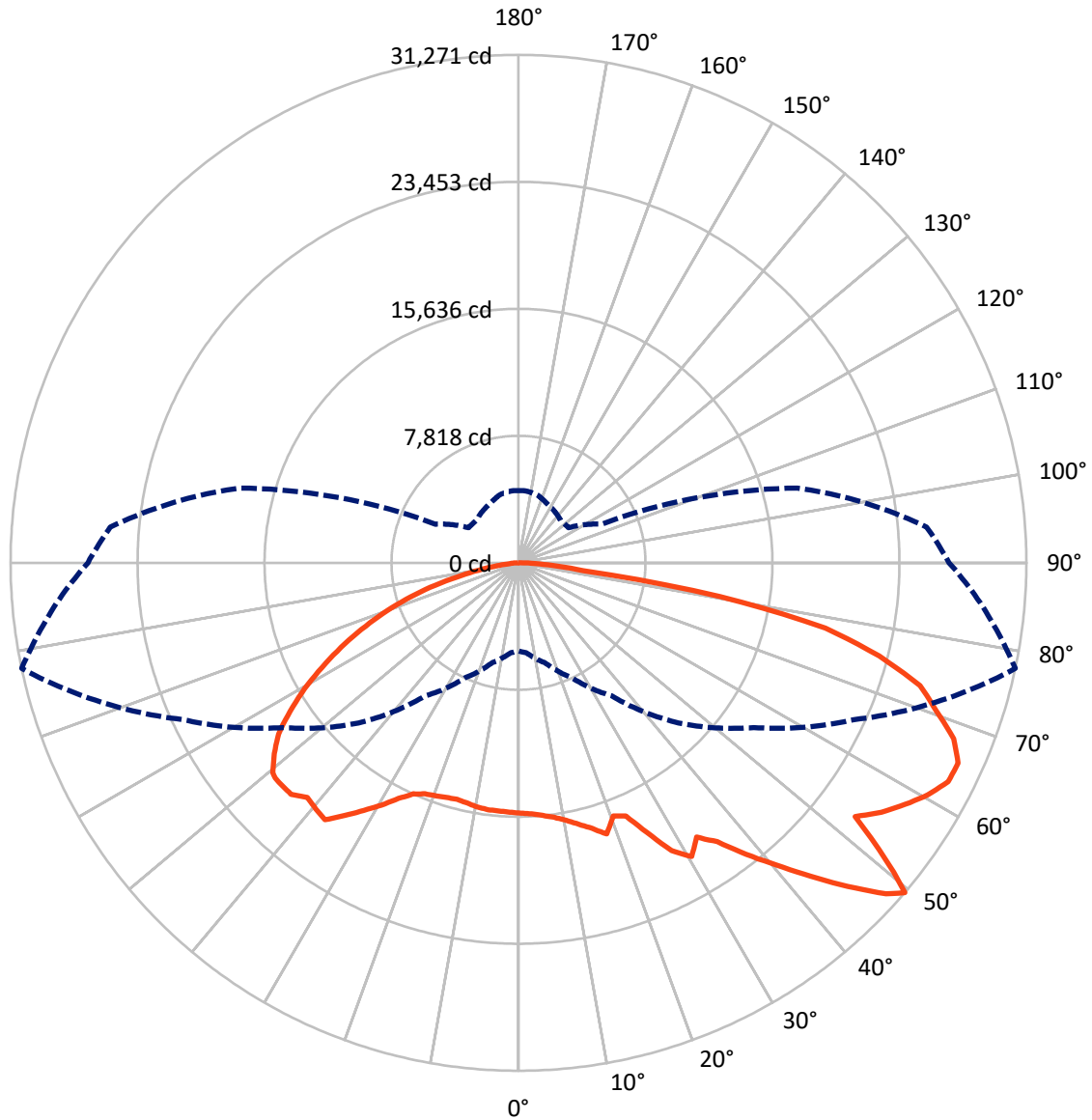
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 19.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

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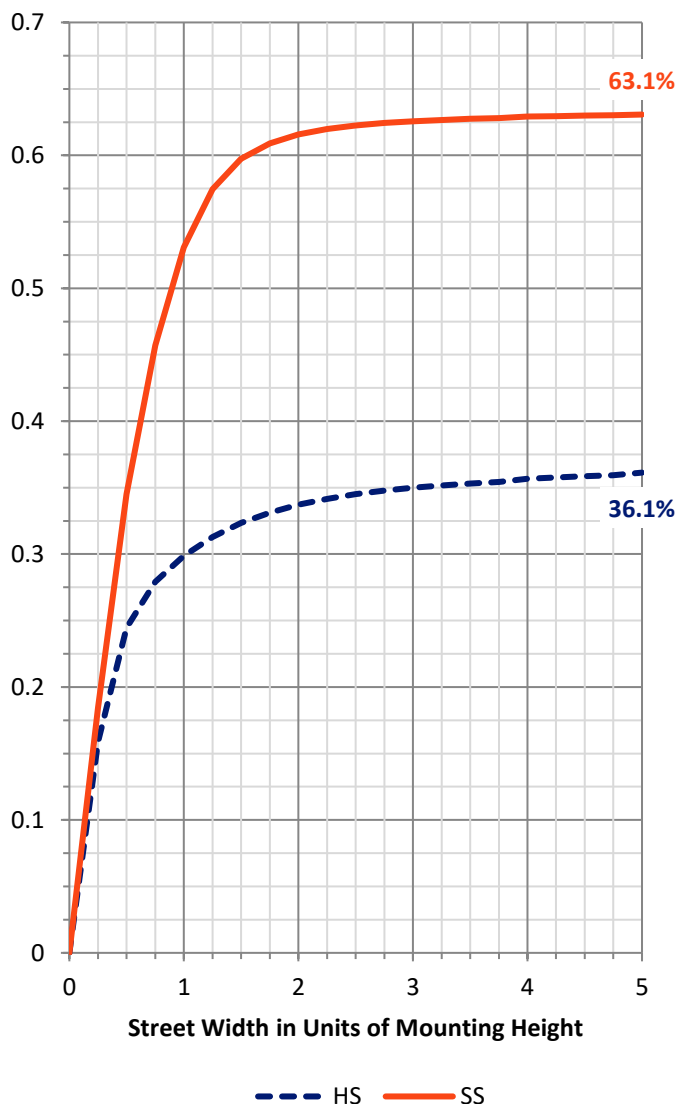
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20545.6	0.0	20545.6
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	34943.4	0.0	34943.4
	% Fixture	63.0	0.0	63.0
Total	Lumens	55489.0	0.0	55489.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1493.6	2.7
10°-20°	4395.5	7.9
20°-30°	6274.6	11.3
30°-40°	8077.4	14.6
40°-50°	9474.9	17.1
50°-60°	9774.6	17.6
60°-70°	8875.2	16.0
70°-80°	5894.2	10.6
80°-90°	1229.0	2.2
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°	55489.0	100.0
0°-180°	55489.0	100.0

Coefficient of Utilization

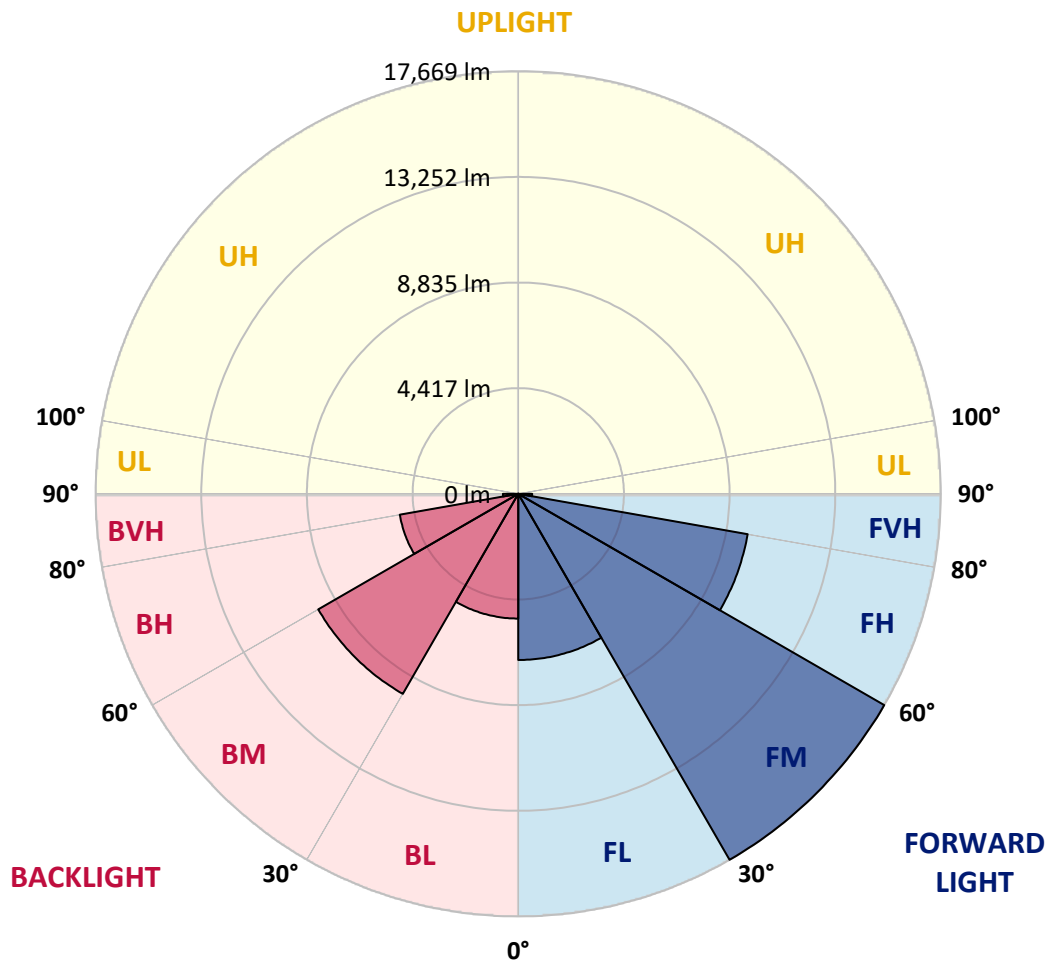


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6948.0	12.5			
FM (30°-60°)	17669.3	31.8			
FH (60°-80°)	9740.4	17.6			G4/12000
FVH (80°-90°)	585.7	1.1			G4/750
BL (0°-30°)	5215.7	9.4	B5		
BM (30°-60°)	9657.6	17.4	B5		
BH (60°-80°)	5029.0	9.1	B5		G5
BVH (80°-90°)	643.3	1.2			G4/750
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7
2.5°	16038.7	15915.5	15954.7	16021.9	15716.7	15783.9	15652.3	15705.5	15543.1	15481.5	15509.5
5°	17172.8	17041.2	17088.8	17111.2	16668.8	16489.6	16077.9	15991.1	15736.3	15624.3	15613.1
7.5°	17732.8	17590.0	17601.2	17615.2	17262.4	17287.6	16915.2	16470.0	15996.7	15825.9	15750.3
10°	18654.0	18455.2	18388.0	18360.0	17884.0	17685.2	17360.4	17116.8	16377.6	16119.9	15926.7
12.5°	19222.4	19076.8	19076.8	19048.8	18544.8	18390.8	17811.2	17553.6	16825.6	16520.4	16187.1
15°	19326.0	19228.0	19354.0	19328.8	18998.4	18819.2	18561.6	18024.0	17279.2	16962.8	16570.8
17.5°	18155.6	17895.2	17396.8	17472.4	17475.2	17839.2	17662.8	18032.4	17814.0	17556.4	17133.6
20°	14910.3	14999.9	15797.9	15604.7	15531.9	16304.7	17094.4	17116.8	16682.8	16640.8	17212.0
22.5°	12989.5	12670.3	13557.9	14848.7	14929.9	15963.1	16884.4	17993.2	17298.8	16926.4	16489.6
25°	11063.0	11180.6	12519.1	14190.7	15372.3	15601.9	16660.4	18430.0	18726.8	18382.4	17469.6
27.5°	10729.8	10724.2	11306.6	13160.3	15585.1	16447.6	16797.6	18183.6	20252.8	20059.6	18906.0
30°	10657.0	10612.2	10917.4	12457.5	14596.7	17209.2	17875.6	18371.2	20132.4	20992.0	20513.2
32.5°	10337.8	10298.6	10623.4	11429.8	13804.3	17766.4	18903.2	19642.4	19723.6	20129.6	22210.1
35°	9836.6	9867.4	10318.2	11194.6	12659.1	16428.0	19956.0	21073.3	21367.3	21087.3	21375.7
37.5°	9324.2	9357.8	9800.2	10794.2	12460.3	15867.9	20636.4	22456.5	23066.9	22767.3	21434.5
40°	8688.6	8741.8	9254.2	10371.4	12230.7	14605.1	19239.2	24027.3	24856.1	24464.1	22980.1
42.5°	7966.2	7988.6	8571.0	9727.4	11939.5	14680.7	17797.2	25477.7	26592.2	26376.6	24503.3
45°	7339.0	7339.0	7868.2	8898.6	11275.8	14537.9	17186.8	24396.9	28723.0	28417.8	26029.4
47.5°	6484.9	6560.5	7182.2	8204.2	10494.6	14207.5	17536.8	21969.3	30708.3	30453.5	27561.0
49°	5432.1	5560.9	6381.3	7823.4	9993.4	13933.1	17676.8	22826.1	29339.0	31271.1	28555.0
50°	5000.9	5068.1	5076.5	7551.8	9621.0	13683.9	17741.2	23484.1	27029.0	29952.2	29252.2
52.5°	4328.9	3906.1	3472.1	6798.5	8873.4	12762.7	17780.4	25270.5	26474.6	25951.0	28709.0
55°	1828.4	2394.1	3043.7	5560.9	8067.0	11623.0	17651.6	27233.4	27692.6	27115.8	24615.3
57.5°	1383.2	1472.8	1635.2	4314.9	5779.3	10323.8	17217.6	28476.6	28720.2	28065.0	25614.9
60°	201.6	207.2	291.2	1750.0	3309.7	7369.8	15655.1	28440.2	29484.6	28980.6	26477.4
62.5°	84.0	86.8	112.0	1433.6	2550.9	5672.9	14291.5	27964.2	30226.6	29686.2	27286.6
65°	14.0	16.8	47.6	1268.4	2108.4	5300.5	12796.3	28059.4	29963.4	29739.4	27600.2
67.5°	11.2	14.0	44.8	1139.6	1738.8	4852.5	11320.6	26544.6	29003.0	28905.0	26763.0
70°	11.2	14.0	47.6	1030.4	1503.6	4275.7	9497.8	24447.3	27241.8	27281.0	25357.3
72.5°	14.0	14.0	47.6	921.2	1307.6	3654.1	7515.4	21647.3	25642.9	25858.6	23358.1
75°	14.0	14.0	44.8	800.8	1122.8	3046.5	5412.5	15918.3	22996.9	22932.5	20485.2
77.5°	14.0	14.0	44.8	635.6	932.4	2506.1	3525.3	8965.8	19043.2	19314.8	17128.0
80°	14.0	14.0	44.8	464.8	730.8	1878.8	2136.4	4589.3	10167.0	12586.3	11782.7
82.5°	14.0	14.0	44.8	313.6	501.2	1083.6	1232.0	2324.0	3651.3	4001.3	4681.7
85°	11.2	11.2	33.6	187.6	257.6	383.6	593.6	1237.6	1996.4	2086.0	2035.6
87.5°	5.6	5.6	16.8	67.2	112.0	140.0	266.0	498.4	733.6	750.4	652.4
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°	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7	15408.7
2.5°	15509.5	15419.9	15338.7	15352.7	15179.1	15128.7	14935.5	15036.3	14938.3	14851.5	14932.7
5°	15534.7	15425.5	15277.1	15134.3	14736.7	14551.9	14319.5	14378.3	14246.7	14143.1	14232.7
7.5°	15607.5	15473.1	15243.5	14837.5	14364.3	14070.3	13807.1	14064.7	14033.9	13955.5	14047.9
10°	15641.1	15526.3	15131.5	14655.5	13994.7	13809.9	13571.9	13569.1	13577.5	13591.5	13683.9
12.5°	15730.7	15557.1	14932.7	14378.3	13765.1	13389.9	13216.3	13356.3	13104.3	12955.9	13020.3
15°	15943.5	15627.1	14798.3	13989.1	13409.5	13098.7	12544.3	12591.9	12538.7	12393.1	12457.5
17.5°	16363.6	15823.1	14792.7	13742.7	12955.9	12449.1	11964.7	11735.1	11662.2	11673.4	11729.5
20°	16878.8	16170.3	14803.9	13426.3	12482.7	11894.7	11147.0	10987.4	10746.6	10752.2	10766.2
22.5°	16551.2	16570.8	14809.5	13065.1	11891.9	11155.4	10363.0	10049.4	9864.6	9817.0	9887.0
25°	17438.8	17349.2	14896.3	12871.9	11270.2	10281.8	9453.0	9052.6	8775.4	8753.0	8831.4
27.5°	18620.4	18458.0	15344.3	12454.7	10612.2	9234.6	8335.8	8033.4	7795.4	7711.4	7767.4
30°	20056.8	19866.4	15963.1	12129.9	9724.6	8109.0	7339.0	7131.8	6896.5	6742.5	6756.5
32.5°	21557.7	21151.7	16598.8	11855.5	8814.6	7123.4	6465.3	6280.5	6003.3	5804.5	5852.1
35°	23069.7	22492.9	17307.2	11371.0	7703.0	6255.3	5723.3	5474.1	5247.3	5068.1	5037.3
37.5°	21874.1	24060.9	17993.2	10920.2	6832.1	5594.5	4992.5	4816.1	4681.7	4541.7	4538.9
40°	21972.1	22473.3	18399.2	10122.2	5860.5	4916.9	4312.1	4373.7	4429.7	4323.3	4323.3
42.5°	22943.7	22229.7	18236.8	9063.8	5138.1	4239.3	3962.1	4211.3	4387.7	4312.1	4309.3
45°	24312.9	23386.1	18514.0	7871.0	4435.3	3822.1	3864.1	4169.3	4398.9	4384.9	4379.3
47.5°	25766.2	24702.1	17982.0	6454.1	3950.9	3693.3	3864.1	4107.7	4382.1	4446.5	4432.5
49°	26513.8	25222.9	17769.2	5628.1	3757.7	3676.5	3869.7	4057.3	4351.3	4449.3	4435.3
50°	26970.2	25502.9	17494.8	5157.7	3654.1	3679.3	3880.9	4026.5	4323.3	4432.5	4424.1
52.5°	27997.8	25928.6	16133.9	4340.1	3486.1	3687.7	3953.7	3995.7	4219.7	4337.3	4398.9
55°	26950.6	26900.2	14397.9	3964.9	3396.5	3668.1	3984.5	4023.7	4132.9	4197.3	4244.9
57.5°	26788.2	27323.0	12211.1	3763.3	3318.1	3640.1	3948.1	4020.9	4085.3	4074.1	4054.5
60°	27303.4	27692.6	9957.0	3564.5	3228.5	3595.3	3827.7	3934.1	3953.7	3925.7	3880.9
62.5°	27384.6	27793.4	7652.6	3362.9	3130.5	3486.1	3651.3	3757.7	3757.7	3687.7	3670.9
65°	27006.6	27163.4	5639.3	3130.5	3012.9	3360.1	3444.1	3522.5	3558.9	3466.5	3472.1
67.5°	25923.0	25015.7	4281.3	2853.3	2870.1	3186.5	3245.3	3298.5	3306.9	3253.7	3248.1
70°	23744.5	22613.3	3060.5	2433.3	2609.7	2912.1	3001.7	3082.9	3054.9	2962.5	2948.5
72.5°	20460.0	19454.8	2080.4	1948.8	2296.0	2648.9	2704.9	2707.7	2651.7	2718.9	2766.5
75°	17601.2	15195.9	1551.2	1554.0	1839.6	2284.8	2458.5	2472.5	2497.7	2867.3	2942.9
77.5°	13986.3	9901.0	1321.6	1226.4	1411.2	1901.2	2175.6	2276.4	3021.3	3276.1	3242.5
80°	8590.6	5944.5	1024.8	971.6	1148.0	1461.6	1870.4	2326.8	3082.9	2898.1	2800.1
82.5°	4023.7	2713.3	739.2	744.8	854.0	1066.8	1478.4	2707.7	2662.9	2198.0	2170.0
85°	1556.8	938.0	448.0	506.8	574.0	722.4	1134.0	2671.3	2069.2	1862.0	1724.8
87.5°	400.4	182.0	196.0	207.2	254.8	380.8	618.8	1400.0	1089.2	954.8	938.0
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)