

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: P591278

Luminaire Tested: **CTN-CA8-480-727-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591278
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-CA8-480-727-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 36858 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

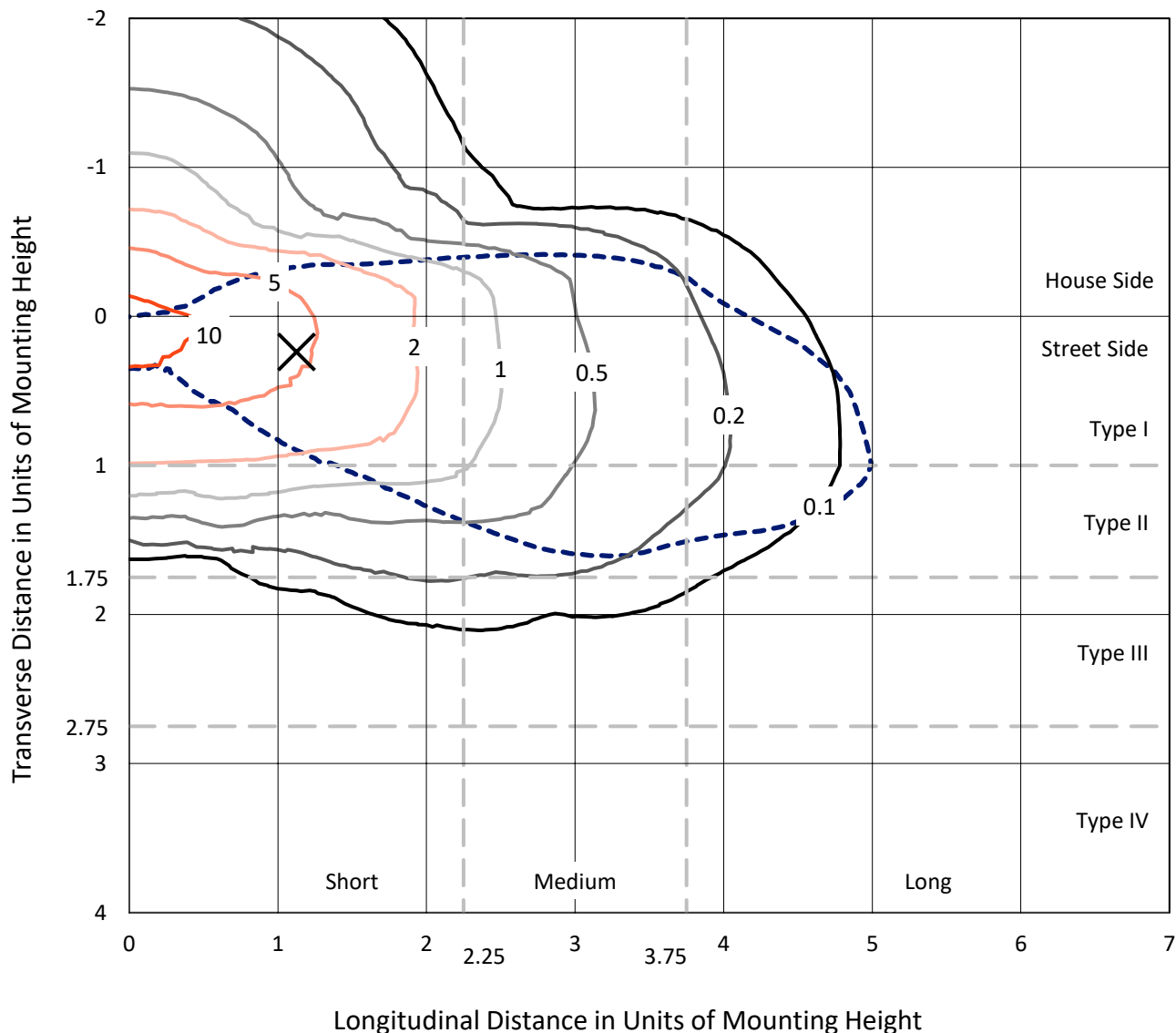
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

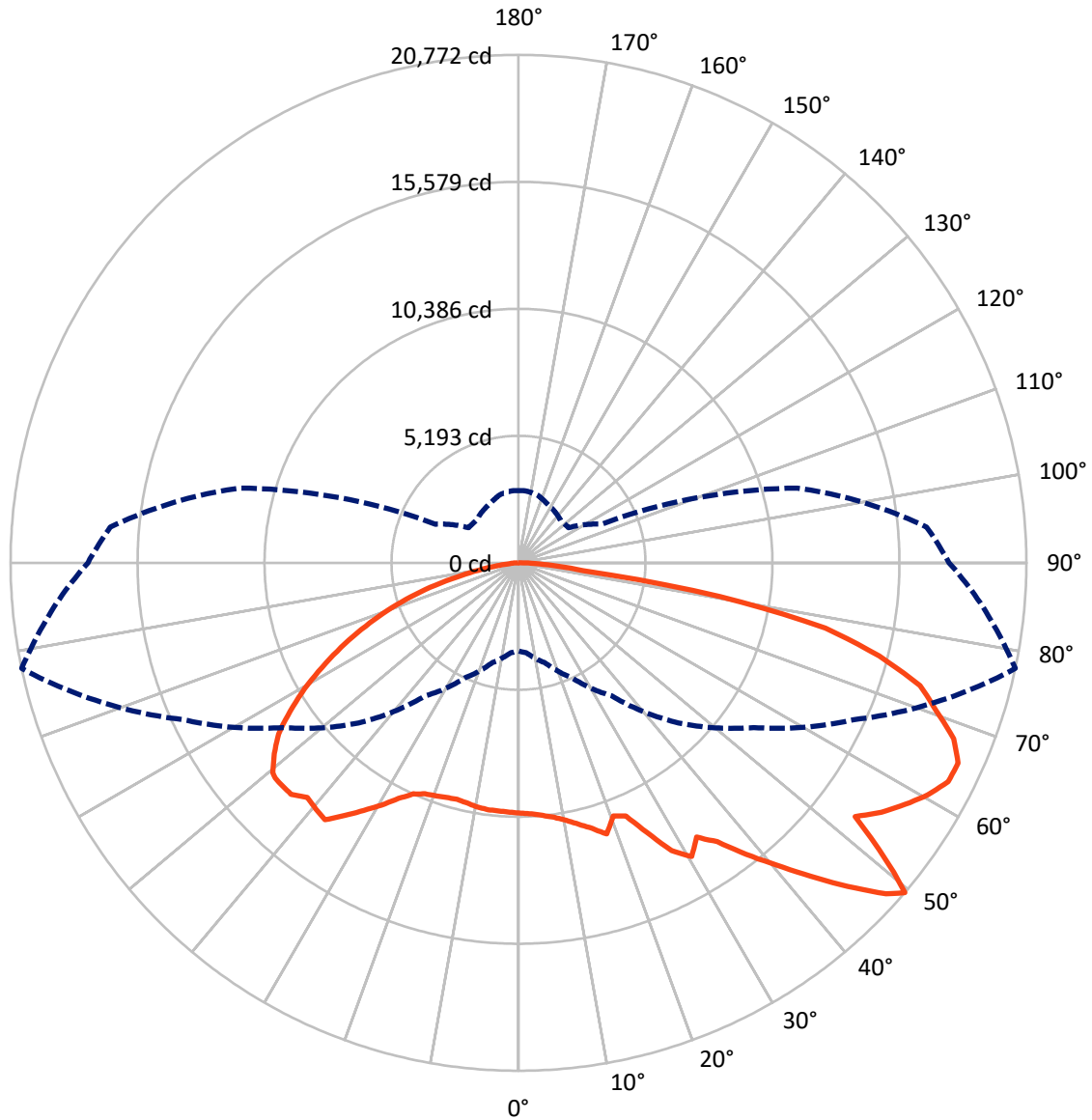
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13 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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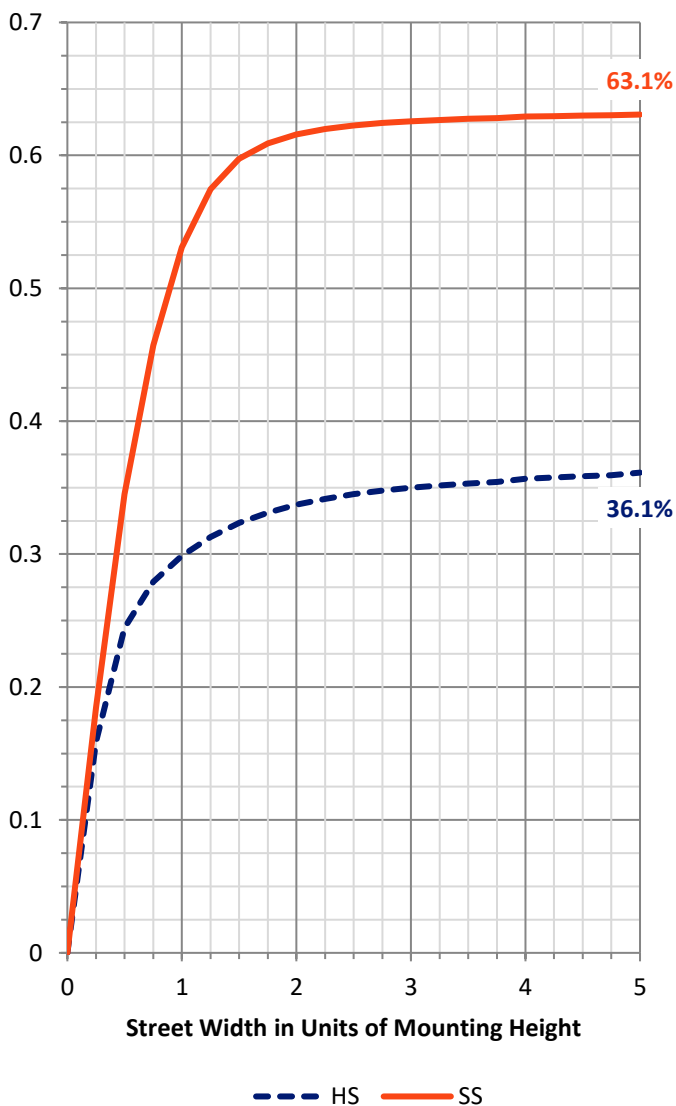
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13647.2	0.0	13647.2
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	23210.8	0.0	23210.8
	% Fixture	63.0	0.0	63.0
Total	Lumens	36858.0	0.0	36858.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	992.1	2.7
10°-20°	2919.6	7.9
20°-30°	4167.8	11.3
30°-40°	5365.4	14.6
40°-50°	6293.6	17.1
50°-60°	6492.7	17.6
60°-70°	5895.3	16.0
70°-80°	3915.2	10.6
80°-90°	816.4	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°	36858.0	100.0
0°-180°	36858.0	100.0

Coefficient of Utilization

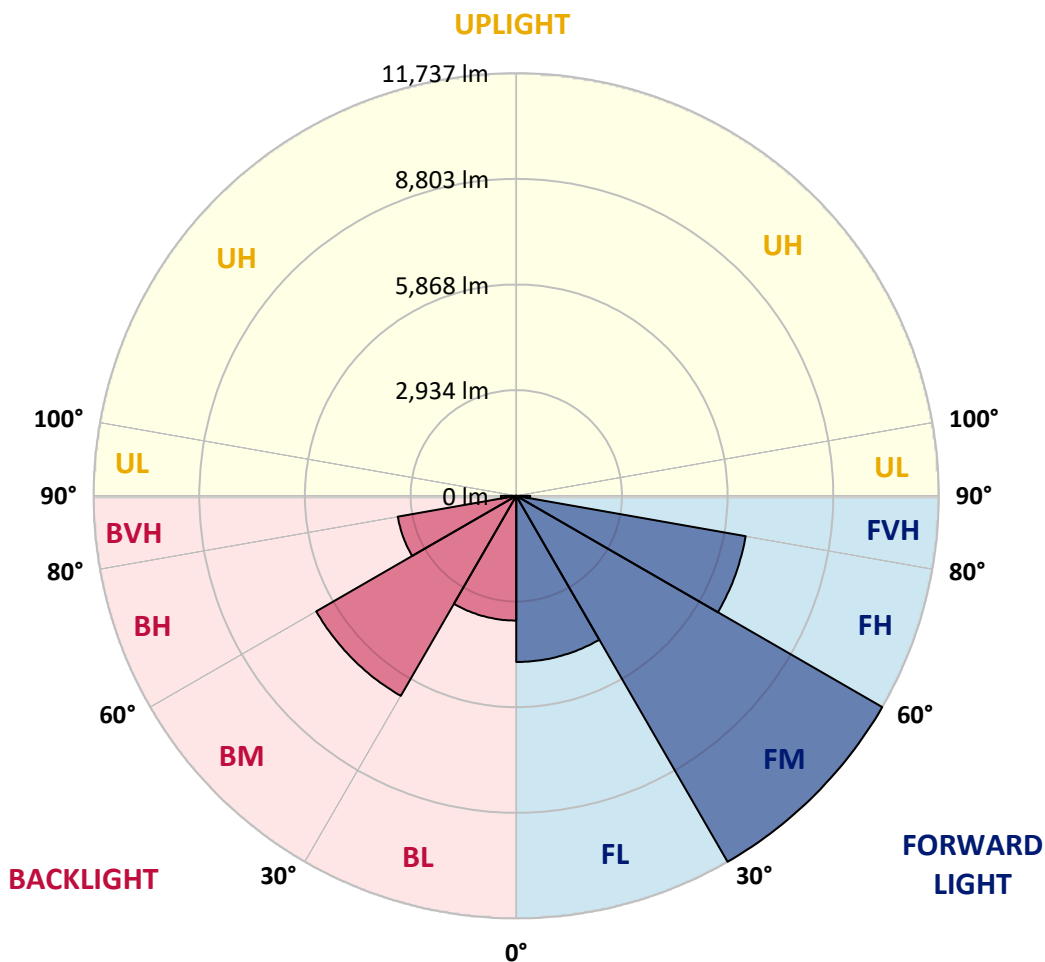


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4615.1	12.5			
FM	(30°-60°)	11736.7	31.8			
FH	(60°-80°)	6470.0	17.6			G3/7500
FVH	(80°-90°)	389.1	1.1			G3/500
BL	(0°-30°)	3464.5	9.4	B4/5000		
BM	(30°-60°)	6415.0	17.4	B4/8500		
BH	(60°-80°)	3340.5	9.1	B4/5000		G4/5000
BVH	(80°-90°)	427.3	1.2			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1
2.5°	10653.6	10571.7	10597.8	10642.4	10439.7	10484.3	10396.9	10432.2	10324.4	10283.4	10302.0
5°	11406.8	11319.4	11351.0	11365.9	11072.1	10953.0	10679.6	10622.0	10452.7	10378.3	10370.9
7.5°	11778.8	11684.0	11691.4	11700.7	11466.4	11483.1	11235.7	10940.0	10625.7	10512.2	10462.0
10°	12390.7	12258.7	12214.0	12195.4	11879.3	11747.2	11531.4	11369.6	10878.6	10707.5	10579.2
12.5°	12768.3	12671.6	12671.6	12653.0	12318.2	12215.9	11830.9	11659.8	11176.2	10973.5	10752.1
15°	12837.1	12772.0	12855.7	12839.0	12619.5	12500.5	12329.4	11972.2	11477.5	11267.3	11007.0
17.5°	12059.7	11886.7	11555.6	11605.8	11607.7	11849.5	11732.3	11977.8	11832.8	11661.6	11380.8
20°	9904.0	9963.5	10493.6	10365.3	10316.9	10830.3	11354.8	11369.6	11081.4	11053.5	11432.9
22.5°	8628.1	8416.1	9005.7	9863.1	9917.0	10603.4	11215.3	11951.8	11490.5	11243.2	10953.0
25°	7348.5	7426.6	8315.7	9426.0	10210.9	10363.4	11066.5	12241.9	12439.1	12210.3	11604.0
27.5°	7127.2	7123.5	7510.3	8741.6	10352.3	10925.1	11157.6	12078.3	13452.7	13324.4	12558.1
30°	7078.8	7049.1	7251.8	8274.7	9695.7	11431.0	11873.7	12202.9	13372.8	13943.8	13625.7
32.5°	6866.8	6840.8	7056.5	7592.2	9169.4	11801.1	12556.3	13047.3	13101.2	13370.9	14752.8
35°	6533.9	6554.3	6853.8	7435.9	8408.7	10912.1	13255.6	13997.7	14193.0	14007.0	14198.6
37.5°	6193.5	6215.8	6509.7	7170.0	8276.6	10540.1	13707.5	14916.5	15321.9	15122.9	14237.6
40°	5771.3	5806.6	6147.0	6889.1	8124.1	9701.3	12779.4	15959.9	16510.4	16250.0	15264.3
42.5°	5291.4	5306.3	5693.2	6461.3	7930.7	9751.5	11821.6	16923.3	17663.6	17520.4	16276.1
45°	4874.8	4874.8	5226.4	5910.8	7489.9	9656.7	11416.1	16205.4	19079.0	18876.2	17289.7
47.5°	4307.6	4357.8	4770.7	5449.5	6970.9	9437.2	11648.6	14592.9	20397.6	20228.4	18307.1
49°	3608.2	3693.8	4238.7	5196.6	6638.0	9254.9	11741.6	15162.0	19488.1	20771.5	18967.4
50°	3321.8	3366.4	3372.0	5016.2	6390.7	9089.4	11784.4	15599.1	17953.7	19895.5	19430.5
52.5°	2875.4	2594.6	2306.3	4515.9	5894.1	8477.5	11810.4	16785.7	17585.5	17237.7	19069.7
55°	1214.5	1590.2	2021.7	3693.8	5358.4	7720.5	11724.9	18089.5	18394.5	18011.4	16350.5
57.5°	918.8	978.3	1086.2	2866.1	3838.9	6857.5	11436.6	18915.3	19077.1	18641.9	17014.5
60°	133.9	137.6	193.4	1162.4	2198.4	4895.3	10398.8	18891.1	19584.9	19250.1	17587.3
62.5°	55.8	57.7	74.4	952.3	1694.4	3768.2	9493.0	18574.9	20077.7	19718.8	18124.8
65°	9.3	11.2	31.6	842.5	1400.5	3520.8	8499.8	18638.2	19902.9	19754.1	18333.1
67.5°	7.4	9.3	29.8	757.0	1155.0	3223.2	7519.6	17632.0	19265.0	19199.9	17777.0
70°	7.4	9.3	31.6	684.4	998.8	2840.1	6308.8	16238.9	18095.1	18121.1	16843.4
72.5°	9.3	9.3	31.6	611.9	868.6	2427.2	4992.0	14379.0	17033.1	17176.3	15515.4
75°	9.3	9.3	29.8	531.9	745.8	2023.6	3595.2	10573.6	15275.5	15232.7	13607.1
77.5°	9.3	9.3	29.8	422.2	619.4	1664.6	2341.6	5955.4	12649.3	12829.7	11377.1
80°	9.3	9.3	29.8	308.7	485.4	1248.0	1419.1	3048.4	6753.3	8360.3	7826.5
82.5°	9.3	9.3	29.8	208.3	332.9	719.8	818.4	1543.7	2425.3	2657.8	3109.8
85°	7.4	7.4	22.3	124.6	171.1	254.8	394.3	822.1	1326.1	1385.6	1352.2
87.5°	3.7	3.7	11.2	44.6	74.4	93.0	176.7	331.1	487.3	498.5	433.4
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°	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1	10235.1
2.5°	10302.0	10242.5	10188.6	10197.9	10082.6	10049.1	9920.8	9987.7	9922.6	9865.0	9918.9
5°	10318.8	10246.3	10147.7	10052.8	9788.7	9666.0	9511.6	9550.6	9463.2	9394.4	9453.9
7.5°	10367.1	10277.9	10125.4	9855.7	9541.3	9346.1	9171.2	9342.3	9321.9	9269.8	9331.2
10°	10389.5	10313.2	10051.0	9734.8	9295.8	9173.1	9015.0	9013.1	9018.7	9028.0	9089.4
12.5°	10449.0	10333.7	9918.9	9550.6	9143.3	8894.1	8778.8	8871.8	8704.4	8605.8	8648.6
15°	10590.3	10380.2	9829.6	9292.1	8907.1	8700.7	8332.4	8364.0	8328.7	8232.0	8274.7
17.5°	10869.3	10510.4	9825.9	9128.4	8605.8	8269.2	7947.4	7794.9	7746.5	7754.0	7791.2
20°	11211.5	10741.0	9833.4	8918.3	8291.5	7900.9	7404.3	7298.3	7138.3	7142.1	7151.4
22.5°	10993.9	11007.0	9837.1	8678.3	7899.0	7409.9	6883.5	6675.2	6552.5	6520.8	6567.3
25°	11583.5	11524.0	9894.7	8550.0	7486.1	6829.6	6279.1	6013.1	5829.0	5814.1	5866.2
27.5°	12368.4	12260.5	10192.3	8272.9	7049.1	6134.0	5537.0	5336.1	5178.0	5122.2	5159.4
30°	13322.5	13196.1	10603.4	8057.1	6459.5	5386.3	4874.8	4737.2	4581.0	4478.7	4488.0
32.5°	14319.5	14049.8	11025.6	7874.9	5855.0	4731.6	4294.5	4171.8	3987.6	3855.6	3887.2
35°	15323.8	14940.7	11496.1	7553.1	5116.6	4155.0	3801.7	3636.1	3485.5	3366.4	3346.0
37.5°	14529.6	15982.2	11951.8	7253.7	4538.2	3716.1	3316.2	3199.0	3109.8	3016.8	3014.9
40°	14594.7	14927.6	12221.5	6723.6	3892.8	3266.0	2864.3	2905.2	2942.4	2871.7	2871.7
42.5°	15240.1	14765.8	12113.6	6020.5	3412.9	2815.9	2631.8	2797.3	2914.5	2864.3	2862.4
45°	16149.6	15534.0	12297.7	5228.2	2946.1	2538.8	2566.7	2769.4	2921.9	2912.6	2908.9
47.5°	17114.9	16408.1	11944.3	4287.1	2624.3	2453.2	2566.7	2728.5	2910.8	2953.5	2944.2
49°	17611.5	16754.1	11803.0	3738.4	2496.0	2442.1	2570.4	2695.0	2890.3	2955.4	2946.1
50°	17914.7	16940.1	11620.7	3426.0	2427.2	2443.9	2577.8	2674.6	2871.7	2944.2	2938.7
52.5°	18597.3	17222.8	10716.8	2882.9	2315.6	2449.5	2626.2	2654.1	2802.9	2881.0	2921.9
55°	17901.6	17868.2	9563.7	2633.6	2256.1	2436.5	2646.7	2672.7	2745.2	2788.0	2819.6
57.5°	17793.8	18149.0	8111.1	2499.7	2204.0	2417.9	2622.5	2670.8	2713.6	2706.2	2693.2
60°	18136.0	18394.5	6613.8	2367.7	2144.5	2388.1	2542.5	2613.2	2626.2	2607.6	2577.8
62.5°	18189.9	18461.5	5083.1	2233.8	2079.4	2315.6	2425.3	2496.0	2496.0	2449.5	2438.3
65°	17938.8	18043.0	3745.9	2079.4	2001.3	2231.9	2287.7	2339.8	2363.9	2302.6	2306.3
67.5°	17219.1	16616.4	2843.8	1895.2	1906.4	2116.6	2155.6	2191.0	2196.6	2161.2	2157.5
70°	15772.0	15020.6	2032.9	1616.3	1733.4	1934.3	1993.8	2047.8	2029.2	1967.8	1958.5
72.5°	13590.4	12922.7	1381.9	1294.5	1525.1	1759.5	1796.7	1798.5	1761.3	1806.0	1837.6
75°	11691.4	10093.7	1030.4	1032.3	1222.0	1517.7	1633.0	1642.3	1659.0	1904.5	1954.8
77.5°	9290.3	6576.6	877.9	814.6	937.4	1262.9	1445.2	1512.1	2006.8	2176.1	2153.8
80°	5706.2	3948.6	680.7	645.4	762.6	970.9	1242.4	1545.6	2047.8	1925.0	1859.9
82.5°	2672.7	1802.3	491.0	494.7	567.3	708.6	982.0	1798.5	1768.8	1460.0	1441.4
85°	1034.1	623.1	297.6	336.6	381.3	479.9	753.3	1774.4	1374.5	1236.8	1145.7
87.5°	266.0	120.9	130.2	137.6	169.3	252.9	411.0	930.0	723.5	634.2	623.1
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)