

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: P591119

Luminaire Tested: **CTN-CA10-630-722-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591119
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-630-722-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43750 lumens
Efficiency: N/A
Efficacy: 69.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

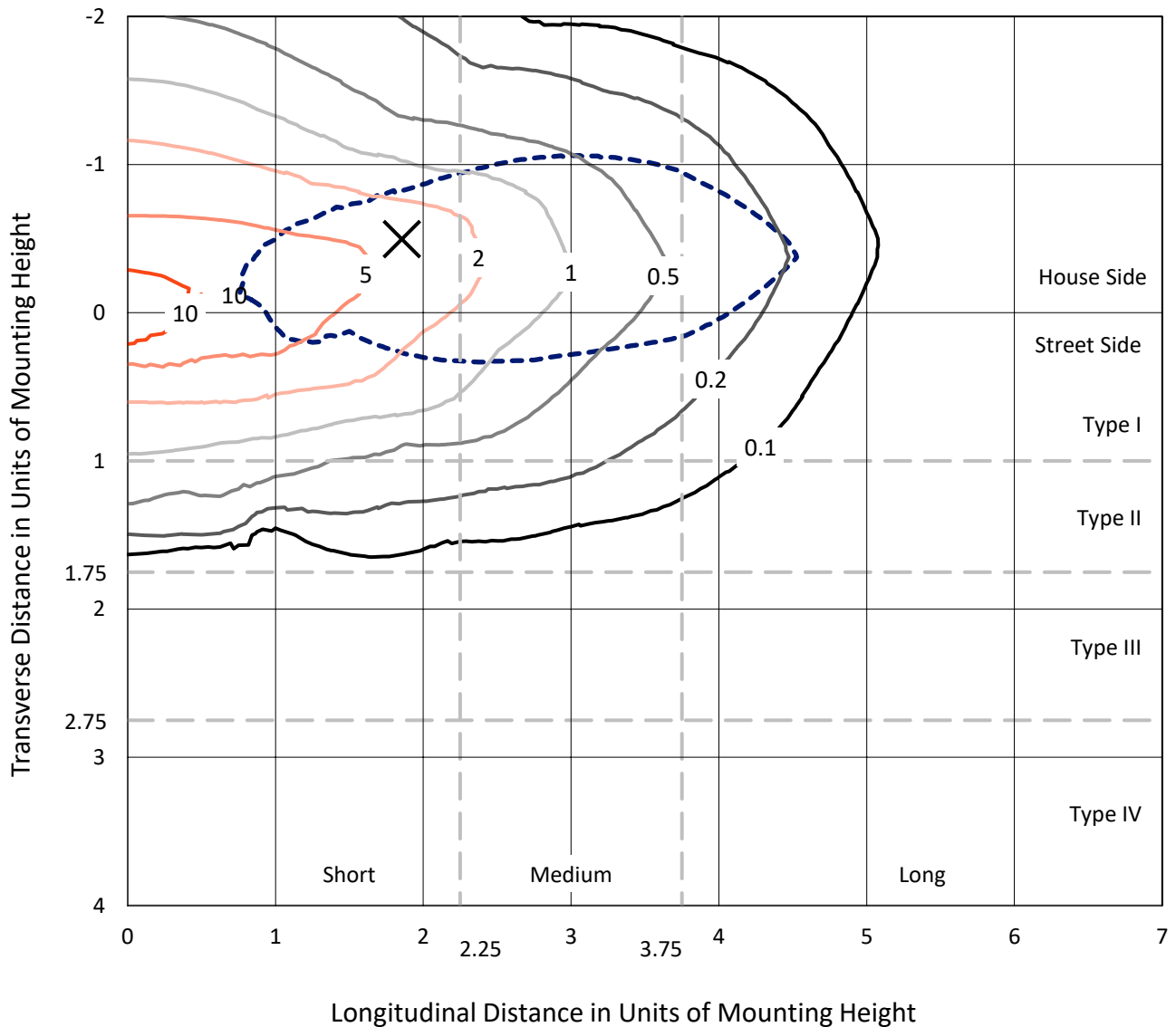
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

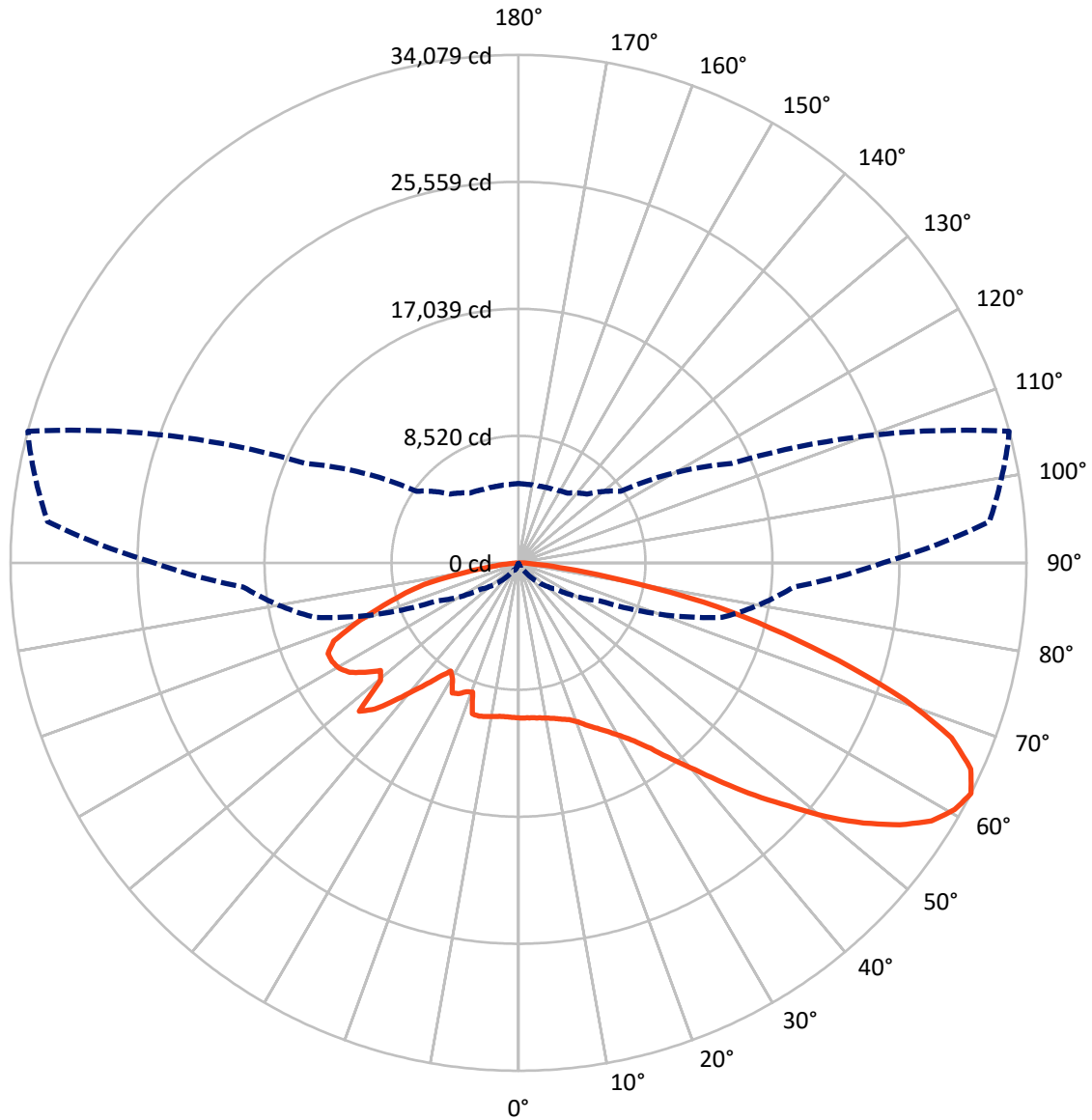
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.6 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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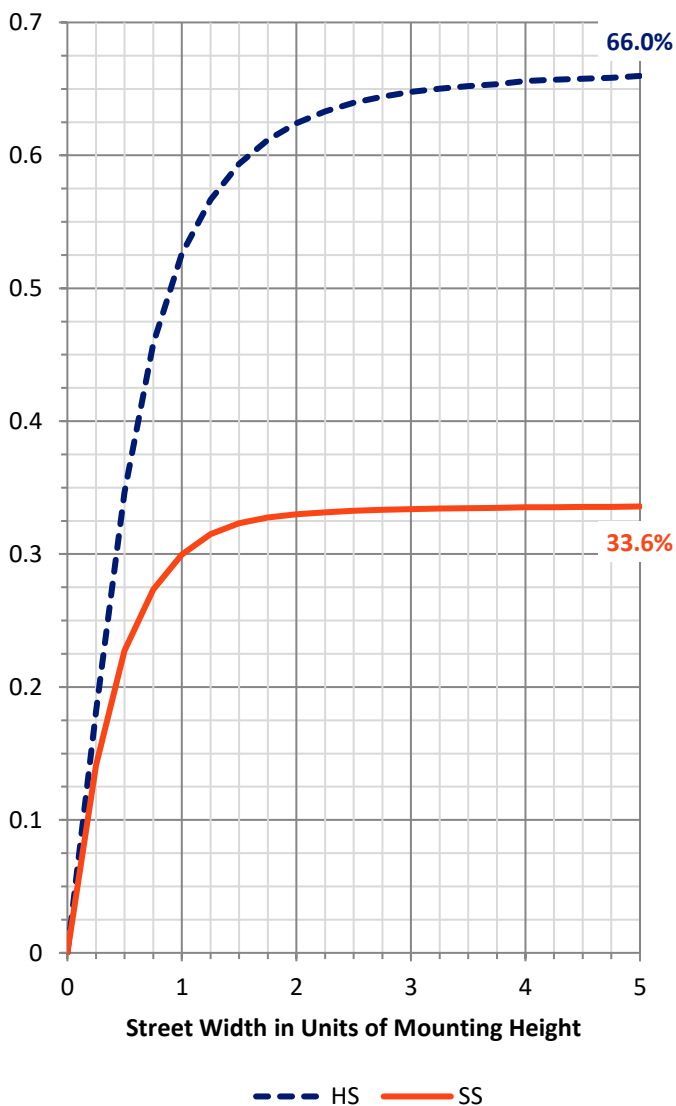
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	29110.8	0.0	29110.8
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	14639.3	0.0	14639.3
	% Fixture	33.5	0.0	33.5
Total	Lumens	43750.0	0.0	43750.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	993.1	2.3
10°-20°	2804.8	6.4
20°-30°	3952.9	9.0
30°-40°	5370.7	12.3
40°-50°	7306.2	16.7
50°-60°	8655.5	19.8
60°-70°	8487.7	19.4
70°-80°	5353.3	12.2
80°-90°	825.8	1.9
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°	43750.0	100.0
0°-180°	43750.0	100.0

Coefficient of Utilization



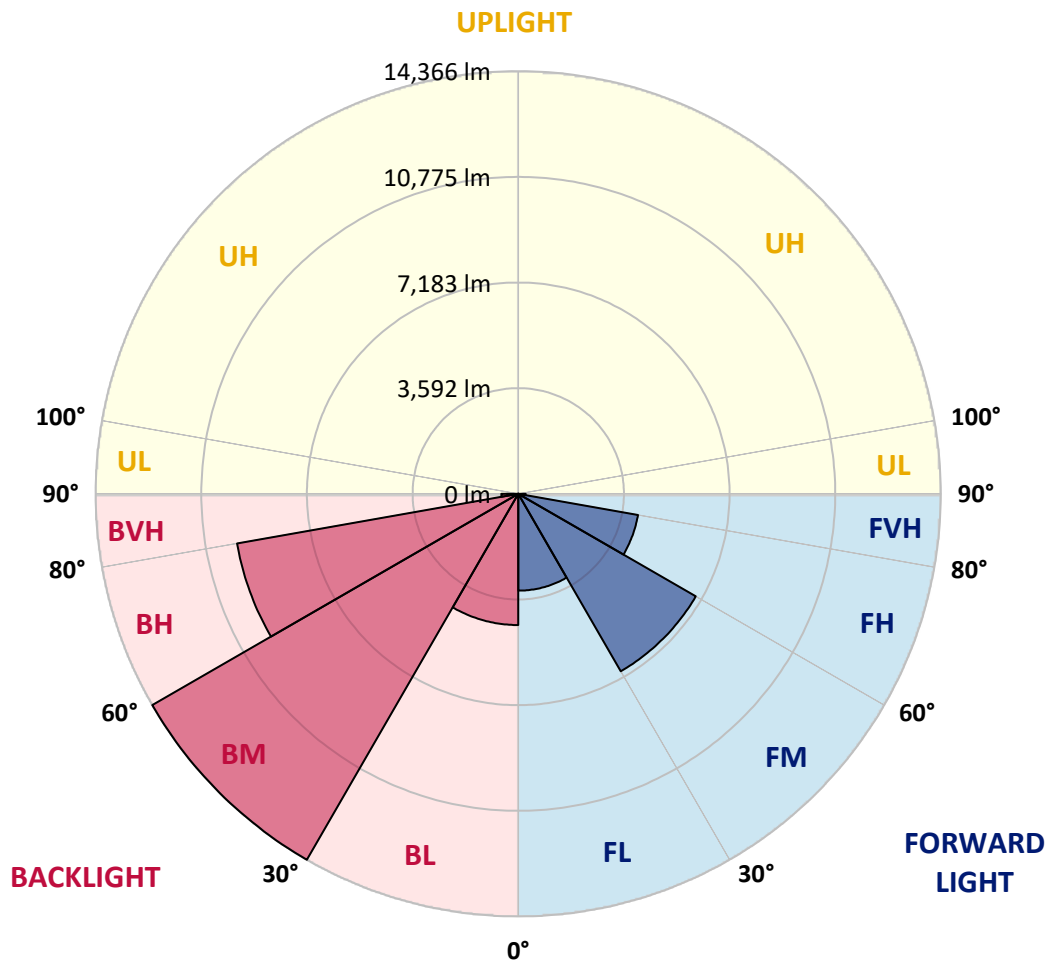
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3290.7	7.5			
FM	(30°-60°)	6966.1	15.9			
FH	(60°-80°)	4133.3	9.4			G2/5000
FVH	(80°-90°)	249.1	0.6			G3/500
BL	(0°-30°)	4460.1	10.2	B4/5000		
BM	(30°-60°)	14366.3	32.8	B5		
BH	(60°-80°)	9707.7	22.2	B5		G5
BVH	(80°-90°)	576.7	1.3			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 I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4
2.5°	10414.4	10333.1	10391.2	10479.5	10347.0	10423.7	10295.9	10400.5	10374.9	10381.9	10430.7
5°	10333.1	10247.1	10316.8	10433.0	10302.8	10388.8	10284.2	10372.6	10363.3	10395.8	10435.3
7.5°	10256.4	10175.0	10247.1	10323.8	10256.4	10340.0	10261.0	10370.2	10377.2	10449.3	10481.8
10°	10175.0	10093.7	10163.4	10251.7	10195.9	10300.5	10268.0	10400.5	10451.6	10546.9	10574.8
12.5°	9996.1	9924.0	9982.1	10084.4	10093.7	10247.1	10268.0	10472.5	10535.3	10660.8	10702.6
15°	8920.0	8999.0	9308.1	9605.6	9733.4	10017.0	10172.7	10537.6	10625.9	10804.8	10869.9
17.5°	7216.4	7067.7	6586.6	6712.1	7418.6	8371.5	8731.7	9638.1	10595.7	10986.1	11069.8
20°	4264.8	4569.2	5510.5	5798.7	6059.0	7083.9	8294.8	8834.0	9201.2	10588.7	11344.0
22.5°	3516.4	3537.3	4211.3	5540.7	5833.5	6235.6	7172.2	8947.9	9326.7	9603.3	10444.6
25°	3260.7	3281.7	3397.9	4425.1	5673.2	6138.0	6549.4	8178.6	9649.8	9991.4	10649.1
27.5°	3056.2	3084.1	3191.0	3479.2	5289.7	6110.1	6630.7	7253.6	9793.9	10451.6	11067.5
30°	2902.8	2914.5	3023.7	3302.6	3999.8	6117.1	6749.3	7414.0	8971.1	11034.9	11653.2
32.5°	2763.4	2770.4	2884.2	3156.2	3576.8	5666.2	6928.2	7748.6	8566.7	11513.7	12457.3
35°	2656.5	2651.8	2754.1	3021.4	3439.7	4339.1	7128.1	8150.7	9212.8	11060.5	13656.5
37.5°	2554.2	2547.2	2635.6	2881.9	3318.8	4062.6	6895.7	8634.1	10140.1	11404.5	13558.9
40°	2475.2	2461.2	2535.6	2756.4	3193.3	3992.8	5431.5	9145.4	11158.1	13177.8	14379.4
42.5°	2405.5	2396.2	2458.9	2635.6	3065.5	3909.2	5061.9	9422.0	12424.8	15227.7	16501.3
45°	2300.9	2314.8	2384.6	2554.2	2928.4	3790.6	5099.1	7567.3	13765.8	17005.6	18616.2
47.5°	2256.7	2254.4	2298.6	2458.9	2809.9	3625.6	5073.6	6939.8	14609.4	18867.2	20687.0
50°	2187.0	2175.4	1896.5	2347.4	2689.0	3421.1	4966.7	7121.1	12157.5	20694.0	22588.2
52.5°	2056.8	1829.1	1659.4	2268.3	2565.8	3198.0	4727.3	7200.1	11739.1	20368.6	24222.0
55°	1092.3	1217.8	1571.1	2156.8	2421.7	2998.1	4376.3	7144.4	12643.2	16287.5	22485.9
57.5°	969.2	964.5	999.4	1703.6	1262.0	2779.7	3953.3	6888.7	13498.5	17031.2	22906.6
60°	76.7	79.0	93.0	567.1	669.3	1956.9	3497.8	6572.6	13951.7	17909.7	23926.8
62.5°	37.2	41.8	55.8	506.7	611.2	1780.3	3086.4	6033.4	14142.3	18544.2	24431.2
65°	9.3	11.6	25.6	446.2	532.2	1585.1	2672.7	5401.3	14158.6	18569.7	24837.9
67.5°	7.0	11.6	25.6	404.4	485.7	1413.1	2310.2	4959.7	13466.0	18474.5	24633.4
70°	7.0	11.6	25.6	362.6	439.3	1224.8	1989.4	4527.4	11697.3	18118.9	23938.5
72.5°	7.0	13.9	25.6	318.4	385.8	1038.9	1689.6	4050.9	9817.1	16633.7	22390.6
75°	7.0	13.9	27.9	258.0	330.0	827.4	1387.5	3469.9	8164.6	14423.5	19824.8
77.5°	7.0	13.9	27.9	199.9	267.3	618.2	1050.5	2749.4	6514.5	10637.5	13928.5
80°	7.0	13.9	27.9	141.8	218.5	434.6	764.6	1875.6	3885.9	5591.8	7093.2
82.5°	7.0	13.9	27.9	102.3	158.0	313.8	471.8	925.0	1854.7	2684.4	3367.7
85°	4.6	11.6	25.6	67.4	83.7	190.6	281.2	411.4	555.5	734.4	992.4
87.5°	4.6	7.0	16.3	25.6	34.9	67.4	104.6	93.0	104.6	218.5	313.8
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):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4	10407.4
2.5°	10423.7	10414.4	10416.7	10467.9	10423.7	10433.0	10356.3	10509.7	10495.7	10474.8	10535.3
5°	10435.3	10430.7	10449.3	10493.4	10426.0	10437.6	10365.6	10544.5	10500.4	10493.4	10565.5
7.5°	10493.4	10486.4	10505.0	10526.0	10451.6	10451.6	10388.8	10530.6	10505.0	10458.6	10539.9
10°	10598.0	10572.4	10591.0	10602.7	10488.8	10484.1	10367.9	10535.3	10470.2	10446.9	10551.5
12.5°	10744.4	10686.3	10714.2	10695.6	10544.5	10516.7	10360.9	10470.2	10388.8	10374.9	10470.2
15°	10942.0	10865.3	10886.2	10851.3	10660.8	10579.4	10328.4	10374.9	10244.7	10233.1	10302.8
17.5°	11125.6	11079.1	11067.5	11067.5	10844.4	10642.2	10298.2	10233.1	10061.1	10049.5	10084.4
20°	11457.9	11395.2	11388.2	11332.4	11002.4	10693.3	10249.4	10049.5	9793.9	9735.8	9800.8
22.5°	11564.8	11869.3	11848.4	11602.0	11134.9	10735.1	10149.4	9819.4	9468.5	9356.9	9389.5
25°	11883.2	12341.1	12303.9	11946.0	11269.7	10758.4	10028.6	9566.1	9082.7	8887.4	8894.4
27.5°	12387.6	12854.7	12829.2	12313.2	11437.0	10765.3	9893.8	9298.8	8699.2	8443.5	8464.5
30°	13029.0	13500.8	13463.6	12722.3	11690.3	10779.3	9791.5	8978.1	8348.3	8071.7	8067.0
32.5°	13921.5	14349.1	14239.9	13268.4	11994.8	10837.4	9656.7	8673.6	8027.5	7737.0	7713.8
35°	15269.5	15427.5	15292.7	13919.2	12317.9	10874.6	9440.6	8376.1	7730.0	7444.2	7423.2
37.5°	17091.6	16896.4	16715.1	14651.3	12652.5	10865.3	9166.3	8087.9	7474.4	7202.5	7202.5
40°	17270.6	18583.7	18249.0	15422.9	12954.7	10814.1	8906.0	7806.7	7267.5	7046.7	7081.6
42.5°	18109.6	20649.8	20180.4	16168.9	13173.1	10665.4	8627.1	7551.1	7074.6	6895.7	6909.6
45°	20171.1	22530.1	22255.8	16889.4	13291.7	10402.8	8304.1	7300.1	6858.5	6716.7	6744.6
47.5°	22388.3	24765.9	24363.8	17554.1	13226.6	10014.6	7960.1	7070.0	6633.0	6542.4	6593.5
50°	24484.6	27117.9	26783.2	18021.3	12938.4	9470.8	7592.9	6825.9	6456.4	6384.4	6409.9
52.5°	26541.5	29253.7	29002.7	18274.6	12362.0	8901.4	7253.6	6593.5	6291.4	6200.8	6235.6
55°	28238.1	31278.1	31034.0	18249.0	11495.1	8306.4	6916.6	6342.5	6124.1	6042.7	6070.6
57.5°	29562.8	32853.8	32679.5	17860.9	10486.4	7760.2	6535.4	6096.2	5903.3	5831.2	5854.5
60°	30748.2	33853.2	33627.7	17003.3	9417.3	7158.3	6142.7	5803.3	5643.0	5584.9	5622.1
62.5°	31719.6	33874.1	34078.6	15762.2	8369.2	6521.5	5705.7	5443.1	5326.9	5292.0	5315.3
65°	31968.3	33251.2	33351.2	14228.3	7307.0	5889.3	5180.5	5008.5	4959.7	4938.8	4985.2
67.5°	31624.3	31938.1	31343.1	12931.4	6337.9	5173.5	4613.4	4506.5	4536.7	4541.3	4601.8
70°	30736.5	28424.0	27506.0	11846.1	5433.8	4381.0	3990.5	3955.7	4037.0	4104.4	4148.6
72.5°	28472.8	23336.5	22462.7	10312.1	4283.4	3353.7	3142.2	3253.8	3225.9	3256.1	3335.1
75°	24512.5	18012.0	17470.4	8392.4	3263.1	2438.0	2154.5	2166.1	2200.9	2354.3	2438.0
77.5°	17461.1	12954.7	12713.0	6437.8	2161.4	1434.0	1482.8	1647.8	1696.6	1701.3	1759.4
80°	9252.3	7221.1	6893.3	3793.0	1429.3	1024.9	1115.6	1187.6	1252.7	1320.1	1336.4
82.5°	4169.5	3265.4	3174.8	1884.9	906.4	790.2	811.1	934.3	987.8	999.4	1011.0
85°	1619.9	1127.2	1073.7	783.2	595.0	534.5	592.7	718.2	769.3	746.0	739.1
87.5°	432.3	265.0	241.7	262.6	278.9	295.2	337.0	383.5	439.3	423.0	409.0
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)