

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: P591376

Luminaire Tested: **CTN-CA8-480-730-U-T2-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591376
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-730-U-T2-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50703 lumens
Efficiency: N/A
Efficacy: 105.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

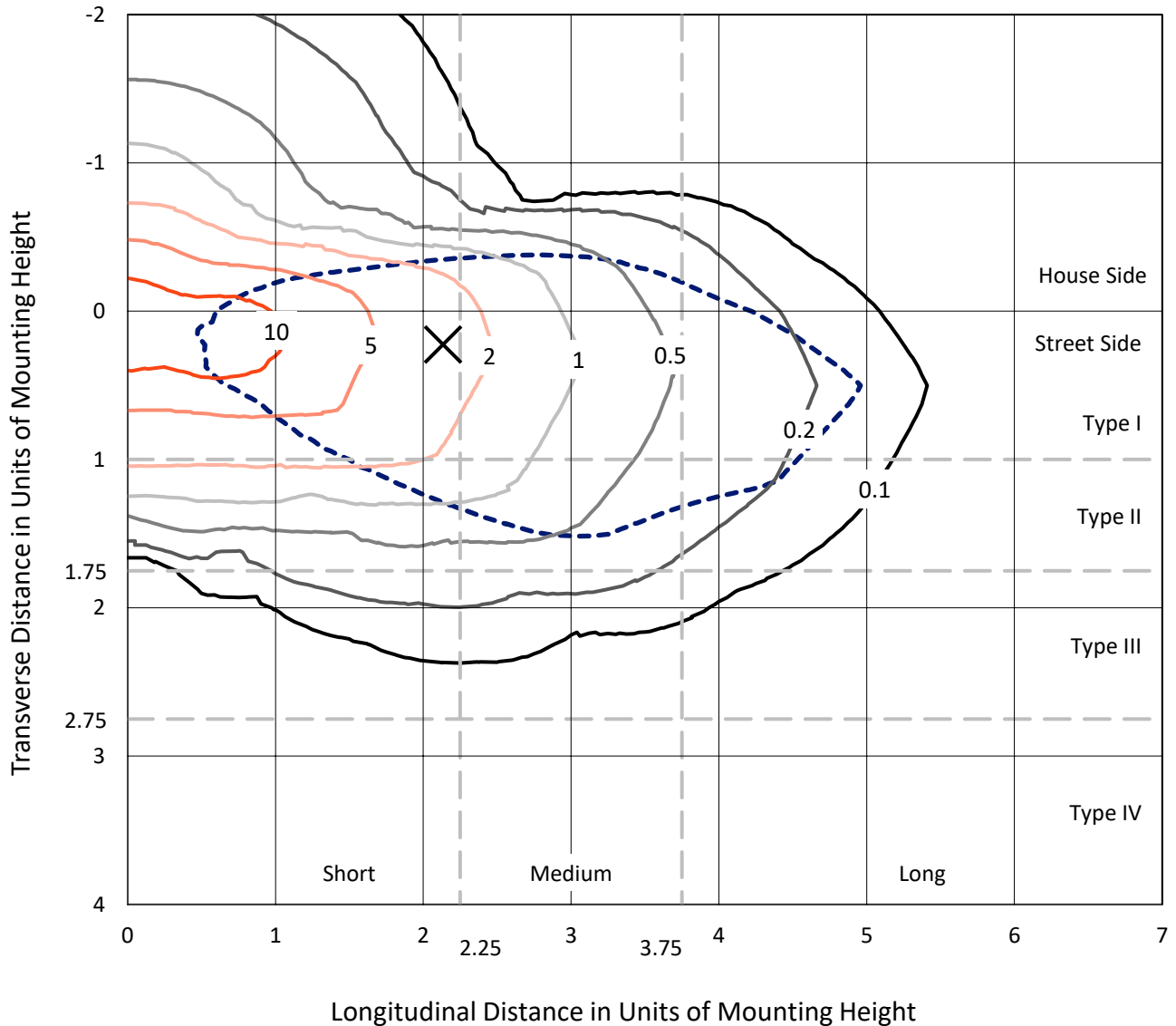
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

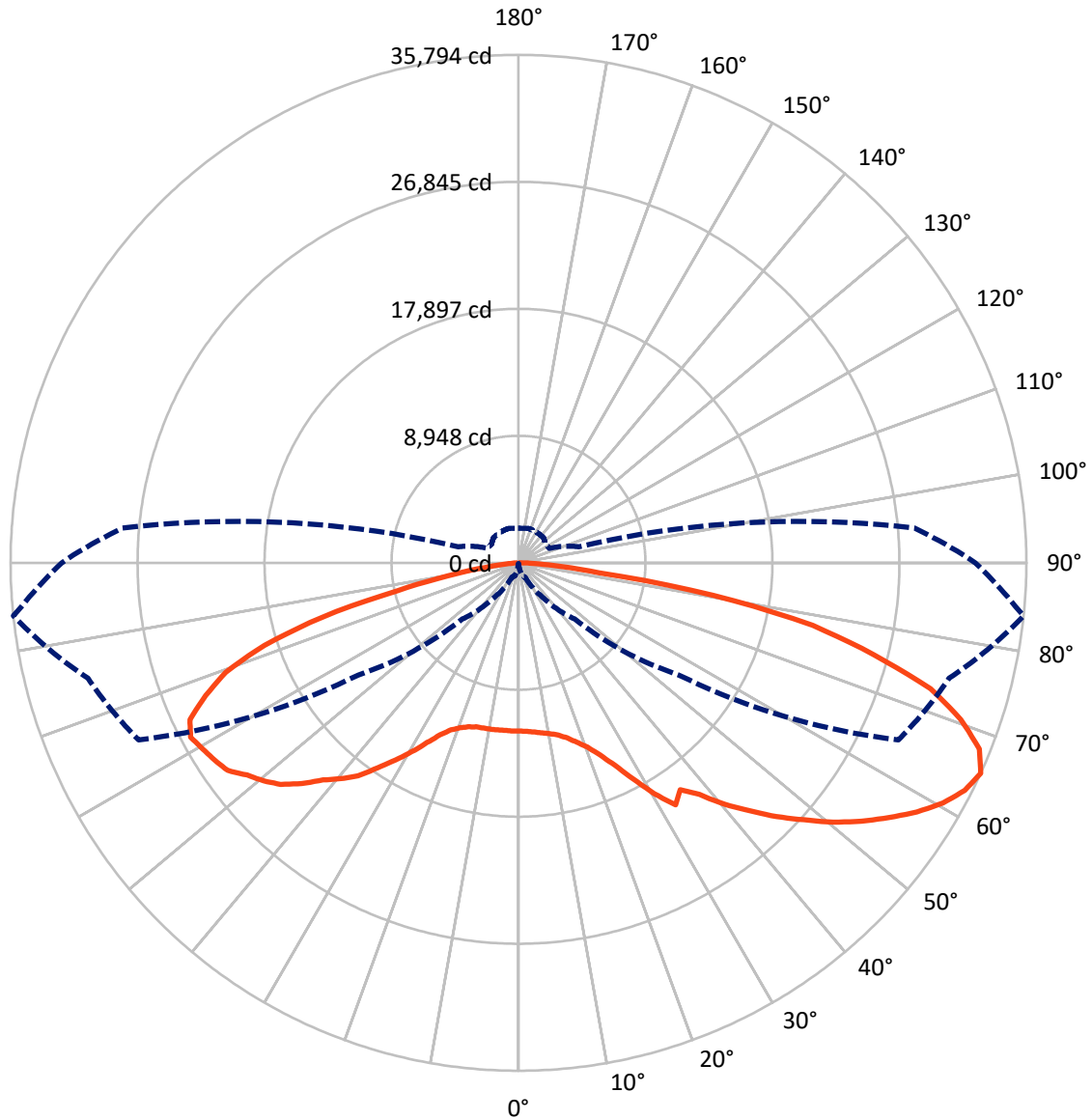
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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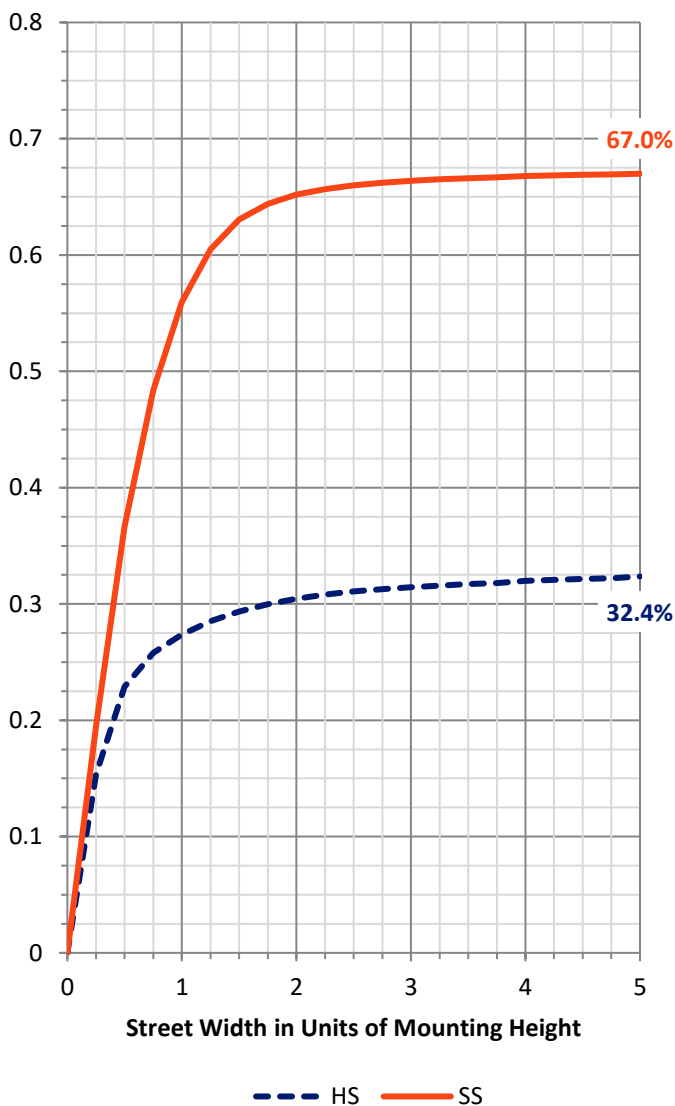
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16785.2	0.0	16785.2
	% Fixture	33.1	0.0	33.1
Street Side	Lumens	33917.8	0.0	33917.8
	% Fixture	66.9	0.0	66.9
Total	Lumens	50703.0	0.0	50703.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1144.2	2.3
10°-20°	3406.0	6.7
20°-30°	5117.3	10.1
30°-40°	6805.1	13.4
40°-50°	8402.2	16.6
50°-60°	9441.7	18.6
60°-70°	9260.2	18.3
70°-80°	6021.3	11.9
80°-90°	1105.0	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°	50703.0	100.0
0°-180°	50703.0	100.0

Coefficient of Utilization

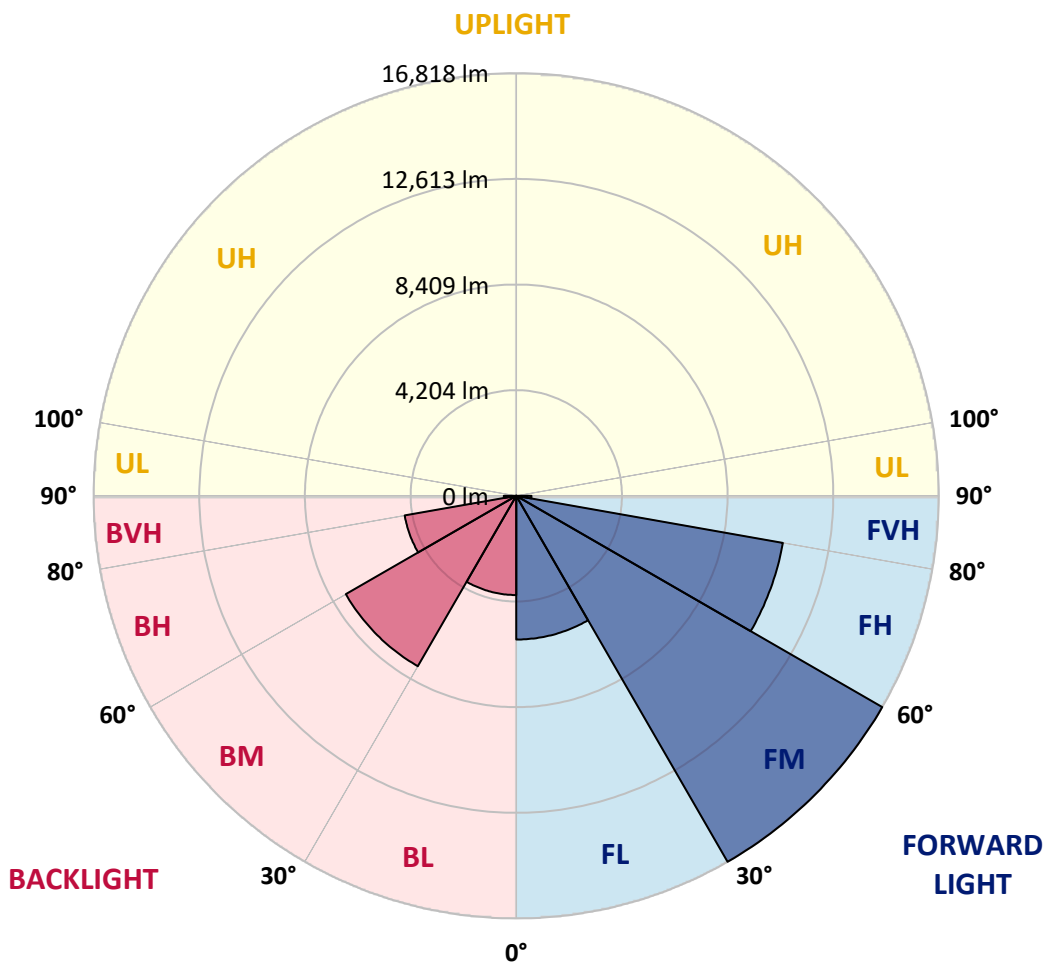


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5719.0	11.3			
FM (30°-60°)	16818.0	33.2			
FH (60°-80°)	10773.7	21.2			G4/12000
FVH (80°-90°)	607.1	1.2			G4/750
BL (0°-30°)	3948.5	7.8	B4/5000		
BM (30°-60°)	7831.0	15.4	B4/8500		
BH (60°-80°)	4507.8	8.9	B4/5000		G4/5000
BVH (80°-90°)	498.0	1.0			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°	84°	85°
0°	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9
2.5°	12361.8	12245.4	12258.3	12314.4	12098.7	12169.9	12049.1	12070.7	11926.2	11900.3	11915.4
5°	13230.9	13105.9	13105.9	13140.4	12778.0	12681.0	12344.6	12288.5	12075.0	11980.1	11984.4
7.5°	13679.5	13556.6	13532.9	13565.2	13304.3	13325.8	12980.8	12650.8	12271.2	12103.0	12094.4
10°	14339.4	14201.4	14119.5	14121.6	13770.1	13636.4	13381.9	13151.1	12571.0	12243.2	12202.2
12.5°	14872.1	14766.5	14723.3	14691.0	14302.8	14214.4	13735.6	13548.0	12929.0	12456.7	12402.8
15°	15180.5	15081.3	15018.8	14945.5	14729.8	14585.3	14378.3	13951.3	13353.9	12799.6	12732.8
17.5°	14376.1	14205.7	13910.3	13780.9	13731.3	13940.5	14831.2	14613.3	13901.7	13287.0	13215.8
20°	12254.0	12409.3	12633.6	12124.6	12282.0	13837.0	15508.3	15488.9	14667.3	13871.5	13778.7
22.5°	10425.2	10015.4	10722.8	11499.2	11995.2	13461.7	15771.5	16500.4	15704.6	14693.1	14585.3
25°	8546.7	8779.7	9732.9	11296.4	11990.9	13177.0	15627.0	17276.8	17030.9	15812.4	15685.2
27.5°	8292.3	8296.6	9213.1	10410.1	12228.1	13837.0	15784.4	17307.0	18529.8	17259.5	17013.7
30°	8238.3	8212.5	8460.5	9914.0	11809.7	14453.7	16798.0	17576.6	18894.3	18877.0	18549.2
32.5°	7986.0	7970.9	8229.7	8889.6	10914.7	15107.2	17757.7	18833.9	18762.7	20334.9	20246.5
35°	7625.9	7679.8	8001.1	8686.9	10494.2	14563.7	18743.3	20274.5	20395.3	19627.5	19979.0
37.5°	7250.6	7280.8	7591.3	8419.5	9791.1	13612.7	19493.8	21687.1	22101.2	20714.5	20434.1
40°	6739.5	6802.0	7166.5	8098.2	9648.8	12730.6	18963.3	23295.9	23940.8	22372.9	21941.6
42.5°	6198.2	6228.4	6672.6	7576.2	9411.5	12743.5	17874.2	24684.8	25635.9	23886.9	23449.1
45°	5723.7	5732.3	6148.6	6957.3	8943.6	12663.7	17186.2	24740.9	27665.3	25508.6	24958.7
47.5°	5143.6	5225.5	5637.4	6444.0	8346.2	12396.3	17507.5	23000.5	29701.1	27055.0	26552.5
50°	3944.5	4009.2	4807.1	5941.5	7692.7	11949.9	17727.5	24402.3	27432.4	28732.8	28372.7
52.5°	3392.4	3282.4	3856.1	5376.5	7095.3	11205.9	17820.3	26369.1	27428.1	30251.1	29890.9
55°	1451.4	2225.6	3474.3	4414.6	6549.7	10213.8	17753.4	28292.9	28765.2	31683.1	31558.0
57.5°	1147.3	1201.2	2553.5	3571.4	5902.7	9040.6	17451.5	29565.3	29938.4	33117.2	32761.4
60°	211.3	239.4	1255.2	1509.6	4274.4	7289.4	16351.6	29746.4	30794.6	34365.9	33910.9
62.5°	97.0	114.3	1009.3	1257.3	3418.3	5995.4	15409.1	29688.2	31586.0	35293.3	34892.2
65°	45.3	58.2	903.6	1140.9	2958.9	5594.3	13776.6	29530.8	31411.4	35793.6	35142.3
67.5°	34.5	49.6	830.3	1024.4	2460.7	5195.3	12225.9	27878.8	30570.3	35019.4	34115.8
70°	34.5	49.6	759.1	931.7	2087.6	4688.5	9924.8	25810.6	28650.9	33063.3	32310.7
72.5°	36.7	49.6	675.0	843.2	1809.4	4048.0	7753.1	22508.8	26349.7	30363.2	29571.7
75°	36.7	49.6	582.3	746.2	1524.7	3390.2	5191.0	16088.5	22696.4	25842.9	24963.0
77.5°	36.7	49.6	483.1	623.3	1242.2	2708.7	3357.9	8674.0	17856.9	21193.2	20065.3
80°	36.7	49.6	360.2	472.3	933.8	1910.8	2005.7	4373.7	9607.8	13923.2	14119.5
82.5°	36.7	47.4	250.2	345.1	610.3	1048.1	1108.5	2111.3	3545.5	5710.8	5790.6
85°	34.5	41.0	179.0	228.6	334.3	394.7	539.2	1050.3	1699.4	2437.0	2417.6
87.5°	21.6	21.6	58.2	90.6	135.9	155.3	241.5	388.2	586.6	804.4	759.1
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°	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9	11852.9
2.5°	11913.2	11863.6	11801.1	11783.8	11637.2	11568.2	11428.0	11490.5	11419.4	11361.1	11428.0
5°	11930.5	11857.2	11725.6	11570.3	11257.6	11115.3	10916.9	10938.4	10834.9	10755.1	10800.4
7.5°	11973.6	11883.0	11676.0	11326.6	10953.5	10729.2	10522.2	10684.0	10612.8	10552.4	10597.7
10°	11995.2	11924.0	11557.4	11188.6	10651.6	10528.7	10269.9	10250.5	10256.9	10250.5	10321.6
12.5°	12053.4	11952.1	11419.4	10949.2	10492.0	10166.4	10006.8	10004.6	9799.7	9711.3	9750.1
15°	12225.9	12006.0	11326.6	10664.5	10159.9	9944.2	9439.6	9441.7	9355.5	9254.1	9252.0
17.5°	12571.0	12167.7	11326.6	10472.6	9853.7	9418.0	8978.1	8738.7	8680.4	8693.4	8684.8
20°	13026.1	12439.5	11322.3	10190.1	9422.3	8971.6	8337.5	8134.8	7951.5	7964.4	7964.4
22.5°	13679.5	12840.6	11330.9	9931.3	9010.4	8397.9	7684.1	7427.4	7231.2	7237.7	7237.7
25°	14617.7	13528.6	11432.3	9773.9	8458.3	7722.9	7002.6	6603.6	6403.0	6405.2	6409.5
27.5°	15812.4	14488.3	11783.8	9439.6	7998.9	6924.9	6135.6	5842.3	5641.8	5590.0	5590.0
30°	17164.6	15639.9	12238.9	9221.8	7287.3	6025.6	5370.0	5152.2	4910.7	4839.5	4839.5
32.5°	18663.5	16795.9	12709.0	8954.3	6616.5	5253.6	4707.9	4507.4	4205.4	4117.0	4086.8
35°	20222.7	17990.6	13280.5	8579.1	5773.3	4617.3	4134.3	3890.6	3672.7	3556.3	3528.3
37.5°	21063.8	19351.5	13796.0	8199.5	5122.0	4114.9	3575.7	3385.9	3241.4	3159.5	3144.4
40°	22219.8	20341.4	14063.4	7571.9	4421.1	3603.7	3060.3	3051.6	3071.0	2997.7	2993.4
42.5°	23397.3	21318.3	13990.1	6730.8	3875.5	3081.8	2801.5	2950.3	3058.1	2993.4	2997.7
45°	24870.3	22633.9	14257.5	5846.6	3336.3	2792.8	2747.5	2922.2	3071.0	3055.9	3055.9
47.5°	26360.5	23906.3	13763.6	4764.0	2974.0	2708.7	2754.0	2876.9	3062.4	3112.0	3101.2
50°	27574.7	24777.5	13459.5	3845.3	2769.1	2710.9	2775.6	2820.9	3023.6	3103.4	3101.2
52.5°	28556.0	25607.9	12325.2	3245.7	2652.7	2719.5	2844.6	2812.2	2954.6	3038.7	3088.3
55°	29944.8	26757.3	11033.3	3015.0	2592.3	2710.9	2868.3	2842.4	2900.7	2939.5	2976.2
57.5°	31018.8	27328.8	9303.7	2866.2	2538.4	2697.9	2848.9	2851.1	2879.1	2864.0	2848.9
60°	31920.3	27850.8	7610.8	2721.7	2469.3	2669.9	2767.0	2797.2	2788.5	2769.1	2730.3
62.5°	32360.3	28415.8	5911.3	2568.5	2396.0	2588.0	2633.2	2667.8	2648.3	2583.6	2579.3
65°	32194.2	28010.3	4382.3	2402.5	2307.6	2497.4	2495.2	2510.3	2518.9	2437.0	2445.6
67.5°	31262.5	26229.0	3338.5	2191.1	2206.2	2368.0	2357.2	2365.8	2342.1	2286.0	2294.7
70°	28553.8	24206.0	2368.0	1835.3	1999.2	2165.3	2180.4	2217.0	2163.1	2063.9	2070.4
72.5°	24548.9	20729.6	1660.6	1462.2	1755.5	1966.8	1958.2	1956.1	1882.7	1921.6	1969.0
75°	20938.7	15875.0	1261.6	1177.5	1386.7	1693.0	1790.0	1796.5	1807.3	2195.5	2223.5
77.5°	16118.7	9603.5	1074.0	929.5	1076.2	1404.0	1585.1	1658.5	2277.4	2359.4	2316.2
80°	9605.6	5546.9	830.3	724.6	869.1	1071.8	1354.4	1751.2	2288.2	2044.5	1956.1
82.5°	4675.6	2572.9	603.9	552.1	640.5	778.5	1063.2	2040.2	1936.7	1580.8	1559.2
85°	1744.7	869.1	362.3	377.4	427.0	511.1	808.7	1947.4	1485.9	1287.5	1216.3
87.5°	435.6	159.6	146.7	151.0	191.9	256.6	414.1	938.1	720.3	597.4	584.4
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)