

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: P591221

Luminaire Tested: **CTN-CA10-630-727-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591221
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-630-727-U-T3-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 46723 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B5 - U0 - G4

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

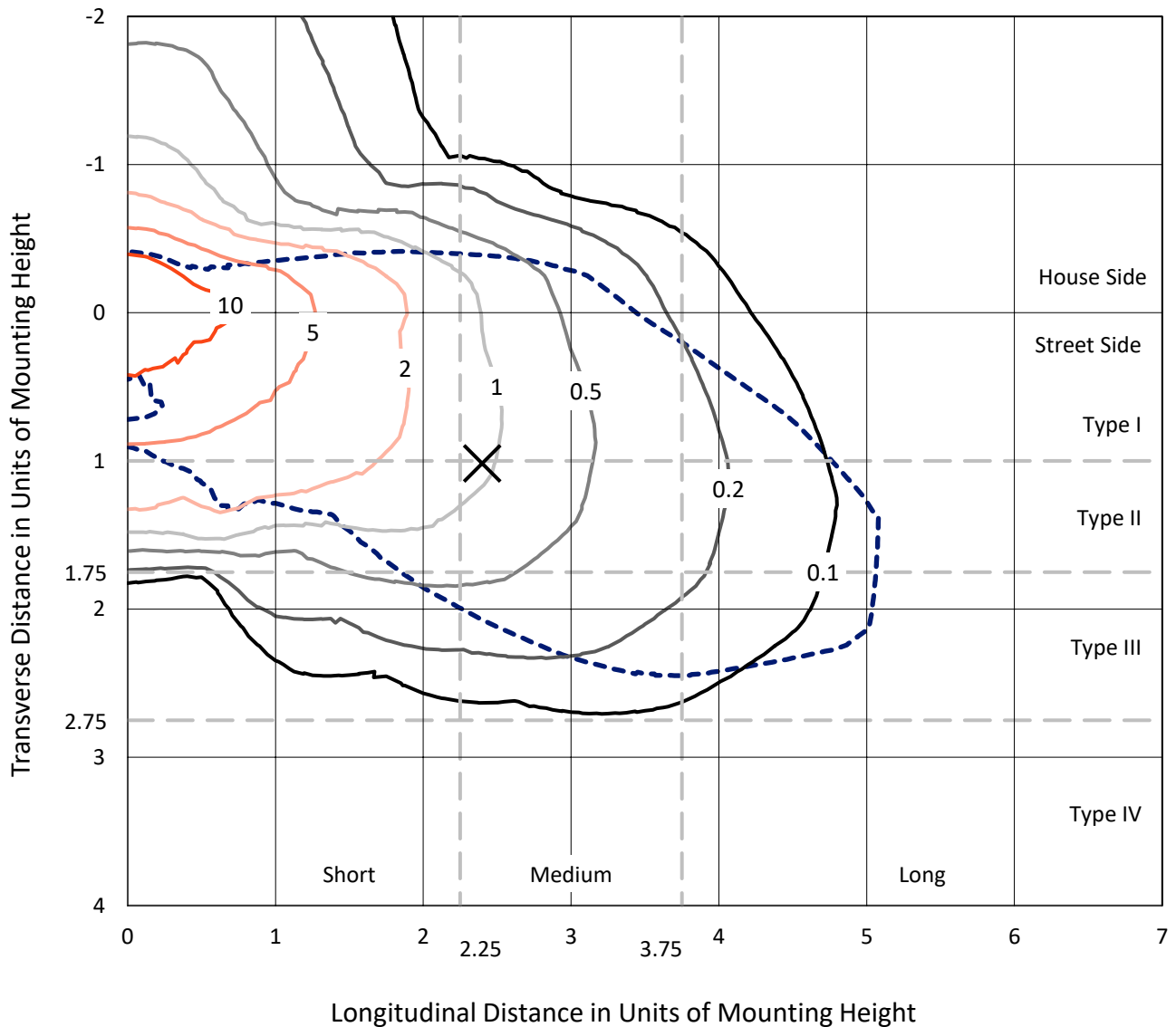




REPORT NUMBER: P591221
 CATALOG NUMBER: CTN-CA10-630-727-U-T3-SSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

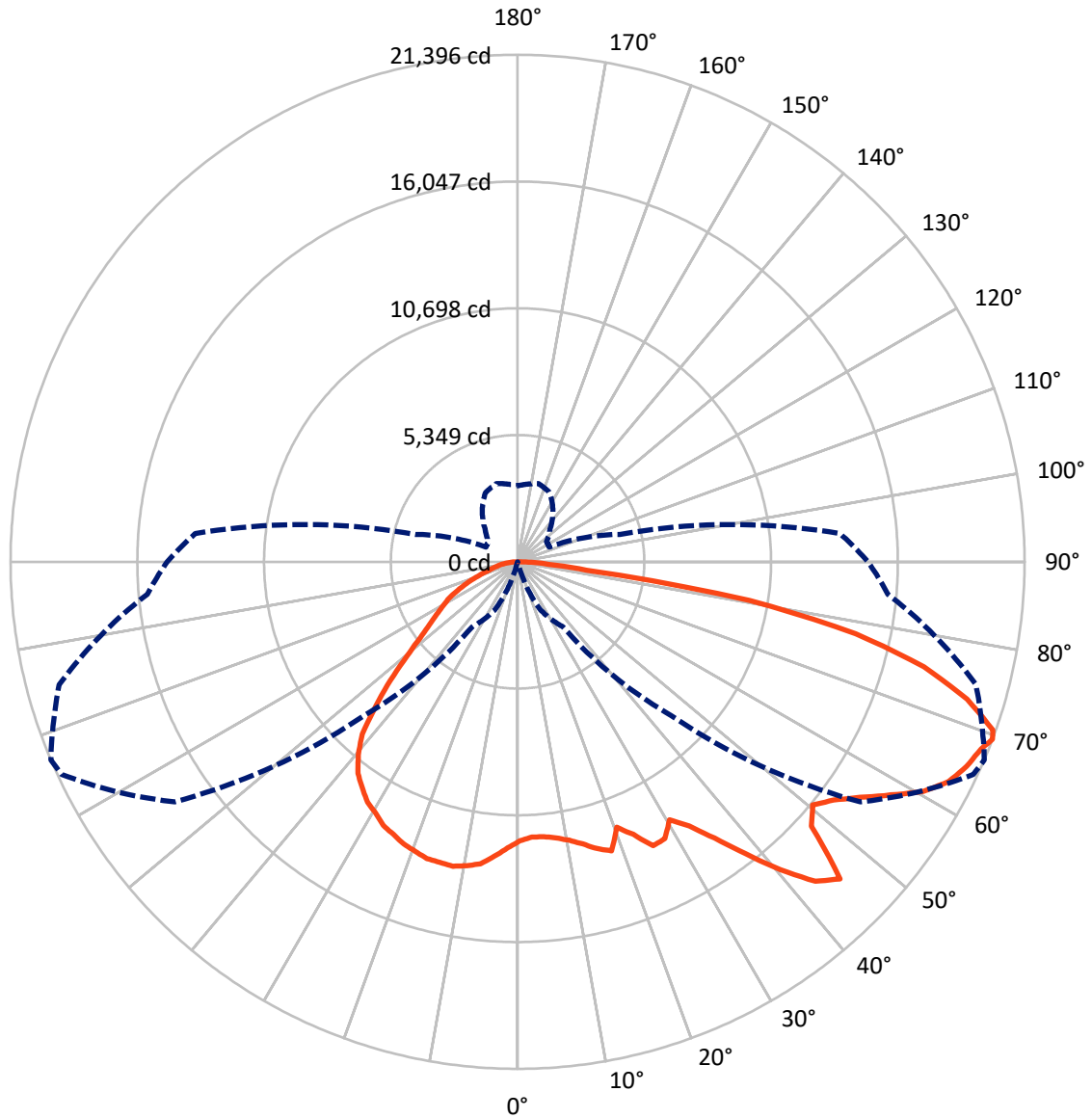
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.7 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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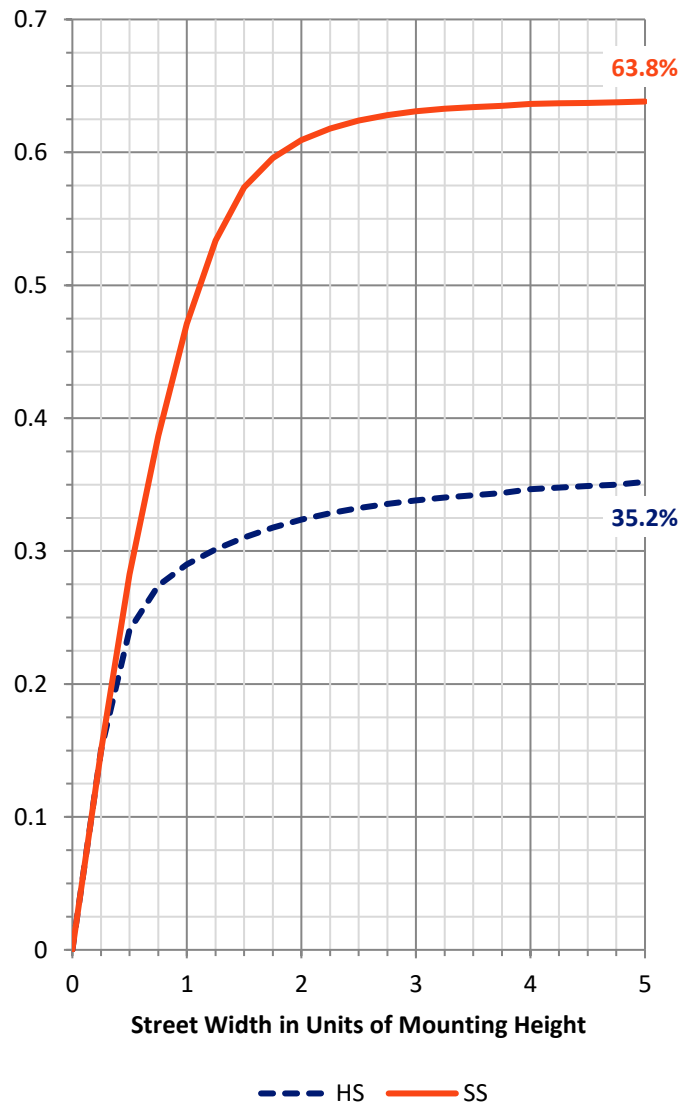
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16903.0	0.0	16903.0
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	29820.0	0.0	29820.0
	% Fixture	63.8	0.0	63.8
Total	Lumens	46723.0	0.0	46723.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1177.0	2.5
10°-20°	3633.9	7.8
20°-30°	5363.4	11.5
30°-40°	6738.7	14.4
40°-50°	7904.2	16.9
50°-60°	8271.1	17.7
60°-70°	7389.3	15.8
70°-80°	5200.7	11.1
80°-90°	1044.6	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°	46723.0	100.0
0°-180°	46723.0	100.0

Coefficient of Utilization

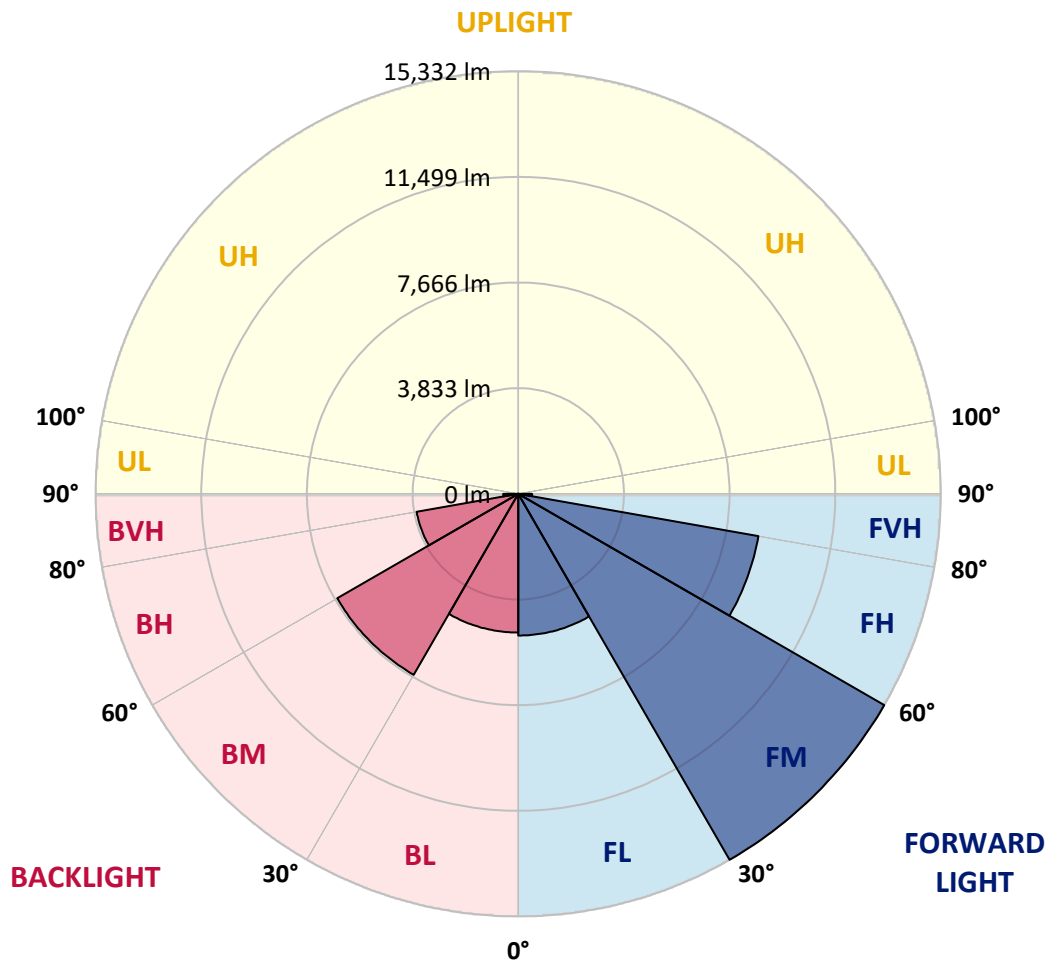


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5141.7	11.0			
FM (30°-60°)	15332.4	32.8			
FH (60°-80°)	8846.7	18.9			G4/12000
FVH (80°-90°)	499.2	1.1			G3/500
BL (0°-30°)	5032.6	10.8	B5		
BM (30°-60°)	7581.7	16.2	B4/8500		
BH (60°-80°)	3743.3	8.0	B4/5000		G4/5000
BVH (80°-90°)	545.4	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-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9
2.5°	11489.8	11422.2	11453.6	11542.9	11357.0	11489.8	11441.5	11576.7	11627.4	11620.2	11813.4
5°	11581.6	11506.7	11518.8	11586.4	11383.5	11487.4	11441.5	11591.2	11649.2	11632.3	11895.5
7.5°	11907.6	11825.5	11798.9	11820.6	11600.9	11680.6	11581.6	11702.3	11765.1	11765.1	12064.5
10°	12421.9	12322.9	12265.0	12262.5	12004.2	11967.9	11847.2	11902.7	11948.6	11987.2	12320.5
12.5°	12960.4	12878.3	12803.5	12762.4	12421.9	12337.4	12161.1	12202.2	12216.7	12269.8	12600.6
15°	13450.6	13368.5	13346.8	13281.6	12943.5	12803.5	12557.1	12537.8	12557.1	12588.5	12917.0
17.5°	13262.3	13267.1	13387.9	13399.9	12960.4	12636.8	12465.4	12791.4	12822.8	13071.5	13284.0
20°	12904.9	12728.6	12095.9	11750.6	11801.3	12221.5	11910.0	11895.5	11960.7	12402.6	13479.6
22.5°	10748.4	10651.8	10999.6	11110.7	11511.5	11670.9	12412.3	12431.6	12496.8	12496.8	12810.7
25°	9280.2	9780.1	10456.2	11663.7	11538.1	11569.5	11871.3	13153.6	13276.8	13274.4	13228.5
27.5°	9594.1	9531.4	10543.2	11301.4	12197.3	12141.8	11813.4	12685.1	13230.9	14167.8	13950.5
30°	9970.9	9925.0	9999.8	11282.1	12767.2	12842.1	12537.8	12448.5	12634.4	14602.5	14776.4
32.5°	10321.0	10265.5	10350.0	10545.6	11967.9	13564.1	13329.9	13221.2	13288.8	13684.9	15838.9
35°	10630.1	10625.3	10721.9	10953.7	12165.9	13815.3	14141.3	14134.0	14315.2	14655.6	15993.5
37.5°	10849.9	10847.4	10924.7	11195.2	11468.1	12760.0	14902.0	15334.2	15624.0	16128.7	15624.0
40°	10847.4	10886.1	11088.9	11436.7	11798.9	12187.7	15237.6	16744.5	17092.2	17452.0	16611.7
42.5°	10620.5	10642.2	10999.6	11644.3	12093.5	12429.2	13904.6	18041.2	18430.0	18403.5	17389.2
45°	10410.4	10420.0	10818.5	11610.5	12339.8	12945.9	13631.8	18036.4	19086.9	19251.1	18120.9
47.5°	10137.5	10137.5	10531.1	11414.9	12562.0	13527.9	14361.0	15580.5	16676.9	19985.2	18727.1
50°	9787.3	9830.8	9347.8	11212.1	12668.2	14080.9	14979.2	15983.8	16135.9	17872.2	19289.7
52.5°	9229.5	9205.4	7304.9	10987.5	12711.7	14481.8	15621.6	16614.1	16696.2	16522.3	18739.1
55°	5817.3	6486.3	6459.7	10724.3	12685.1	14740.2	16114.2	17307.1	17539.0	17326.5	15764.1
57.5°	3513.6	3354.2	5520.3	9970.9	10188.2	14940.6	16783.1	18360.0	18562.8	18070.2	16029.7
60°	1371.6	1294.4	1398.2	4537.5	7309.7	13899.8	17693.5	19478.1	19671.3	18777.8	16254.3
62.5°	171.5	147.3	125.6	3141.7	4646.1	10325.8	18176.5	20378.8	20415.0	19289.7	16297.7
65°	24.1	26.6	48.3	2801.2	4221.1	10149.6	18345.5	20745.9	20820.7	19659.2	16150.4
67.5°	9.7	12.1	38.6	2436.6	3704.4	9681.1	17927.7	20999.4	21086.4	20016.6	16008.0
69°	9.7	12.1	38.6	2190.3	3351.8	9164.3	17659.7	21224.0	21395.5	20023.8	15681.9
70°	9.7	12.1	36.2	2014.0	3076.5	8727.2	17401.3	21137.1	21274.7	19830.6	15319.7
72.5°	9.7	12.1	36.2	1550.3	2340.0	7007.9	15766.5	19905.5	19835.5	18613.6	13909.5
75°	12.1	12.1	36.2	1089.1	1622.8	4984.2	13305.7	17676.6	17708.0	16570.6	11699.9
77.5°	12.1	12.1	36.2	693.1	1023.9	2883.3	9635.2	14496.3	14585.6	13805.6	8761.0
80°	12.1	12.1	36.2	316.3	635.1	1506.9	4737.9	9446.8	9927.4	9268.1	4807.9
82.5°	12.1	12.1	33.8	198.0	347.7	678.6	1869.1	2963.0	2934.0	2888.1	1528.6
85°	9.7	9.7	26.6	140.1	231.8	393.6	1038.4	1328.2	1311.3	1161.5	789.7
87.5°	4.8	4.8	14.5	58.0	96.6	178.7	519.2	603.7	574.7	492.6	338.1
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°	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9	11769.9
2.5°	11902.7	11919.6	11999.3	12103.2	12134.6	12269.8	12291.5	12513.7	12547.5	12603.0	12627.2
5°	12023.5	12088.7	12262.5	12506.4	12714.1	12926.6	12933.9	13204.3	13274.4	13259.9	13329.9
7.5°	12194.9	12303.6	12569.2	12907.3	12982.2	13257.5	13238.1	13506.2	13511.0	13472.4	13578.6
10°	12458.1	12593.4	12834.9	13042.5	13185.0	13363.7	13339.6	13593.1	13556.9	13515.8	13634.2
12.5°	12728.6	12798.6	12945.9	13177.8	13209.2	13271.9	13240.5	13474.8	13436.1	13385.4	13501.4
15°	12965.3	12999.1	12999.1	13124.6	13044.9	13095.7	12989.4	13177.8	13088.4	13064.3	13175.3
17.5°	13271.9	13216.4	13102.9	13093.2	12885.6	12808.3	12648.9	12699.6	12530.6	12547.5	12605.4
20°	13617.3	13494.1	13194.7	12895.2	12511.3	12327.7	12011.4	11987.2	11830.3	11801.3	11856.8
22.5°	13745.2	13853.9	13305.7	12726.2	12064.5	11654.0	11279.7	11101.0	10871.6	10724.3	10743.6
25°	14134.0	14329.6	13474.8	12424.3	11538.1	10861.9	10299.3	9891.2	9545.8	9369.6	9405.8
27.5°	14660.5	14979.2	13571.4	12214.2	10847.4	9963.6	9021.8	8485.7	8128.3	7944.8	7940.0
30°	15413.9	15814.8	13757.3	11774.7	10079.5	8782.8	7621.2	6988.5	6696.3	6575.6	6585.3
32.5°	16355.7	16838.7	14143.7	11407.7	9244.0	7519.8	6196.5	5643.5	5510.7	5488.9	5476.8
35°	17604.2	18082.3	14450.4	10842.6	8159.7	6087.8	4974.6	4583.4	4605.1	4600.3	4614.8
37.5°	17401.3	19214.9	14800.5	10289.6	6863.0	4771.7	4020.7	3801.0	3808.2	3892.7	3909.6
40°	16638.2	18224.8	15322.1	9374.4	5346.4	3665.7	3170.7	3120.0	3327.6	3513.6	3547.4
42.5°	17237.1	17628.3	15392.2	8386.7	3912.0	2810.9	2651.5	2861.6	3197.2	3412.2	3450.8
45°	17836.0	18152.3	14986.5	6908.8	2806.0	2405.2	2523.5	2825.4	3197.2	3426.7	3453.2
47.5°	18444.5	18442.1	14513.2	5539.6	2294.1	2298.9	2492.1	2827.8	3216.6	3448.4	3462.9
50°	18830.9	18676.3	13276.8	4339.5	2134.7	2236.1	2475.2	2842.3	3211.7	3380.8	3388.0
52.5°	19024.1	18794.7	12185.3	3467.7	2059.9	2185.4	2477.6	2876.1	3185.2	3279.3	3274.5
55°	18698.1	18729.5	11282.1	2883.3	1989.8	2144.4	2489.7	2900.2	3197.2	3293.8	3293.8
57.5°	18292.4	18299.6	10562.5	2441.4	1919.8	2110.6	2504.2	2936.4	3419.4	3600.5	3574.0
60°	18007.4	17681.4	9543.4	2163.7	1840.1	2079.2	2523.5	3093.4	3941.0	4124.5	4061.8
62.5°	17539.0	17097.0	8495.4	1970.5	1750.8	2055.0	2535.6	3313.2	4011.0	4020.7	3866.2
65°	16717.9	16085.2	6858.1	1779.7	1659.0	2021.2	2528.3	3395.3	3694.7	3549.8	3506.3
67.5°	15529.8	14703.9	5375.4	1589.0	1557.6	1970.5	2576.6	3245.5	3489.4	3371.1	3313.2
69°	14788.5	13655.9	4462.6	1475.5	1492.4	1931.9	2600.8	3216.6	3417.0	3272.1	3204.5
70°	14225.8	12747.9	3779.2	1400.6	1436.8	1898.1	2552.5	3199.7	3383.2	3204.5	3124.8
72.5°	12079.0	10248.6	2419.7	1226.7	1291.9	1813.5	2422.1	3093.4	3308.3	3187.6	3088.6
75°	9338.2	7527.0	1543.1	1067.4	1144.6	1688.0	2286.9	3018.5	3342.1	3124.8	2907.5
77.5°	6285.8	4204.2	1178.4	895.9	970.8	1523.8	2071.9	2808.5	3226.2	3035.4	2767.4
80°	2864.0	1603.5	910.4	726.9	784.8	1226.7	1787.0	2484.9	3049.9	3047.5	2854.3
82.5°	1147.0	1072.2	676.2	555.4	618.2	915.2	1415.1	2127.5	2690.1	2806.0	2996.8
85°	668.9	676.2	449.2	386.4	461.2	673.7	1009.4	1644.5	2187.8	2419.7	2581.5
87.5°	272.9	304.3	210.1	202.8	253.6	359.8	463.6	796.9	1178.4	1446.5	1545.5
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)