

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: P591110

Luminaire Tested: **CTN-CA10-310-722-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591110
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-CA10-310-722-U-T2-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: 24185 lumens
Efficiency: N/A
Efficacy: 77.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

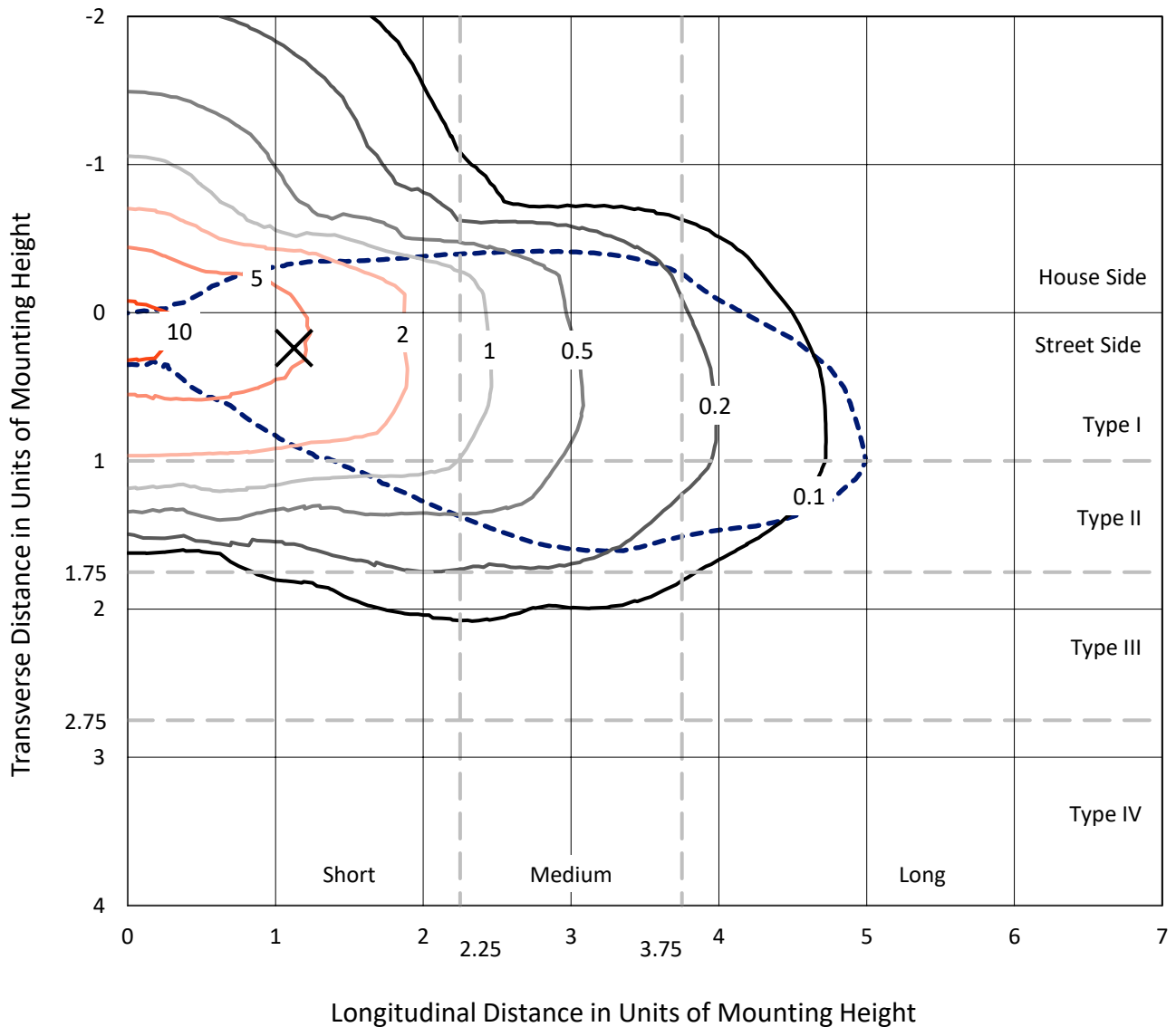
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

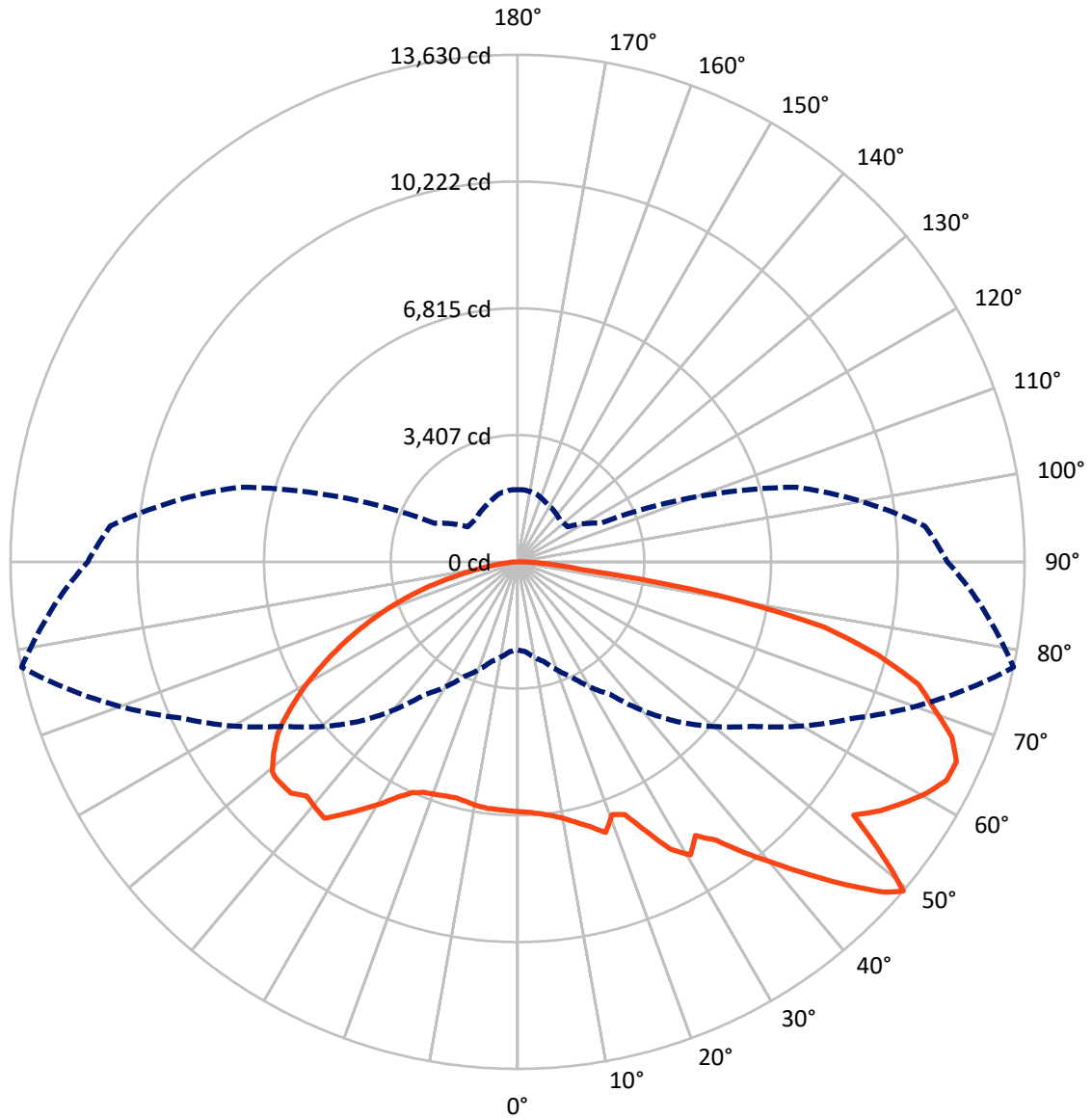
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.3 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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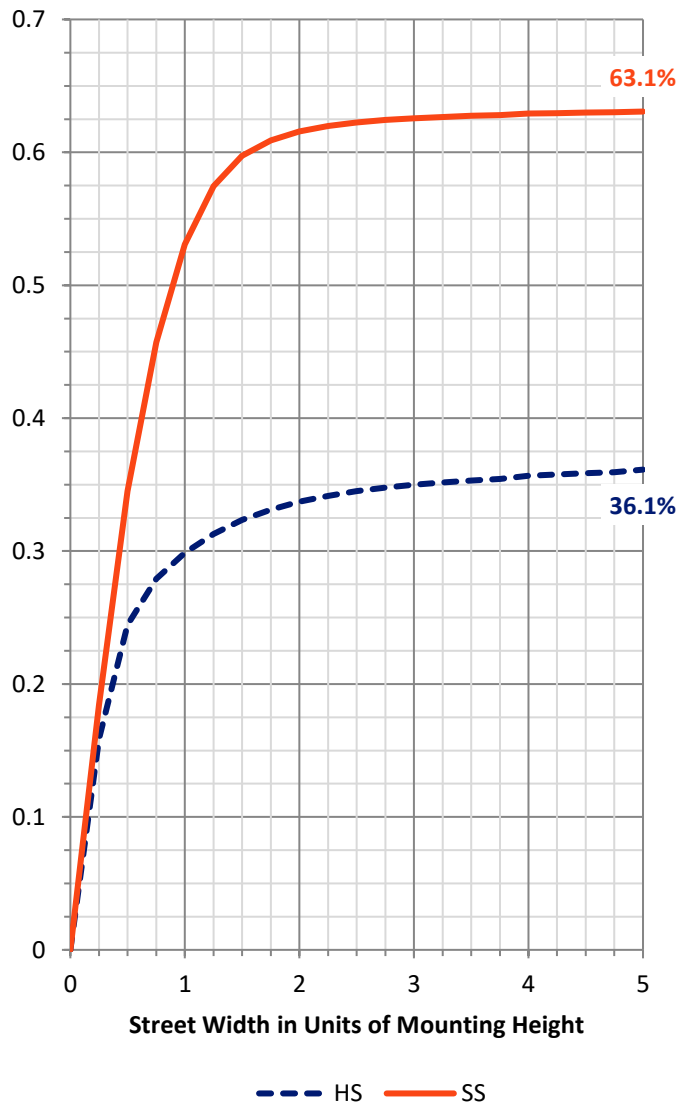
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8954.8	0.0	8954.8
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	15230.2	0.0	15230.2
	% Fixture	63.0	0.0	63.0
Total	Lumens	24185.0	0.0	24185.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	651.0	2.7
10°-20°	1915.8	7.9
20°-30°	2734.8	11.3
30°-40°	3520.6	14.6
40°-50°	4129.6	17.1
50°-60°	4260.3	17.6
60°-70°	3868.3	16.0
70°-80°	2569.0	10.6
80°-90°	535.7	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°	24185.0	100.0
0°-180°	24185.0	100.0

Coefficient of Utilization



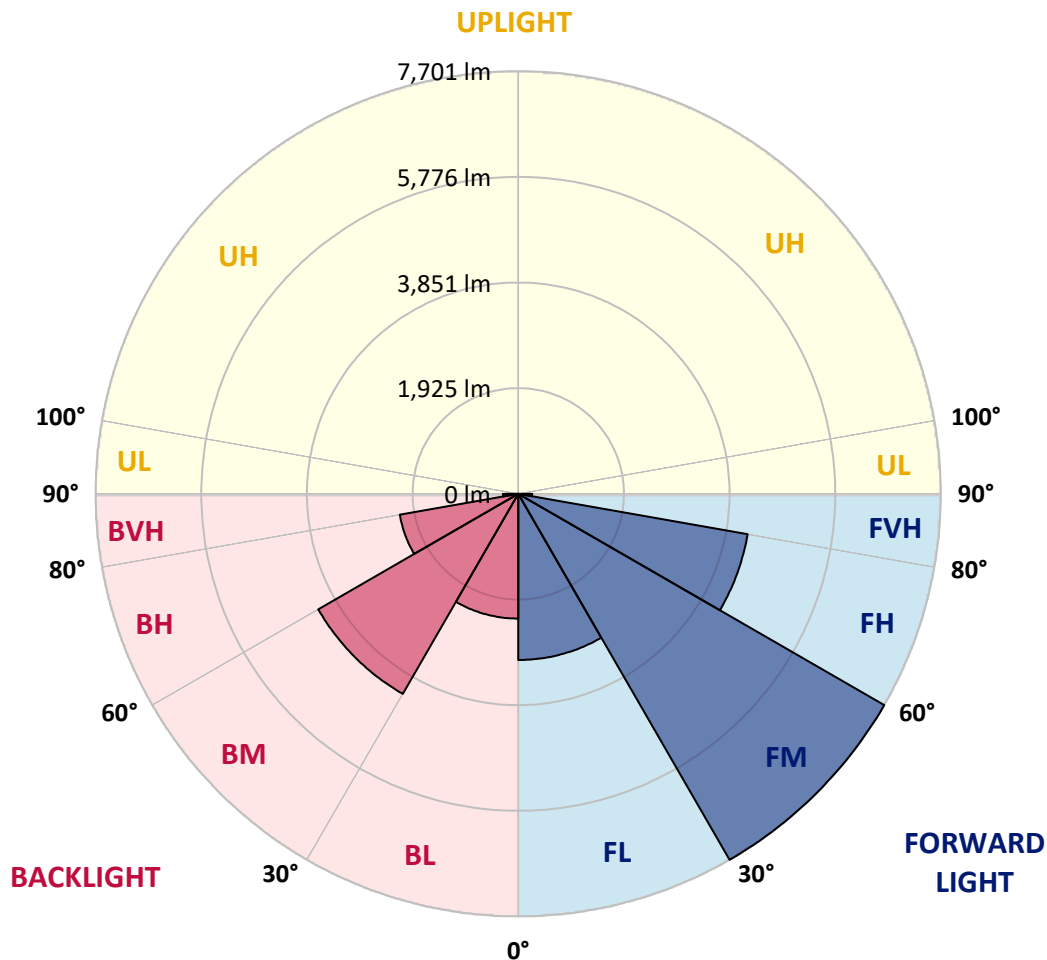
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3028.3	12.5			
FM (30°-60°)	7701.2	31.8			
FH (60°-80°)	4245.4	17.6			G2/5000
FVH (80°-90°)	255.3	1.1			G3/500
BL (0°-30°)	2273.3	9.4	B3/2500		
BM (30°-60°)	4209.3	17.4	B3/5000		
BH (60°-80°)	2191.9	9.1	B3/2500		G3/2500
BVH (80°-90°)	280.4	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9
2.5°	6990.5	6936.8	6953.9	6983.2	6850.2	6879.5	6822.1	6845.3	6774.5	6747.7	6759.9
5°	7484.8	7427.4	7448.2	7457.9	7265.1	7187.0	7007.6	6969.8	6858.7	6809.9	6805.0
7.5°	7728.9	7666.6	7671.5	7677.6	7523.8	7534.8	7372.5	7178.5	6972.2	6897.8	6864.8
10°	8130.4	8043.7	8014.4	8002.2	7794.8	7708.1	7566.6	7460.4	7138.2	7025.9	6941.7
12.5°	8378.1	8314.7	8314.7	8302.5	8082.8	8015.7	7763.0	7650.8	7333.5	7200.4	7055.2
15°	8423.3	8380.6	8435.5	8424.5	8280.5	8202.4	8090.1	7855.8	7531.2	7393.3	7222.4
17.5°	7913.2	7799.7	7582.4	7615.4	7616.6	7775.2	7698.4	7859.5	7764.3	7652.0	7467.7
20°	6498.7	6537.7	6885.6	6801.4	6769.6	7106.5	7450.6	7460.4	7271.2	7252.9	7501.9
22.5°	5661.5	5522.4	5909.2	6471.8	6507.2	6957.6	7359.1	7842.4	7539.7	7377.4	7187.0
25°	4821.8	4873.1	5456.5	6185.0	6700.1	6800.1	7261.5	8032.8	8162.1	8012.0	7614.2
27.5°	4676.6	4674.2	4928.0	5735.9	6792.8	7168.7	7321.3	7925.4	8827.2	8743.0	8240.2
30°	4644.9	4625.4	4758.4	5429.6	6362.0	7500.7	7791.1	8007.1	8774.8	9149.4	8940.7
32.5°	4505.8	4488.7	4630.2	4981.7	6016.6	7743.5	8239.0	8561.2	8596.6	8773.5	9680.3
35°	4287.3	4300.7	4497.2	4879.2	5517.5	7160.2	8697.9	9184.8	9313.0	9190.9	9316.6
37.5°	4064.0	4078.6	4271.4	4704.7	5430.8	6916.1	8994.4	9787.7	10053.8	9923.2	9342.3
40°	3786.9	3810.1	4033.5	4520.4	5330.8	6365.7	8385.5	10472.4	10833.6	10662.7	10015.9
42.5°	3472.1	3481.8	3735.7	4239.7	5203.8	6398.6	7756.9	11104.5	11590.3	11496.3	10679.8
45°	3198.7	3198.7	3429.4	3878.5	4914.6	6336.4	7490.9	10633.5	12519.0	12386.0	11345.0
47.5°	2826.5	2859.4	3130.4	3575.8	4574.1	6192.4	7643.4	9575.4	13384.3	13273.2	12012.5
49°	2367.6	2423.7	2781.3	3409.8	4355.7	6072.8	7704.5	9948.8	12787.5	13629.6	12445.8
50°	2179.7	2208.9	2212.6	3291.5	4193.3	5964.2	7732.5	10235.6	11780.6	13054.7	12749.6
52.5°	1886.8	1702.5	1513.3	2963.2	3867.5	5562.6	7749.6	11014.2	11539.0	11310.8	12512.9
55°	796.9	1043.5	1326.6	2423.7	3516.0	5065.9	7693.5	11869.7	12069.9	11818.5	10728.6
57.5°	602.9	641.9	712.7	1880.7	2518.9	4499.7	7504.3	12411.6	12517.8	12232.2	11164.3
60°	87.9	90.3	126.9	762.8	1442.5	3212.1	6823.3	12395.7	12850.9	12631.3	11540.2
62.5°	36.6	37.8	48.8	624.9	1111.8	2472.6	6229.0	12188.3	13174.3	12938.8	11892.9
65°	6.1	7.3	20.7	552.8	919.0	2310.2	5577.3	12229.8	13059.6	12962.0	12029.6
67.5°	4.9	6.1	19.5	496.7	757.9	2115.0	4934.1	11569.5	12641.0	12598.3	11664.7
70°	4.9	6.1	20.7	449.1	655.4	1863.6	4139.6	10655.4	11873.4	11890.5	11052.1
72.5°	6.1	6.1	20.7	401.5	569.9	1592.6	3275.6	9435.0	11176.5	11270.5	10180.7
75°	6.1	6.1	19.5	349.0	489.4	1327.8	2359.1	6938.0	10023.2	9995.2	8928.5
77.5°	6.1	6.1	19.5	277.0	406.4	1092.3	1536.5	3907.8	8300.0	8418.4	7465.3
80°	6.1	6.1	19.5	202.6	318.5	818.9	931.2	2000.3	4431.3	5485.8	5135.5
82.5°	6.1	6.1	19.5	136.7	218.5	472.3	537.0	1012.9	1591.4	1744.0	2040.5
85°	4.9	4.9	14.6	81.8	112.3	167.2	258.7	539.4	870.2	909.2	887.2
87.5°	2.4	2.4	7.3	29.3	48.8	61.0	115.9	217.2	319.7	327.1	284.4
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°	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9	6715.9
2.5°	6759.9	6720.8	6685.4	6691.5	6615.9	6593.9	6509.7	6553.6	6510.9	6473.1	6508.5
5°	6770.8	6723.3	6658.6	6596.3	6423.0	6342.5	6241.2	6266.8	6209.5	6164.3	6203.4
7.5°	6802.6	6744.0	6643.9	6467.0	6260.7	6132.6	6017.9	6130.1	6116.7	6082.5	6122.8
10°	6817.2	6767.2	6595.1	6387.6	6099.6	6019.1	5915.3	5914.1	5917.8	5923.9	5964.2
12.5°	6856.3	6780.6	6508.5	6266.8	5999.5	5836.0	5760.3	5821.4	5711.5	5646.8	5674.9
15°	6949.0	6811.1	6449.9	6097.2	5844.6	5709.1	5467.4	5488.2	5465.0	5401.5	5429.6
17.5°	7132.1	6896.5	6447.4	5989.8	5646.8	5426.0	5214.8	5114.7	5083.0	5087.9	5112.3
20°	7356.6	7047.9	6452.3	5851.9	5440.6	5184.3	4858.5	4788.9	4683.9	4686.4	4692.5
22.5°	7213.9	7222.4	6454.8	5694.4	5183.1	4862.1	4516.7	4380.1	4299.5	4278.8	4309.3
25°	7600.7	7561.7	6492.6	5610.2	4912.2	4481.4	4120.1	3945.6	3824.8	3815.0	3849.2
27.5°	8115.7	8045.0	6687.9	5428.4	4625.4	4024.9	3633.2	3501.4	3397.6	3361.0	3385.4
30°	8741.8	8658.8	6957.6	5286.8	4238.5	3534.3	3198.7	3108.4	3005.9	2938.8	2944.9
32.5°	9396.0	9219.0	7234.6	5167.2	3841.9	3104.7	2817.9	2737.4	2616.6	2529.9	2550.7
35°	10055.0	9803.6	7543.4	4956.1	3357.4	2726.4	2494.5	2385.9	2287.1	2208.9	2195.5
37.5°	9533.9	10487.0	7842.4	4759.6	2977.8	2438.4	2176.0	2099.1	2040.5	1979.5	1978.3
40°	9576.6	9795.0	8019.3	4411.8	2554.3	2143.0	1879.4	1906.3	1930.7	1884.3	1884.3
42.5°	10000.1	9688.9	7948.5	3950.5	2239.5	1847.7	1726.9	1835.5	1912.4	1879.4	1878.2
45°	10596.8	10192.9	8069.4	3430.6	1933.1	1665.9	1684.2	1817.2	1917.3	1911.2	1908.7
47.5°	11230.2	10766.5	7837.5	2813.0	1722.0	1609.7	1684.2	1790.3	1909.9	1938.0	1931.9
49°	11556.1	10993.5	7744.7	2453.0	1637.8	1602.4	1686.6	1768.4	1896.5	1939.2	1933.1
50°	11755.0	11115.5	7625.1	2248.0	1592.6	1603.6	1691.5	1755.0	1884.3	1931.9	1928.3
52.5°	12202.9	11301.0	7032.0	1891.6	1519.4	1607.3	1723.2	1741.5	1839.2	1890.4	1917.3
55°	11746.5	11724.5	6275.4	1728.1	1480.4	1598.7	1736.6	1753.7	1801.3	1829.4	1850.1
57.5°	11675.7	11908.8	5322.2	1640.2	1446.2	1586.5	1720.8	1752.5	1780.6	1775.7	1767.2
60°	11900.2	12069.9	4339.8	1553.6	1407.1	1567.0	1668.3	1714.7	1723.2	1711.0	1691.5
62.5°	11935.6	12113.8	3335.4	1465.7	1364.4	1519.4	1591.4	1637.8	1637.8	1607.3	1600.0
65°	11770.9	11839.2	2457.9	1364.4	1313.2	1464.5	1501.1	1535.3	1551.1	1510.9	1513.3
67.5°	11298.6	10903.2	1866.0	1243.6	1250.9	1388.8	1414.5	1437.6	1441.3	1418.1	1415.7
70°	10349.1	9856.0	1333.9	1060.5	1137.4	1269.2	1308.3	1343.7	1331.5	1291.2	1285.1
72.5°	8917.6	8479.4	906.8	849.4	1000.7	1154.5	1178.9	1180.1	1155.7	1185.0	1205.8
75°	7671.5	6623.2	676.1	677.3	801.8	995.9	1071.5	1077.6	1088.6	1249.7	1282.7
77.5°	6096.0	4315.4	576.0	534.5	615.1	828.7	948.3	992.2	1316.8	1427.9	1413.2
80°	3744.2	2590.9	446.7	423.5	500.4	637.1	815.2	1014.2	1343.7	1263.1	1220.4
82.5°	1753.7	1182.6	322.2	324.6	372.2	465.0	644.4	1180.1	1160.6	958.0	945.8
85°	678.5	408.8	195.3	220.9	250.2	314.9	494.3	1164.3	901.9	811.6	751.8
87.5°	174.5	79.3	85.4	90.3	111.1	166.0	269.7	610.2	474.7	416.2	408.8
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)