

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: P591266

Luminaire Tested: **CTN-CA8-330-727-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591266
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-CA8-330-727-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: 25387 lumens
Efficiency: N/A
Efficacy: 76.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

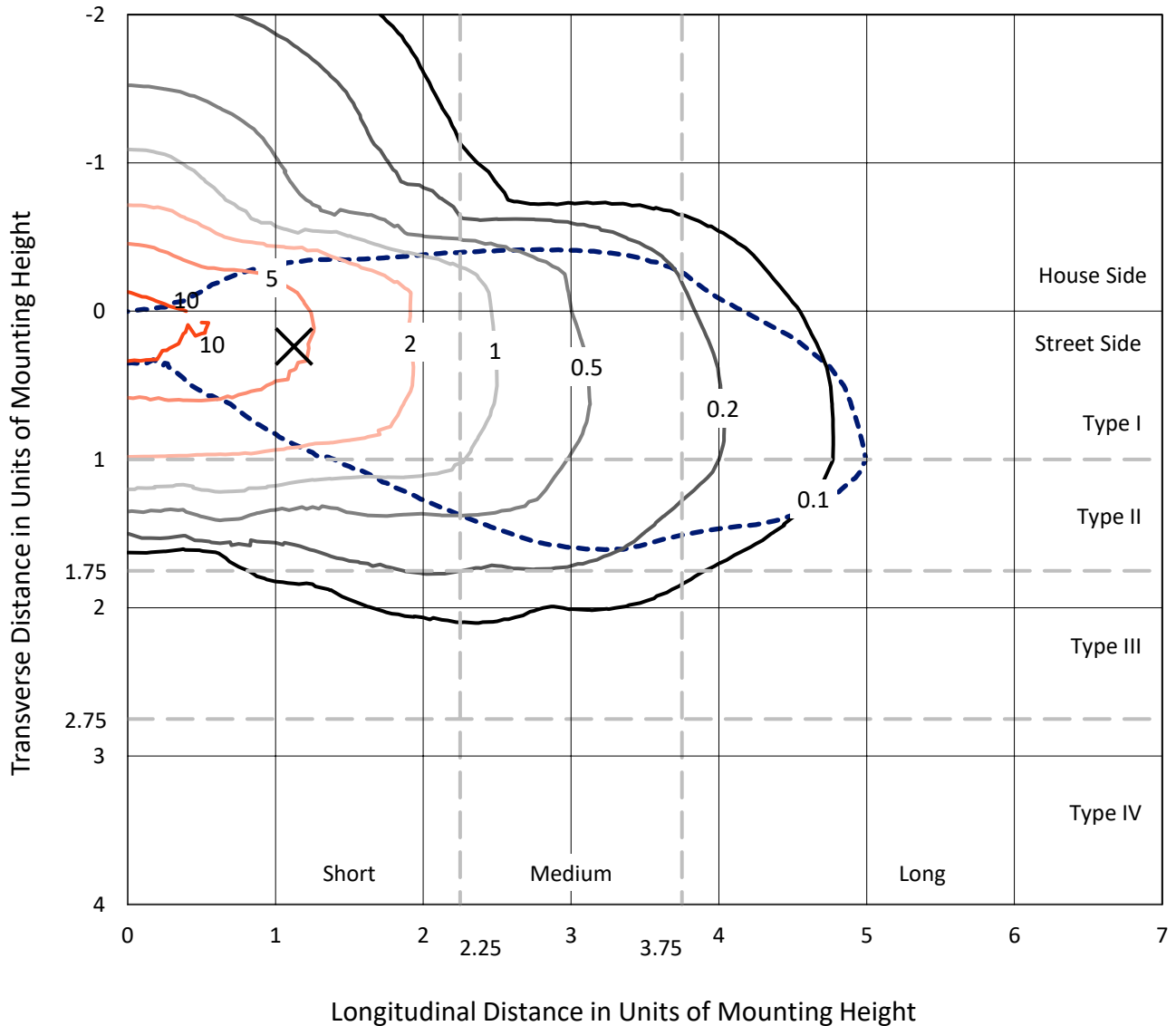
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

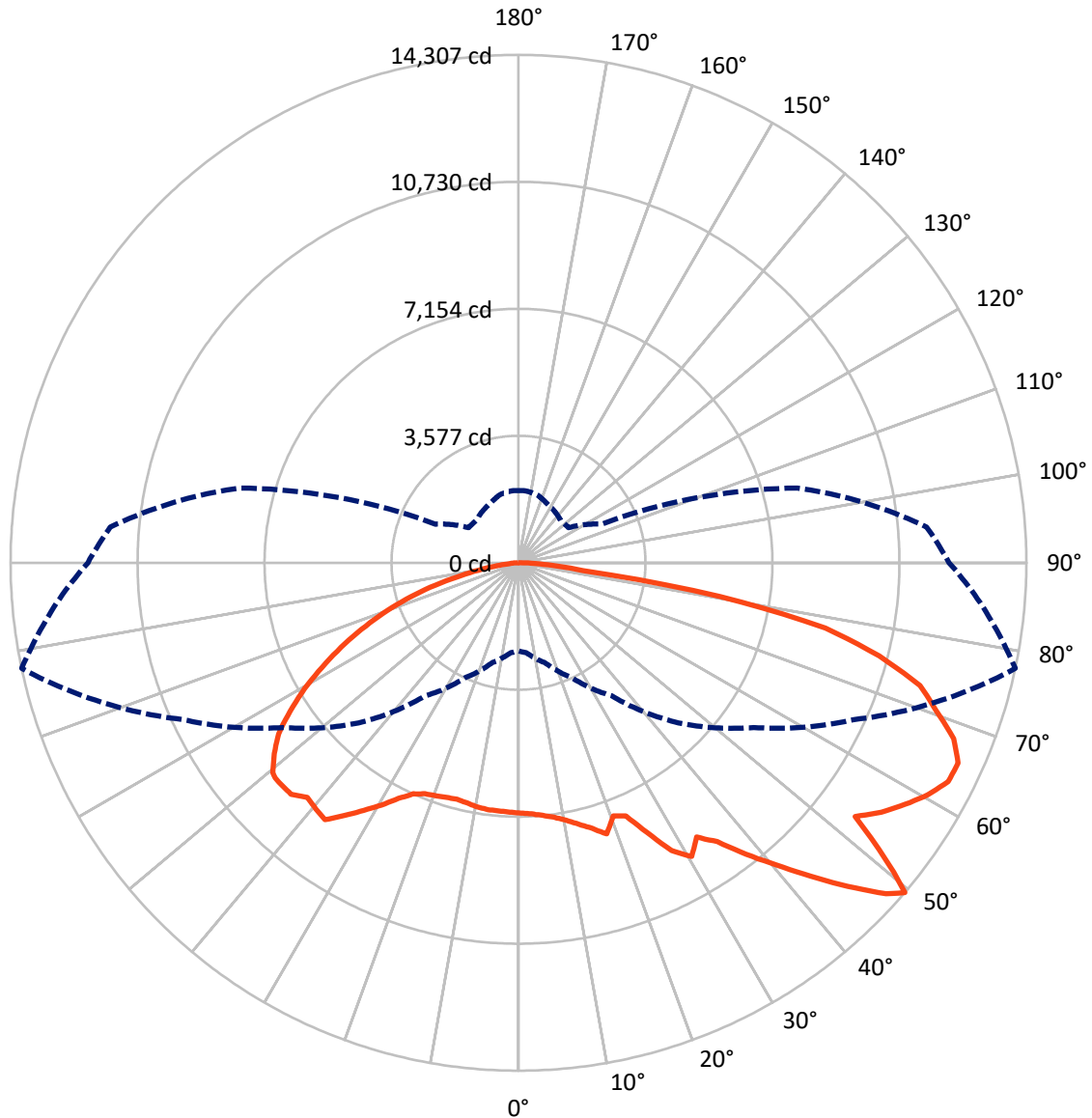
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.9 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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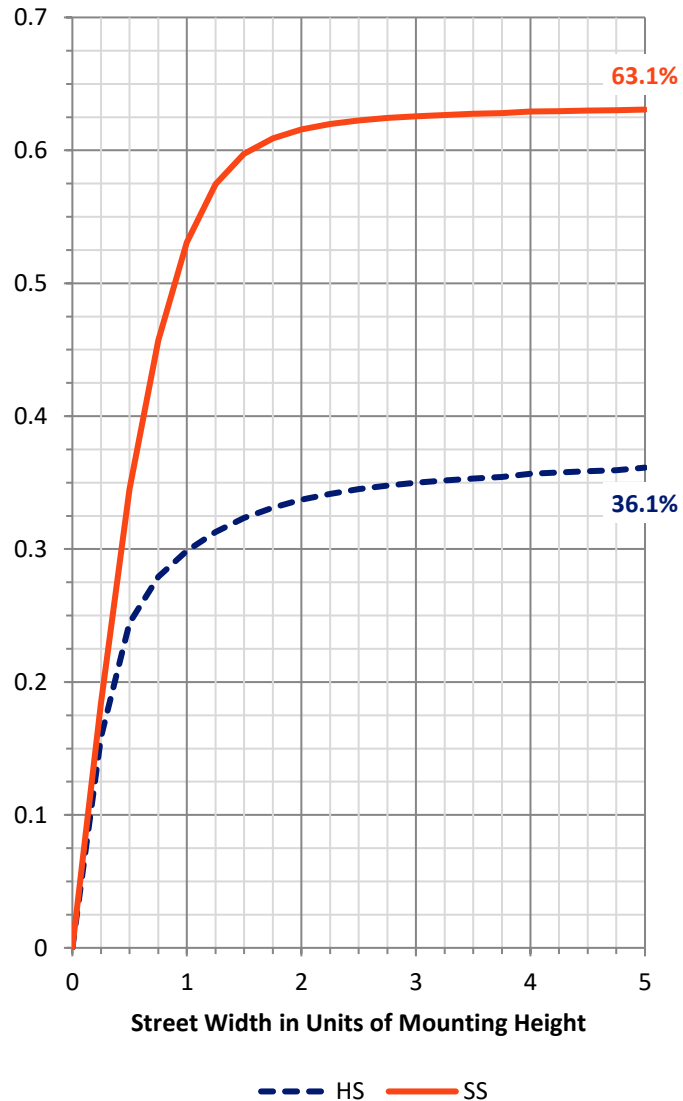
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9399.9	0.0	9399.9
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	15987.1	0.0	15987.1
	% Fixture	63.0	0.0	63.0
Total	Lumens	25387.0	0.0	25387.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	683.3	2.7
10°-20°	2011.0	7.9
20°-30°	2870.7	11.3
30°-40°	3695.5	14.6
40°-50°	4334.9	17.1
50°-60°	4472.0	17.6
60°-70°	4060.5	16.0
70°-80°	2696.7	10.6
80°-90°	562.3	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°	25387.0	100.0
0°-180°	25387.0	100.0

Coefficient of Utilization

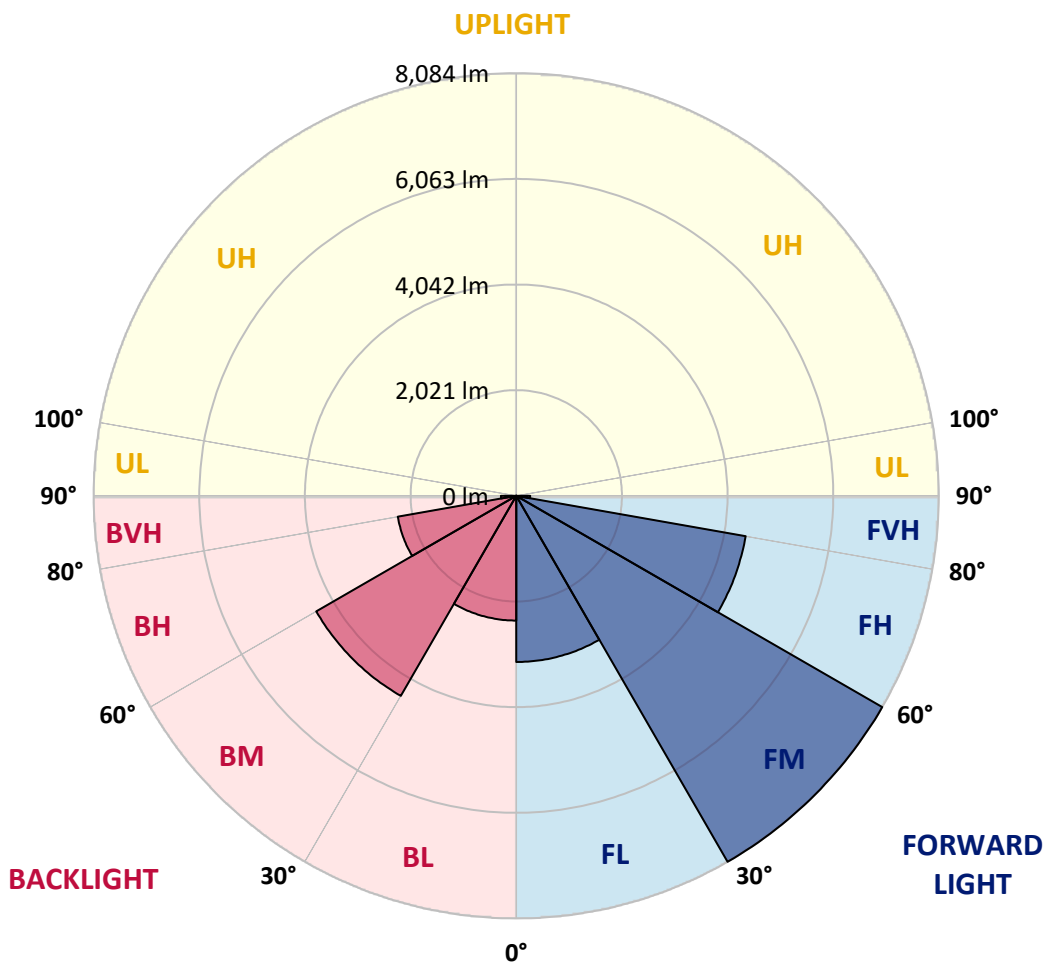


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3178.8	12.5			
FM (30°-60°)	8084.0	31.8			
FH (60°-80°)	4456.4	17.6			G2/5000
FVH (80°-90°)	268.0	1.1			G3/500
BL (0°-30°)	2386.2	9.4	B3/2500		
BM (30°-60°)	4418.5	17.4	B3/5000		
BH (60°-80°)	2300.9	9.1	B3/2500		G3/2500
BVH (80°-90°)	294.3	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: 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°	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7
2.5°	7338.0	7281.6	7299.5	7330.3	7190.6	7221.4	7161.2	7185.5	7111.2	7083.0	7095.8
5°	7856.8	7796.6	7818.4	7828.6	7626.2	7544.2	7355.9	7316.2	7199.6	7148.4	7143.2
7.5°	8113.0	8047.7	8052.8	8059.2	7897.8	7909.3	7738.9	7535.2	7318.7	7240.6	7206.0
10°	8534.5	8443.5	8412.8	8400.0	8182.2	8091.2	7942.6	7831.2	7493.0	7375.1	7286.7
12.5°	8794.5	8727.9	8727.9	8715.1	8484.5	8414.0	8148.9	8031.0	7697.9	7558.3	7405.8
15°	8841.9	8797.1	8854.7	8843.2	8692.0	8610.1	8492.2	8246.2	7905.5	7760.7	7581.4
17.5°	8306.4	8187.3	7959.3	7993.9	7995.1	8161.7	8081.0	8250.1	8150.1	8032.3	7838.8
20°	6821.7	6862.7	7227.8	7139.4	7106.1	7459.7	7820.9	7831.2	7632.6	7613.4	7874.7
22.5°	5942.9	5796.8	6202.9	6793.5	6830.6	7303.4	7724.8	8232.1	7914.4	7744.0	7544.2
25°	5061.5	5115.3	5727.7	6492.4	7033.1	7138.1	7622.3	8432.0	8567.8	8410.2	7992.6
27.5°	4909.0	4906.5	5172.9	6021.0	7130.4	7525.0	7685.1	8319.2	9266.0	9177.6	8649.8
30°	4875.7	4855.2	4994.9	5699.5	6678.2	7873.4	8178.3	8405.1	9210.9	9604.2	9385.1
32.5°	4729.7	4711.8	4860.4	5229.3	6315.7	8128.4	8648.5	8986.7	9023.8	9209.6	10161.4
35°	4500.4	4514.5	4720.7	5121.7	5791.7	7516.0	9130.2	9641.3	9775.8	9647.7	9779.7
37.5°	4266.0	4281.3	4483.7	4938.5	5700.7	7259.8	9441.5	10274.2	10553.4	10416.4	9806.6
40°	3975.2	3999.5	4233.9	4745.1	5595.7	6682.0	8802.2	10992.8	11372.0	11192.7	10513.7
42.5°	3644.6	3654.9	3921.3	4450.4	5462.5	6716.6	8142.5	11656.4	12166.3	12067.7	11210.6
45°	3357.7	3357.7	3599.8	4071.2	5158.9	6651.3	7863.2	11161.9	13141.2	13001.5	11908.8
47.5°	2967.0	3001.5	3285.9	3753.5	4801.4	6500.1	8023.3	10051.3	14049.5	13932.9	12609.5
49°	2485.3	2544.2	2919.6	3579.3	4572.1	6374.6	8087.4	10443.3	13423.0	14307.0	13064.3
50°	2288.0	2318.7	2322.6	3455.0	4401.7	6260.6	8116.8	10744.3	12366.1	13703.6	13383.3
52.5°	1980.5	1787.1	1588.5	3110.4	4059.7	5839.1	8134.8	11561.6	12112.5	11872.9	13134.8
55°	836.5	1095.3	1392.5	2544.2	3690.8	5317.7	8075.8	12459.7	12669.8	12405.9	11261.9
57.5°	632.8	673.8	748.1	1974.1	2644.1	4723.3	7877.3	13028.5	13139.9	12840.1	11719.2
60°	92.2	94.8	133.2	800.7	1514.2	3371.8	7162.4	13011.8	13489.6	13259.0	12113.8
62.5°	38.4	39.7	51.2	655.9	1167.1	2595.4	6538.6	12794.0	13829.1	13581.9	12484.0
65°	6.4	7.7	21.8	580.3	964.6	2425.1	5854.5	12837.6	13708.7	13606.2	12627.5
67.5°	5.1	6.4	20.5	521.4	795.5	2220.1	5179.4	12144.5	13269.3	13224.5	12244.4
70°	5.1	6.4	21.8	471.4	687.9	1956.2	4345.4	11185.0	12463.5	12481.4	11601.3
72.5°	6.4	6.4	21.8	421.5	598.3	1671.8	3438.4	9903.9	11732.0	11830.7	10686.7
75°	6.4	6.4	20.5	366.4	513.7	1393.8	2476.3	7282.9	10521.4	10491.9	9372.3
77.5°	6.4	6.4	20.5	290.8	426.6	1146.6	1612.9	4102.0	8712.5	8836.8	7836.3
80°	6.4	6.4	20.5	212.7	334.4	859.6	977.5	2099.7	4651.6	5758.4	5390.7
82.5°	6.4	6.4	20.5	143.5	229.3	495.8	563.7	1063.3	1670.5	1830.6	2141.9
85°	5.1	5.1	15.4	85.8	117.9	175.5	271.6	566.2	913.4	954.4	931.3
87.5°	2.6	2.6	7.7	30.7	51.2	64.1	121.7	228.0	335.6	343.3	298.5
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°	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7	7049.7
2.5°	7095.8	7054.8	7017.7	7024.1	6944.7	6921.6	6833.2	6879.3	6834.5	6794.8	6831.9
5°	7107.4	7057.4	6989.5	6924.2	6742.3	6657.7	6551.4	6578.3	6518.1	6470.7	6511.7
7.5°	7140.7	7079.2	6974.1	6788.4	6571.9	6437.4	6316.9	6434.8	6420.7	6384.8	6427.1
10°	7156.0	7103.5	6922.9	6705.1	6402.8	6318.2	6209.3	6208.1	6211.9	6218.3	6260.6
12.5°	7197.0	7117.6	6831.9	6578.3	6297.7	6126.1	6046.6	6110.7	5995.4	5927.5	5957.0
15°	7294.4	7149.6	6770.4	6400.2	6135.0	5992.8	5739.2	5761.0	5736.6	5670.0	5699.5
17.5°	7486.6	7239.3	6767.9	6287.5	5927.5	5695.6	5474.0	5369.0	5335.6	5340.8	5366.4
20°	7722.3	7398.2	6773.0	6142.7	5711.0	5442.0	5099.9	5026.9	4916.7	4919.3	4925.7
22.5°	7572.4	7581.4	6775.6	5977.5	5440.7	5103.8	4741.2	4597.7	4513.2	4491.4	4523.4
25°	7978.5	7937.5	6815.3	5889.1	5156.3	4704.1	4324.9	4141.7	4014.9	4004.6	4040.5
27.5°	8519.1	8444.8	7020.2	5698.2	4855.2	4225.0	3813.7	3675.4	3566.5	3528.1	3553.7
30°	9176.3	9089.2	7303.4	5549.6	4449.1	3710.0	3357.7	3262.9	3155.3	3084.8	3091.2
32.5°	9862.9	9677.2	7594.2	5424.0	4032.8	3259.0	2958.0	2873.4	2746.6	2655.7	2677.4
35°	10554.7	10290.8	7918.3	5202.4	3524.2	2861.9	2618.5	2504.5	2400.7	2318.7	2304.6
37.5°	10007.7	11008.2	8232.1	4996.2	3125.8	2559.6	2284.1	2203.4	2141.9	2077.9	2076.6
40°	10052.5	10281.8	8417.9	4631.1	2681.3	2249.6	1972.8	2001.0	2026.6	1978.0	1978.0
42.5°	10497.1	10170.4	8343.6	4146.8	2350.8	1939.5	1812.7	1926.7	2007.4	1972.8	1971.6
45°	11123.5	10699.5	8470.4	3601.1	2029.2	1748.7	1767.9	1907.5	2012.6	2006.2	2003.6
47.5°	11788.4	11301.6	8227.0	2952.9	1807.6	1689.7	1767.9	1879.3	2004.9	2034.3	2027.9
49°	12130.4	11539.9	8129.7	2574.9	1719.2	1682.0	1770.4	1856.3	1990.8	2035.6	2029.2
50°	12339.2	11668.0	8004.1	2359.7	1671.8	1683.3	1775.6	1842.2	1978.0	2027.9	2024.1
52.5°	12809.4	11862.7	7381.5	1985.7	1594.9	1687.2	1808.9	1828.1	1930.6	1984.4	2012.6
55°	12330.3	12307.2	6587.2	1814.0	1553.9	1678.2	1823.0	1840.9	1890.9	1920.3	1942.1
57.5°	12256.0	12500.7	5586.7	1721.8	1518.1	1665.4	1806.3	1839.6	1869.1	1864.0	1855.0
60°	12491.7	12669.8	4555.5	1630.8	1477.1	1644.9	1751.2	1799.9	1808.9	1796.1	1775.6
62.5°	12528.8	12715.9	3501.2	1538.6	1432.2	1594.9	1670.5	1719.2	1719.2	1687.2	1679.5
65°	12355.9	12427.6	2580.1	1432.2	1378.4	1537.3	1575.7	1611.6	1628.2	1586.0	1588.5
67.5°	11860.1	11445.1	1958.8	1305.4	1313.1	1457.9	1484.8	1509.1	1512.9	1488.6	1486.0
70°	10863.4	10345.9	1400.2	1113.2	1194.0	1332.3	1373.3	1410.5	1397.6	1355.4	1349.0
72.5°	9360.8	8900.9	951.8	891.6	1050.5	1211.9	1237.5	1238.8	1213.2	1243.9	1265.7
75°	8052.8	6952.4	709.7	711.0	841.7	1045.4	1124.8	1131.2	1142.7	1311.8	1346.4
77.5°	6398.9	4529.9	604.7	561.1	645.7	869.8	995.4	1041.5	1382.3	1498.8	1483.5
80°	3930.3	2719.7	468.9	444.5	525.2	668.7	855.8	1064.6	1410.5	1325.9	1281.1
82.5°	1840.9	1241.4	338.2	340.8	390.7	488.1	676.4	1238.8	1218.3	1005.6	992.8
85°	712.3	429.2	205.0	231.9	262.6	330.5	518.8	1222.1	946.7	851.9	789.1
87.5°	183.2	83.3	89.7	94.8	116.6	174.2	283.1	640.5	498.3	436.8	429.2
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)