

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: P591269

Luminaire Tested: **CTN-CA8-330-727-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591269
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-CA8-330-727-U-T3-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: 24786 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B4 - 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

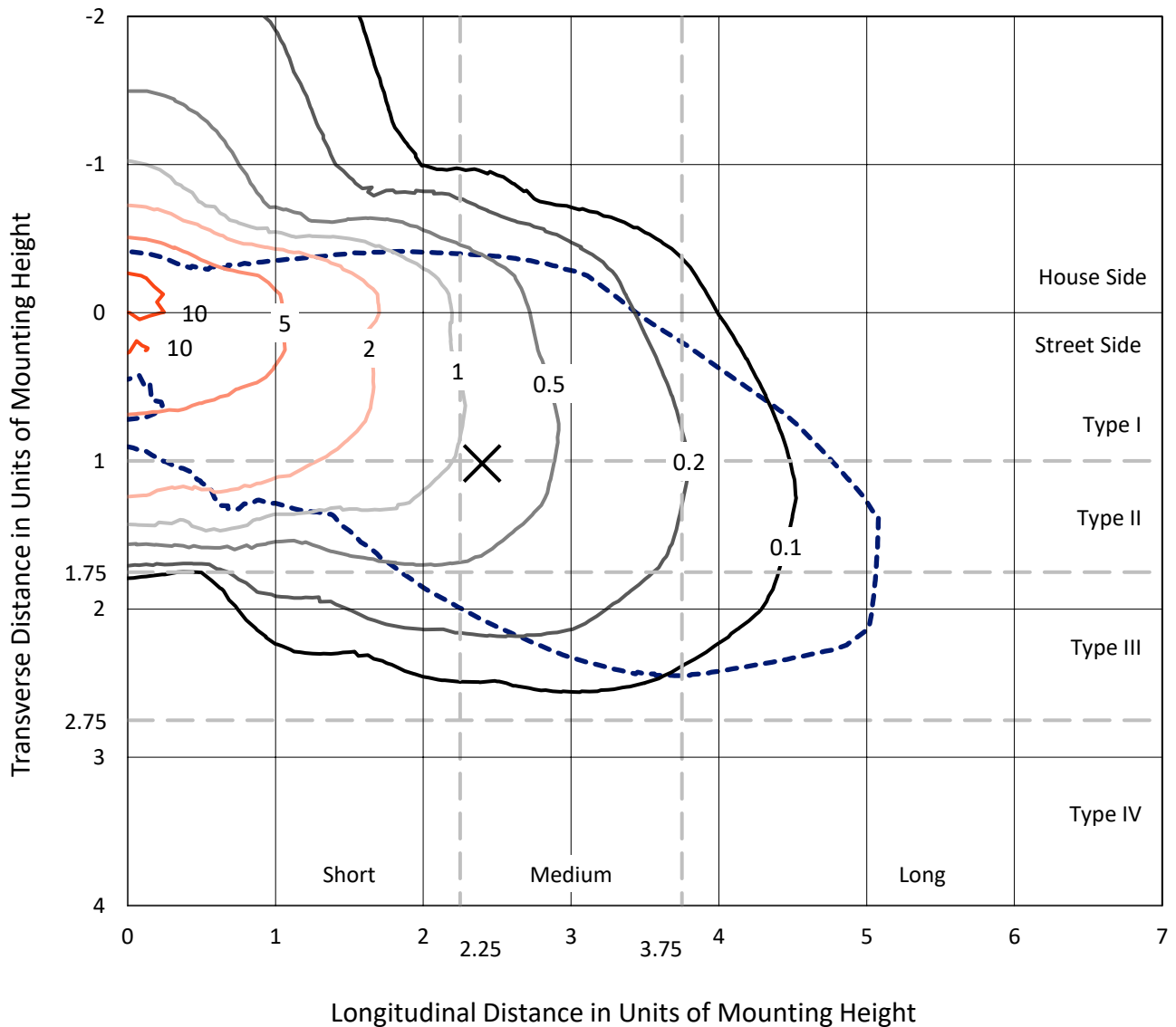




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Iso-Footcandle Lines of Horizontal Illumination

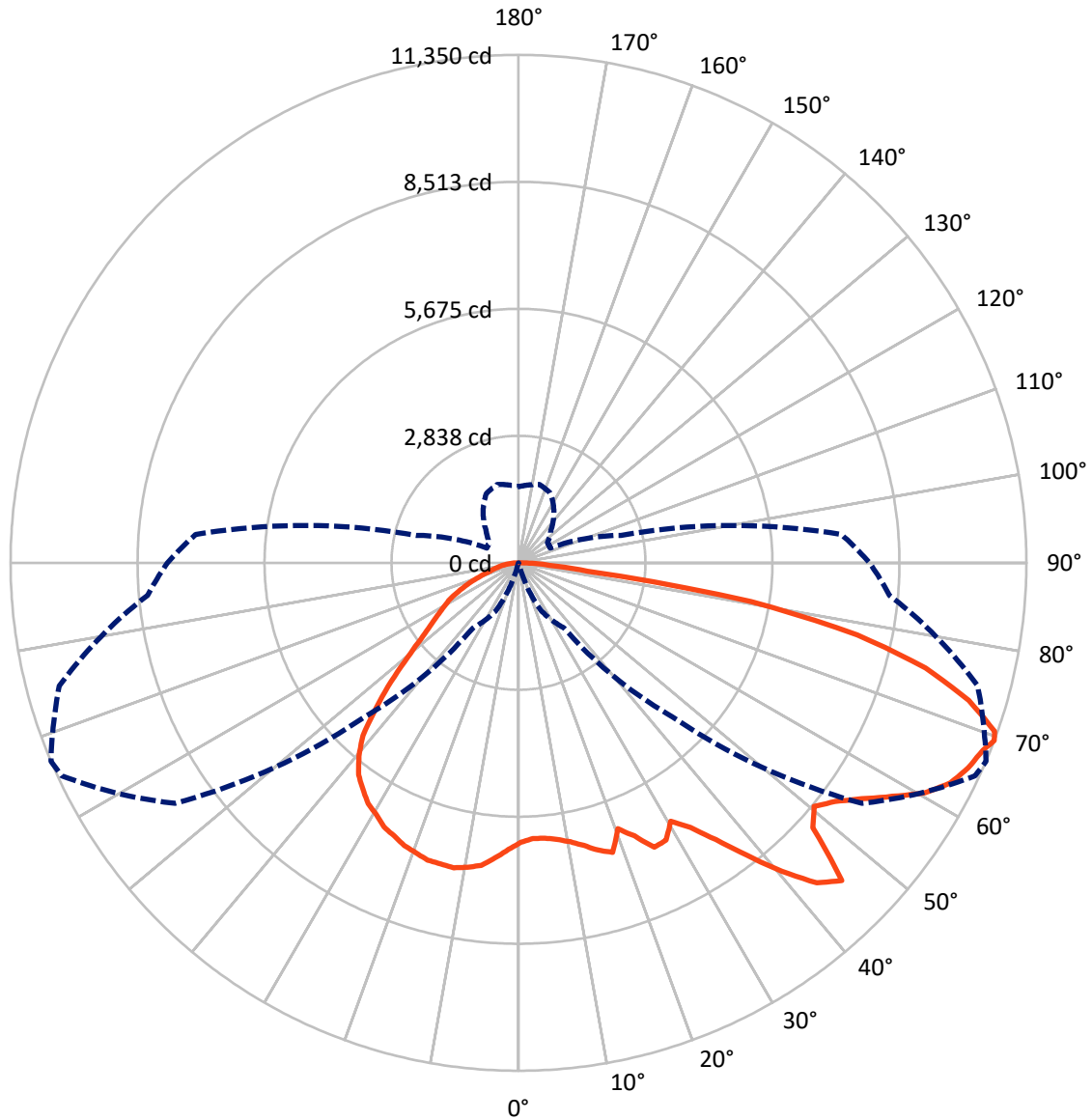
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.2 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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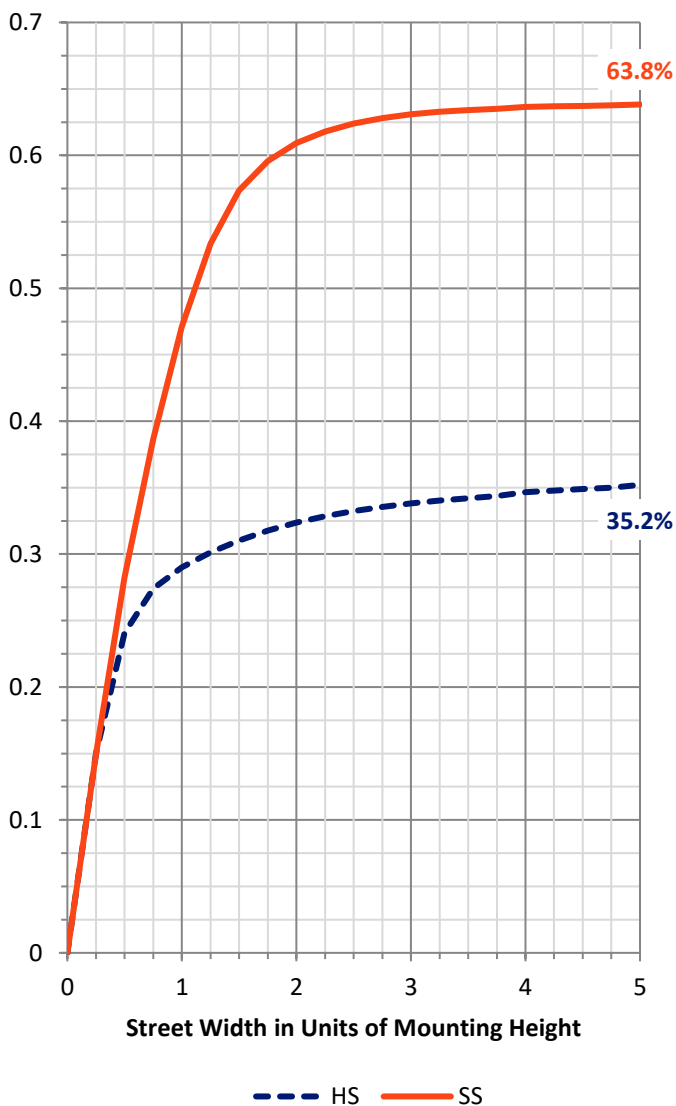
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8966.9	0.0	8966.9
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	15819.1	0.0	15819.1
	% Fixture	63.8	0.0	63.8
Total	Lumens	24786.0	0.0	24786.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	624.4	2.5
10°-20°	1927.7	7.8
20°-30°	2845.2	11.5
30°-40°	3574.8	14.4
40°-50°	4193.1	16.9
50°-60°	4387.7	17.7
60°-70°	3920.0	15.8
70°-80°	2758.9	11.1
80°-90°	554.2	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°	24786.0	100.0
0°-180°	24786.0	100.0

Coefficient of Utilization

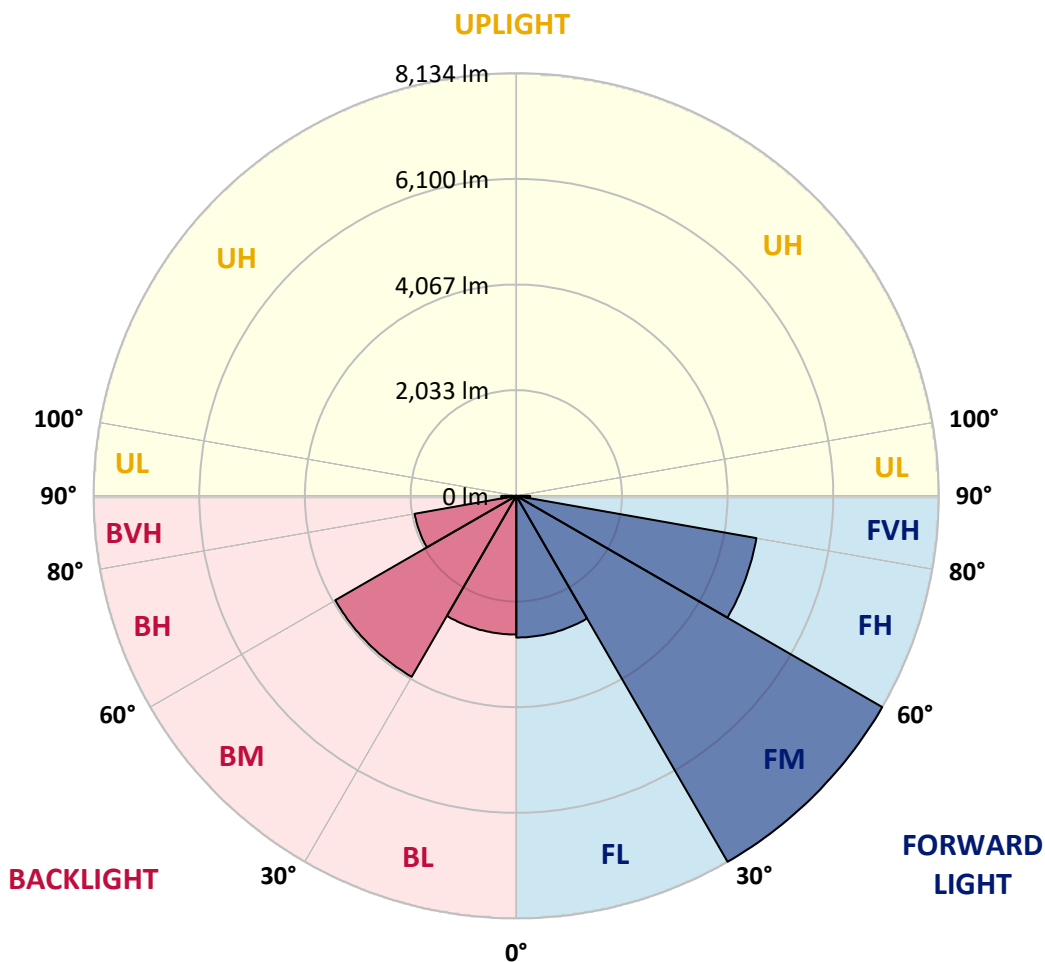


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2727.6	11.0			
FM (30°-60°)	8133.6	32.8			
FH (60°-80°)	4693.1	18.9			G2/5000
FVH (80°-90°)	264.8	1.1			G3/500
BL (0°-30°)	2669.7	10.8	B4/5000		
BM (30°-60°)	4022.0	16.2	B3/5000		
BH (60°-80°)	1985.8	8.0	B3/2500		G3/2500
BVH (80°-90°)	289.3	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G3
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8
2.5°	6095.2	6059.3	6076.0	6123.4	6024.7	6095.2	6069.6	6141.3	6168.2	6164.4	6266.9
5°	6143.9	6104.2	6110.6	6146.4	6038.8	6093.9	6069.6	6149.0	6179.7	6170.8	6310.4
7.5°	6316.8	6273.3	6259.2	6270.7	6154.1	6196.4	6143.9	6207.9	6241.2	6241.2	6400.1
10°	6589.7	6537.2	6506.4	6505.1	6368.1	6348.8	6284.8	6314.3	6338.6	6359.1	6535.9
12.5°	6875.4	6831.8	6792.1	6770.3	6589.7	6544.8	6451.3	6473.1	6480.8	6509.0	6684.5
15°	7135.4	7091.8	7080.3	7045.7	6866.4	6792.1	6661.4	6651.2	6661.4	6678.1	6852.3
17.5°	7035.5	7038.0	7102.1	7108.5	6875.4	6703.7	6612.7	6785.7	6802.3	6934.3	7047.0
20°	6845.9	6752.4	6416.7	6233.6	6260.5	6483.4	6318.1	6310.4	6345.0	6579.4	7150.8
22.5°	5701.9	5650.7	5835.1	5894.1	6106.7	6191.3	6584.6	6594.8	6629.4	6629.4	6795.9
25°	4923.0	5188.2	5546.9	6187.4	6120.8	6137.5	6297.6	6977.8	7043.2	7041.9	7017.5
27.5°	5089.6	5056.3	5593.0	5995.3	6470.5	6441.1	6266.9	6729.3	7018.8	7515.9	7400.6
30°	5289.4	5265.1	5304.8	5985.0	6772.9	6812.6	6651.2	6603.8	6702.4	7746.5	7838.7
32.5°	5475.2	5445.7	5490.5	5594.3	6348.8	7195.6	7071.4	7013.7	7049.6	7259.7	8402.4
35°	5639.1	5636.6	5687.8	5810.8	6453.9	7328.8	7501.8	7497.9	7594.0	7774.6	8484.3
37.5°	5755.7	5754.4	5795.4	5938.9	6083.7	6769.0	7905.3	8134.6	8288.3	8556.1	8288.3
40°	5754.4	5774.9	5882.5	6067.0	6259.2	6465.4	8083.4	8882.7	9067.2	9258.1	8812.3
42.5°	5634.0	5645.6	5835.1	6177.2	6415.5	6593.5	7376.2	9570.7	9776.9	9762.8	9224.8
45°	5522.6	5527.7	5739.1	6159.3	6546.1	6867.7	7231.5	9568.1	10125.4	10212.5	9612.9
47.5°	5377.8	5377.8	5586.6	6055.5	6664.0	7176.4	7618.4	8265.3	8846.9	10601.9	9934.5
50°	5192.1	5215.1	4958.9	5947.9	6720.3	7469.8	7946.3	8479.2	8559.9	9481.0	10233.0
52.5°	4896.1	4883.3	3875.2	5828.7	6743.4	7682.4	8287.1	8813.6	8857.1	8764.9	9940.9
55°	3086.0	3440.9	3426.8	5689.1	6729.3	7819.5	8548.4	9181.2	9304.2	9191.5	8362.6
57.5°	1863.9	1779.4	2928.5	5289.4	5404.7	7925.8	8903.2	9739.8	9847.4	9586.0	8503.6
60°	727.6	686.6	741.7	2407.1	3877.7	7373.7	9386.2	10332.9	10435.4	9961.4	8622.7
62.5°	91.0	78.1	66.6	1666.6	2464.7	5477.7	9642.4	10810.7	10829.9	10233.0	8645.8
65°	12.8	14.1	25.6	1486.0	2239.3	5384.2	9732.1	11005.4	11045.1	10429.0	8567.6
67.5°	5.1	6.4	20.5	1292.6	1965.1	5135.7	9510.5	11139.9	11186.1	10618.6	8492.0
69°	5.1	6.4	20.5	1161.9	1778.1	4861.6	9368.3	11259.1	11350.0	10622.4	8319.1
70°	5.1	6.4	19.2	1068.4	1632.0	4629.7	9231.2	11213.0	11286.0	10519.9	8126.9
72.5°	5.1	6.4	19.2	822.4	1241.3	3717.6	8363.9	10559.6	10522.5	9874.3	7378.8
75°	6.4	6.4	19.2	577.8	860.9	2644.1	7058.5	9377.2	9393.9	8790.5	6206.6
77.5°	6.4	6.4	19.2	367.7	543.2	1529.6	5111.4	7690.1	7737.5	7323.7	4647.6
80°	6.4	6.4	19.2	167.8	336.9	799.4	2513.4	5011.4	5266.4	4916.6	2550.6
82.5°	6.4	6.4	17.9	105.0	184.5	360.0	991.5	1571.8	1556.5	1532.1	810.9
85°	5.1	5.1	14.1	74.3	123.0	208.8	550.8	704.6	695.6	616.2	418.9
87.5°	2.6	2.6	7.7	30.7	51.2	94.8	275.4	320.3	304.9	261.3	179.3
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°	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8	6243.8
2.5°	6314.3	6323.2	6365.5	6420.6	6437.2	6509.0	6520.5	6638.4	6656.3	6685.8	6698.6
5°	6378.3	6412.9	6505.1	6634.5	6744.7	6857.4	6861.3	7004.7	7041.9	7034.2	7071.4
7.5°	6469.3	6526.9	6667.8	6847.2	6886.9	7032.9	7022.7	7164.9	7167.4	7146.9	7203.3
10°	6608.9	6680.6	6808.7	6918.9	6994.5	7089.3	7076.5	7211.0	7191.8	7170.0	7232.8
12.5°	6752.4	6789.5	6867.7	6990.6	7007.3	7040.6	7024.0	7148.2	7127.7	7100.8	7162.3
15°	6877.9	6895.9	6895.9	6962.5	6920.2	6947.1	6890.7	6990.6	6943.2	6930.4	6989.4
17.5°	7040.6	7011.1	6950.9	6945.8	6835.6	6794.6	6710.1	6737.0	6647.3	6656.3	6687.0
20°	7223.8	7158.5	6999.6	6840.8	6637.1	6539.7	6371.9	6359.1	6275.8	6260.5	6289.9
22.5°	7291.7	7349.3	7058.5	6751.1	6400.1	6182.3	5983.7	5889.0	5767.3	5689.1	5699.4
25°	7497.9	7601.7	7148.2	6591.0	6120.8	5762.1	5463.6	5247.1	5064.0	4970.4	4989.7
27.5°	7777.2	7946.3	7199.5	6479.5	5754.4	5285.6	4786.0	4501.6	4312.0	4214.6	4212.1
30°	8176.9	8389.5	7298.1	6246.4	5347.1	4659.2	4043.0	3707.3	3552.3	3488.3	3493.4
32.5°	8676.5	8932.7	7503.1	6051.6	4903.8	3989.2	3287.2	2993.8	2923.3	2911.8	2905.4
35°	9338.8	9592.4	7665.8	5751.9	4328.6	3229.5	2638.9	2431.4	2442.9	2440.4	2448.1
37.5°	9231.2	10193.3	7851.5	5458.5	3640.7	2531.3	2132.9	2016.4	2020.2	2065.0	2074.0
40°	8826.4	9668.0	8128.2	4973.0	2836.2	1944.6	1682.0	1655.1	1765.3	1863.9	1881.9
42.5°	9144.1	9351.6	8165.4	4449.1	2075.3	1491.1	1406.6	1518.0	1696.1	1810.1	1830.6
45°	9461.8	9629.6	7950.1	3665.1	1488.6	1275.9	1338.7	1498.8	1696.1	1817.8	1831.9
47.5°	9784.6	9783.3	7699.1	2938.7	1217.0	1219.6	1322.0	1500.1	1706.3	1829.3	1837.0
50°	9989.6	9907.6	7043.2	2302.0	1132.4	1186.2	1313.1	1507.8	1703.8	1793.5	1797.3
52.5°	10092.1	9970.4	6464.1	1839.6	1092.7	1159.3	1314.3	1525.7	1689.7	1739.7	1737.1
55°	9919.1	9935.8	5985.0	1529.6	1055.6	1137.6	1320.8	1538.5	1696.1	1747.3	1747.3
57.5°	9703.9	9707.7	5603.3	1295.1	1018.4	1119.6	1328.4	1557.7	1814.0	1910.0	1895.9
60°	9552.7	9379.8	5062.7	1147.8	976.2	1103.0	1338.7	1641.0	2090.7	2188.0	2154.7
62.5°	9304.2	9069.8	4506.7	1045.3	928.8	1090.2	1345.1	1757.6	2127.8	2132.9	2050.9
65°	8868.7	8533.0	3638.2	944.1	880.1	1072.2	1341.3	1801.1	1960.0	1883.1	1860.1
67.5°	8238.4	7800.3	2851.6	842.9	826.3	1045.3	1366.9	1721.7	1851.1	1788.3	1757.6
69°	7845.1	7244.3	2367.4	782.7	791.7	1024.8	1379.7	1706.3	1812.7	1735.8	1699.9
70°	7546.6	6762.6	2004.8	743.0	762.2	1006.9	1354.1	1697.4	1794.7	1699.9	1657.7
72.5°	6407.8	5436.7	1283.6	650.8	685.4	962.1	1284.9	1641.0	1755.0	1691.0	1638.5
75°	4953.8	3993.0	818.6	566.2	607.2	895.4	1213.1	1601.3	1773.0	1657.7	1542.4
77.5°	3334.6	2230.3	625.1	475.3	515.0	808.3	1099.1	1489.9	1711.5	1610.3	1468.1
80°	1519.3	850.6	483.0	385.6	416.3	650.8	948.0	1318.2	1618.0	1616.7	1514.2
82.5°	608.5	568.8	358.7	294.6	327.9	485.5	750.7	1128.6	1427.1	1488.6	1589.8
85°	354.8	358.7	238.3	205.0	244.7	357.4	535.5	872.4	1160.6	1283.6	1369.4
87.5°	144.8	161.4	111.5	107.6	134.5	190.9	246.0	422.7	625.1	767.3	819.9
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)