

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: P591173

Luminaire Tested: **CTN-CA8-330-722-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591173
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-CA8-330-722-U-T3-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23855 lumens
Efficiency: N/A
Efficacy: 72.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G3

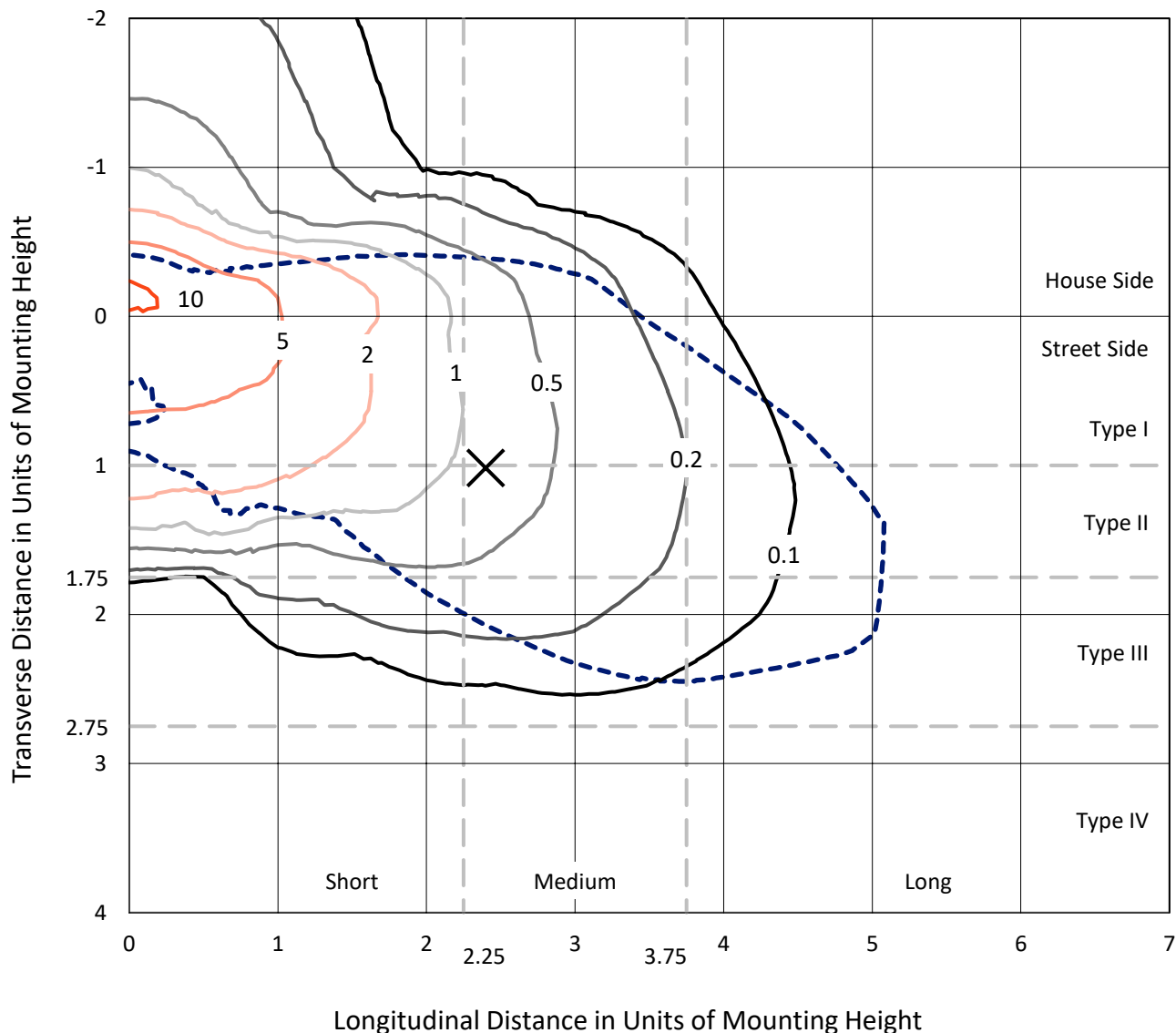
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

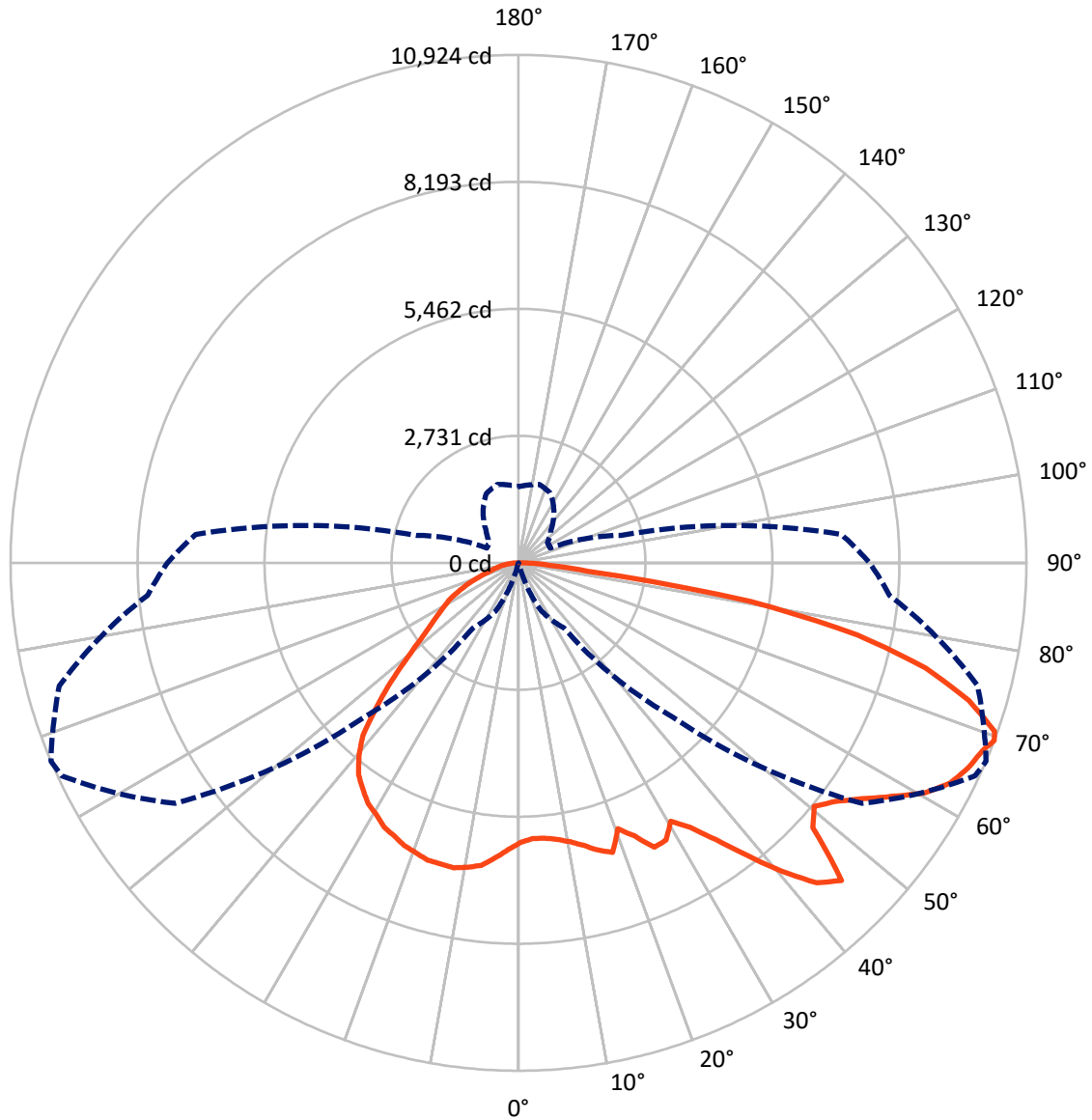
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.8 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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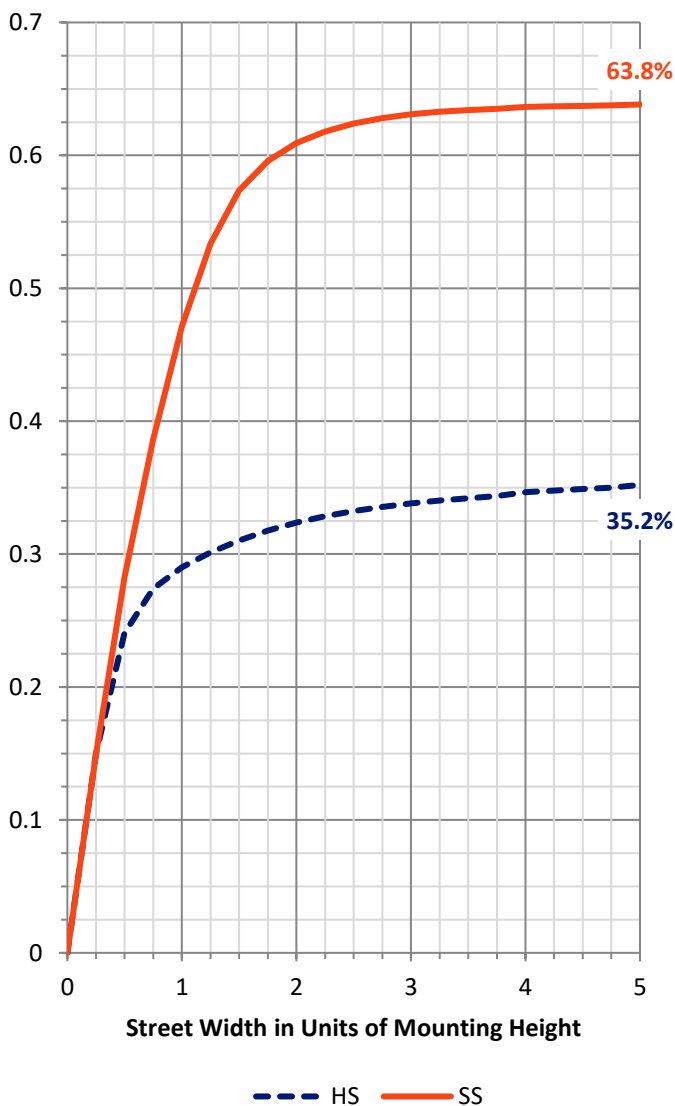
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8630.1	0.0	8630.1
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	15224.9	0.0	15224.9
	% Fixture	63.8	0.0	63.8
Total	Lumens	23855.0	0.0	23855.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	600.9	2.5
10°-20°	1855.3	7.8
20°-30°	2738.3	11.5
30°-40°	3440.5	14.4
40°-50°	4035.6	16.9
50°-60°	4222.9	17.7
60°-70°	3772.7	15.8
70°-80°	2655.3	11.1
80°-90°	533.4	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°	23855.0	100.0
0°-180°	23855.0	100.0

Coefficient of Utilization

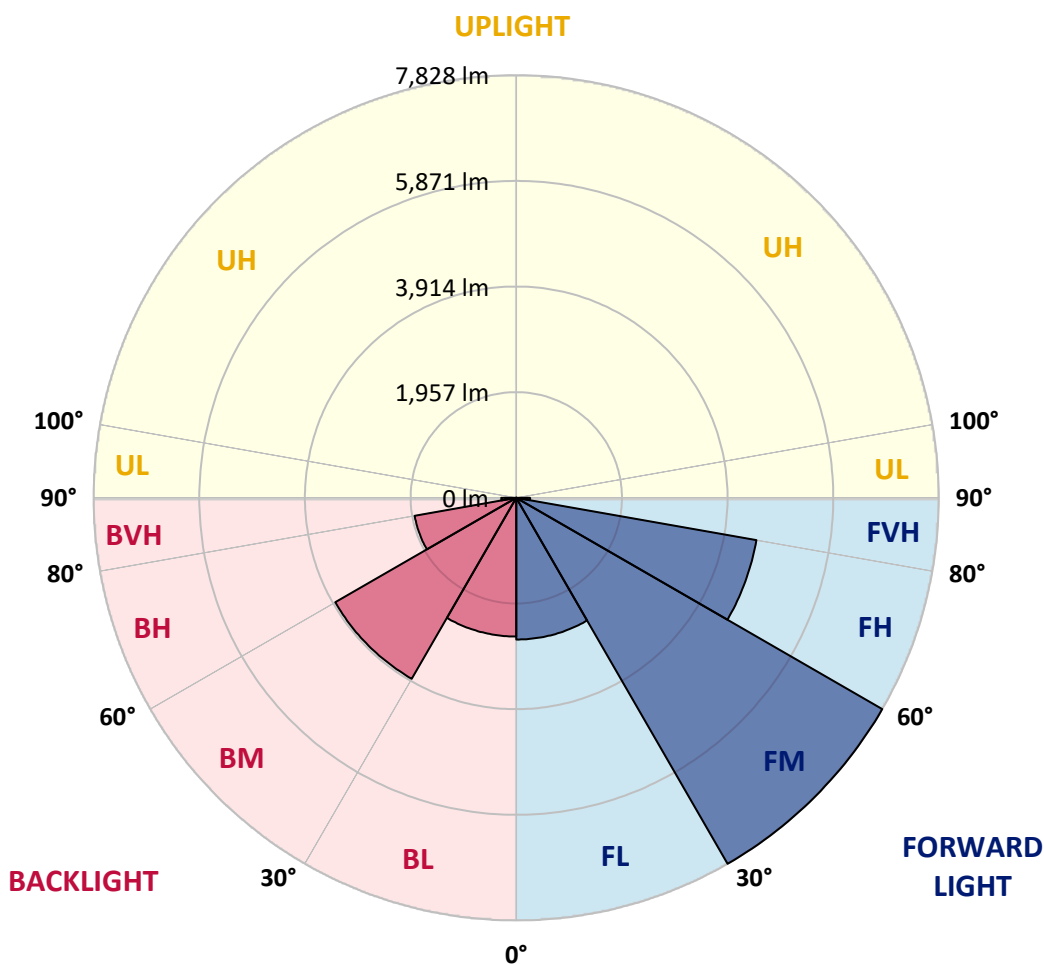


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2625.2	11.0			
FM (30°-60°)	7828.1	32.8			
FH (60°-80°)	4516.8	18.9			G2/5000
FVH (80°-90°)	254.9	1.1			G3/500
BL (0°-30°)	2569.5	10.8	B4/5000		
BM (30°-60°)	3870.9	16.2	B3/5000		
BH (60°-80°)	1911.2	8.0	B3/2500		G3/2500
BVH (80°-90°)	278.5	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°	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3
2.5°	5866.3	5831.7	5847.8	5893.4	5798.4	5866.3	5841.6	5910.6	5936.5	5932.8	6031.5
5°	5913.1	5874.9	5881.0	5915.6	5812.0	5865.0	5841.6	5918.0	5947.6	5939.0	6073.4
7.5°	6079.5	6037.6	6024.1	6035.2	5923.0	5963.7	5913.1	5974.8	6006.8	6006.8	6159.7
10°	6342.2	6291.6	6262.0	6260.8	6128.9	6110.4	6048.7	6077.1	6100.5	6120.2	6290.4
12.5°	6617.1	6575.2	6537.0	6516.0	6342.2	6299.0	6209.0	6230.0	6237.4	6264.5	6433.4
15°	6867.4	6825.5	6814.4	6781.1	6608.5	6537.0	6411.2	6401.3	6411.2	6427.2	6594.9
17.5°	6771.2	6773.7	6835.3	6841.5	6617.1	6451.9	6364.4	6530.8	6546.8	6673.8	6782.3
20°	6588.7	6498.7	6175.7	5999.4	6025.3	6239.8	6080.8	6073.4	6106.7	6332.3	6882.2
22.5°	5487.7	5438.4	5616.0	5672.7	5877.4	5958.7	6337.2	6347.1	6380.4	6380.4	6540.7
25°	4738.1	4993.3	5338.6	5955.0	5890.9	5906.9	6061.1	6715.7	6778.6	6777.4	6754.0
27.5°	4898.4	4866.4	5382.9	5770.1	6227.5	6199.1	6031.5	6476.6	6755.2	7233.6	7122.6
30°	5090.7	5067.3	5105.5	5760.2	6518.5	6556.7	6401.3	6355.7	6450.7	7455.5	7544.3
32.5°	5269.5	5241.2	5284.3	5384.2	6110.4	6925.3	6805.7	6750.3	6784.8	6987.0	8086.8
35°	5427.3	5424.9	5474.2	5592.5	6211.5	7053.6	7220.0	7216.3	7308.8	7482.6	8165.7
37.5°	5539.5	5538.3	5577.7	5715.8	5855.2	6514.8	7608.4	7829.1	7977.0	8234.7	7977.0
40°	5538.3	5558.0	5661.6	5839.1	6024.1	6222.6	7779.8	8549.1	8726.6	8910.3	8481.3
42.5°	5422.4	5433.5	5616.0	5945.2	6174.5	6345.9	7099.2	9211.2	9409.7	9396.1	8878.3
45°	5315.1	5320.1	5523.5	5927.9	6300.2	6609.7	6959.9	9208.7	9745.0	9828.9	9251.9
47.5°	5175.8	5175.8	5376.8	5828.0	6413.7	6906.8	7332.2	7954.8	8514.6	10203.7	9561.3
50°	4997.0	5019.2	4772.6	5724.5	6467.9	7189.2	7647.8	8160.7	8238.4	9124.9	9848.6
52.5°	4712.2	4699.9	3729.6	5609.8	6490.1	7393.8	7975.8	8482.5	8524.4	8435.7	9567.5
55°	2970.1	3311.6	3298.1	5475.4	6476.6	7525.8	8227.3	8836.4	8954.7	8846.2	8048.5
57.5°	1793.9	1712.5	2818.5	5090.7	5201.7	7628.1	8568.8	9373.9	9477.5	9226.0	8184.2
60°	700.3	660.8	713.9	2316.7	3732.1	7096.7	9033.6	9944.8	10043.4	9587.2	8298.8
62.5°	87.5	75.2	64.1	1604.0	2372.1	5272.0	9280.2	10404.6	10423.1	9848.6	8321.0
65°	12.3	13.6	24.7	1430.2	2155.2	5182.0	9366.5	10592.1	10630.3	10037.2	8245.8
67.5°	4.9	6.2	19.7	1244.0	1891.3	4942.8	9153.2	10721.5	10765.9	10219.7	8173.1
69°	4.9	6.2	19.7	1118.3	1711.3	4678.9	9016.4	10836.2	10923.7	10223.4	8006.6
70°	4.9	6.2	18.5	1028.3	1570.7	4455.8	8884.5	10791.8	10862.1	10124.8	7821.7
72.5°	4.9	6.2	18.5	791.5	1194.7	3577.9	8049.8	10163.0	10127.2	9503.4	7101.6
75°	6.2	6.2	18.5	556.0	828.5	2544.8	6793.4	9025.0	9041.0	8460.3	5973.5
77.5°	6.2	6.2	18.5	353.8	522.8	1472.1	4919.4	7401.2	7446.9	7048.6	4473.0
80°	6.2	6.2	18.5	161.5	324.3	769.3	2419.0	4823.2	5068.6	4732.0	2454.8
82.5°	6.2	6.2	17.3	101.1	177.5	346.5	954.3	1512.8	1498.0	1474.6	780.4
85°	4.9	4.9	13.6	71.5	118.4	201.0	530.2	678.1	669.5	593.0	403.2
87.5°	2.5	2.5	7.4	29.6	49.3	91.2	265.1	308.2	293.4	251.5	172.6
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°	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3	6009.3
2.5°	6077.1	6085.7	6126.4	6179.4	6195.4	6264.5	6275.6	6389.0	6406.3	6434.6	6447.0
5°	6138.7	6172.0	6260.8	6385.3	6491.3	6599.8	6603.5	6741.6	6777.4	6770.0	6805.7
7.5°	6226.3	6281.7	6417.4	6590.0	6628.2	6768.8	6758.9	6895.7	6898.2	6878.5	6932.7
10°	6360.7	6429.7	6553.0	6659.0	6731.8	6823.0	6810.7	6940.1	6921.6	6900.7	6961.1
12.5°	6498.7	6534.5	6609.7	6728.1	6744.1	6776.2	6760.1	6879.7	6860.0	6834.1	6893.3
15°	6619.6	6636.8	6636.8	6700.9	6660.3	6686.1	6631.9	6728.1	6682.4	6670.1	6726.8
17.5°	6776.2	6747.8	6689.8	6684.9	6578.9	6539.4	6458.1	6483.9	6397.6	6406.3	6435.9
20°	6952.5	6889.6	6736.7	6583.8	6387.8	6294.1	6132.6	6120.2	6040.1	6025.3	6053.7
22.5°	7017.8	7073.3	6793.4	6497.5	6159.7	5950.1	5759.0	5667.8	5550.6	5475.4	5485.3
25°	7216.3	7316.2	6879.7	6343.4	5890.9	5545.7	5258.4	5050.1	4873.7	4783.7	4802.2
27.5°	7485.1	7647.8	6929.0	6236.1	5538.3	5087.0	4606.2	4332.5	4150.0	4056.3	4053.9
30°	7869.8	8074.4	7024.0	6011.7	5146.2	4484.1	3891.1	3568.1	3418.9	3357.3	3362.2
32.5°	8350.6	8597.2	7221.2	5824.3	4719.6	3839.3	3163.7	2881.3	2813.5	2802.4	2796.3
35°	8988.0	9232.1	7377.8	5535.8	4166.1	3108.2	2539.8	2340.1	2351.2	2348.7	2356.1
37.5°	8884.5	9810.4	7556.6	5253.5	3504.0	2436.3	2052.8	1940.6	1944.3	1987.5	1996.1
40°	8494.8	9304.9	7822.9	4786.2	2729.7	1871.6	1618.8	1592.9	1699.0	1793.9	1811.2
42.5°	8800.6	9000.3	7858.7	4281.9	1997.3	1435.1	1353.8	1461.0	1632.4	1742.1	1761.8
45°	9106.4	9267.9	7651.5	3527.4	1432.7	1228.0	1288.4	1442.5	1632.4	1749.5	1763.1
47.5°	9417.1	9415.8	7409.9	2828.3	1171.3	1173.7	1272.4	1443.8	1642.3	1760.6	1768.0
50°	9614.3	9535.4	6778.6	2215.6	1089.9	1141.7	1263.7	1451.2	1639.8	1726.1	1729.8
52.5°	9713.0	9595.8	6221.3	1770.5	1051.7	1115.8	1265.0	1468.4	1626.2	1674.3	1671.8
55°	9546.5	9562.6	5760.2	1472.1	1015.9	1094.8	1271.1	1480.7	1632.4	1681.7	1681.7
57.5°	9339.4	9343.1	5392.8	1246.5	980.2	1077.6	1278.5	1499.2	1745.8	1838.3	1824.7
60°	9193.9	9027.5	4872.5	1104.7	939.5	1061.5	1288.4	1579.4	2012.1	2105.8	2073.8
62.5°	8954.7	8729.1	4337.4	1006.1	893.9	1049.2	1294.6	1691.6	2047.9	2052.8	1973.9
65°	8535.5	8212.5	3501.5	908.7	847.0	1032.0	1290.9	1733.5	1886.4	1812.4	1790.2
67.5°	7928.9	7507.3	2744.5	811.3	795.2	1006.1	1315.5	1657.1	1781.6	1721.2	1691.6
69°	7550.4	6972.2	2278.4	753.3	761.9	986.3	1327.9	1642.3	1744.6	1670.6	1636.1
70°	7263.2	6508.6	1929.5	715.1	733.6	969.1	1303.2	1633.6	1727.3	1636.1	1595.4
72.5°	6167.1	5232.5	1235.4	626.3	659.6	925.9	1236.6	1579.4	1689.1	1627.5	1576.9
75°	4767.7	3843.0	787.8	545.0	584.4	861.8	1167.6	1541.2	1706.4	1595.4	1484.4
77.5°	3209.3	2146.5	601.7	457.4	495.6	778.0	1057.8	1433.9	1647.2	1549.8	1412.9
80°	1462.2	818.7	464.8	371.1	400.7	626.3	912.4	1268.7	1557.2	1556.0	1457.3
82.5°	585.6	547.4	345.2	283.6	315.6	467.3	722.5	1086.2	1373.5	1432.7	1530.1
85°	341.5	345.2	229.3	197.3	235.5	344.0	515.4	839.6	1117.0	1235.4	1318.0
87.5°	139.3	155.3	107.3	103.6	129.5	183.7	236.7	406.9	601.7	738.5	789.1
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)