

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: P591175

Luminaire Tested: **CTN-CA8-330-722-U-T3-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591175
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-7)
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-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D 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: 27631 lumens
Efficiency: N/A
Efficacy: 83.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G3

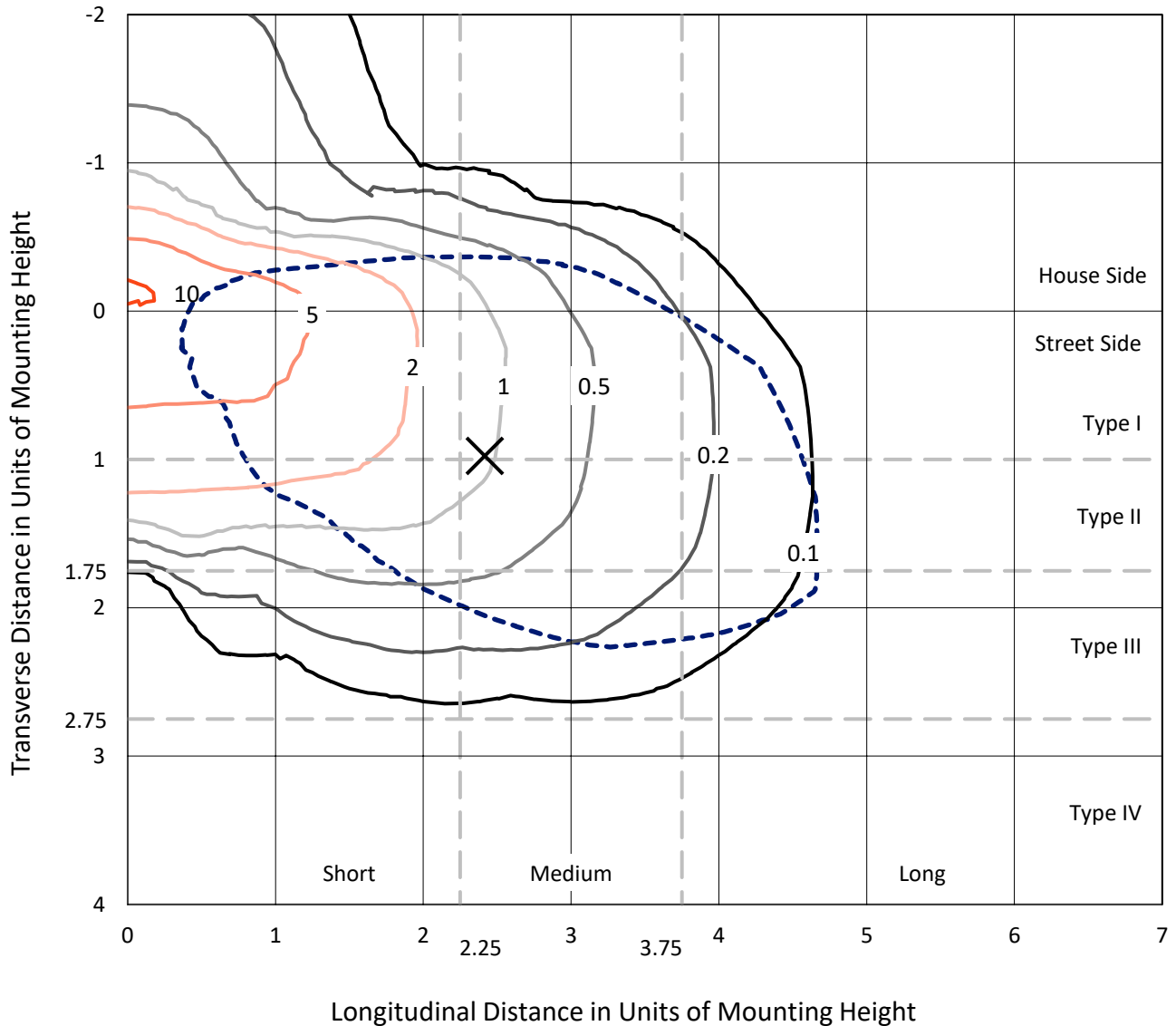
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

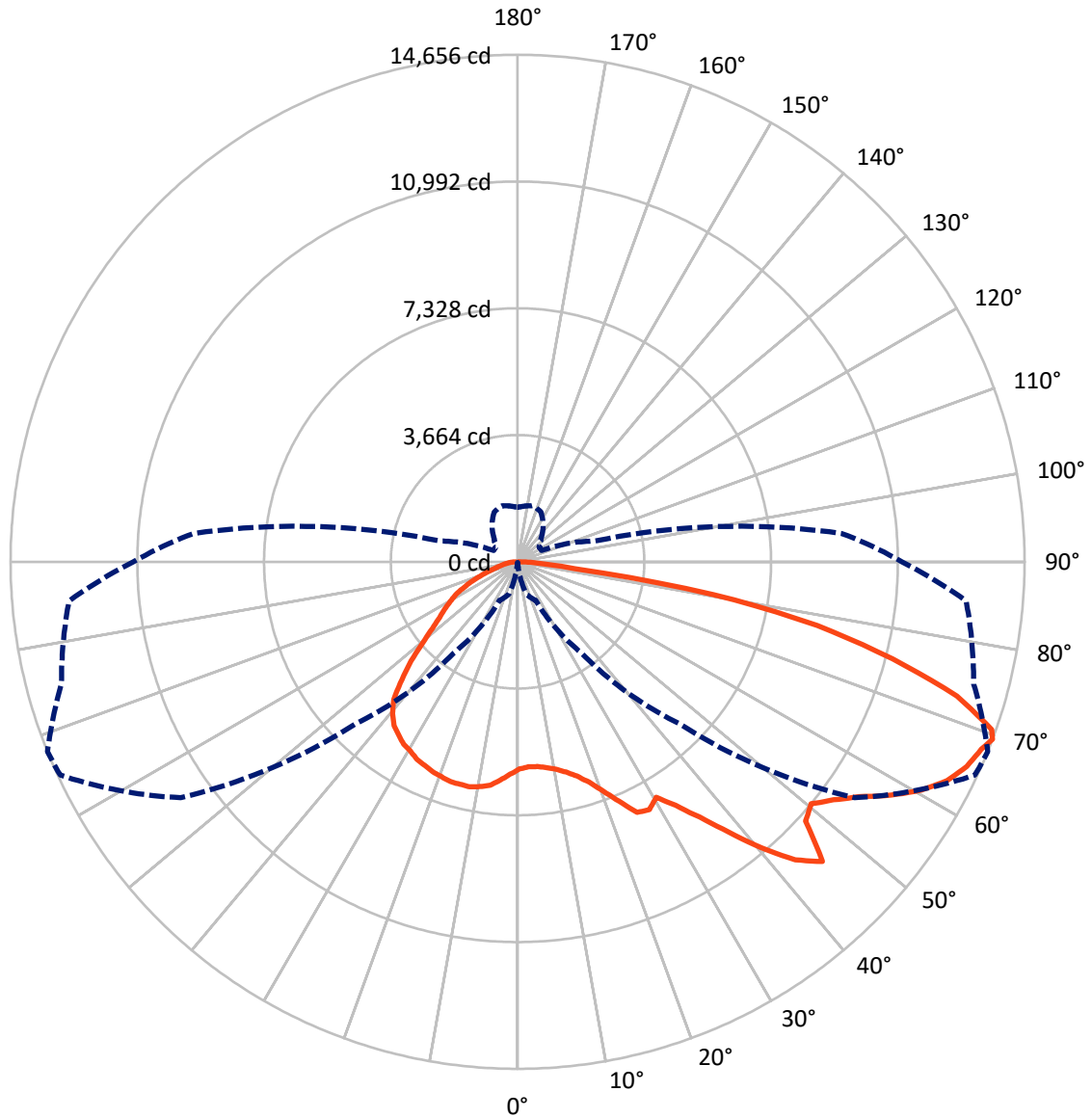
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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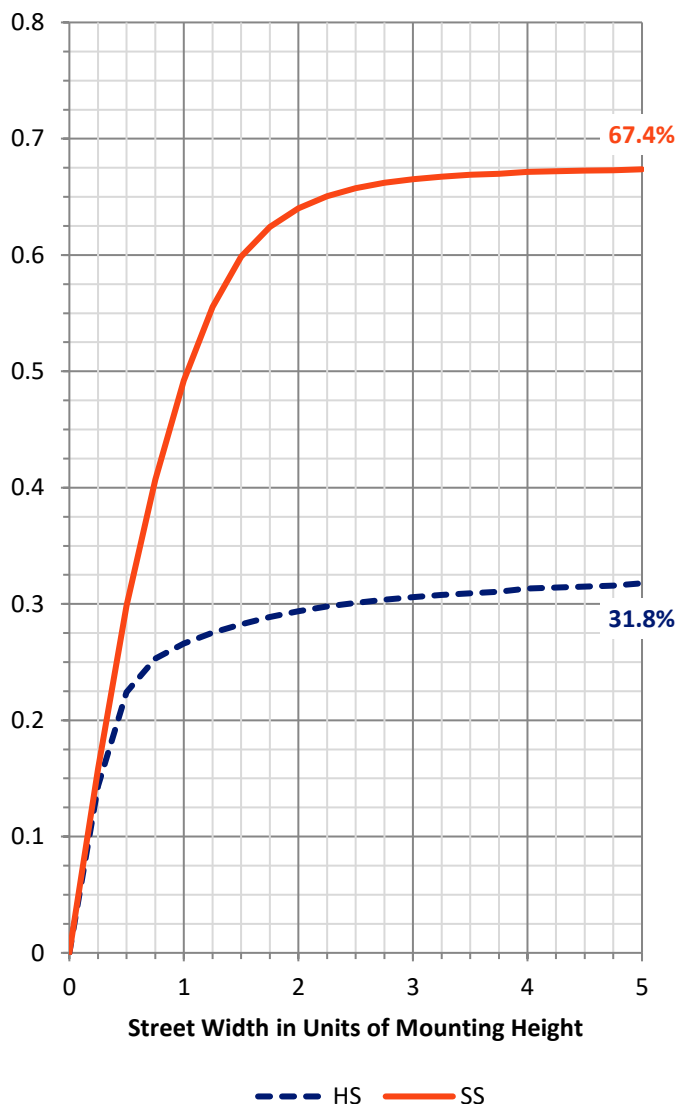
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9012.8	0.0	9012.8
	% Fixture	32.6	0.0	32.6
Street Side	Lumens	18618.2	0.0	18618.2
	% Fixture	67.4	0.0	67.4
Total	Lumens	27631.0	0.0	27631.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	598.2	2.2
10°-20°	1850.9	6.7
20°-30°	2845.8	10.3
30°-40°	3696.1	13.4
40°-50°	4562.4	16.5
50°-60°	5123.9	18.5
60°-70°	5007.6	18.1
70°-80°	3362.8	12.2
80°-90°	583.2	2.1
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°	27631.0	100.0
0°-180°	27631.0	100.0

Coefficient of Utilization

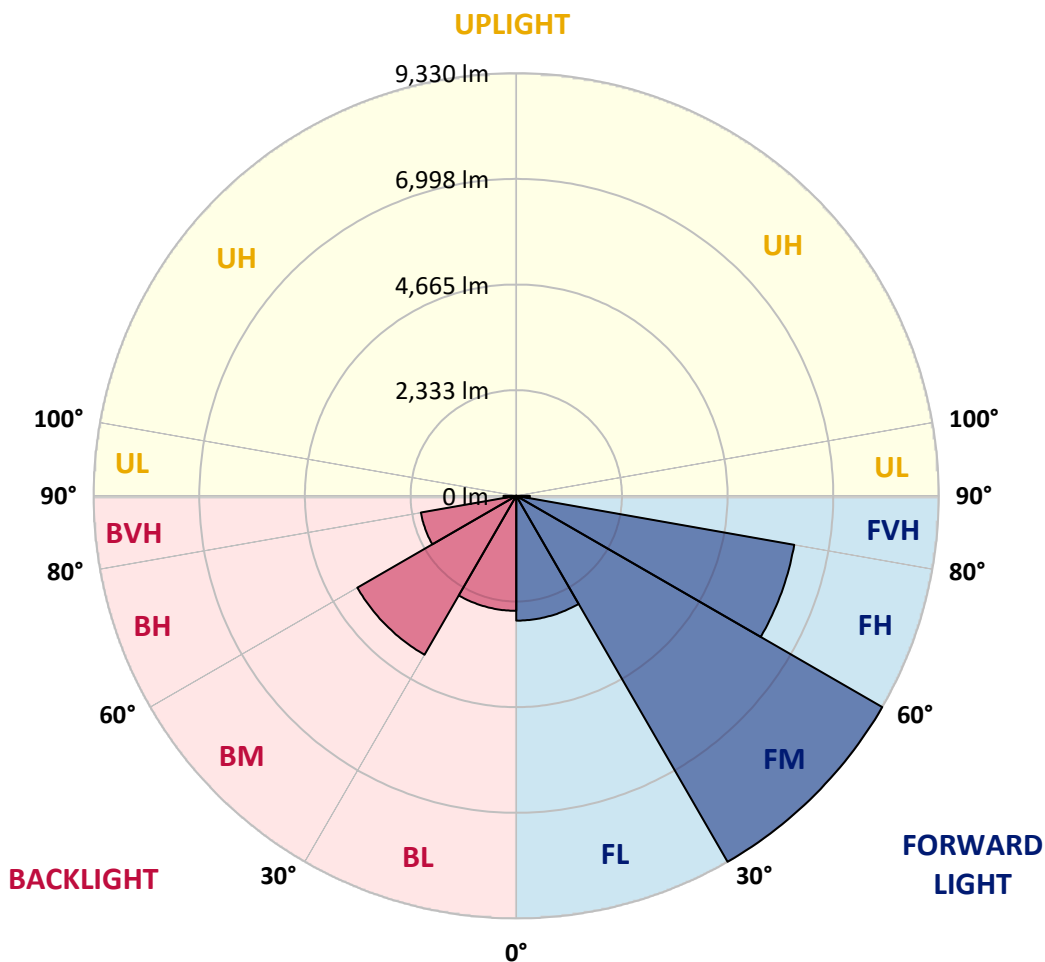


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2755.1	10.0			
FM	(30°-60°)	9330.3	33.8			
FH	(60°-80°)	6232.2	22.6			G3/7500
FVH	(80°-90°)	300.6	1.1			G3/500
BL	(0°-30°)	2539.9	9.2	B4/5000		
BM	(30°-60°)	4052.1	14.7	B3/5000		
BH	(60°-80°)	2138.2	7.7	B3/2500		G3/2500
BVH	(80°-90°)	282.6	1.0			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°	68°	75°	85°
0°	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6
2.5°	5868.7	5833.0	5846.6	5895.9	5796.0	5861.4	5830.5	5897.1	5931.6	5916.8	6010.5
5°	5924.2	5884.8	5887.2	5921.8	5814.5	5870.0	5835.5	5907.0	5945.2	5924.2	6050.0
7.5°	6093.1	6050.0	6037.7	6035.2	5934.1	5976.0	5907.0	5964.9	6004.4	5993.3	6135.1
10°	6352.1	6300.3	6276.8	6263.3	6142.5	6130.1	6043.8	6069.7	6099.3	6111.6	6264.5
12.5°	6636.9	6566.6	6551.8	6511.1	6355.8	6328.6	6223.8	6236.2	6236.2	6264.5	6416.2
15°	6878.5	6820.6	6820.6	6778.7	6627.0	6588.8	6444.5	6429.7	6427.3	6449.5	6585.1
17.5°	6723.2	6691.1	6662.8	6641.8	6407.5	6345.9	6736.7	6710.8	6698.5	6720.7	6799.6
20°	6201.6	6287.9	6105.5	5847.8	5884.8	6627.0	7112.8	7065.9	7073.3	7095.5	7073.3
22.5°	5458.2	5244.9	5580.2	5672.7	5826.8	6375.5	7455.5	7504.8	7519.6	7520.9	7405.0
25°	4677.7	4796.1	5251.1	5956.3	5936.6	6394.0	7247.2	7948.7	8022.7	8015.3	7814.3
27.5°	4902.1	4879.9	5231.3	5694.9	6280.5	6786.0	7375.4	7687.3	8111.4	8581.2	8308.7
30°	5098.2	5079.7	5116.7	5765.2	6507.4	7178.1	7855.0	7804.4	7894.5	8745.2	8891.9
32.5°	5273.2	5259.7	5302.8	5374.3	6130.1	7601.0	8369.1	8359.3	8390.1	8456.7	9579.9
35°	5438.5	5439.7	5492.7	5609.8	6178.2	7688.6	8877.1	8981.9	9063.3	9210.0	9461.5
37.5°	5551.9	5554.4	5596.3	5738.1	5976.0	7255.8	9391.2	9764.8	9910.3	10174.1	9817.8
40°	5550.7	5569.1	5670.2	5855.2	6173.3	6969.8	9550.3	10652.5	10886.8	11079.1	10479.9
42.5°	5434.8	5444.6	5633.3	5967.4	6348.4	7186.8	9055.9	11518.0	11778.2	11725.2	11027.3
45°	5328.7	5326.3	5540.8	5952.6	6504.9	7485.1	9122.5	11493.4	12357.7	12293.5	11530.4
47.5°	5186.9	5190.6	5417.5	5888.5	6648.0	7804.4	9615.6	10451.6	11199.9	12781.8	11939.7
50°	5009.4	5031.6	5262.1	5791.1	6719.5	8102.8	10042.2	10909.0	10997.7	11479.8	12340.4
52.5°	4714.7	4675.3	5095.7	5678.9	6770.0	8319.8	10449.1	11347.9	11431.7	11256.7	12748.5
55°	2676.7	3321.5	4887.3	5548.2	6784.8	8450.5	10764.7	11847.2	11977.9	11812.7	13080.2
57.5°	1681.7	1733.5	4233.9	5201.7	6660.3	8531.9	11151.9	12532.7	12726.3	12333.0	13331.7
60°	595.5	642.4	2059.0	2388.2	5459.4	8307.5	11741.2	13340.3	13404.4	12822.5	13516.6
62.5°	62.9	82.6	1395.7	1753.2	4238.8	7666.4	12148.1	13990.1	13932.1	13185.0	13616.5
65°	22.2	30.8	1226.8	1568.3	3945.4	7466.6	12282.5	14267.5	14266.2	13416.7	13545.0
67.5°	17.3	23.4	1066.5	1362.4	3521.2	7038.8	12059.3	14475.8	14456.1	13646.1	13356.3
69°	17.3	24.7	960.5	1228.0	3214.2	6629.5	11886.7	14585.6	14655.8	13649.8	13014.8
70°	17.3	24.7	892.6	1134.3	2964.0	6254.7	11638.9	14501.7	14537.5	13531.4	12661.0
72.5°	17.3	24.7	691.7	877.8	2253.8	4814.6	10196.3	13214.5	13282.4	12492.0	11378.7
75°	17.3	24.7	487.0	638.7	1479.5	3230.3	8118.8	11006.4	11190.1	10557.6	9323.4
77.5°	17.3	24.7	291.0	436.5	928.4	1773.0	5586.4	8435.7	8851.2	8261.9	6664.0
80°	17.3	23.4	136.9	238.0	528.9	939.5	2559.6	5193.1	5734.4	5168.4	3485.5
82.5°	17.3	23.4	112.2	171.4	267.5	467.3	999.9	1701.4	1670.6	1500.5	1123.2
85°	16.0	21.0	92.5	125.8	192.3	295.9	557.3	692.9	660.9	584.4	588.1
87.5°	11.1	12.3	32.1	56.7	77.7	146.7	270.0	293.4	299.6	250.3	262.6
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°	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6	5989.6
2.5°	6054.9	6062.3	6098.1	6162.2	6161.0	6230.0	6211.5	6371.8	6377.9	6375.5	6387.8
5°	6110.4	6152.3	6231.2	6368.1	6447.0	6550.6	6530.8	6692.3	6702.2	6688.6	6723.2
7.5°	6206.6	6258.4	6387.8	6556.7	6577.7	6708.4	6681.2	6811.9	6805.8	6781.1	6840.3
10°	6342.2	6403.8	6521.0	6617.1	6677.6	6754.0	6724.4	6835.4	6814.4	6787.3	6844.0
12.5°	6480.3	6509.9	6575.2	6683.7	6688.6	6705.9	6671.4	6761.4	6738.0	6697.3	6756.5
15°	6612.2	6615.9	6604.8	6654.1	6602.3	6613.4	6538.2	6594.9	6554.3	6535.8	6574.0
17.5°	6783.6	6739.2	6660.3	6639.3	6517.3	6465.5	6354.5	6352.1	6280.5	6254.7	6280.5
20°	6989.5	6893.3	6710.8	6537.0	6326.2	6220.1	6031.5	5980.9	5923.0	5867.5	5898.3
22.5°	7274.3	7088.1	6773.7	6449.5	6100.5	5892.2	5660.4	5517.4	5408.9	5301.6	5333.7
25°	7598.5	7338.4	6862.5	6300.3	5830.5	5461.9	5161.0	4916.9	4761.6	4605.0	4675.3
27.5°	8037.5	7678.7	6916.7	6189.3	5479.1	4984.7	4505.1	4187.0	4025.5	3913.3	3877.6
30°	8549.1	8118.8	7014.1	5971.1	5066.1	4397.9	3788.8	3433.7	3262.3	3209.3	3231.5
32.5°	9173.0	8653.9	7212.6	5788.6	4646.9	3775.2	3065.1	2787.7	2664.4	2655.7	2653.3
35°	10007.7	9337.0	7382.8	5505.0	4092.1	3049.0	2438.7	2209.4	2204.5	2200.8	2209.4
37.5°	10648.8	10032.4	7564.0	5227.6	3433.7	2380.8	1950.5	1811.2	1796.4	1839.5	1850.6
40°	11154.3	10530.5	7835.3	4759.1	2661.9	1777.9	1498.0	1446.2	1551.0	1646.0	1665.7
42.5°	11610.5	10949.7	7894.5	4259.8	1939.4	1364.9	1241.6	1327.9	1489.4	1597.9	1618.8
45°	12038.3	11389.8	7668.8	3517.6	1387.0	1156.5	1181.1	1310.6	1491.8	1607.7	1620.1
47.5°	12505.6	11684.5	7424.7	2828.3	1140.5	1108.4	1168.8	1316.8	1506.6	1623.8	1629.9
50°	12813.8	11895.3	6814.4	2211.9	1069.0	1078.8	1163.9	1330.3	1509.1	1592.9	1597.9
52.5°	12939.6	12064.2	6262.1	1770.5	1033.2	1056.6	1170.1	1353.8	1502.9	1549.8	1547.3
55°	13018.5	12141.9	5787.4	1473.4	1001.1	1039.4	1181.1	1371.0	1516.5	1564.6	1564.6
57.5°	12968.0	11968.1	5434.8	1255.1	969.1	1027.0	1194.7	1396.9	1644.7	1729.8	1721.2
60°	12931.0	11642.6	4934.2	1108.4	930.9	1013.5	1212.0	1486.9	1918.4	2004.7	1976.4
62.5°	12739.9	11367.6	4391.7	1014.7	887.7	1006.1	1226.8	1607.7	1956.7	1951.7	1896.2
65°	12252.9	10807.9	3536.0	919.8	843.3	996.2	1231.7	1660.8	1800.1	1722.4	1706.4
67.5°	11562.4	10000.3	2790.1	824.8	794.0	975.2	1272.4	1597.9	1712.5	1646.0	1621.3
69°	11111.2	9402.3	2317.9	765.6	762.0	958.0	1288.4	1591.7	1680.5	1605.3	1573.2
70°	10747.5	8884.5	2001.0	727.4	737.3	944.4	1272.4	1590.5	1666.9	1573.2	1537.5
72.5°	9186.6	7197.8	1292.1	636.2	664.5	908.7	1212.0	1549.8	1638.6	1576.9	1527.6
75°	7118.9	5240.0	835.9	549.9	588.1	848.3	1151.6	1523.9	1664.5	1552.3	1446.2
77.5°	4568.0	2803.7	647.3	462.3	505.5	763.2	1043.1	1419.1	1616.4	1515.3	1378.4
80°	1989.9	1040.6	499.3	374.8	409.3	620.2	895.1	1261.3	1532.5	1521.4	1429.0
82.5°	844.6	670.7	384.7	287.3	325.5	458.7	701.5	1081.3	1353.8	1406.8	1507.9
85°	478.4	401.9	256.4	197.3	241.7	337.8	499.3	829.8	1102.2	1221.8	1306.9
87.5°	205.9	167.7	118.4	106.0	136.9	175.1	214.5	389.6	588.1	717.6	771.8
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)