

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: P591185

Luminaire Tested: **CTN-CA8-480-722-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591185
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-CA8-480-722-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: 34635 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 - G4

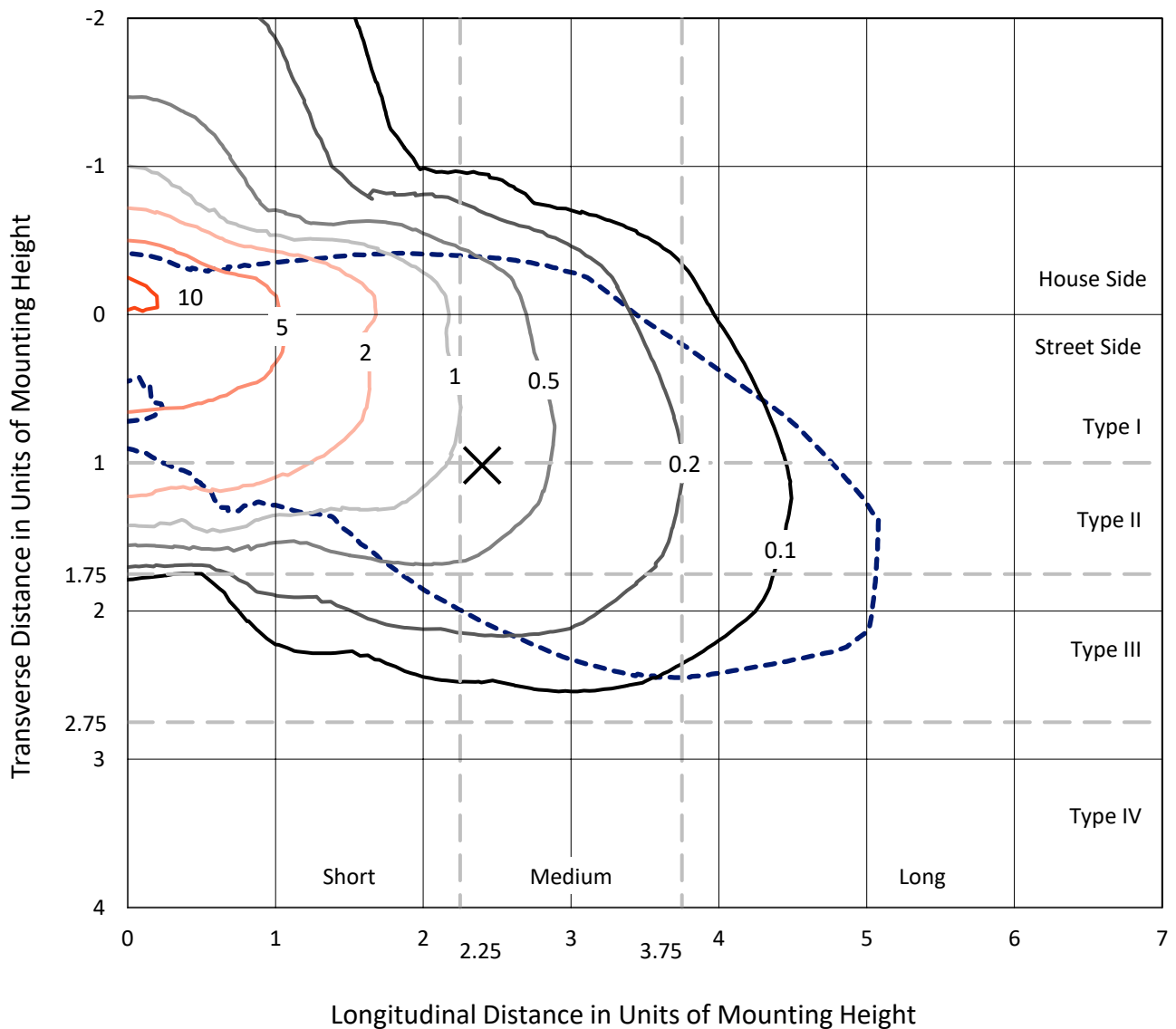
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

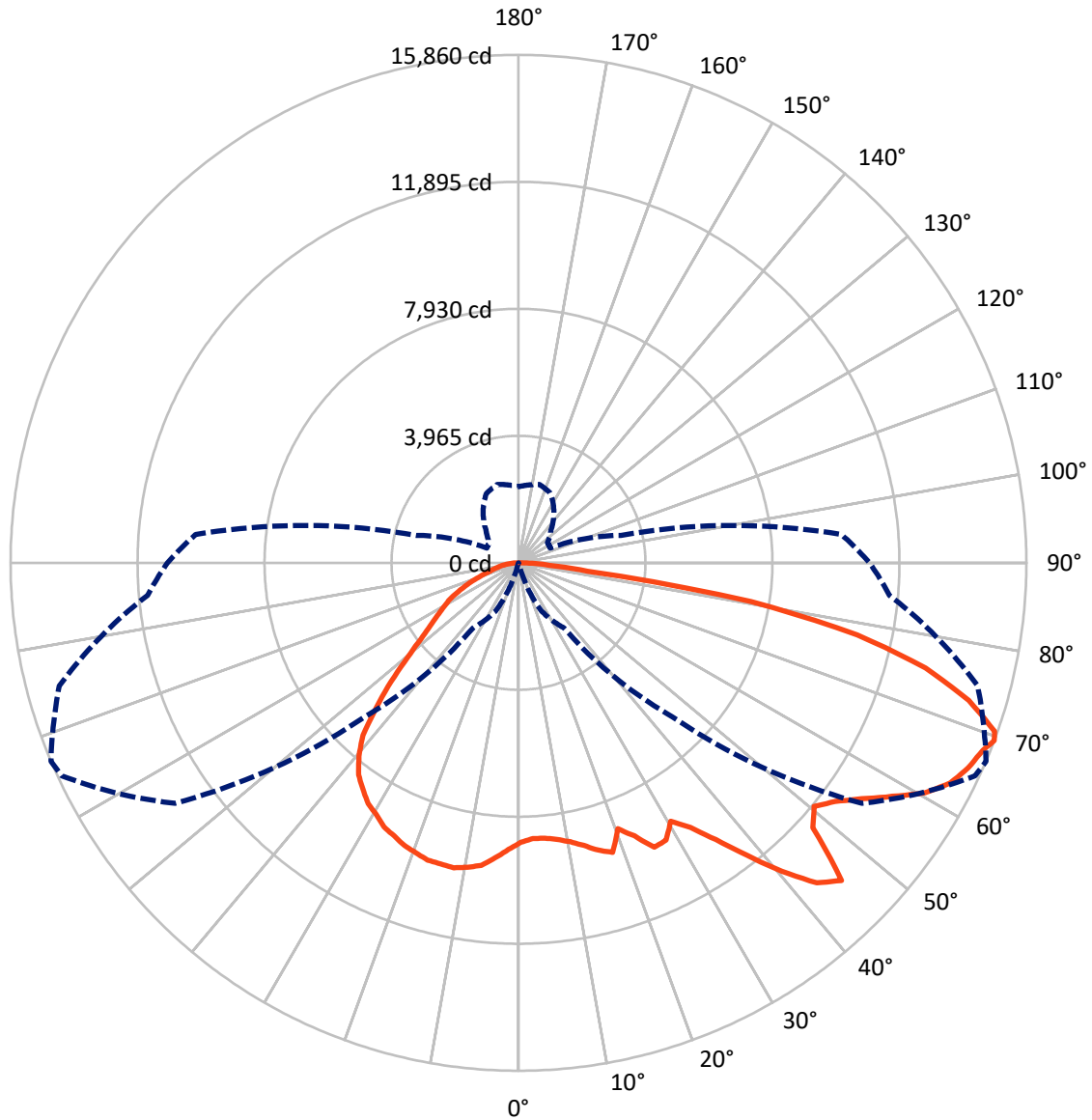
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.9 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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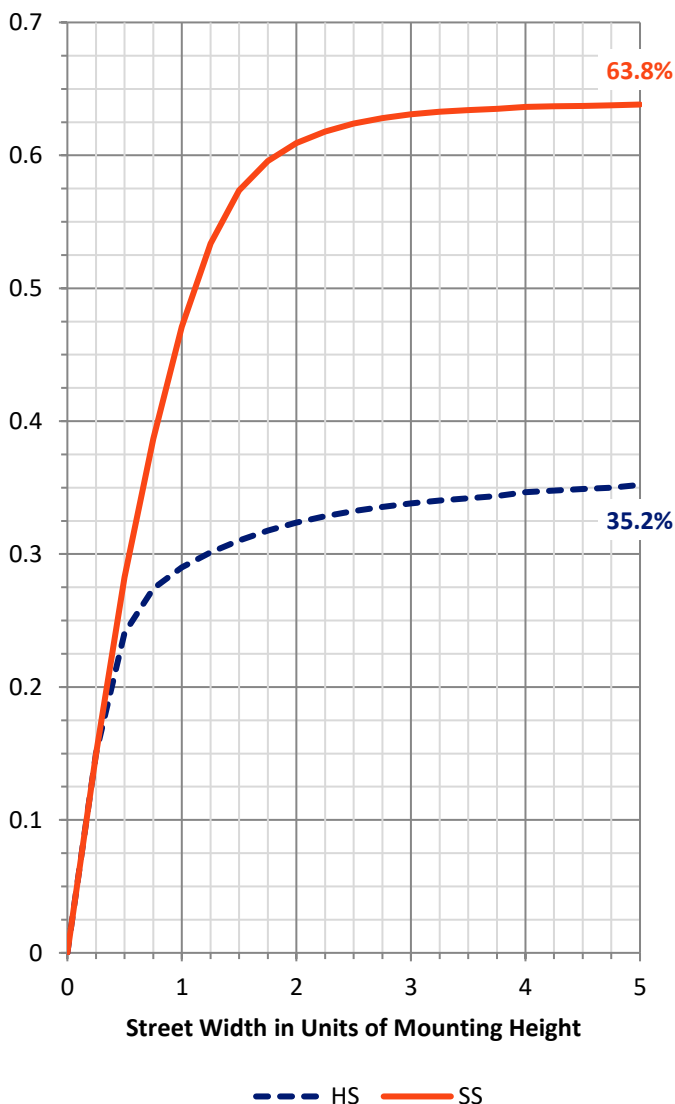
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12530.0	0.0	12530.0
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	22105.1	0.0	22105.1
	% Fixture	63.8	0.0	63.8
Total	Lumens	34635.0	0.0	34635.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	872.5	2.5
10°-20°	2693.7	7.8
20°-30°	3975.8	11.5
30°-40°	4995.3	14.4
40°-50°	5859.2	16.9
50°-60°	6131.3	17.7
60°-70°	5477.6	15.8
70°-80°	3855.2	11.1
80°-90°	774.4	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°	34635.0	100.0
0°-180°	34635.0	100.0

Coefficient of Utilization

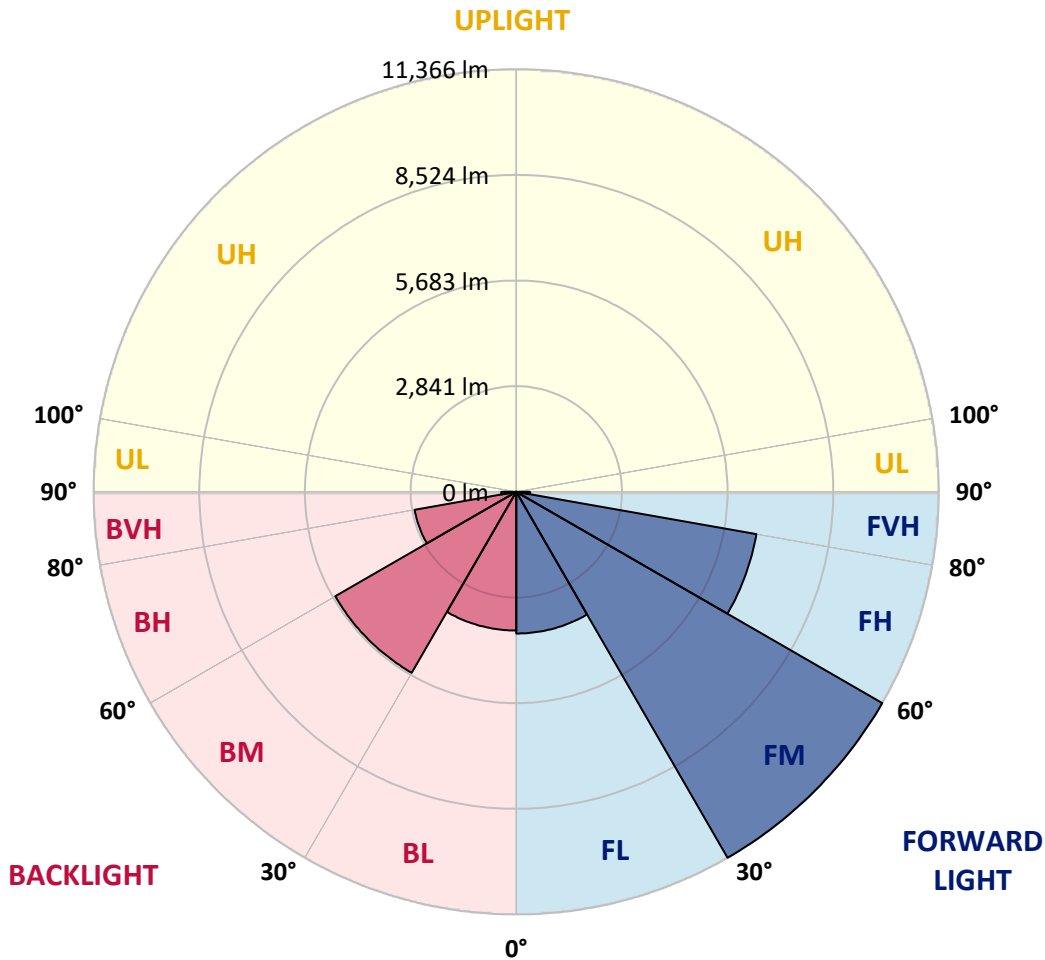


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3811.5	11.0			
FM	(30°-60°)	11365.6	32.8			
FH	(60°-80°)	6557.9	18.9			G3/7500
FVH	(80°-90°)	370.0	1.1			G3/500
BL	(0°-30°)	3730.6	10.8	B4/5000		
BM	(30°-60°)	5620.2	16.2	B4/8500		
BH	(60°-80°)	2774.9	8.0	B4/5000		G4/5000
BVH	(80°-90°)	404.3	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-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8
2.5°	8517.2	8467.1	8490.3	8556.6	8418.7	8517.2	8481.4	8581.6	8619.2	8613.9	8757.1
5°	8585.2	8529.7	8538.7	8588.8	8438.4	8515.4	8481.4	8592.4	8635.3	8622.8	8817.9
7.5°	8826.9	8766.0	8746.3	8762.4	8599.5	8658.6	8585.2	8674.7	8721.3	8721.3	8943.2
10°	9208.2	9134.8	9091.8	9090.0	8898.5	8871.6	8782.1	8823.3	8857.3	8886.0	9133.0
12.5°	9607.4	9546.5	9491.0	9460.6	9208.2	9145.5	9014.8	9045.3	9056.0	9095.4	9340.6
15°	9970.7	9909.9	9893.8	9845.4	9594.8	9491.0	9308.4	9294.1	9308.4	9331.7	9575.1
17.5°	9831.1	9834.7	9924.2	9933.1	9607.4	9367.5	9240.4	9482.0	9505.3	9689.7	9847.2
20°	9566.2	9435.5	8966.5	8710.5	8748.1	9059.6	8828.7	8817.9	8866.3	9193.8	9992.2
22.5°	7967.6	7896.0	8153.8	8236.2	8533.3	8651.5	9201.0	9215.3	9263.7	9263.7	9496.4
25°	6879.3	7249.8	7751.0	8646.1	8553.0	8576.3	8800.0	9750.6	9841.9	9840.1	9806.1
27.5°	7112.0	7065.4	7815.5	8377.6	9041.7	9000.5	8757.1	9403.3	9807.8	10502.4	10341.3
30°	7391.2	7357.2	7412.7	8363.2	9464.1	9519.6	9294.1	9227.9	9365.7	10824.6	10953.5
32.5°	7650.8	7609.6	7672.3	7817.3	8871.6	10054.9	9881.2	9800.7	9850.8	10144.4	11741.1
35°	7879.9	7876.3	7948.0	8119.8	9018.4	10241.0	10482.7	10477.3	10611.6	10864.0	11855.7
37.5°	8042.8	8041.0	8098.3	8298.8	8501.1	9458.8	11046.6	11367.0	11581.8	11955.9	11581.8
40°	8041.0	8069.7	8220.0	8477.8	8746.3	9034.5	11295.4	12412.4	12670.2	12936.9	12314.0
42.5°	7872.8	7888.9	8153.8	8631.8	8964.7	9213.5	10307.3	13373.7	13661.9	13642.2	12890.4
45°	7717.0	7724.2	8019.6	8606.7	9147.3	9596.6	10105.0	13370.1	14148.8	14270.5	13432.8
47.5°	7514.8	7514.8	7806.5	8461.7	9312.0	10028.0	10645.6	11549.6	12362.3	14814.7	13882.1
50°	7255.2	7287.4	6929.4	8311.3	9390.8	10438.0	11103.9	11848.5	11961.3	13248.4	14299.2
52.5°	6841.7	6823.8	5415.0	8144.9	9423.0	10735.1	11580.0	12315.7	12376.6	12247.7	13891.0
55°	4312.3	4808.2	4788.5	7949.7	9403.3	10926.6	11945.2	12829.5	13001.3	12843.8	11685.6
57.5°	2604.6	2486.4	4092.1	7391.2	7552.3	11075.2	12441.0	13610.0	13760.3	13395.2	11882.5
60°	1016.8	959.5	1036.5	3363.6	5418.6	10303.7	13115.9	14438.8	14582.0	13919.7	12049.0
62.5°	127.1	109.2	93.1	2328.9	3444.1	7654.4	13473.9	15106.5	15133.3	14299.2	12081.2
65°	17.9	19.7	35.8	2076.5	3129.1	7523.7	13599.2	15378.6	15434.1	14573.0	11972.0
67.5°	7.2	9.0	28.6	1806.2	2746.0	7176.4	13289.5	15566.5	15631.0	14838.0	11866.4
69°	7.2	9.0	28.6	1623.6	2484.6	6793.3	13090.8	15733.0	15860.1	14843.3	11624.8
70°	7.2	9.0	26.9	1492.9	2280.6	6469.3	12899.3	15668.6	15770.6	14700.1	11356.3
72.5°	7.2	9.0	26.9	1149.2	1734.6	5194.8	11687.4	14755.6	14703.7	13797.9	10310.9
75°	9.0	9.0	26.9	807.3	1202.9	3694.7	9863.3	13103.4	13126.6	12283.5	8672.9
77.5°	9.0	9.0	26.9	513.8	759.0	2137.4	7142.4	10745.8	10812.1	10233.9	6494.4
80°	9.0	9.0	26.9	234.5	470.8	1117.0	3512.1	7002.8	7359.0	6870.3	3564.0
82.5°	9.0	9.0	25.1	146.8	257.8	503.0	1385.5	2196.4	2174.9	2140.9	1133.1
85°	7.2	7.2	19.7	103.8	171.8	291.8	769.7	984.5	972.0	861.0	585.4
87.5°	3.6	3.6	10.7	43.0	71.6	132.5	384.9	447.5	426.0	365.2	250.6
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°	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8	8724.8
2.5°	8823.3	8835.8	8894.9	8971.9	8995.1	9095.4	9111.5	9276.2	9301.3	9342.4	9360.3
5°	8912.8	8961.1	9090.0	9270.8	9424.8	9582.3	9587.7	9788.2	9840.1	9829.3	9881.2
7.5°	9039.9	9120.5	9317.4	9568.0	9623.5	9827.5	9813.2	10011.9	10015.5	9986.9	10065.6
10°	9235.0	9335.3	9514.3	9668.2	9773.8	9906.3	9888.4	10076.4	10049.5	10019.1	10106.8
12.5°	9435.5	9487.4	9596.6	9768.5	9791.7	9838.3	9815.0	9988.6	9960.0	9922.4	10008.3
15°	9610.9	9636.0	9636.0	9729.1	9670.0	9707.6	9628.8	9768.5	9702.2	9684.3	9766.7
17.5°	9838.3	9797.1	9713.0	9705.8	9551.9	9494.6	9376.4	9414.0	9288.7	9301.3	9344.2
20°	10094.3	10003.0	9781.0	9559.0	9274.4	9138.4	8903.9	8886.0	8769.6	8748.1	8789.3
22.5°	10189.1	10269.7	9863.3	9433.7	8943.2	8638.9	8361.5	8229.0	8058.9	7949.7	7964.1
25°	10477.3	10622.3	9988.6	9210.0	8553.0	8051.8	7634.7	7332.2	7076.2	6945.5	6972.4
27.5°	10867.6	11103.9	10060.2	9054.2	8041.0	7385.9	6687.7	6290.3	6025.4	5889.4	5885.8
30°	11426.1	11723.2	10198.1	8728.4	7471.8	6510.5	5649.5	5180.5	4963.9	4874.4	4881.5
32.5°	12124.2	12482.2	10484.5	8456.3	6852.4	5574.3	4593.3	4183.4	4085.0	4068.8	4059.9
35°	13049.7	13404.1	10711.8	8037.5	6048.7	4512.8	3687.6	3397.6	3413.7	3410.1	3420.8
37.5°	12899.3	14243.7	10971.4	7627.5	5087.4	3537.2	2980.5	2817.6	2823.0	2885.6	2898.1
40°	12333.6	13509.7	11358.1	6949.1	3963.2	2717.3	2350.4	2312.8	2466.7	2604.6	2629.6
42.5°	12777.6	13067.6	11410.0	6216.9	2899.9	2083.7	1965.5	2121.2	2370.1	2529.4	2558.0
45°	13221.5	13456.0	11109.2	5121.4	2080.1	1782.9	1870.6	2094.4	2370.1	2540.1	2559.8
47.5°	13672.6	13670.8	10758.4	4106.4	1700.6	1704.2	1847.4	2096.2	2384.4	2556.2	2567.0
50°	13959.0	13844.5	9841.9	3216.8	1582.4	1657.6	1834.8	2106.9	2380.8	2506.1	2511.5
52.5°	14102.2	13932.2	9032.7	2570.6	1526.9	1620.0	1836.6	2132.0	2361.1	2430.9	2427.3
55°	13860.6	13883.9	8363.2	2137.4	1475.0	1589.6	1845.6	2149.9	2370.1	2441.7	2441.7
57.5°	13559.8	13565.2	7829.8	1809.8	1423.1	1564.5	1856.3	2176.7	2534.8	2669.0	2649.3
60°	13348.6	13107.0	7074.4	1603.9	1364.0	1541.3	1870.6	2293.1	2921.4	3057.5	3010.9
62.5°	13001.3	12673.8	6297.5	1460.7	1297.8	1523.4	1879.6	2456.0	2973.3	2980.5	2865.9
65°	12392.7	11923.7	5083.8	1319.3	1229.8	1498.3	1874.2	2516.9	2738.8	2631.4	2599.2
67.5°	11512.0	10899.8	3984.7	1177.9	1154.6	1460.7	1910.0	2405.9	2586.7	2499.0	2456.0
69°	10962.4	10122.9	3308.1	1093.7	1106.3	1432.1	1927.9	2384.4	2533.0	2425.6	2375.4
70°	10545.4	9449.8	2801.5	1038.2	1065.1	1407.0	1892.1	2371.9	2507.9	2375.4	2316.4
72.5°	8954.0	7597.1	1793.7	909.4	957.7	1344.3	1795.4	2293.1	2452.4	2362.9	2289.5
75°	6922.2	5579.7	1143.9	791.2	848.5	1251.3	1695.2	2237.6	2477.5	2316.4	2155.3
77.5°	4659.6	3116.5	873.6	664.1	719.6	1129.5	1535.9	2081.9	2391.5	2250.1	2051.4
80°	2123.0	1188.6	674.9	538.8	581.8	909.4	1324.7	1842.0	2260.9	2259.1	2115.9
82.5°	850.3	794.8	501.2	411.7	458.3	678.4	1049.0	1577.1	1994.1	2080.1	2221.5
85°	495.9	501.2	333.0	286.4	341.9	499.4	748.3	1219.0	1621.8	1793.7	1913.6
87.5°	202.3	225.5	155.7	150.4	188.0	266.7	343.7	590.7	873.6	1072.3	1145.7
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)