

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: P510509

Luminaire Tested: **CTN-CA10-310-760-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-760-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 48393 lumens
Efficiency: N/A
Efficacy: 154.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

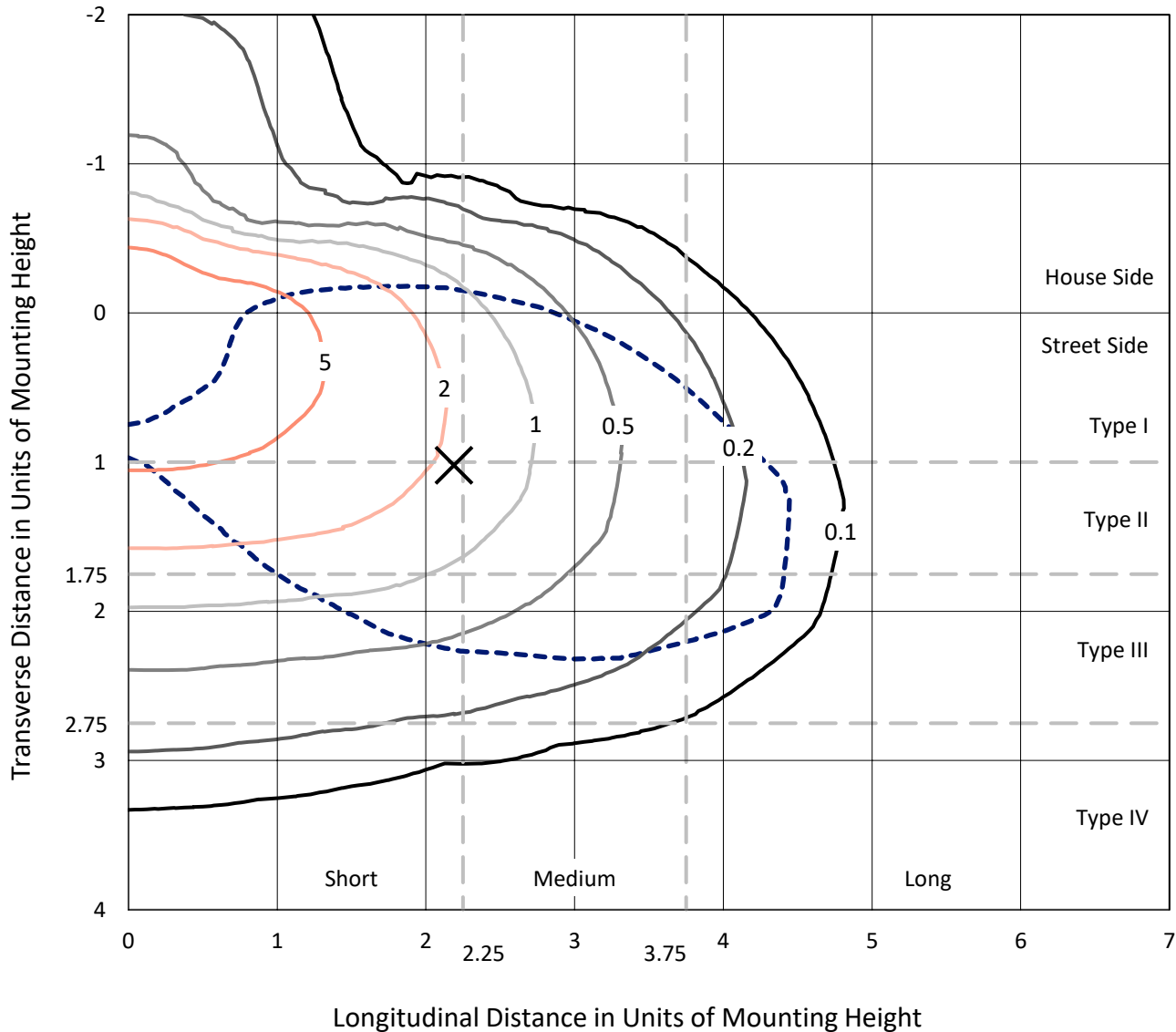
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

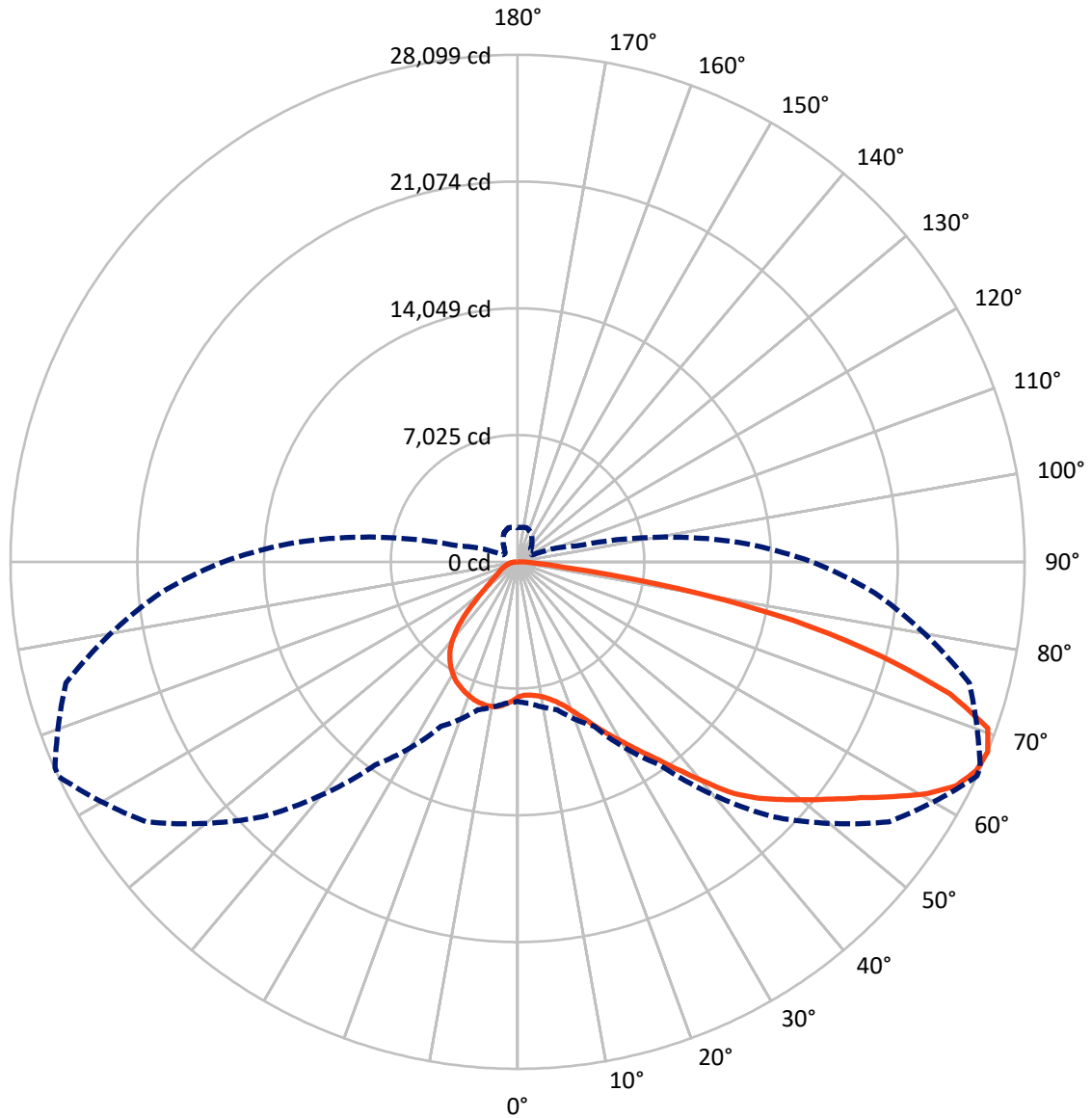
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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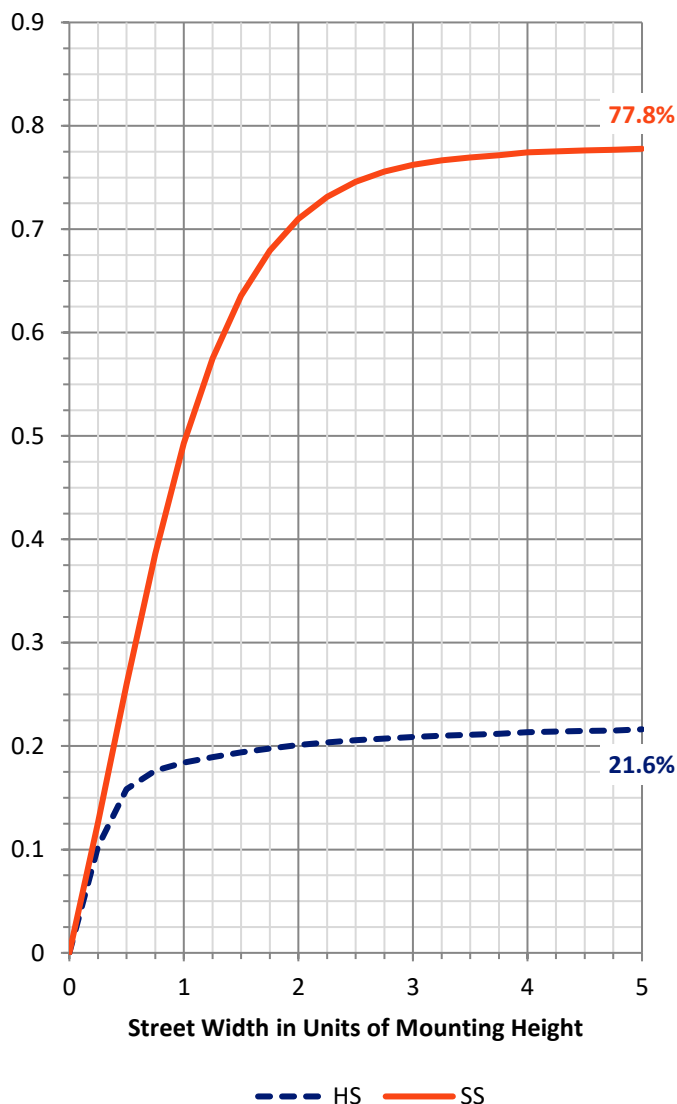
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10689.4	0.0	10689.4
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	37703.6	0.0	37703.6
	% Fixture	77.9	0.0	77.9
Total	Lumens	48393.0	0.0	48393.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	744.8	1.5
10°-20°	2326.9	4.8
20°-30°	4028.1	8.3
30°-40°	5918.9	12.2
40°-50°	8000.1	16.5
50°-60°	9837.8	20.3
60°-70°	10541.8	21.8
70°-80°	6217.4	12.8
80°-90°	777.2	1.6
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°	48393.0	100.0
0°-180°	48393.0	100.0

Coefficient of Utilization



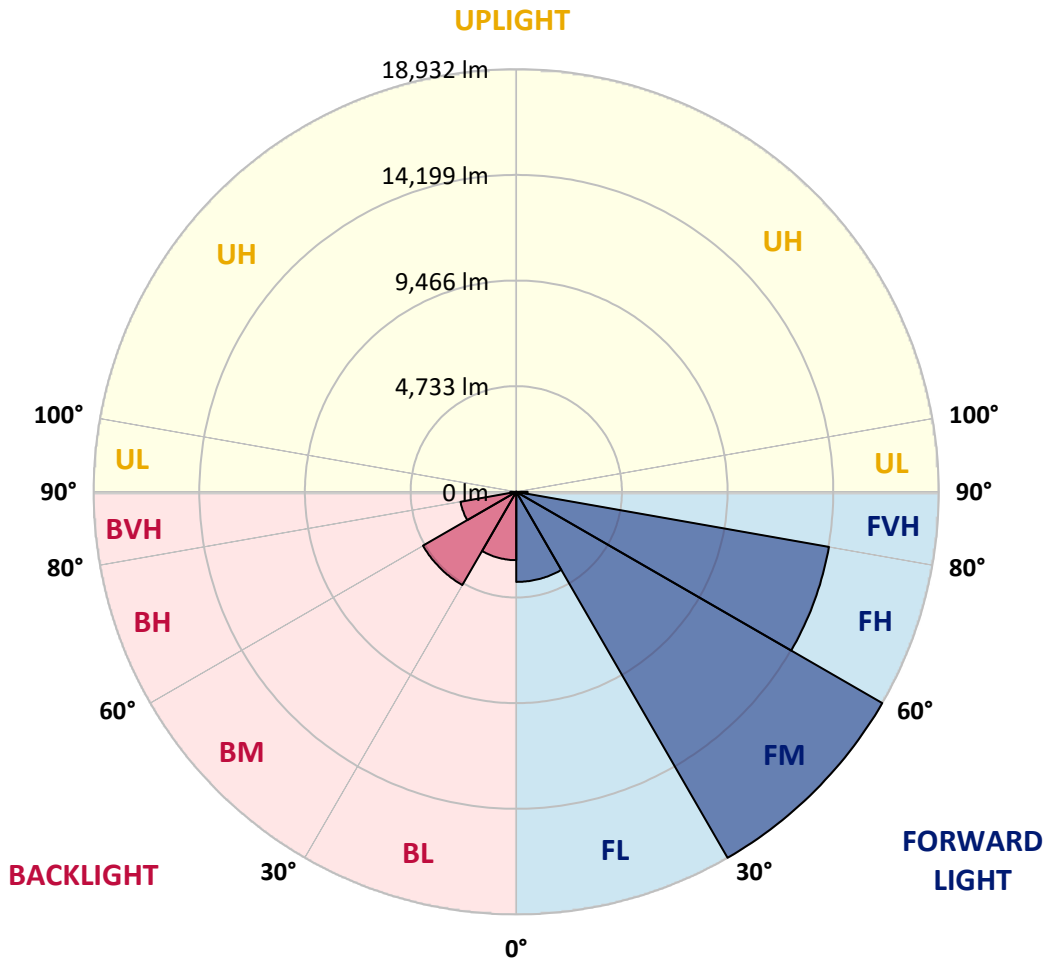
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4038.0	8.3			
FM (30°-60°)	18931.7	39.1			
FH (60°-80°)	14224.3	29.4			G5
FVH (80°-90°)	509.6	1.1			G4/750
BL (0°-30°)	3061.7	6.3	B4/5000		
BM (30°-60°)	4825.2	10.0	B3/5000		
BH (60°-80°)	2535.0	5.2	B4/5000		G4/5000
BVH (80°-90°)	267.5	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9
2.5°	7333.8	7320.0	7314.1	7332.8	7346.6	7362.4	7385.1	7406.8	7409.8	7438.4	7475.9
5°	7422.6	7410.8	7397.9	7395.0	7390.0	7389.0	7395.0	7419.6	7425.6	7453.2	7534.1
7.5°	7619.9	7608.1	7584.4	7575.5	7548.9	7501.5	7478.8	7491.7	7494.6	7528.2	7628.8
10°	7941.6	7905.1	7876.5	7846.9	7763.0	7688.0	7632.7	7609.1	7604.1	7636.7	7753.1
12.5°	8325.4	8294.8	8263.2	8185.3	8078.7	7943.5	7845.9	7791.6	7787.7	7815.3	7903.1
15°	8730.9	8730.9	8709.2	8616.4	8511.9	8287.9	8136.9	8046.2	8052.1	8073.8	8114.2
17.5°	9254.8	9211.4	9201.5	9096.0	8979.5	8775.3	8535.5	8390.5	8397.4	8407.3	8376.7
20°	9787.6	9774.8	9760.0	9689.9	9584.3	9321.9	9052.5	8862.1	8863.1	8827.6	8691.4
22.5°	10492.1	10449.6	10460.5	10381.6	10238.5	9969.1	9659.3	9433.4	9448.2	9396.9	9150.2
25°	11191.6	11149.2	11126.5	11073.2	10949.9	10694.3	10326.3	10119.1	10101.4	10008.6	9650.5
27.5°	11890.2	11865.5	11884.2	11820.1	11719.5	11434.3	11096.9	10867.0	10878.8	10814.7	10280.9
30°	12613.4	12585.7	12667.6	12564.0	12501.9	12224.6	11901.0	11630.7	11640.5	11664.2	11065.3
32.5°	13159.0	13191.6	13334.6	13322.8	13310.9	13002.1	12661.7	12511.7	12526.5	12609.4	11996.7
35°	13685.9	13688.8	13890.1	14042.0	14106.2	13847.7	13494.5	13489.5	13586.2	13838.8	13295.2
37.5°	14123.0	14113.1	14381.5	14617.3	14792.9	14592.6	14398.2	14701.1	14788.9	15312.9	14602.5
40°	14361.7	14382.4	14727.8	15021.8	15367.1	15272.4	15293.1	16067.6	16283.7	16742.5	15580.2
42.5°	14194.0	14257.1	14794.9	15394.7	15915.7	16042.0	16458.4	17543.7	17635.4	17718.3	16542.2
45°	13912.8	13978.9	14574.8	15543.7	16368.6	16902.4	17617.7	18679.3	18780.0	18687.2	17342.4
47.5°	13619.8	13687.8	14351.9	15483.5	16743.5	17766.7	18648.7	19683.7	19812.0	19524.9	18112.0
50°	13247.8	13353.4	14079.5	15356.3	17047.4	18699.0	19624.5	20717.7	20776.9	20362.5	18695.1
52.5°	12790.0	12906.4	13691.8	15138.2	17285.2	19350.2	20612.2	21839.6	21833.6	21341.3	19362.1
55°	12308.5	12414.1	13223.1	14794.9	17418.4	19851.5	21401.5	23075.8	23146.9	22734.5	19965.9
57.5°	11691.8	11787.5	12669.6	14333.1	17280.2	20276.7	22680.2	24545.0	24580.5	23704.3	20446.4
60°	10874.9	11016.0	11902.0	13746.1	16883.6	20769.0	24089.1	26090.1	26133.5	24658.4	20755.2
62.5°	9978.0	10034.3	10937.0	12842.3	16306.4	21148.9	25065.9	27298.7	27235.6	25404.3	20848.0
65°	8884.8	8929.2	9710.6	11680.0	15233.9	20940.7	25416.2	27920.3	27842.4	25873.0	20562.8
67.5°	7740.3	7877.4	8491.1	10067.8	13737.2	19979.7	25120.2	28098.9	28059.4	25908.5	19882.0
70°	6254.4	6302.7	6857.2	8202.0	11461.9	18055.8	24133.5	27641.1	27610.5	25115.3	18491.9
72.5°	4410.3	4363.0	4632.3	5687.1	8279.0	14362.7	20605.3	25068.9	25120.2	22467.1	16103.2
75°	2341.3	2432.1	2851.4	3481.9	4693.5	9233.1	16427.8	20747.3	20729.6	18786.9	12728.8
77.5°	1247.1	1245.2	1533.3	1802.6	2297.9	4242.6	10835.4	15646.3	15733.2	14556.1	8739.8
80°	598.9	621.6	639.4	733.1	1145.5	1960.5	4532.7	9073.3	9665.3	8681.6	4151.8
82.5°	479.5	481.5	483.5	462.7	473.6	798.2	1746.4	2625.5	2720.2	2186.4	1338.9
85°	355.2	333.5	330.5	280.2	316.7	479.5	881.1	1120.8	1065.6	1037.0	755.8
87.5°	143.1	134.2	130.2	122.3	122.3	180.6	310.8	405.5	404.5	369.0	253.6
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°	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9	7474.9
2.5°	7505.5	7541.0	7623.9	7694.9	7721.5	7786.7	7847.8	7883.4	7908.0	7922.8	7989.9
5°	7583.4	7654.5	7786.7	7886.3	7983.0	8103.4	8181.3	8230.7	8258.3	8274.1	8322.4
7.5°	7702.8	7774.8	7914.9	8067.9	8156.7	8255.3	8305.6	8341.2	8358.9	8354.0	8392.5
10°	7809.4	7880.4	8020.5	8137.9	8188.2	8244.5	8271.1	8279.0	8280.0	8283.9	8322.4
12.5°	7954.4	7997.8	8072.8	8149.8	8138.9	8140.9	8163.6	8153.7	8131.0	8127.1	8152.7
15°	8110.3	8111.3	8117.2	8100.4	8032.3	8002.7	7971.2	7944.5	7882.4	7878.4	7918.9
17.5°	8305.6	8259.3	8151.7	8037.3	7875.5	7764.0	7651.5	7605.1	7529.1	7514.4	7534.1
20°	8557.2	8460.6	8199.1	7914.9	7612.0	7412.7	7276.6	7139.4	7033.9	7008.2	7026.9
22.5°	8918.4	8727.9	8259.3	7784.7	7316.0	6975.6	6711.2	6546.4	6368.8	6278.1	6287.0
25°	9354.5	9056.5	8363.9	7619.9	6967.7	6476.4	6047.2	5716.7	5516.4	5383.2	5418.7
27.5°	9925.7	9516.3	8489.2	7457.1	6534.6	5838.0	5215.4	4767.5	4563.3	4500.1	4458.7
30°	10587.8	10071.8	8621.4	7216.4	6066.9	5047.7	4250.5	3877.5	3643.7	3606.2	3574.6
32.5°	11473.8	10771.3	8869.0	6954.9	5508.5	4257.4	3392.1	2962.9	2909.6	2879.1	2872.1
35°	12616.3	11687.9	9128.5	6615.5	4780.3	3330.9	2566.3	2334.4	2308.8	2342.3	2345.3
37.5°	13828.9	12682.4	9439.3	6232.7	3942.7	2485.4	1963.4	1802.6	1831.2	1935.8	1959.5
40°	14649.8	13337.6	9721.5	5712.7	2907.7	1805.6	1428.7	1394.1	1552.0	1686.2	1713.8
42.5°	15437.2	13833.9	9835.9	5025.0	2073.9	1285.6	1153.4	1271.8	1492.8	1639.8	1659.6
45°	16109.1	14411.1	9547.8	4200.2	1406.0	1074.5	1105.1	1268.8	1514.5	1677.3	1692.1
47.5°	16748.4	14882.7	9154.2	3309.2	1109.0	1034.0	1104.1	1295.5	1562.9	1716.8	1725.7
50°	17359.2	15241.8	8482.3	2517.9	1038.9	1015.3	1112.9	1336.9	1589.5	1686.2	1682.2
52.5°	17812.0	15427.3	7766.9	2032.5	1011.3	1000.5	1136.6	1389.2	1594.4	1652.6	1648.7
55°	18144.6	15391.8	7297.3	1664.5	988.6	994.5	1175.1	1428.7	1641.8	1729.6	1726.6
57.5°	18175.1	15231.0	6763.5	1406.0	961.0	993.6	1216.5	1483.9	1878.6	2040.4	1991.1
60°	18138.6	14964.6	6230.7	1234.3	930.4	999.5	1260.0	1649.7	2220.0	2347.2	2312.7
62.5°	17959.1	14468.3	5432.5	1120.8	903.8	1021.2	1292.5	1780.9	2203.2	2218.0	2168.7
65°	17404.6	13804.3	4384.7	1006.4	877.1	1036.0	1319.2	1815.4	2023.6	1976.3	1951.6
67.5°	16307.4	12321.3	3382.2	901.8	842.6	1033.0	1398.1	1766.1	1955.5	1921.0	1889.4
70°	14748.5	10636.1	2348.2	794.3	784.4	1014.3	1378.4	1782.9	1923.0	1869.7	1827.3
72.5°	12321.3	8344.1	1493.8	706.4	697.6	969.9	1329.0	1772.0	1901.3	1877.6	1819.4
75°	9277.5	5824.2	949.2	610.7	620.6	889.0	1250.1	1713.8	1890.4	1816.4	1704.9
77.5°	5841.0	2875.1	738.0	519.0	533.8	766.6	1080.4	1496.8	1814.5	1770.1	1627.0
80°	2209.1	1167.2	577.2	421.3	434.1	595.9	886.0	1231.3	1670.4	1743.4	1682.2
82.5°	1017.2	730.1	433.1	338.4	343.4	434.1	661.1	911.7	1413.9	1600.4	1753.3
85°	594.0	478.5	289.1	225.9	234.8	256.5	372.0	556.5	916.6	1220.5	1365.5
87.5°	202.3	166.7	112.5	95.7	92.7	105.6	89.8	182.5	272.3	479.5	547.6
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)