

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: P510486

Luminaire Tested: **CTN-CA10-310-740-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510486
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-740-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44098 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G5

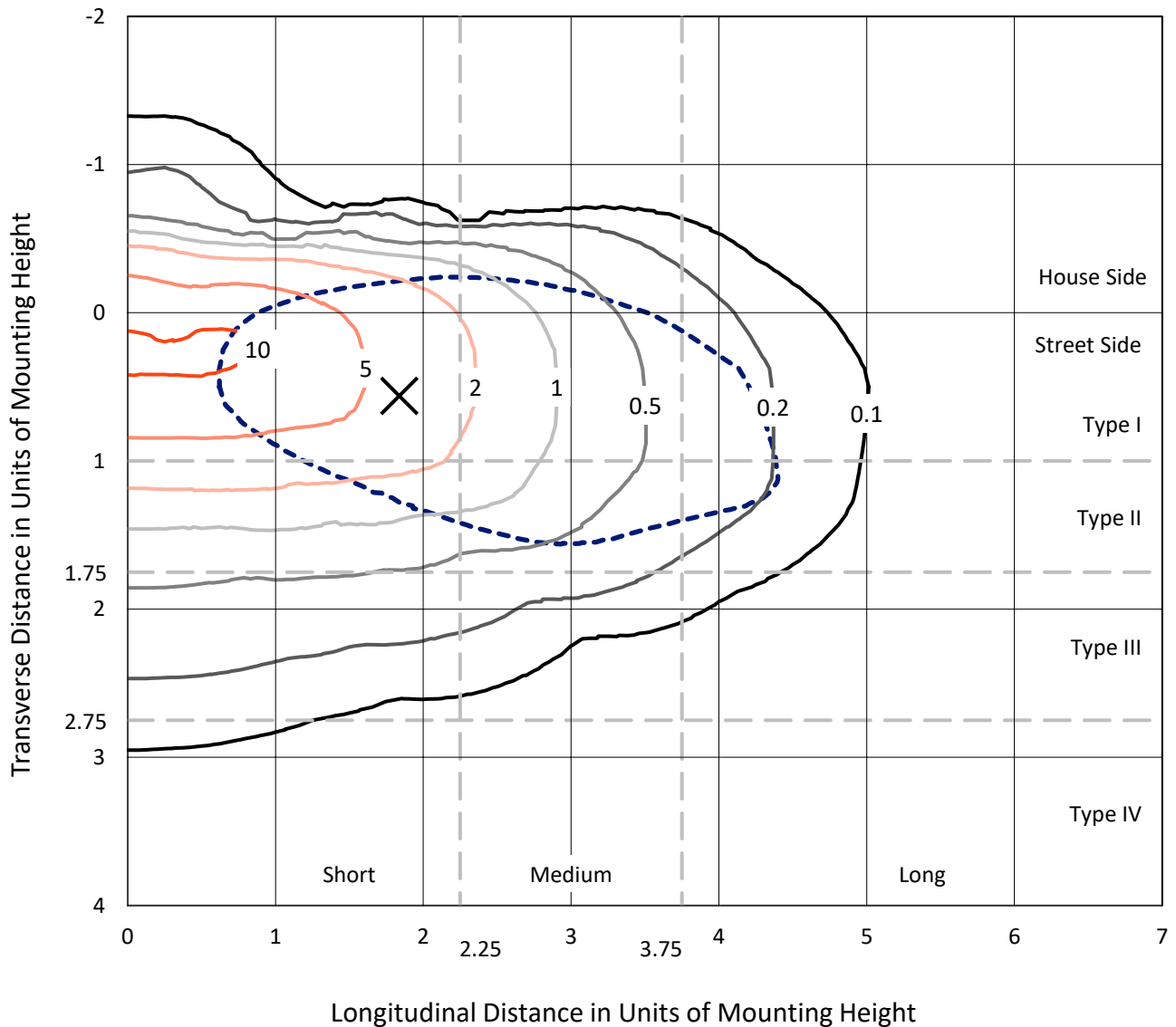
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

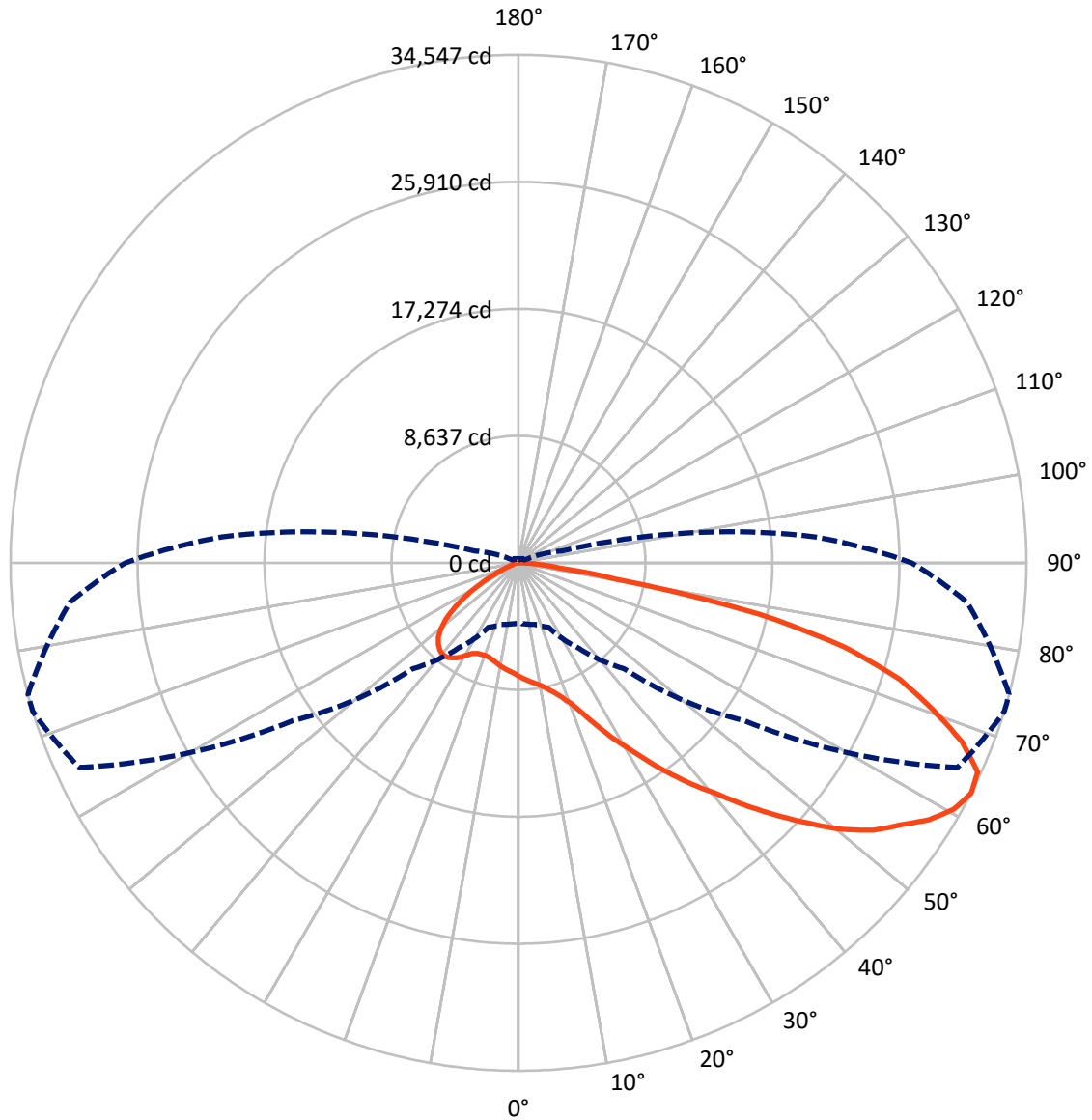
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.7 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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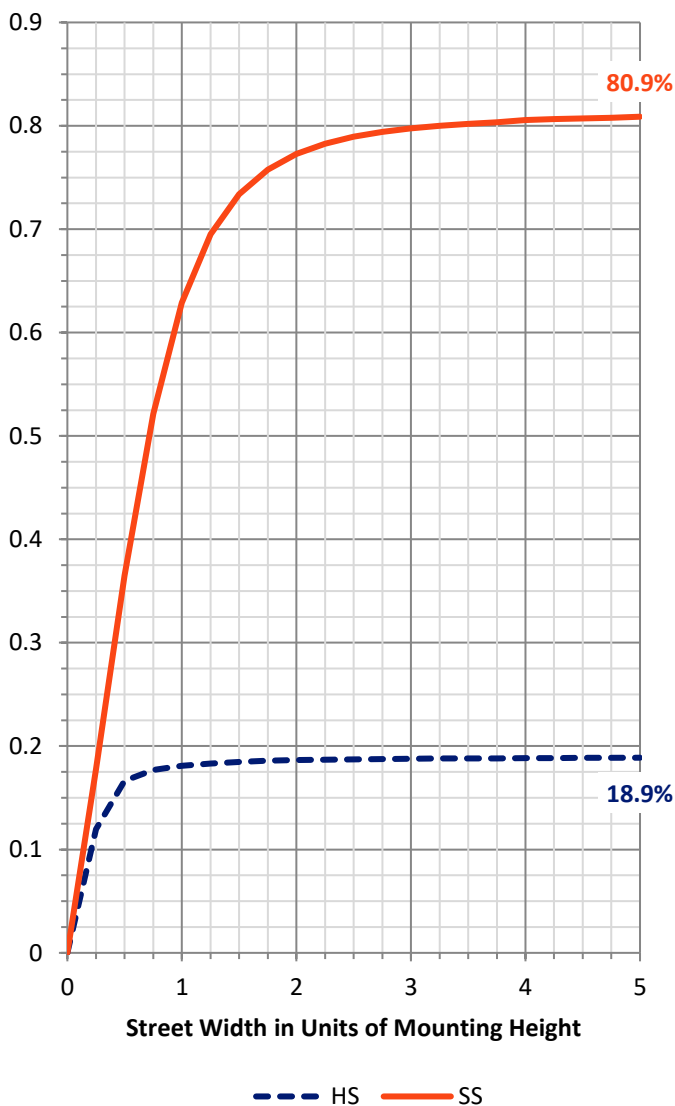
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8435.7	0.0	8435.7
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	35662.3	0.0	35662.3
	% Fixture	80.9	0.0	80.9
Total	Lumens	44098.0	0.0	44098.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	738.7	1.7
10°-20°	2221.8	5.0
20°-30°	3838.8	8.7
30°-40°	5772.6	13.1
40°-50°	7697.1	17.5
50°-60°	9064.9	20.6
60°-70°	9012.1	20.4
70°-80°	5174.1	11.7
80°-90°	578.0	1.3
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°	44098.0	100.0
0°-180°	44098.0	100.0

Coefficient of Utilization

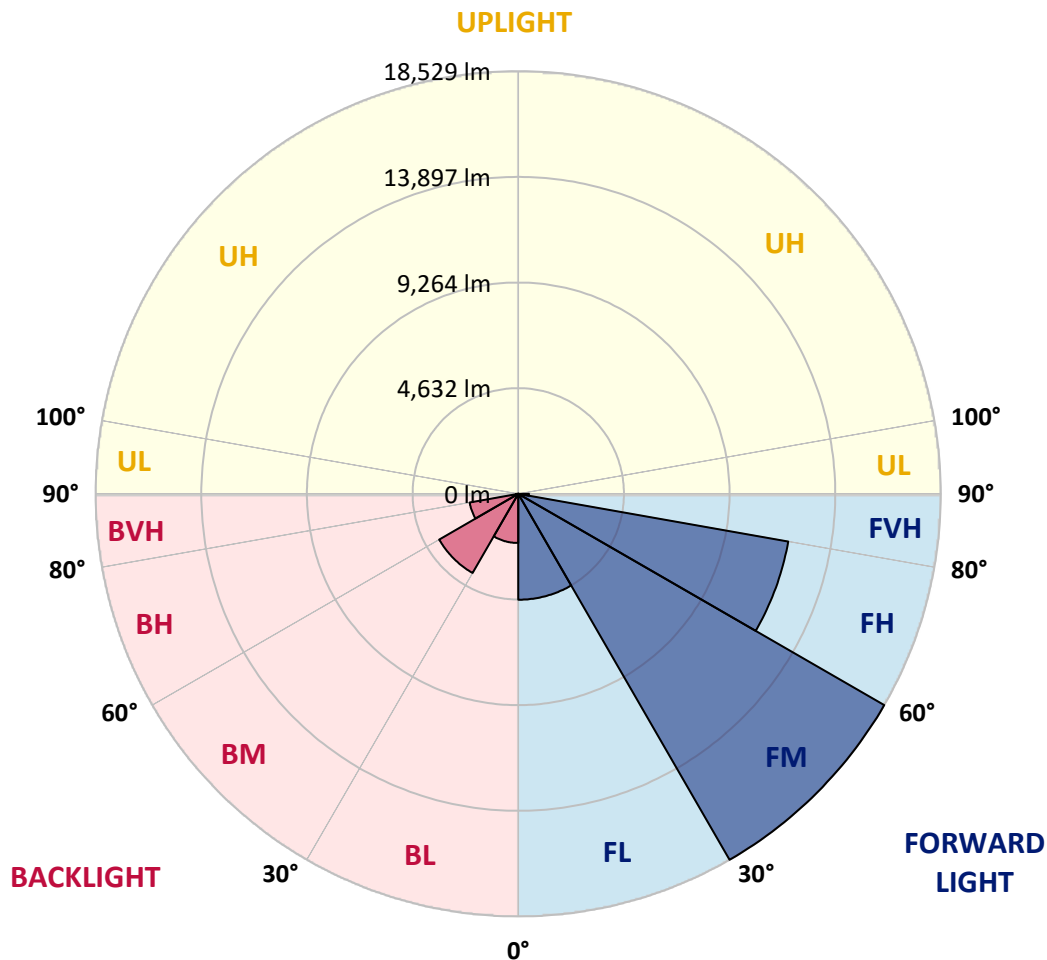


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4643.5	10.5			
FM (30°-60°)	18528.9	42.0			
FH (60°-80°)	12020.4	27.3			G5
FVH (80°-90°)	469.4	1.1			G3/500
BL (0°-30°)	2155.7	4.9	B3/2500		
BM (30°-60°)	4005.7	9.1	B3/5000		
BH (60°-80°)	2165.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	108.6	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8
2.5°	8274.2	8295.0	8270.3	8259.4	8247.5	8170.3	8080.2	7988.2	7913.9	7902.1	7805.1
5°	8855.3	8866.2	8825.6	8779.1	8698.9	8571.2	8409.9	8250.5	8102.0	8062.4	7885.2
7.5°	9301.7	9280.9	9271.0	9231.4	9161.2	9020.6	8776.1	8514.8	8285.1	8229.7	7960.5
10°	9720.4	9711.5	9636.3	9586.8	9475.0	9345.3	9144.3	8812.7	8489.0	8400.0	8025.8
12.5°	10173.8	10154.0	10123.3	10016.4	9925.3	9706.6	9464.1	9162.2	8801.8	8683.1	8137.6
15°	10581.6	10528.2	10511.3	10399.5	10307.4	10140.1	9896.6	9546.2	9161.2	9059.2	8350.5
17.5°	10969.6	10944.9	10907.3	10831.1	10728.1	10599.4	10404.4	10029.3	9631.3	9482.9	8711.8
20°	11299.3	11268.6	11235.9	11256.7	11233.9	11151.8	11029.0	10709.3	10223.3	10079.8	9151.3
22.5°	11528.9	11527.9	11658.6	11734.8	11778.4	11775.4	11745.7	11564.5	11075.6	10930.0	9808.5
25°	11720.0	11734.8	11900.1	12190.1	12449.5	12473.2	12683.1	12597.0	12181.2	12029.8	10797.4
27.5°	11776.4	11806.1	12106.0	12562.3	12956.3	13334.4	13642.3	13799.7	13414.6	13233.5	11860.5
30°	11817.0	11828.8	12122.8	12669.2	13499.7	14098.6	14649.0	14915.2	14583.6	14451.0	13045.4
32.5°	11530.9	11534.9	11985.2	12812.8	13898.6	14937.0	15588.3	16090.2	16003.1	15827.9	14341.1
35°	11136.9	11210.2	11726.9	12674.2	14227.3	15707.1	16594.0	17342.4	17516.6	17390.9	15635.8
37.5°	10649.9	10707.3	11260.7	12468.3	14299.5	16236.7	17376.0	18615.3	19070.7	19049.9	17198.8
40°	10051.1	10121.3	10783.5	12024.8	14263.9	16621.7	18293.6	20024.9	20603.0	20537.6	18749.0
42.5°	9343.3	9446.2	10088.7	11454.7	14003.6	16857.3	19044.9	21460.2	22500.5	22458.0	20120.9
45°	8643.5	8698.9	9284.9	10660.8	13524.5	16933.6	19751.7	23437.9	24446.6	24399.1	21774.0
47.5°	7921.9	7970.4	8582.1	9824.4	12693.0	16780.1	20311.0	25136.5	26429.3	26381.8	23416.2
50°	6243.1	6426.2	7680.3	9088.9	11745.7	16345.6	20838.6	27252.9	28504.0	28302.1	24854.4
52.5°	5341.3	5407.6	6058.0	8347.5	10800.4	15604.2	21190.9	29213.8	30210.6	29919.5	26325.4
55°	4992.9	5037.4	5356.1	6980.5	9912.5	14482.7	21605.7	31179.6	31490.5	31416.2	27525.1
57.5°	4728.6	4778.1	5005.7	5830.3	8977.1	12910.8	21476.0	32562.5	32951.5	32713.9	28799.0
60°	4354.4	4414.8	4716.7	5234.4	7913.9	11315.1	20334.7	33128.7	34013.6	33746.3	29768.1
62.5°	4118.8	4158.4	4331.6	4833.5	7033.0	10192.6	18710.4	32946.5	34547.1	34537.2	30608.5
65°	3799.1	3857.5	4042.6	4449.4	6249.0	9322.5	17178.1	32046.8	34317.5	34326.4	30781.7
67.5°	3464.5	3488.3	3682.3	4008.9	5325.5	8525.7	15195.4	30507.5	32528.8	32732.7	29583.0
70°	3046.8	3034.9	3244.8	3483.3	4352.4	7238.9	12230.7	27769.6	29885.9	29970.0	27158.8
72.5°	2397.4	2408.3	2466.7	2632.0	3304.2	5696.7	8875.1	23461.7	27123.2	27272.7	24060.6
75°	1611.5	1629.3	1901.5	2062.9	2376.7	4094.1	5580.8	15836.8	22929.1	23350.8	19692.3
77.5°	1229.4	1240.3	1319.5	1495.7	1719.4	2918.1	3025.0	8629.6	16693.0	17693.8	15405.2
80°	871.1	875.0	796.8	708.7	915.6	1979.7	1786.7	3675.4	6651.9	7860.5	9048.3
82.5°	390.0	384.1	452.4	376.1	527.6	766.2	843.4	1783.7	2762.7	2969.6	3232.9
85°	181.1	202.9	232.6	195.0	313.8	296.0	328.6	760.2	1294.7	1429.4	1421.4
87.5°	44.5	48.5	61.4	78.2	113.8	101.0	99.0	223.7	289.0	288.0	442.5
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°	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8	7733.8
2.5°	7738.7	7687.3	7565.5	7447.7	7335.9	7261.6	7178.5	7091.4	7038.9	7014.2	7067.6
5°	7777.3	7679.3	7446.7	7213.1	7015.1	6845.9	6727.1	6626.1	6571.7	6576.6	6579.6
7.5°	7810.0	7672.4	7346.7	7017.1	6708.3	6498.4	6343.0	6234.1	6171.8	6124.3	6159.9
10°	7838.7	7643.7	7229.9	6790.4	6454.9	6144.1	5933.2	5801.6	5686.8	5622.4	5672.9
12.5°	7869.4	7632.8	7099.3	6587.5	6153.0	5805.5	5516.5	5385.8	5273.0	5224.5	5255.2
15°	8003.0	7674.4	6977.5	6349.0	5855.0	5405.6	5093.8	4933.5	4844.4	4786.0	4798.8
17.5°	8232.7	7784.3	6899.3	6099.5	5522.4	5047.3	4643.4	4456.4	4308.9	4267.3	4256.4
20°	8559.3	7993.1	6899.3	5888.7	5145.3	4649.4	4184.1	3868.4	3638.7	3552.6	3618.9
22.5°	9107.7	8348.5	6967.6	5697.6	4820.6	4236.6	3682.3	3200.2	2890.4	2764.7	2837.9
25°	9874.9	8897.9	7078.5	5530.4	4524.7	3761.5	3045.8	2491.5	2150.0	2000.5	1998.5
27.5°	10876.6	9738.3	7302.2	5393.8	4170.3	3146.8	2381.6	1848.1	1527.4	1437.3	1450.1
30°	11987.2	10648.9	7724.9	5195.8	3739.7	2458.8	1734.2	1358.1	1132.4	1013.6	1015.6
32.5°	13058.2	11592.3	8226.7	5067.1	3180.4	1854.0	1236.3	969.1	828.5	758.2	769.1
35°	14206.5	12405.9	8599.9	4851.3	2524.1	1340.3	874.0	726.6	668.2	631.5	633.5
37.5°	15446.8	13300.8	8906.8	4562.3	1908.5	920.6	645.4	622.6	597.9	551.4	547.4
40°	16742.5	14337.1	9089.9	4095.1	1326.4	637.5	548.4	574.1	560.3	499.9	494.9
42.5°	17841.3	15137.0	9135.4	3476.4	858.2	516.7	496.9	536.5	539.5	478.1	470.2
45°	18896.4	15849.7	9046.3	2661.7	594.9	486.0	465.2	519.7	523.6	468.2	455.3
47.5°	20077.4	16824.7	8885.0	1775.8	492.0	459.3	454.3	492.0	505.8	460.3	444.4
50°	21511.7	17617.5	8406.9	1090.8	464.2	442.5	442.5	465.2	484.0	444.4	436.5
52.5°	22982.6	18308.5	7699.1	748.3	447.4	424.7	437.5	447.4	454.3	418.7	425.6
55°	24036.8	18921.2	6643.9	601.8	437.5	412.8	443.5	423.7	413.8	383.1	376.1
57.5°	25206.8	19649.7	5565.0	533.5	424.7	419.7	423.7	386.0	358.3	326.7	319.7
60°	26023.4	20041.7	4244.5	501.9	409.8	412.8	391.0	340.5	290.0	267.3	262.3
62.5°	26736.1	20265.4	3111.1	461.3	395.9	395.0	354.4	291.0	238.6	213.8	209.9
65°	26628.3	19916.0	2016.3	428.6	385.1	372.2	317.7	249.4	199.0	180.2	178.2
67.5°	25441.4	18369.8	1270.0	395.0	366.2	343.5	285.1	222.7	183.1	161.3	159.4
70°	22949.9	16234.7	777.0	351.4	325.7	303.9	252.4	208.9	173.2	147.5	142.5
72.5°	19506.2	13904.6	549.4	309.8	284.1	258.4	213.8	199.0	165.3	132.6	128.7
75°	16025.9	10242.1	460.3	270.2	242.5	207.9	182.1	185.1	155.4	120.8	117.8
77.5°	11285.4	6385.6	428.6	220.7	191.0	165.3	157.4	169.3	142.5	110.9	107.9
80°	6586.5	3586.3	354.4	174.2	143.5	127.7	131.7	143.5	124.7	100.0	96.0
82.5°	2658.8	1419.5	249.4	135.6	104.9	102.0	107.9	116.8	102.9	84.1	82.2
85°	949.3	443.5	141.6	89.1	67.3	70.3	69.3	83.1	74.2	61.4	60.4
87.5°	249.4	88.1	63.4	35.6	28.7	28.7	26.7	38.6	35.6	27.7	30.7
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)