

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: P510550

Luminaire Tested: **CTN-CA10-630-740-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510550  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA10-630-740-U-T4-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: 81651 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

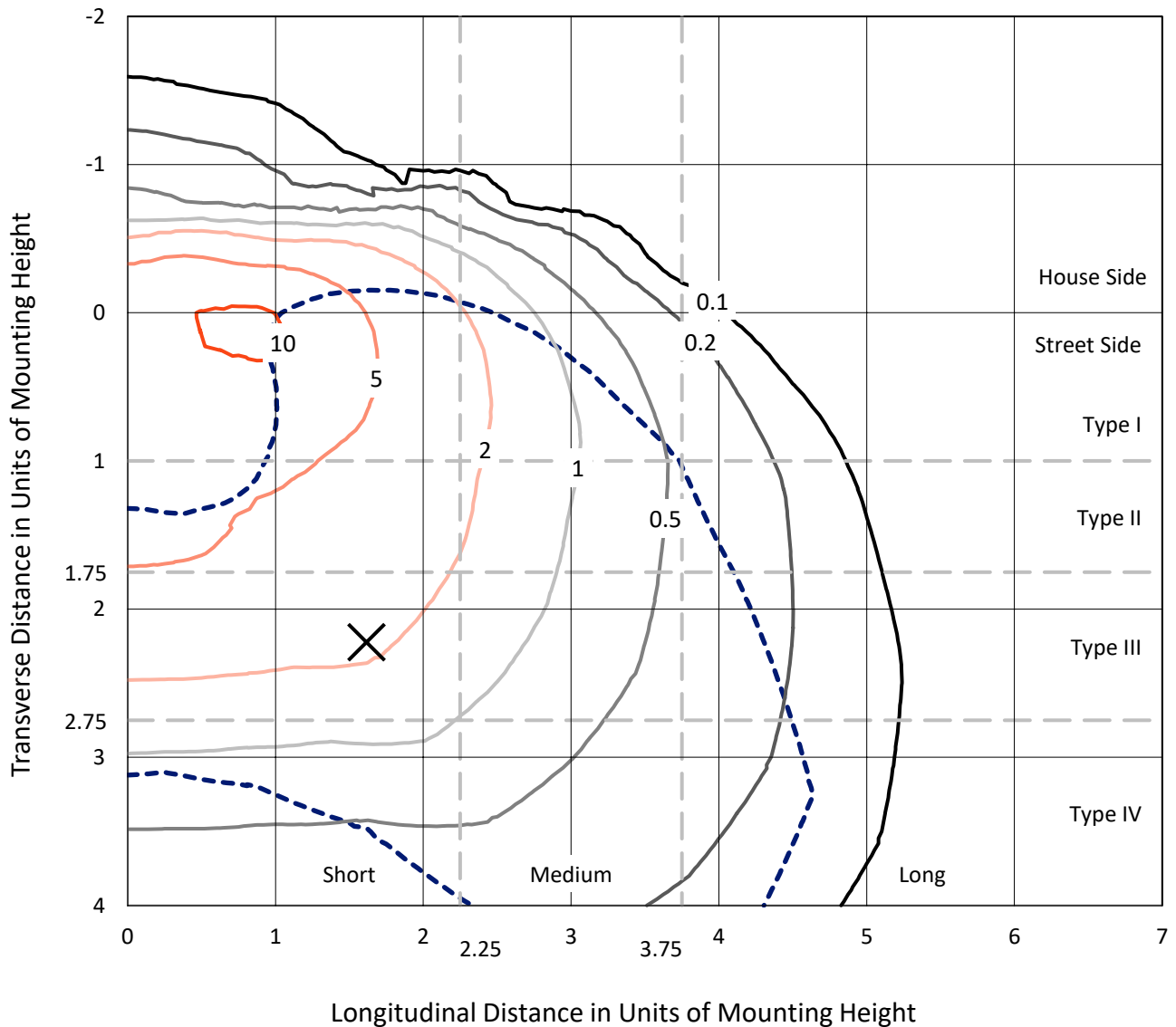
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

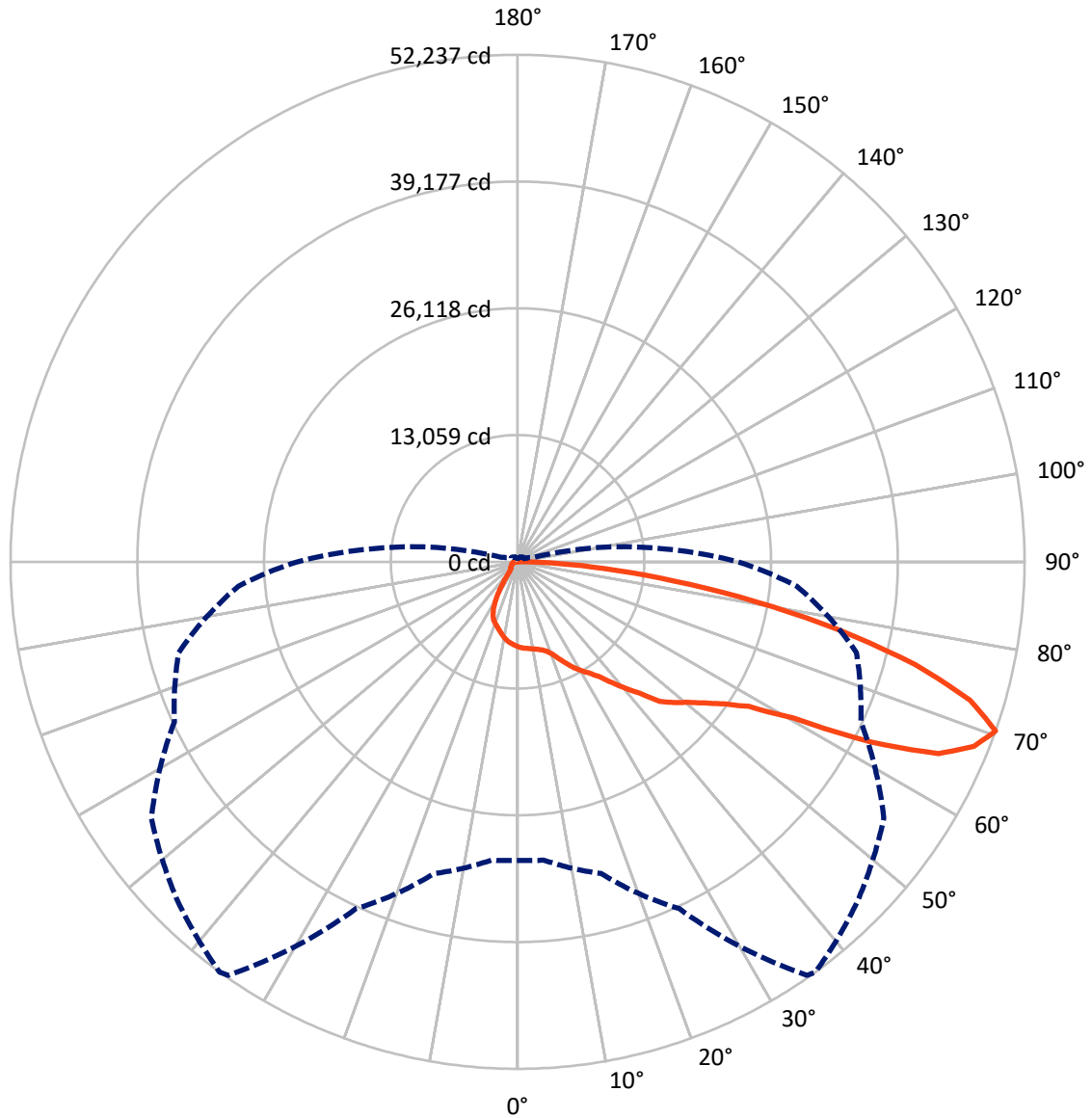
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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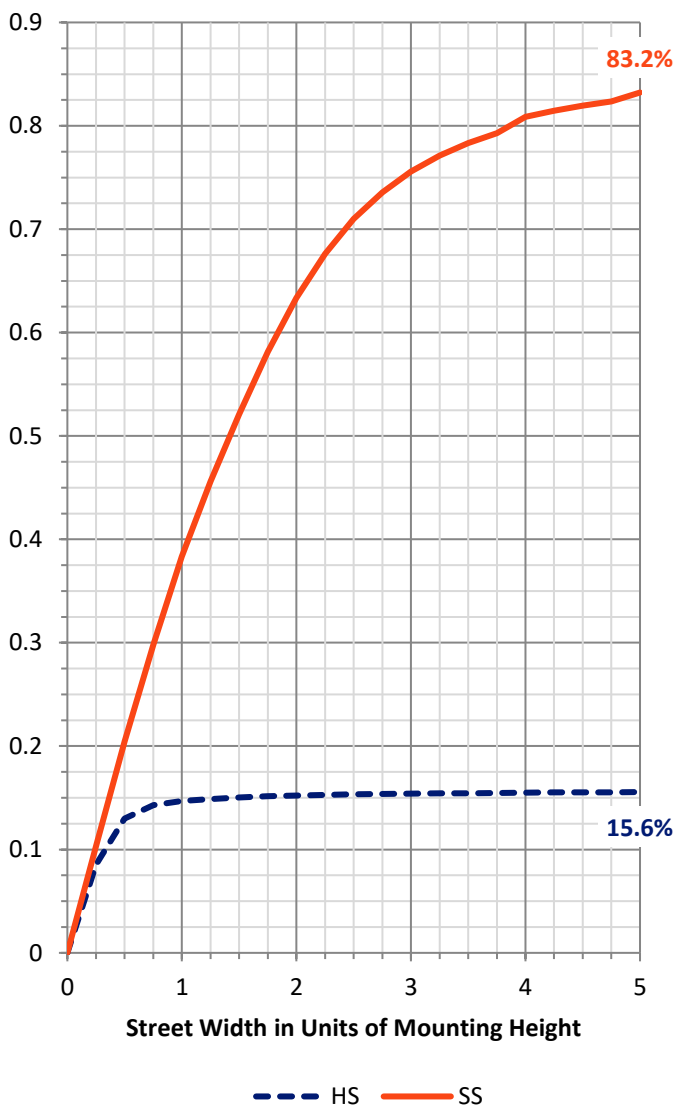
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12885.1	0.0	12885.1
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	68765.9	0.0	68765.9
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	81651.0	0.0	81651.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	829.7	1.0
10°-20°	2467.4	3.0
20°-30°	4437.1	5.4
30°-40°	7021.7	8.6
40°-50°	10973.6	13.4
50°-60°	15757.9	19.3
60°-70°	21374.1	26.2
70°-80°	15819.1	19.4
80°-90°	2970.3	3.6
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°	81651.0	100.0
0°-180°	81651.0	100.0

**Coefficient of Utilization**



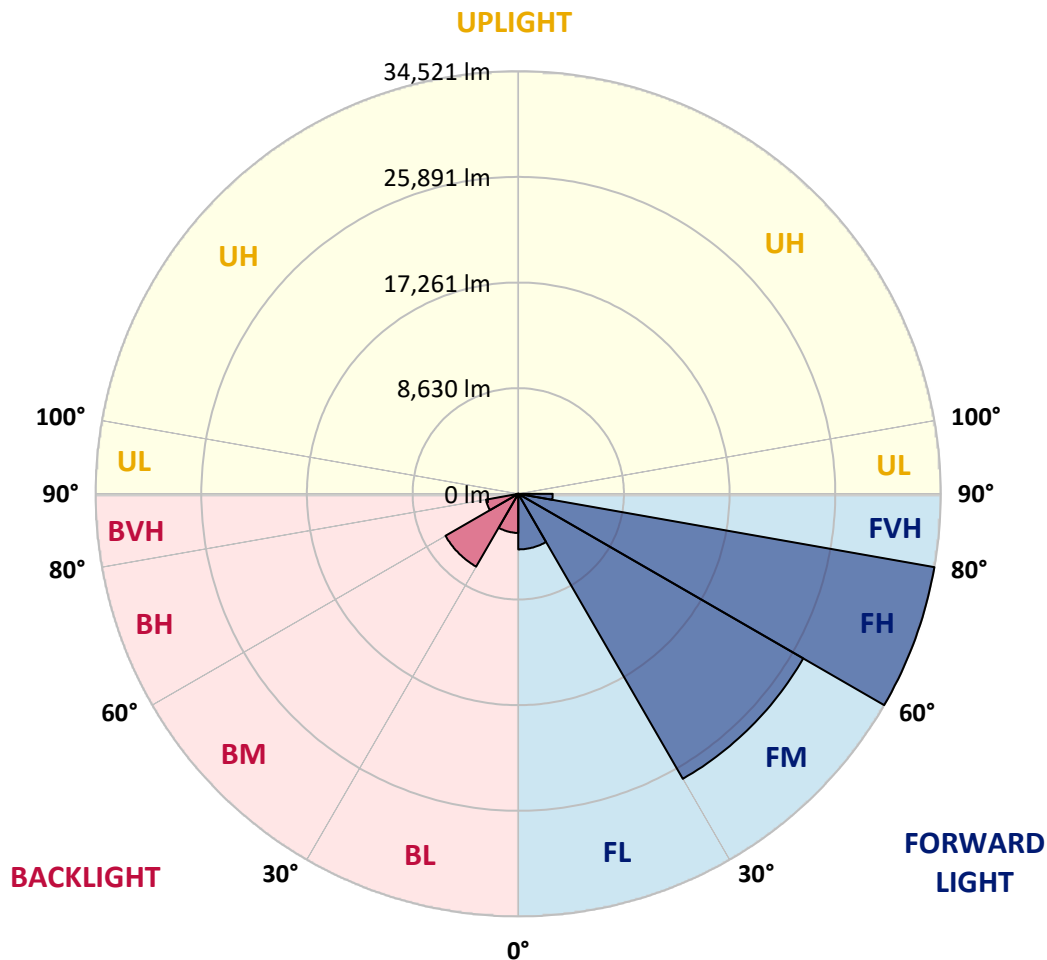
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4541.4	5.6			
FM (30°-60°)	26886.9	32.9			
FH (60°-80°)	34521.2	42.3			G5
FVH (80°-90°)	2816.3	3.4			G5
BL (0°-30°)	3192.9	3.9	B4/5000		
BM (30°-60°)	6866.2	8.4	B4/8500		
BH (60°-80°)	2672.0	3.3	B4/5000		G4/5000
BVH (80°-90°)	154.1	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5
2.5°	8925.7	8906.8	8891.8	8897.4	8886.1	8893.6	8876.7	8855.9	8806.9	8786.2	8776.8
5°	9004.9	8999.2	8984.1	8972.8	8952.1	8944.5	8925.7	8942.7	8916.3	8848.4	8808.8
7.5°	9052.0	9050.1	9033.1	9008.6	9019.9	9029.4	9048.2	9021.8	8987.9	8955.9	8874.8
10°	9072.7	9072.7	9052.0	9065.2	9123.6	9129.3	9138.7	9155.7	9123.6	9076.5	8995.4
12.5°	9125.5	9121.7	9129.3	9172.6	9233.0	9246.1	9293.3	9293.3	9297.0	9268.8	9174.5
15°	9257.5	9257.5	9274.4	9314.0	9417.7	9425.2	9495.0	9557.2	9564.7	9523.3	9451.6
17.5°	9562.8	9555.3	9545.9	9570.4	9681.6	9685.4	9806.0	9885.2	9905.9	9951.2	9939.8
20°	10143.4	10135.9	10134.0	10135.9	10128.4	10117.0	10235.8	10320.6	10426.2	10505.4	10544.9
22.5°	10974.7	10957.8	10957.8	10865.4	10793.8	10805.1	10823.9	10871.1	11010.6	11150.0	11299.0
25°	11870.1	11858.8	11868.2	11632.6	11536.5	11574.2	11549.7	11623.2	11806.0	11926.7	12085.0
27.5°	12601.5	12618.5	12565.7	12382.9	12320.7	12348.9	12292.4	12503.5	12705.2	12916.3	13155.7
30°	13512.0	13421.5	13291.5	13069.0	13046.4	13050.2	13046.4	13385.7	13804.2	14105.8	14437.6
32.5°	14701.5	14716.6	14424.4	13900.3	13708.1	13681.7	13757.1	14254.7	14820.2	15489.4	15926.8
35°	15904.1	15928.6	15715.6	15169.0	14620.4	14537.5	14426.3	15072.8	15889.1	17231.2	17891.0
37.5°	17180.3	17267.0	17014.4	16526.2	15875.9	15798.6	15272.6	15907.9	17114.3	19293.4	20158.7
40°	18888.2	18795.8	18490.4	17870.2	17265.1	17140.7	16530.0	16863.6	18690.2	21876.0	22503.7
42.5°	20147.4	20121.0	19862.7	19250.1	18641.2	18541.3	18049.3	18411.2	20675.2	24494.3	24775.2
45°	21146.4	21308.6	21302.9	20918.4	20575.3	20518.7	20228.4	20761.9	23074.8	26965.6	26828.0
47.5°	22034.3	22134.2	21974.0	21806.2	21646.0	21664.8	21879.7	22976.8	25527.3	29124.0	28515.1
50°	23487.7	23359.5	22641.3	22513.1	22739.3	22748.7	23402.8	25091.8	28228.6	30990.2	29944.0
52.5°	25425.5	25286.0	23810.0	23591.3	24126.7	24166.3	25254.0	27199.3	31014.7	32773.4	31365.3
55°	28309.6	27985.4	26403.8	25423.6	25668.7	25828.9	27146.5	29225.8	33195.7	34345.5	32441.6
57.5°	31851.6	32087.3	31276.7	29061.8	28041.9	28102.3	29312.5	31165.5	35120.3	35721.6	33071.2
60°	35595.3	35538.8	35878.1	34945.0	32992.1	32667.8	32051.4	33144.8	36611.4	36880.9	33719.7
62.5°	37646.3	37976.1	39107.2	39293.8	41056.3	40884.8	36683.0	35599.1	38334.3	37608.5	33896.9
65°	37634.9	37778.2	39883.8	42198.6	47704.9	47655.8	45702.9	39148.6	39618.0	37996.9	33542.5
67.5°	35203.2	35425.7	37887.5	42409.8	50777.5	50719.0	49369.4	44138.3	40021.4	37529.4	31889.3
70°	30769.6	30845.0	33246.6	39437.0	52012.2	52236.5	49495.6	46053.6	39018.6	36140.1	28875.1
72.5°	25384.0	25227.6	27576.3	33678.2	48867.9	48734.1	47403.2	43767.0	37329.6	33442.6	23549.9
75°	18690.2	19125.7	21233.2	27041.0	41840.5	42330.6	42920.6	40268.3	33154.2	27561.3	16284.9
77.5°	12341.4	12895.6	15025.7	20275.6	33124.0	33885.6	35414.4	34249.4	26971.2	19770.4	7755.1
80°	6377.1	6795.6	8712.7	13453.6	23745.9	24844.9	27648.0	25940.1	19121.9	8938.9	1736.1
82.5°	2412.9	2358.2	3903.9	7700.4	15225.5	16224.6	18262.3	15555.4	6805.0	1570.2	806.8
85°	1059.4	1121.6	1617.4	3511.8	8705.1	8835.2	10345.1	6064.2	997.2	750.2	548.5
87.5°	458.1	525.9	678.6	1010.4	2936.9	3391.2	4196.1	1926.5	301.6	260.1	275.2
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°	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5	8748.5
2.5°	8759.8	8748.5	8729.6	8682.5	8605.2	8595.8	8588.3	8580.7	8565.6	8573.2	8616.5
5°	8778.7	8757.9	8690.1	8622.2	8554.3	8494.0	8420.5	8392.2	8354.5	8330.0	8375.3
7.5°	8842.8	8799.4	8699.5	8607.1	8422.4	8333.8	8239.5	8128.3	8049.1	7998.2	8043.5
10°	8950.2	8895.5	8771.1	8580.7	8363.9	8120.8	7954.9	7770.2	7619.4	7577.9	7619.4
12.5°	9125.5	9044.4	8899.3	8641.1	8256.5	7937.9	7623.1	7380.0	7136.8	7067.0	7087.8
15°	9410.1	9346.1	9123.6	8767.3	8258.4	7772.0	7304.6	6912.5	6593.9	6482.7	6475.1
17.5°	9866.3	9798.5	9542.1	9018.1	8326.2	7642.0	6991.6	6394.1	5911.5	5666.4	5626.9
20°	10520.4	10426.2	10037.9	9387.5	8473.3	7585.4	6701.3	5898.3	5148.1	4688.1	4618.4
22.5°	11248.1	11148.2	10575.1	9672.2	8578.8	7474.2	6424.2	5349.8	4362.0	3800.3	3721.1
25°	12152.9	11934.2	11089.7	9941.7	8554.3	7240.5	5973.7	4605.2	3534.5	3048.1	2995.3
27.5°	13046.4	12769.3	11613.8	10083.1	8446.9	6869.1	5313.9	3734.3	2767.2	2422.3	2378.9
30°	14154.8	13619.5	12079.4	10149.1	8175.4	6313.0	4429.9	2838.9	2071.7	1834.1	1792.7
32.5°	15472.5	14661.9	12516.7	10075.6	7723.0	5464.7	3444.0	2079.2	1540.1	1391.2	1389.3
35°	17210.5	15939.9	12997.4	9834.3	7029.3	4550.5	2414.7	1421.3	1200.8	1149.9	1159.3
37.5°	19242.5	17670.4	13485.6	9438.4	6245.2	3481.7	1609.8	1095.2	1055.6	1057.5	1059.4
40°	21385.8	19581.9	14143.5	8882.3	5293.2	2520.3	1159.3	984.0	982.1	1001.0	1006.6
42.5°	23433.0	21438.6	14954.1	8141.5	4296.0	1666.4	1004.7	938.8	914.2	921.8	927.4
45°	25335.0	23031.5	15644.0	7419.5	3227.2	1189.5	985.9	886.0	848.3	844.5	848.3
47.5°	26867.6	24307.7	16064.4	6571.3	2299.8	987.8	946.3	837.0	784.2	772.9	767.2
50°	28034.4	25255.8	16217.0	5609.9	1555.2	942.5	893.5	780.4	716.3	718.2	718.2
52.5°	29173.0	26117.3	16039.9	4641.0	1144.2	902.9	857.7	735.2	667.3	703.1	712.5
55°	29993.0	26479.2	15523.4	3592.9	953.8	853.9	818.1	682.4	635.3	693.7	712.5
57.5°	30471.8	26763.9	14575.2	2593.8	874.7	806.8	767.2	633.4	590.0	605.1	614.5
60°	30769.6	26366.1	13321.6	1773.8	833.2	769.1	716.3	601.3	542.9	507.1	501.4
62.5°	30605.6	25370.8	11670.3	1219.6	789.8	727.6	673.0	571.2	493.9	446.8	443.0
65°	29269.1	23529.1	8959.6	987.8	763.4	708.8	646.6	542.9	460.0	414.7	409.1
67.5°	26790.3	20219.0	5232.9	878.4	752.1	689.9	625.8	516.5	441.1	392.1	384.5
70°	22716.7	15208.5	1753.1	784.2	750.2	688.0	608.9	497.7	420.4	369.5	361.9
72.5°	16388.6	9176.4	853.9	689.9	701.2	659.8	595.7	482.6	407.2	343.1	329.9
75°	9314.0	2987.8	771.0	595.7	652.2	629.6	588.1	484.5	412.8	311.0	296.0
77.5°	2650.4	872.8	744.6	507.1	616.4	650.3	550.4	437.3	422.3	288.4	269.6
80°	895.4	776.6	718.2	394.0	497.7	537.2	476.9	384.5	426.0	262.0	243.2
82.5°	718.2	780.4	603.2	314.8	378.9	407.2	378.9	345.0	345.0	233.7	218.7
85°	574.9	723.9	382.7	250.7	282.8	312.9	267.7	258.3	241.3	196.0	190.4
87.5°	333.7	226.2	158.3	128.2	118.8	120.6	103.7	124.4	152.7	133.8	132.0
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)