

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: P510856

Luminaire Tested: **CTN-CA8-480-750-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510856
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-CA8-480-750-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 65867 lumens
Efficiency: N/A
Efficacy: 137.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

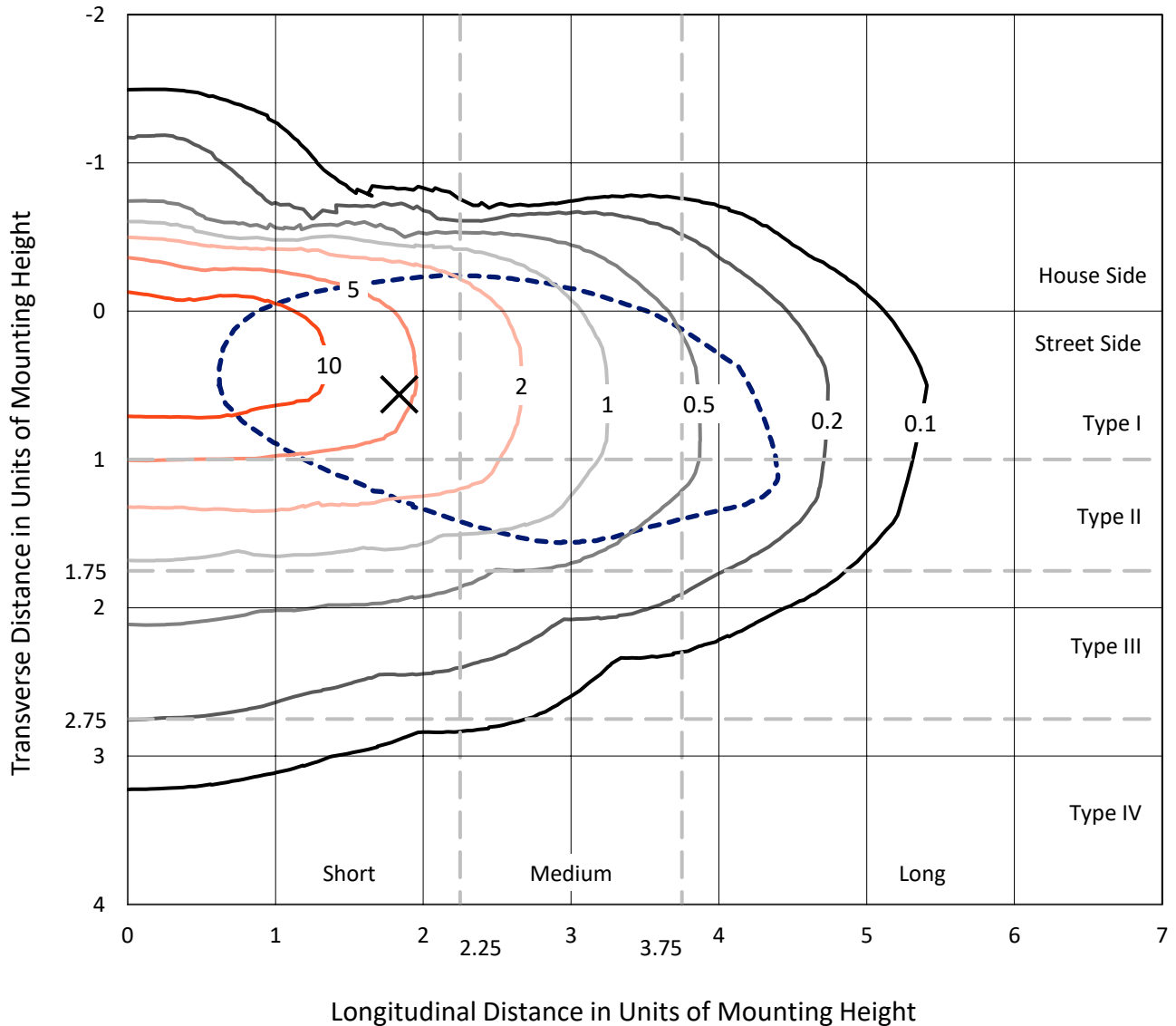
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

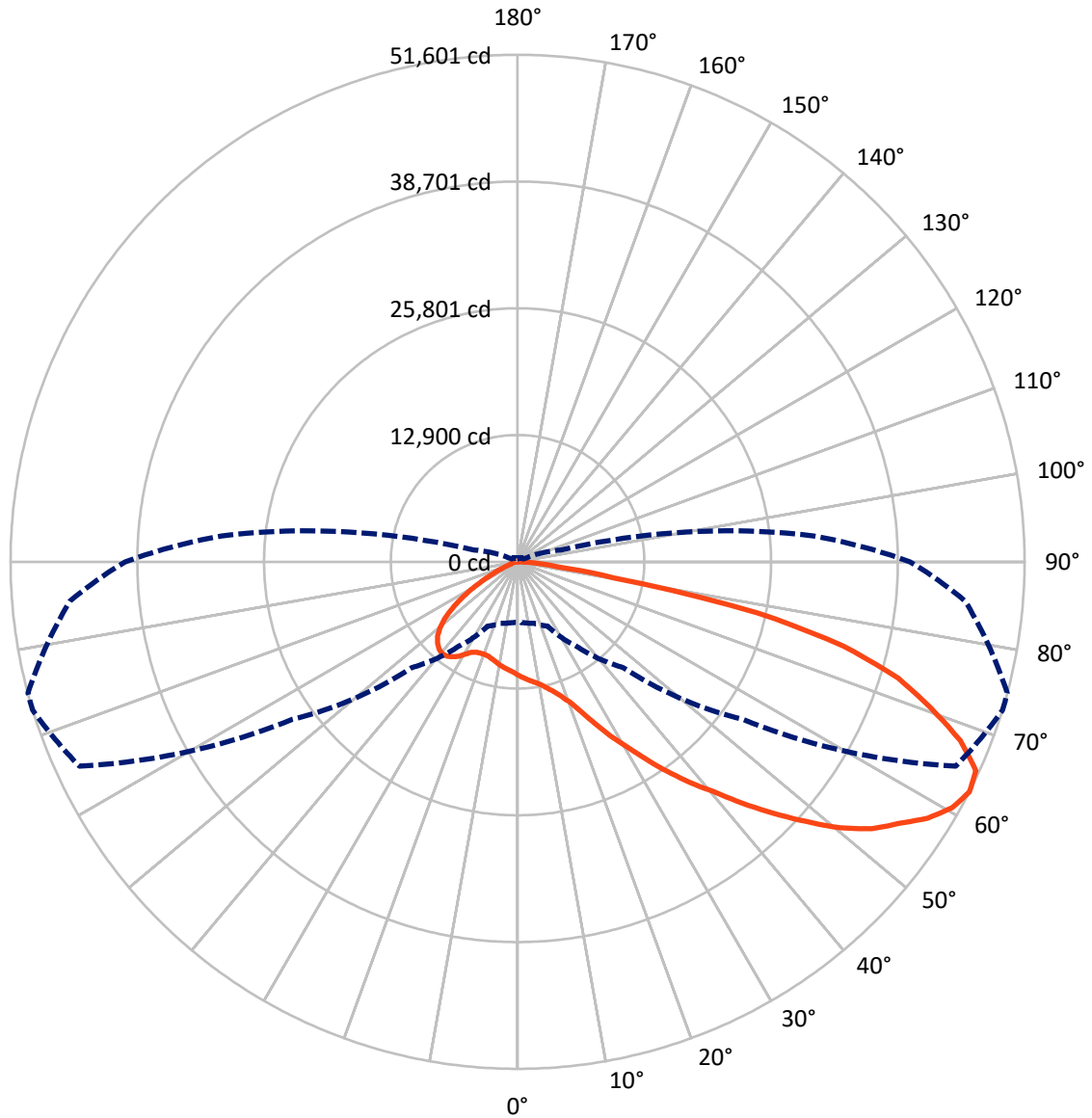
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16 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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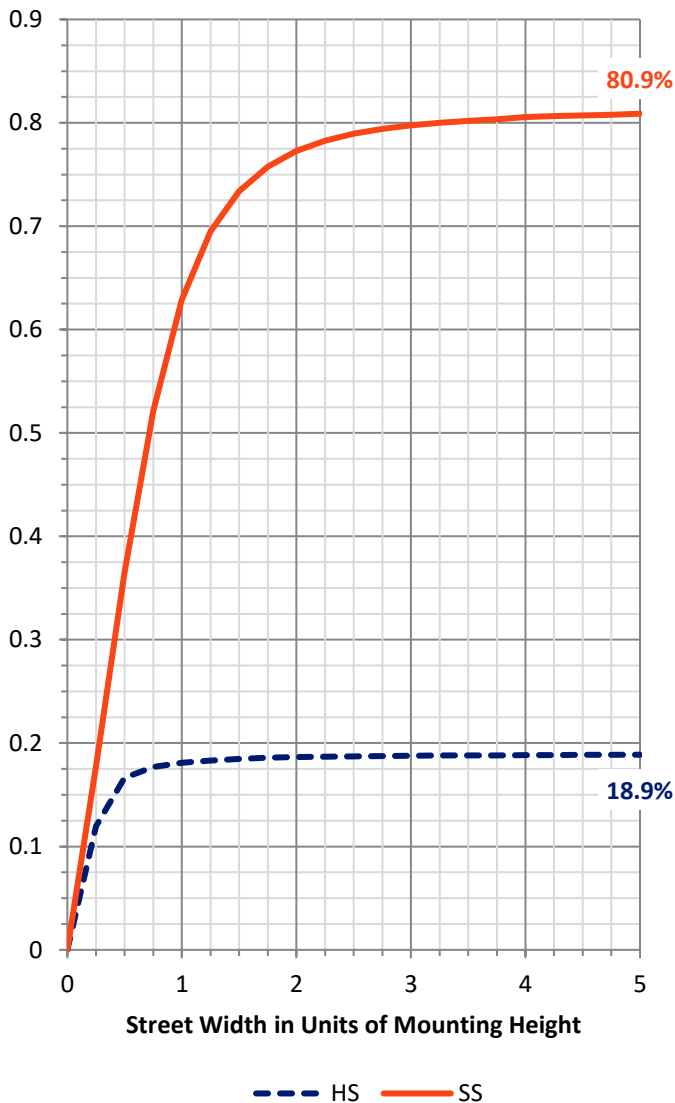
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12600.0	0.0	12600.0
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	53267.0	0.0	53267.0
	% Fixture	80.9	0.0	80.9
Total	Lumens	65867.0	0.0	65867.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1103.3	1.7
10°-20°	3318.6	5.0
20°-30°	5733.8	8.7
30°-40°	8622.2	13.1
40°-50°	11496.8	17.5
50°-60°	13539.8	20.6
60°-70°	13461.0	20.4
70°-80°	7728.3	11.7
80°-90°	863.3	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°	65867.0	100.0
0°-180°	65867.0	100.0

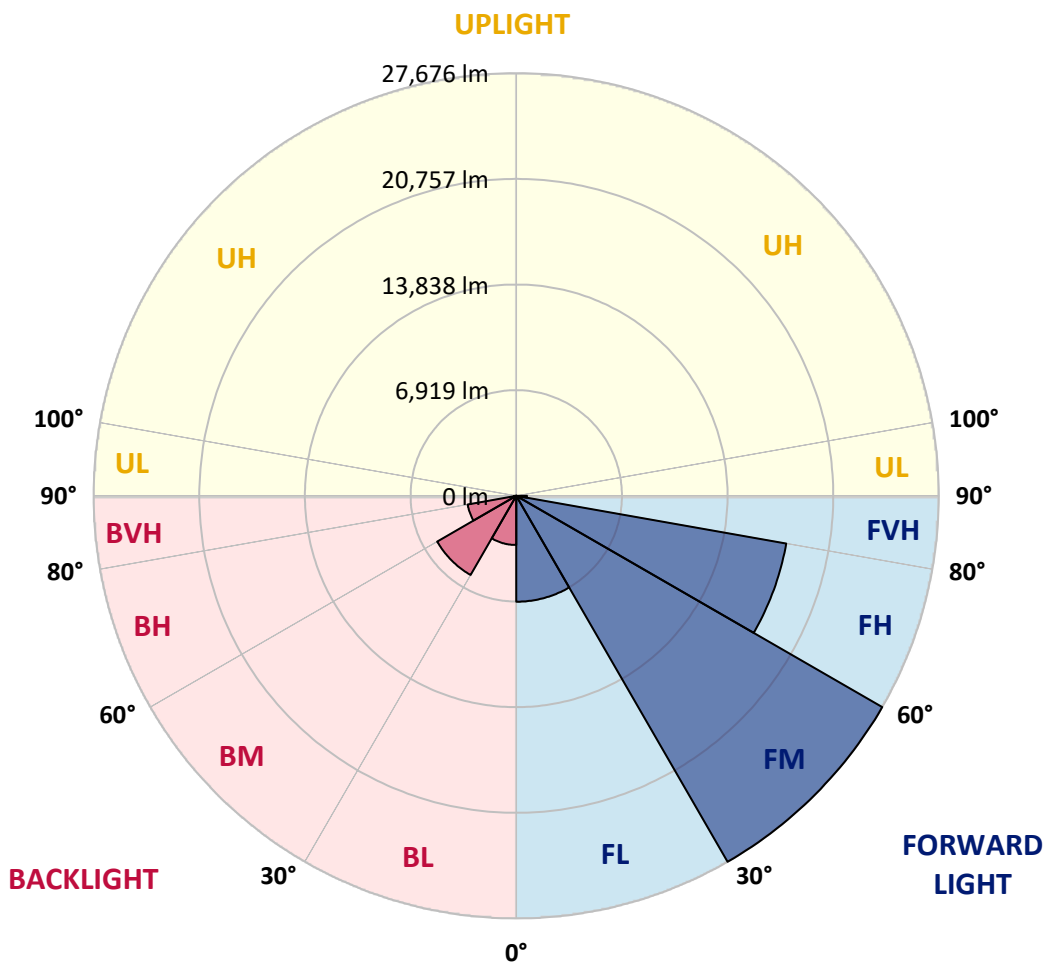


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6935.7	10.5			
FM (30°-60°)	27675.7	42.0			
FH (60°-80°)	17954.3	27.3			G5
FVH (80°-90°)	701.2	1.1			G4/750
BL (0°-30°)	3219.9	4.9	B4/5000		
BM (30°-60°)	5983.1	9.1	B4/8500		
BH (60°-80°)	3234.9	4.9	B4/5000		G4/5000
BVH (80°-90°)	162.1	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6
2.5°	12358.8	12389.9	12352.9	12336.7	12318.9	12203.6	12069.0	11931.5	11820.7	11802.9	11658.0
5°	13226.7	13243.0	13182.4	13112.9	12993.1	12802.4	12561.4	12323.4	12101.6	12042.4	11777.8
7.5°	13893.5	13862.5	13847.7	13788.6	13683.6	13473.6	13108.4	12718.1	12375.1	12292.3	11890.2
10°	14518.9	14505.6	14393.3	14319.3	14152.3	13958.6	13658.4	13163.1	12679.7	12546.6	11987.7
12.5°	15196.1	15166.5	15120.7	14961.0	14825.0	14498.2	14136.0	13685.1	13146.9	12969.5	12154.8
15°	15805.2	15725.4	15700.3	15533.2	15395.7	15145.8	14782.1	14258.7	13683.6	13531.3	12472.7
17.5°	16384.8	16347.8	16291.7	16177.8	16024.1	15831.8	15540.6	14980.2	14385.9	14164.1	13012.3
20°	16877.2	16831.3	16782.5	16813.6	16779.6	16656.9	16473.5	15996.0	15270.0	15055.6	13668.8
22.5°	17220.2	17218.7	17413.9	17527.7	17592.7	17588.3	17544.0	17273.4	16543.0	16325.7	14650.5
25°	17505.5	17527.7	17774.6	18207.8	18595.2	18630.7	18944.1	18815.5	18194.5	17968.3	16127.5
27.5°	17589.8	17634.1	18082.1	18763.7	19352.2	19917.0	20376.8	20611.9	20036.7	19766.2	17715.5
30°	17650.4	17668.2	18107.3	18923.4	20163.9	21058.4	21880.4	22278.1	21782.8	21584.7	19485.2
32.5°	17223.1	17229.0	17901.8	19137.8	20759.7	22310.7	23283.5	24033.1	23903.0	23641.3	21420.6
35°	16634.7	16744.1	17515.9	18930.8	21250.6	23460.9	24785.7	25903.4	26163.7	25975.9	23354.5
37.5°	15907.3	15993.0	16819.5	18623.3	21358.5	24251.9	25953.7	27804.8	28484.9	28453.9	25689.1
40°	15012.8	15117.7	16106.9	17960.9	21305.3	24827.1	27324.3	29910.2	30773.6	30676.1	28004.4
42.5°	13955.6	14109.4	15068.9	17109.3	20916.4	25179.0	28446.5	32054.0	33607.9	33544.4	30053.6
45°	12910.3	12993.1	13868.4	15923.5	20200.8	25292.8	29502.1	35008.1	36514.7	36443.7	32522.7
47.5°	11832.5	11904.9	12818.7	14674.2	18958.9	25063.6	30337.5	37545.2	39476.1	39405.2	34975.6
50°	9324.9	9598.5	11471.7	13575.6	17544.0	24414.6	31125.5	40706.2	42575.1	42273.5	37123.8
52.5°	7978.0	8077.1	9048.5	12468.2	16132.0	23307.2	31651.9	43635.2	45124.0	44689.3	39320.9
55°	7457.6	7524.1	8000.2	10426.4	14805.8	21632.0	32271.4	46571.5	47035.7	46924.8	41112.8
57.5°	7062.8	7136.8	7476.8	8708.4	13408.6	19284.2	32077.7	48637.0	49218.0	48863.2	43015.7
60°	6504.0	6594.1	7045.1	7818.3	11820.7	16900.8	30373.0	49482.7	50804.4	50405.2	44463.1
62.5°	6152.1	6211.2	6469.9	7219.5	10504.8	15224.2	27946.7	49210.6	51601.4	51586.6	45718.4
65°	5674.5	5761.7	6038.2	6645.9	9333.8	13924.6	25658.0	47866.7	51258.3	51271.7	45977.1
67.5°	5174.8	5210.3	5500.0	5988.0	7954.4	12734.4	22696.6	45567.6	48586.7	48891.3	44186.6
70°	4550.8	4533.1	4846.5	5202.9	6501.0	10812.3	18268.4	41478.0	44639.1	44764.7	40565.8
72.5°	3580.9	3597.2	3684.4	3931.3	4935.3	8508.8	13256.3	35043.6	40512.6	40735.8	35938.1
75°	2407.0	2433.6	2840.2	3081.2	3549.9	6115.1	8335.8	23654.6	34248.1	34878.0	29413.4
77.5°	1836.3	1852.6	1970.8	2234.0	2568.2	4358.6	4518.3	12889.6	24933.5	26428.3	23010.0
80°	1301.1	1307.0	1190.2	1058.6	1367.6	2957.0	2668.7	5489.7	9935.6	11740.8	13515.0
82.5°	582.5	573.7	675.7	561.8	788.0	1144.4	1259.7	2664.3	4126.5	4435.5	4828.8
85°	270.6	303.1	347.4	291.3	468.7	442.1	490.9	1135.5	1933.9	2135.0	2123.1
87.5°	66.5	72.4	91.7	116.8	170.0	150.8	147.9	334.1	431.7	430.2	660.9
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°	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6	11551.6
2.5°	11559.0	11482.1	11300.2	11124.3	10957.2	10846.3	10722.1	10592.0	10513.7	10476.7	10556.5
5°	11616.6	11470.3	11122.8	10773.9	10478.2	10225.4	10047.9	9897.1	9815.8	9823.2	9827.6
7.5°	11665.4	11459.9	10973.5	10481.1	10019.8	9706.4	9474.3	9311.6	9218.5	9147.5	9200.7
10°	11708.3	11417.0	10799.0	10142.6	9641.3	9177.1	8862.2	8665.5	8494.0	8397.9	8473.3
12.5°	11754.1	11400.8	10603.8	9839.5	9190.4	8671.4	8239.7	8044.6	7876.0	7803.6	7849.4
15°	11953.7	11462.9	10422.0	9483.1	8745.4	8074.1	7608.4	7368.9	7235.8	7148.6	7167.8
17.5°	12296.7	11627.0	10305.2	9110.6	8248.6	7538.9	6935.7	6656.2	6435.9	6373.8	6357.6
20°	12784.6	11938.9	10305.2	8795.6	7685.3	6944.5	6249.6	5778.0	5435.0	5306.4	5405.4
22.5°	13603.7	12469.7	10407.2	8510.3	7200.3	6328.0	5500.0	4780.0	4317.2	4129.5	4238.9
25°	14749.6	13290.3	10572.8	8260.4	6758.3	5618.3	4549.4	3721.4	3211.3	2988.1	2985.1
27.5°	16245.8	14545.5	10906.9	8056.4	6228.9	4700.2	3557.3	2760.4	2281.3	2146.8	2166.0
30°	17904.7	15905.8	11538.3	7760.7	5585.8	3672.6	2590.3	2028.5	1691.4	1514.0	1516.9
32.5°	19504.5	17314.8	12287.9	7568.5	4750.4	2769.2	1846.7	1447.5	1237.5	1132.5	1148.8
35°	21219.5	18530.1	12845.3	7246.2	3770.2	2001.9	1305.5	1085.2	998.0	943.3	946.2
37.5°	23072.1	19866.7	13303.6	6814.4	2850.6	1375.0	964.0	930.0	893.0	823.5	817.6
40°	25007.5	21414.7	13577.1	6116.6	1981.2	952.2	819.1	857.5	836.8	746.6	739.3
42.5°	26648.6	22609.3	13645.1	5192.5	1281.9	771.8	742.2	801.4	805.8	714.1	702.3
45°	28224.7	23673.8	13512.1	3975.7	888.6	725.9	694.9	776.2	782.1	699.3	680.1
47.5°	29988.5	25130.2	13271.1	2652.4	734.8	686.0	678.6	734.8	755.5	687.5	663.8
50°	32130.9	26314.5	12557.0	1629.3	693.4	660.9	660.9	694.9	723.0	663.8	652.0
52.5°	34328.0	27346.5	11499.8	1117.8	668.3	634.3	653.5	668.3	678.6	625.4	635.8
55°	35902.6	28261.7	9923.7	898.9	653.5	616.5	662.4	632.8	618.0	572.2	561.8
57.5°	37650.2	29349.8	8312.2	796.9	634.3	626.9	632.8	576.6	535.2	487.9	477.6
60°	38869.9	29935.3	6339.8	749.6	612.1	616.5	584.0	508.6	433.2	399.2	391.8
62.5°	39934.5	30269.5	4646.9	689.0	591.4	589.9	529.3	434.7	356.3	319.4	313.4
65°	39773.3	29747.6	3011.7	640.2	575.1	555.9	474.6	372.6	297.2	269.1	266.1
67.5°	38000.6	27438.1	1896.9	589.9	547.0	513.0	425.8	332.7	273.5	241.0	238.0
70°	34279.2	24249.0	1160.6	524.9	486.4	453.9	377.0	312.0	258.7	220.3	212.9
72.5°	29135.5	20768.6	820.6	462.8	424.3	385.9	319.4	297.2	246.9	198.1	192.2
75°	23937.0	15298.1	687.5	403.6	362.2	310.5	272.0	276.5	232.1	180.4	175.9
77.5°	16856.5	9537.8	640.2	329.7	285.4	246.9	235.1	252.8	212.9	165.6	161.2
80°	9838.0	5356.6	529.3	260.2	214.4	190.7	196.6	214.4	186.3	149.3	143.4
82.5°	3971.3	2120.2	372.6	202.6	156.7	152.3	161.2	174.5	153.8	125.7	122.7
85°	1417.9	662.4	211.4	133.1	100.5	105.0	103.5	124.2	110.9	91.7	90.2
87.5°	372.6	131.6	94.6	53.2	42.9	42.9	39.9	57.7	53.2	41.4	45.8
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)