

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: P510867

Luminaire Tested: **CTN-CA8-480-760-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510867  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA8-480-760-U-T2  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 70315 lumens  
Efficiency: N/A  
Efficacy: 146.2 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

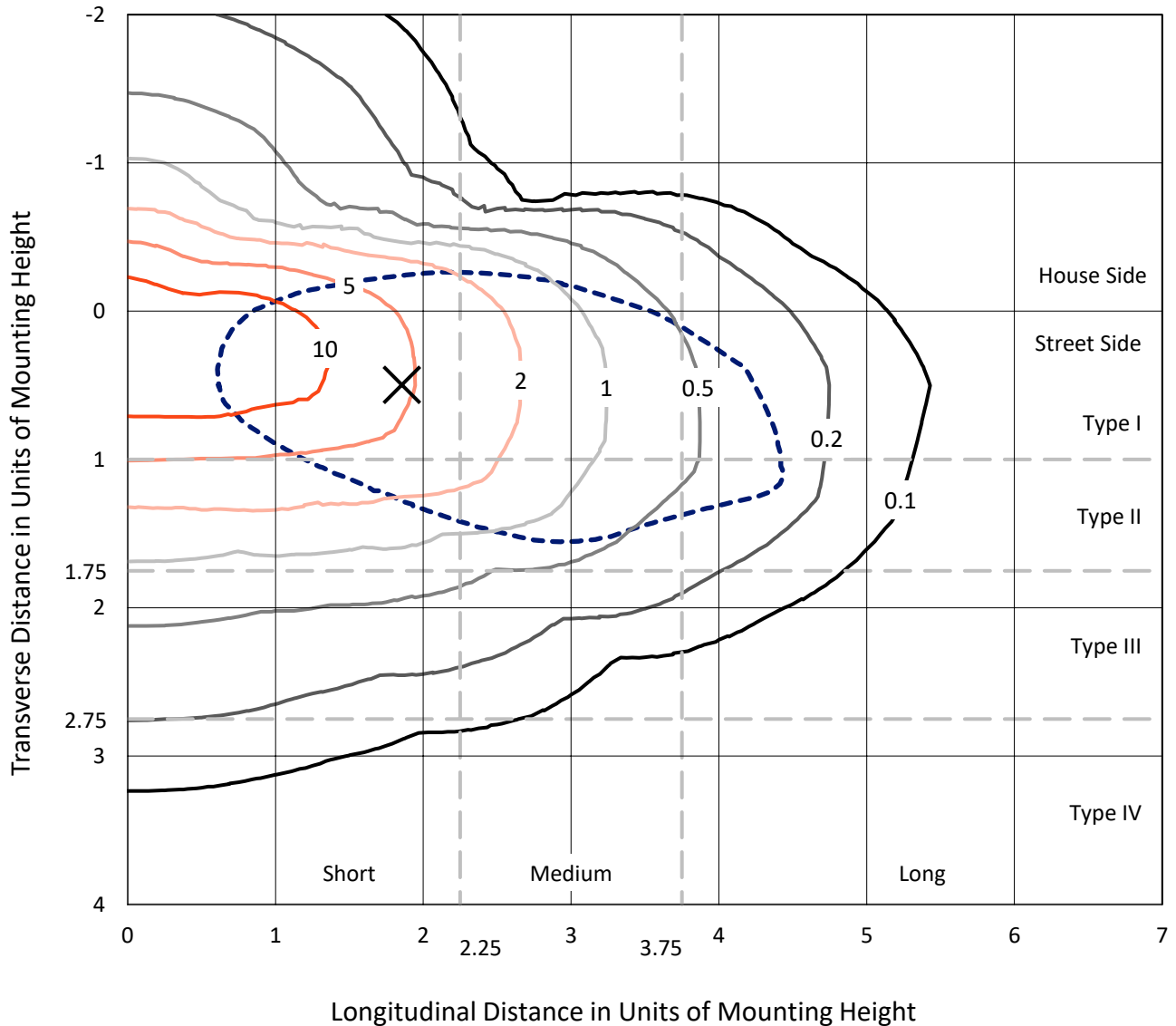
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

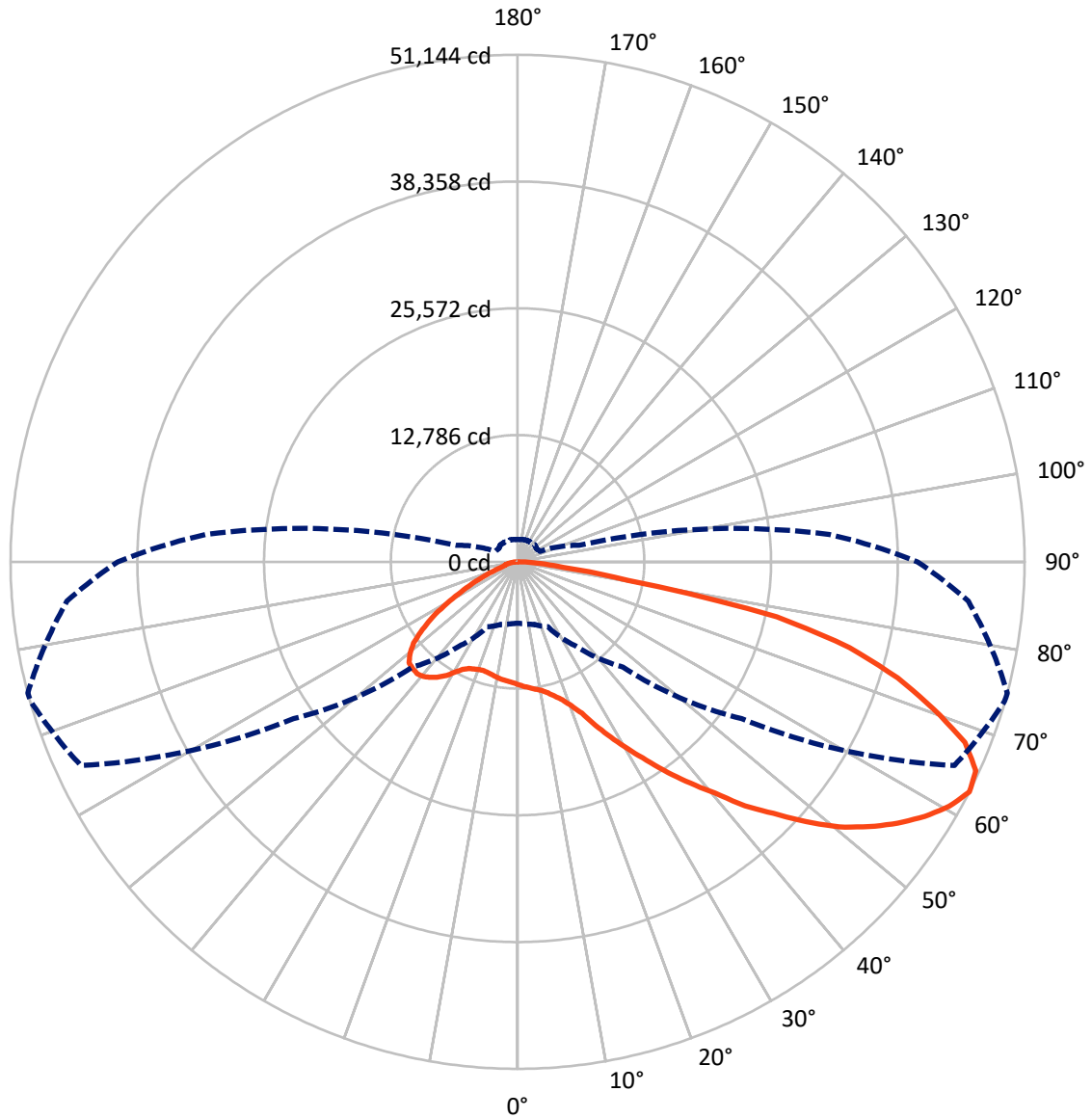
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

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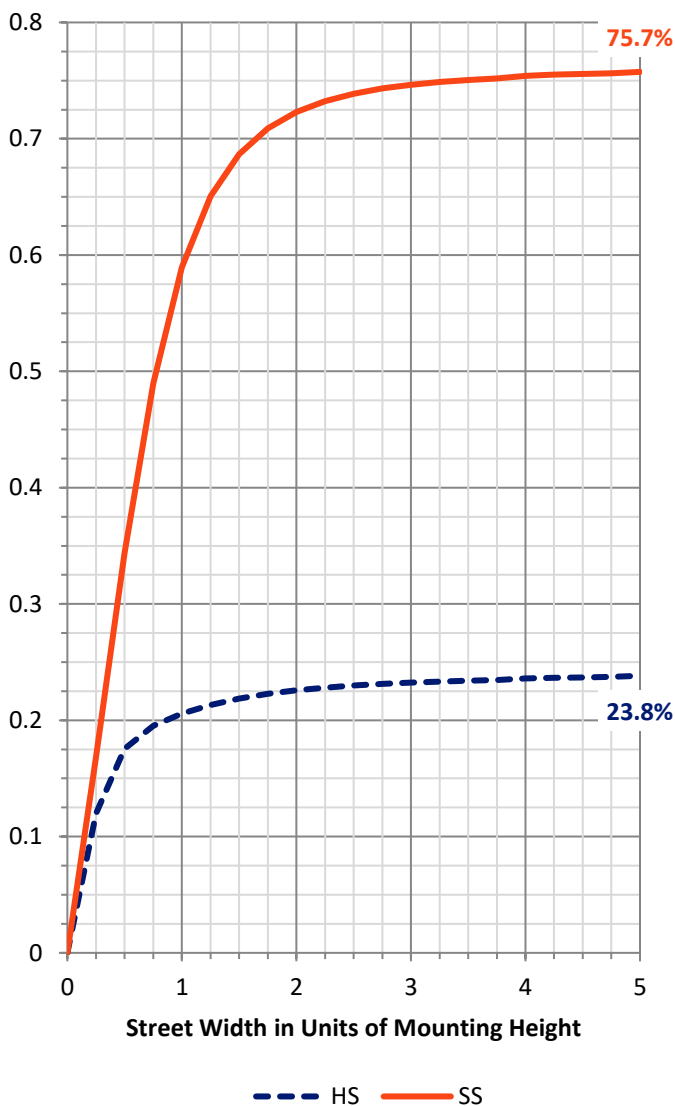
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17036.1	0.0	17036.1
	% Fixture	24.2	0.0	24.2
<b>Street Side</b>	Lumens	53278.9	0.0	53278.9
	% Fixture	75.8	0.0	75.8
<b>Total</b>	Lumens	70315.0	0.0	70315.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1192.4	1.7
10°-20°	3618.9	5.1
20°-30°	6241.8	8.9
30°-40°	9203.6	13.1
40°-50°	12132.4	17.3
50°-60°	14278.7	20.3
60°-70°	14205.9	20.2
70°-80°	8284.5	11.8
80°-90°	1156.8	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°	70315.0	100.0
0°-180°	70315.0	100.0

**Coefficient of Utilization**



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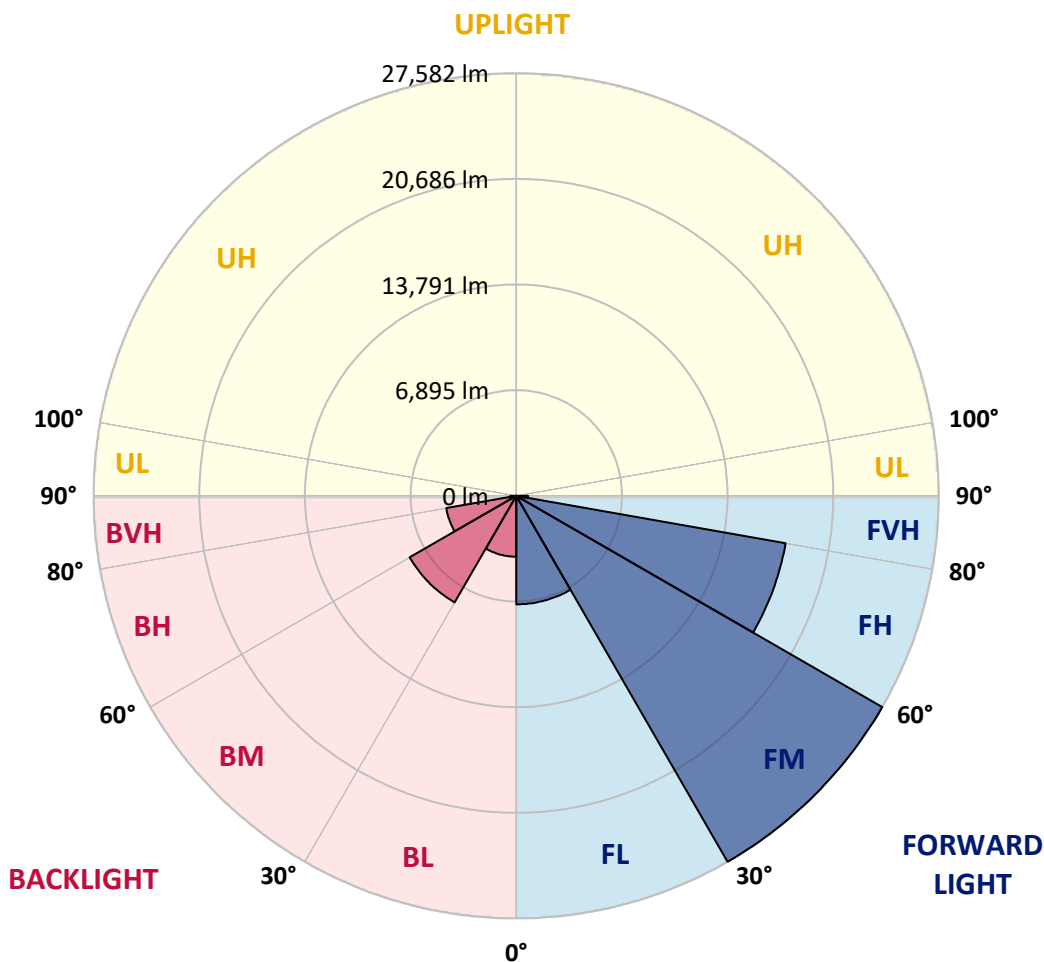
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7080.4	10.1			
FM (30°-60°)	27581.7	39.2			
FH (60°-80°)	17849.2	25.4			G5
FVH (80°-90°)	767.6	1.1			G5
BL (0°-30°)	3972.7	5.6	B4/5000		
BM (30°-60°)	8033.0	11.4	B4/8500		
BH (60°-80°)	4641.2	6.6	B4/5000		G4/5000
BVH (80°-90°)	389.1	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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9
2.5°	13073.6	13020.1	13027.3	12989.7	12933.3	12891.3	12781.3	12662.7	12591.7	12586.0	12484.7
5°	13730.7	13748.0	13752.4	13632.3	13513.6	13379.0	13211.1	12982.5	12795.8	12766.8	12570.0
7.5°	14329.8	14328.3	14319.7	14253.1	14198.1	13998.4	13662.6	13303.7	12999.8	12972.3	12652.5
10°	14943.4	14939.0	14852.2	14740.8	14616.3	14432.5	14144.5	13714.7	13222.7	13186.5	12729.2
12.5°	15612.0	15564.2	15509.2	15374.6	15227.0	14908.6	14606.2	14138.8	13625.0	13559.9	12865.3
15°	16163.3	16114.1	16037.4	15946.3	15791.4	15548.3	15227.0	14672.8	14121.4	14057.7	13170.6
17.5°	16708.9	16685.8	16630.8	16533.8	16415.1	16205.3	15910.1	15439.8	14717.6	14639.5	13678.6
20°	17156.1	17101.1	17060.6	17105.4	17115.6	16960.7	16798.6	16403.6	15607.6	15487.5	14302.3
22.5°	17410.8	17399.2	17620.6	17785.6	17852.2	17886.9	17836.3	17517.9	16797.2	16587.4	15170.6
25°	17652.5	17633.6	17934.7	18347.1	18739.3	18939.0	19073.6	19115.5	18454.2	18264.6	16567.1
27.5°	17659.7	17711.8	18148.8	18840.6	19438.3	20047.5	20692.9	20766.8	20186.4	20035.9	18156.1
30°	17698.8	17721.9	18154.6	18949.1	20193.7	21170.5	22011.3	22426.6	21925.9	21856.5	19905.7
32.5°	17202.4	17232.8	17905.7	19138.7	20763.9	22332.6	23448.3	24064.8	23940.4	23852.1	21772.5
35°	16685.8	16711.8	17493.3	18869.5	21187.9	23387.6	24746.4	25957.7	26184.9	26118.4	23855.0
37.5°	15875.3	15962.2	16781.3	18548.3	21261.7	24163.2	25985.2	27843.4	28529.3	28329.6	26057.6
40°	14995.5	15059.2	16012.8	17875.3	21179.2	24672.6	27202.3	29930.2	30760.8	30653.8	28244.2
42.5°	13884.1	14054.8	15009.9	17015.7	20755.2	24989.6	28328.2	32296.3	33503.2	33646.5	30252.9
45°	12947.7	12943.4	13830.5	15771.2	19986.7	25064.8	29364.3	34688.4	36454.0	36184.8	32908.4
47.5°	11846.5	11891.3	12817.5	14532.4	18853.6	24826.0	30171.8	37516.2	39303.4	39157.3	35086.4
50°	9298.0	9620.7	11374.7	13467.3	17321.1	24160.3	30844.8	40270.1	41976.3	42042.9	37066.1
52.5°	8015.8	8140.3	9108.4	12394.9	15960.7	23043.1	31582.8	43368.5	44559.5	44390.2	39313.6
55°	7502.1	7568.6	8033.2	10468.8	14645.3	21313.8	31937.4	46197.7	46574.0	46546.5	41163.0
57.5°	7130.2	7180.8	7510.8	8736.5	13201.0	19093.8	31637.8	48038.5	48623.1	48443.7	42908.3
60°	6593.3	6633.8	7125.8	7872.6	11714.8	16852.2	29795.6	48873.5	50109.4	50042.8	44451.0
62.5°	6189.5	6259.0	6533.9	7234.4	10445.6	15005.6	27600.2	48613.0	51084.8	51144.1	45629.0
65°	5762.6	5824.8	6057.8	6670.0	9295.1	13791.4	25232.7	47307.7	50636.1	50793.9	45820.0
67.5°	5235.8	5283.6	5560.0	6089.7	7950.7	12577.3	22562.7	44999.5	48147.0	48655.0	43918.4
70°	4573.0	4590.4	4929.0	5289.4	6601.9	10746.6	17940.4	41220.9	44545.0	44555.2	40328.0
72.5°	3639.6	3654.1	3743.8	4017.3	4959.4	8505.0	13186.5	34442.4	40165.9	40092.1	35841.8
75°	2474.6	2602.0	2913.1	3173.6	3577.4	5972.4	8201.1	23205.2	34030.0	34608.8	29441.0
77.5°	1955.1	1966.7	2095.5	2334.3	2683.0	4461.6	4596.2	12839.2	25370.2	26746.4	23141.5
80°	1363.2	1383.5	1314.0	1371.9	1871.2	3053.5	2685.9	5587.5	10580.2	11296.5	13894.2
82.5°	649.8	672.9	772.8	717.8	930.5	1298.1	1418.2	2887.1	4570.1	4690.2	5409.5
85°	428.4	428.4	429.8	406.7	542.7	565.8	644.0	1231.5	2231.5	2306.8	2293.7
87.5°	137.5	152.0	147.6	172.2	208.4	188.1	196.8	386.4	765.5	758.3	633.9
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°	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9	12394.9
2.5°	12412.3	12353.0	12214.0	12092.5	11972.4	11881.2	11803.0	11698.8	11649.6	11604.8	11698.8
5°	12448.5	12342.8	12093.9	11845.0	11616.4	11448.5	11345.7	11270.5	11202.5	11202.5	11234.3
7.5°	12490.4	12347.2	11991.2	11638.1	11295.1	11104.1	10957.9	10862.4	10807.4	10810.3	10878.3
10°	12517.9	12298.0	11874.0	11397.8	11024.5	10717.7	10574.4	10436.9	10332.7	10270.5	10340.0
12.5°	12549.8	12282.1	11716.2	11179.3	10724.9	10377.6	10079.5	9976.7	9875.4	9797.3	9834.9
15°	12746.6	12342.8	11584.5	10901.5	10374.7	9942.0	9551.3	9363.1	9334.2	9280.6	9293.7
17.5°	13067.9	12506.4	11499.1	10561.4	9953.6	9442.7	8947.8	8704.7	8646.8	8619.3	8633.8
20°	13546.9	12817.5	11525.2	10322.6	9478.9	8907.3	8267.6	7982.5	7790.1	7801.6	7858.1
22.5°	14279.1	13319.7	11667.0	10060.7	8965.2	8215.5	7570.1	7182.3	6988.3	6946.4	7010.0
25°	15445.5	14128.6	11823.3	9810.3	8468.8	7468.8	6753.9	6334.2	6085.3	6069.4	6140.3
27.5°	16940.5	15368.8	12163.4	9593.2	7852.3	6571.6	5861.0	5502.1	5237.3	5205.4	5182.3
30°	18470.1	16746.5	12778.4	9263.3	7133.1	5645.4	5027.4	4746.7	4450.0	4329.9	4356.0
32.5°	20090.9	18030.2	13499.1	9031.7	6328.4	4830.6	4293.7	4026.0	3753.9	3580.3	3539.8
35°	21723.3	19306.6	14105.5	8685.9	5565.8	4183.7	3670.0	3393.6	3156.3	3014.4	3004.3
37.5°	23633.6	20635.1	14591.7	8318.3	4774.2	3677.2	3059.3	2900.1	2785.8	2661.3	2674.4
40°	25546.7	22183.5	14981.0	7710.5	4117.2	3133.1	2603.4	2635.3	2659.9	2555.7	2547.0
42.5°	27135.7	23484.5	15159.0	6923.2	3535.4	2659.9	2402.3	2547.0	2654.1	2586.1	2577.4
45°	28749.3	24580.0	15089.5	5946.4	3052.1	2434.1	2386.4	2534.0	2671.5	2655.5	2648.3
47.5°	30503.2	26015.6	14969.4	4833.5	2706.2	2412.4	2421.1	2490.6	2664.2	2693.2	2681.6
50°	32647.9	27336.9	14258.9	3764.1	2538.3	2447.1	2499.2	2463.1	2610.7	2670.0	2680.1
52.5°	34782.5	28354.2	13308.1	3261.9	2471.7	2480.4	2607.8	2484.8	2549.9	2602.0	2649.8
55°	36429.4	29390.4	11769.8	2959.4	2450.0	2496.4	2638.2	2531.1	2529.6	2529.6	2545.6
57.5°	38115.3	30778.2	10231.4	2764.1	2412.4	2513.7	2602.0	2539.8	2519.5	2490.6	2471.7
60°	39289.0	31291.9	8254.6	2635.3	2373.3	2489.1	2500.7	2492.0	2429.8	2402.3	2380.6
62.5°	40330.9	31571.3	6426.8	2487.7	2319.8	2431.2	2370.4	2351.6	2315.5	2248.9	2260.5
65°	40051.6	30972.1	4897.2	2321.2	2282.2	2361.8	2256.1	2211.3	2214.2	2144.7	2167.8
67.5°	38254.2	28284.7	3516.6	2066.5	2179.4	2224.3	2125.9	2092.6	2043.4	2008.7	2040.5
70°	34623.3	25073.5	2371.9	1714.9	1945.0	2041.9	1976.8	1918.9	1842.2	1819.1	1853.8
72.5°	29141.5	20930.3	1636.7	1379.1	1678.7	1804.6	1780.0	1720.7	1665.7	1722.1	1790.1
75°	23940.4	15484.6	1335.7	1130.2	1290.9	1503.6	1576.0	1593.3	1758.3	2308.2	2364.7
77.5°	17232.8	9599.0	1201.1	918.9	1030.4	1202.6	1347.3	1406.6	2147.6	2056.4	2052.1
80°	10047.6	5594.7	916.1	725.0	833.6	881.3	1053.5	1651.2	1852.4	1589.0	1549.9
82.5°	4584.6	2468.9	638.2	580.3	578.9	583.2	717.8	1589.0	1421.1	1251.8	1205.5
85°	1685.9	868.3	387.8	335.7	384.9	334.3	470.3	1165.0	823.4	810.4	675.8
87.5°	415.3	178.0	131.7	110.0	89.7	85.4	143.3	383.5	201.2	183.8	176.6
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)