

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: P510781

Luminaire Tested: **CTN-CA8-330-730-U-T4**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510781  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA8-330-730-U-T4  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 47423 lumens  
Efficiency: N/A  
Efficacy: 143.1 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

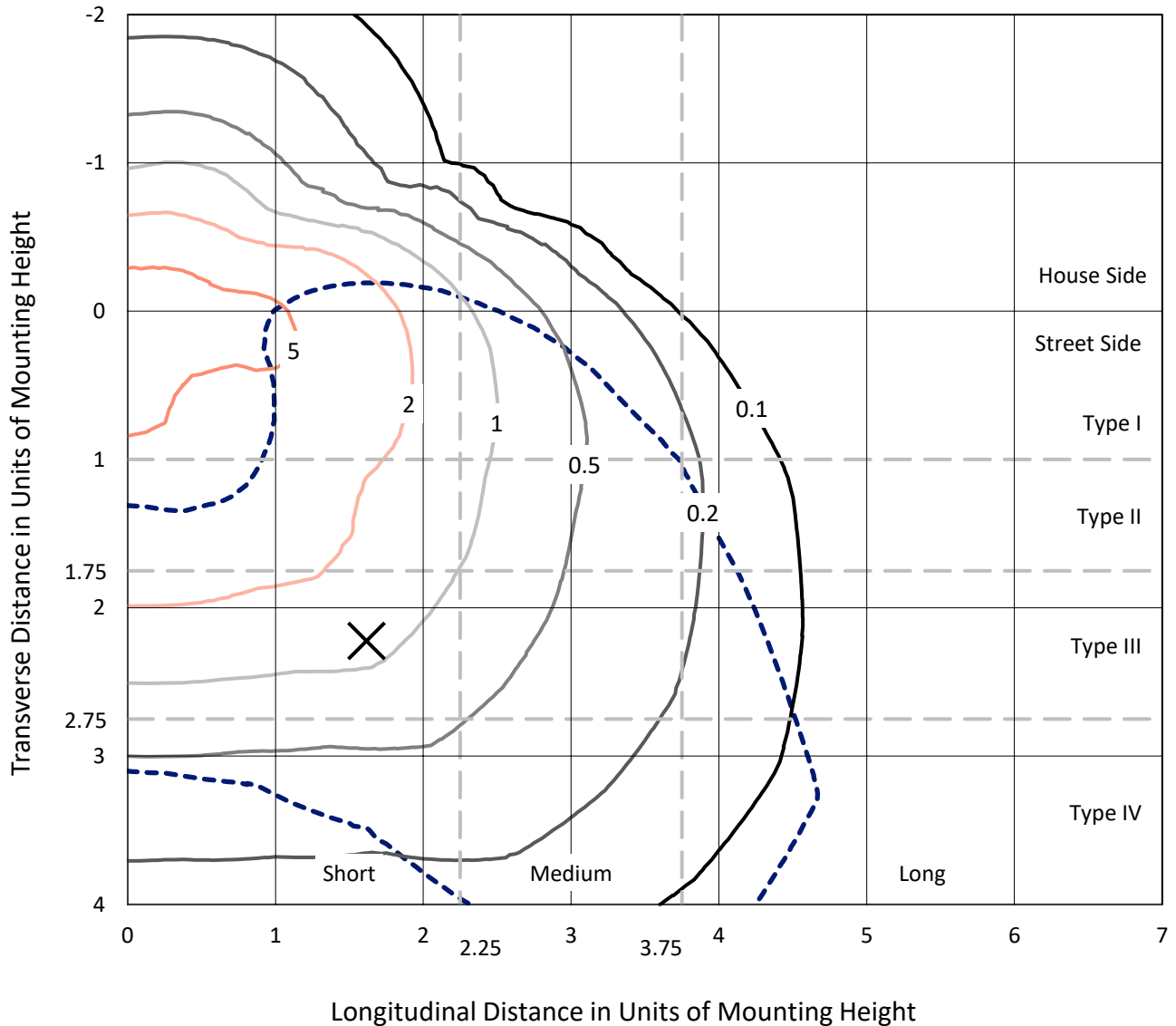
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

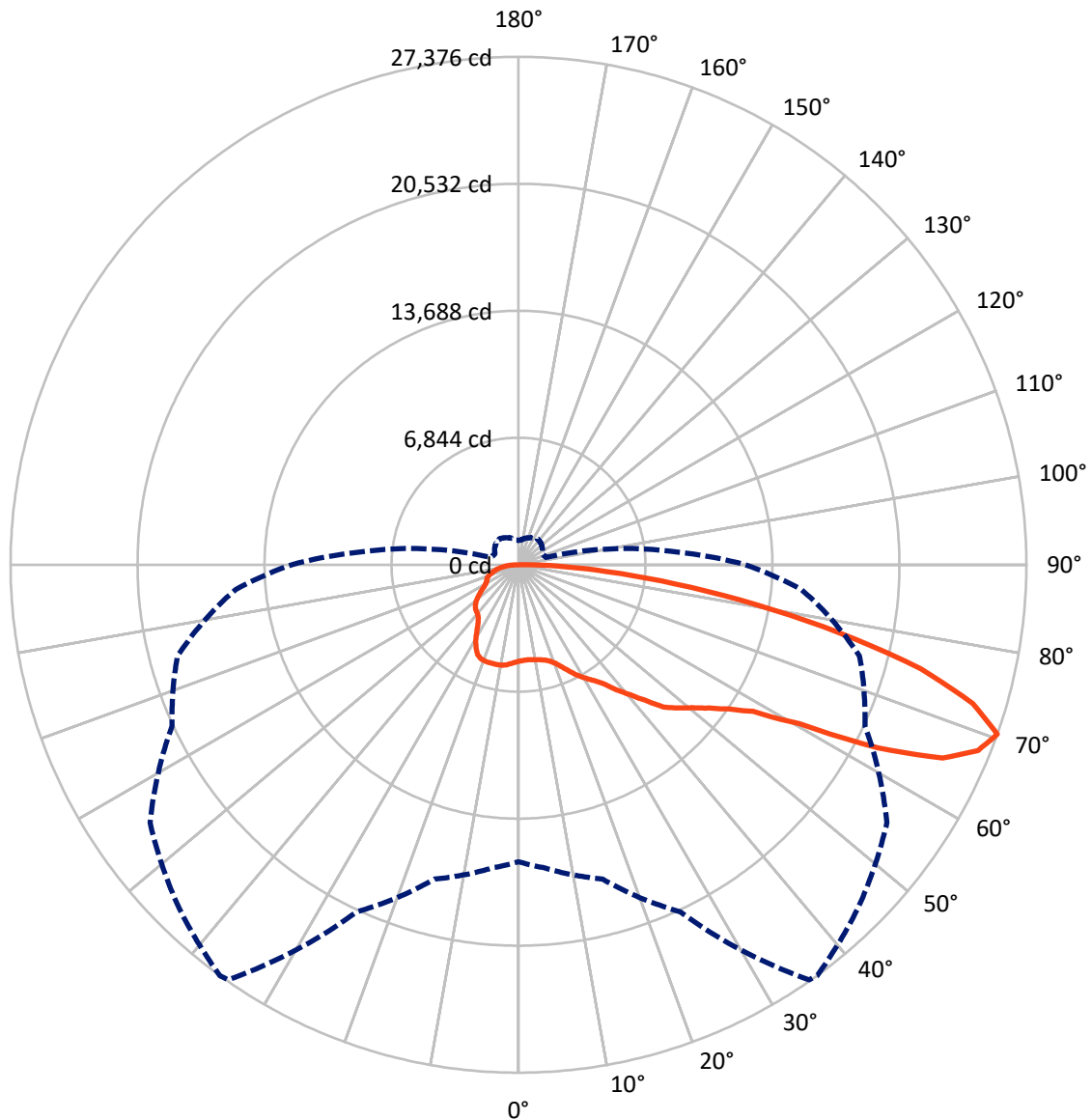
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6 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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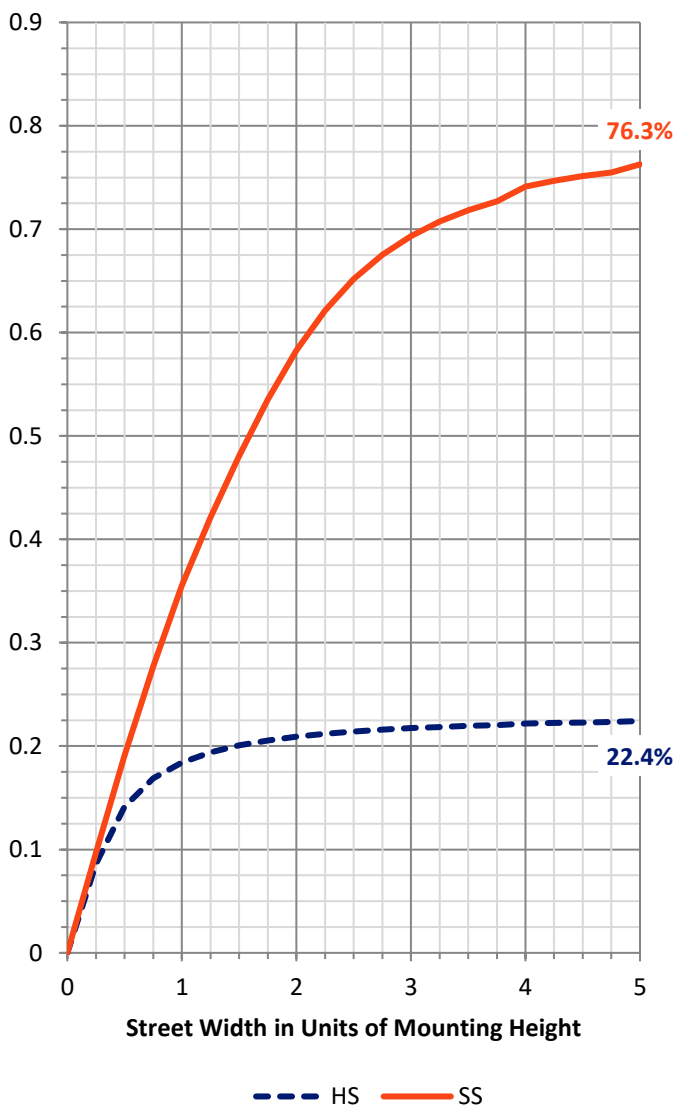
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10805.0	0.0	10805.0
	% Fixture	22.8	0.0	22.8
<b>Street Side</b>	Lumens	36618.0	0.0	36618.0
	% Fixture	77.2	0.0	77.2
<b>Total</b>	Lumens	47423.0	0.0	47423.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	503.2	1.1
10°-20°	1555.7	3.3
20°-30°	2806.2	5.9
30°-40°	4346.3	9.2
40°-50°	6602.0	13.9
50°-60°	9150.8	19.3
60°-70°	11899.2	25.1
70°-80°	8787.4	18.5
80°-90°	1772.2	3.7
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°	47423.0	100.0
0°-180°	47423.0	100.0

**Coefficient of Utilization**

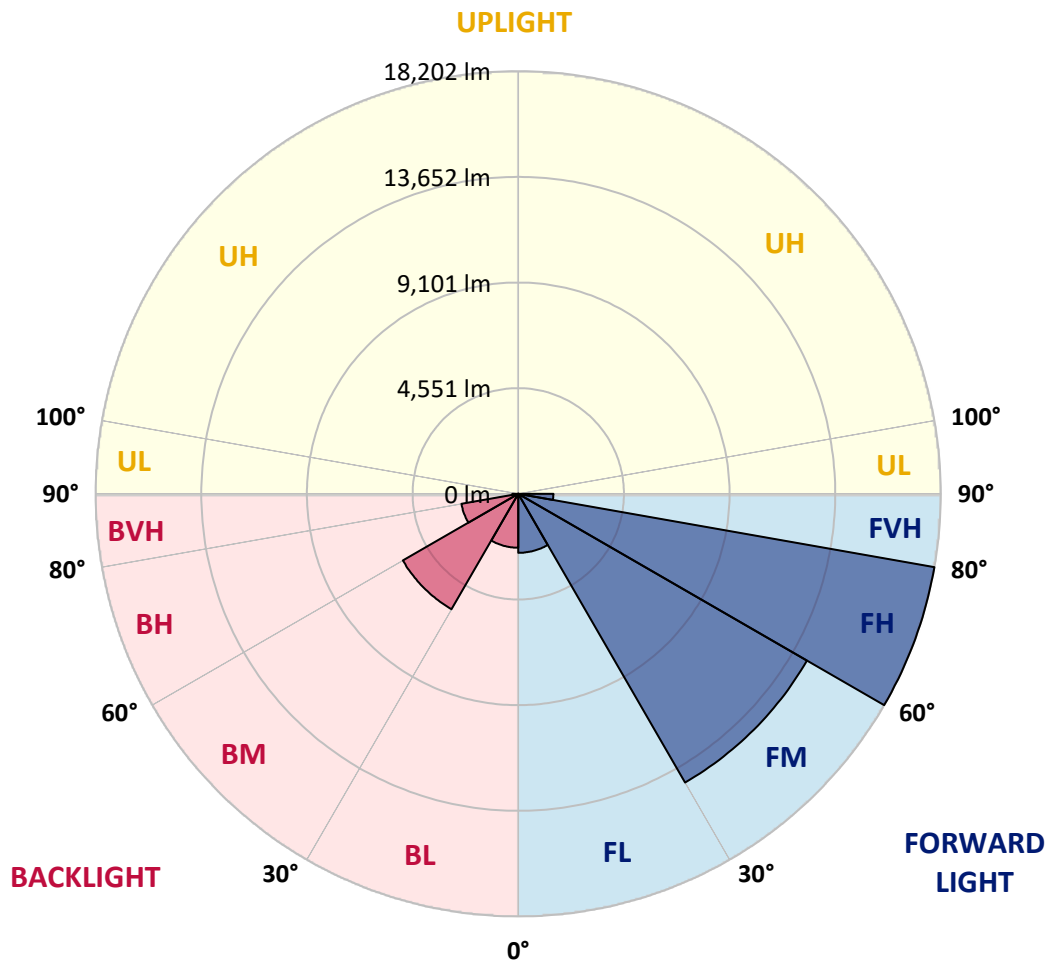


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2542.3	5.4			
FM (30°-60°)	14359.6	30.3			
FH (60°-80°)	18202.0	38.4			G5
FVH (80°-90°)	1514.0	3.2			G5
BL (0°-30°)	2322.8	4.9	B3/2500		
BM (30°-60°)	5739.5	12.1	B4/8500		
BH (60°-80°)	2484.6	5.2	B3/2500		G3/2500
BVH (80°-90°)	258.2	0.5			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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2
2.5°	5162.8	5155.9	5152.0	5159.9	5162.8	5163.8	5165.8	5163.8	5158.9	5176.6	5198.2
5°	5163.8	5159.9	5152.0	5145.1	5145.1	5145.1	5146.1	5168.7	5178.5	5176.6	5203.1
7.5°	5171.6	5168.7	5154.0	5149.1	5160.8	5164.8	5184.4	5177.5	5188.3	5206.0	5228.6
10°	5172.6	5168.7	5155.9	5166.7	5200.1	5206.0	5214.9	5234.5	5238.4	5260.0	5282.6
12.5°	5182.4	5182.4	5187.4	5210.9	5246.3	5253.1	5286.5	5302.2	5325.8	5336.6	5364.1
15°	5234.5	5233.5	5245.3	5271.8	5328.8	5332.7	5373.9	5421.1	5438.7	5465.2	5509.4
17.5°	5358.2	5364.1	5365.1	5384.7	5452.5	5454.4	5522.2	5566.4	5606.6	5653.8	5754.9
20°	5651.8	5641.0	5629.2	5629.2	5655.7	5669.5	5721.5	5792.2	5874.7	5958.1	6077.0
22.5°	6021.0	6042.6	5999.4	5976.8	5989.6	5973.9	6013.1	6070.1	6166.3	6291.0	6441.2
25°	6461.9	6463.8	6460.9	6369.6	6341.1	6350.9	6383.3	6436.3	6564.0	6663.1	6881.1
27.5°	6891.9	6883.1	6851.7	6755.4	6728.0	6741.7	6740.7	6887.0	7017.6	7144.3	7400.6
30°	7282.7	7306.3	7250.3	7088.3	7091.3	7089.3	7134.5	7323.0	7561.6	7797.2	8060.4
32.5°	7972.0	7900.3	7824.7	7504.6	7445.7	7438.8	7465.4	7746.2	8099.7	8497.3	8813.5
35°	8621.1	8603.4	8528.8	8203.7	7863.0	7857.1	7820.8	8162.5	8659.3	9395.8	9790.5
37.5°	9284.8	9259.3	9185.6	8908.7	8570.0	8537.6	8232.2	8606.3	9277.9	10446.4	11009.0
40°	10076.2	10060.5	9946.6	9592.1	9244.6	9195.5	8878.3	9072.7	10058.5	11845.6	12242.3
42.5°	10770.4	10767.5	10636.9	10307.9	10012.4	9963.3	9693.3	9895.6	11143.5	13216.3	13450.0
45°	11280.0	11357.6	11363.5	11175.9	10971.7	10928.5	10856.8	11135.7	12398.4	14460.4	14426.0
47.5°	11710.1	11776.9	11707.2	11610.9	11541.2	11544.2	11655.1	12208.9	13637.6	15544.4	15277.3
50°	12428.8	12387.6	12025.3	11968.3	12056.7	12108.7	12430.8	13367.5	15056.4	16561.6	16041.2
52.5°	13465.7	13307.6	12596.7	12480.9	12815.7	12835.4	13347.9	14403.4	16474.3	17434.6	16740.4
55°	14884.6	14754.0	13950.8	13415.7	13584.5	13717.1	14438.8	15464.9	17631.9	18255.4	17278.4
57.5°	16981.9	16991.7	16336.8	15339.2	14764.8	14906.2	15469.8	16496.8	18588.3	18942.7	17614.2
60°	18662.9	18974.2	18778.8	18323.2	17498.4	17402.2	16973.1	17572.0	19405.2	19527.0	17935.3
62.5°	19828.4	19969.8	20641.4	20737.7	21680.3	21720.5	19665.4	18831.8	20302.7	19909.9	18003.1
65°	19769.5	19856.9	20918.3	22210.5	24995.2	25119.9	23917.0	20737.7	20917.3	20080.8	17805.7
67.5°	18392.9	18524.5	19873.6	22289.1	26761.6	26714.5	25951.5	23390.7	21119.6	19806.8	16865.1
70°	16002.0	16407.5	17540.6	20632.6	27313.4	27376.3	25970.2	24238.1	20598.2	19032.1	15297.0
72.5°	13188.8	13316.5	14386.7	17847.0	25700.2	25607.9	24905.8	23119.7	19655.6	17630.9	12552.6
75°	10030.1	10030.1	11326.2	14222.8	22070.1	22394.1	22667.1	20939.9	17413.0	14370.1	8547.4
77.5°	6658.2	6896.8	7940.6	10687.9	17469.9	17709.5	18652.1	17848.9	14257.1	10537.7	3904.0
80°	3531.9	3561.3	4680.7	7102.1	12495.6	12947.3	14243.4	13766.2	10254.9	4937.0	986.8
82.5°	1235.2	1348.1	2058.1	4116.1	8233.2	8515.0	9448.8	8180.2	3622.2	1092.9	545.9
85°	613.7	635.3	906.3	1959.9	4635.5	4772.0	5520.2	3186.3	583.2	477.2	371.2
87.5°	295.6	302.4	347.6	701.1	2014.9	2108.1	2231.9	1036.9	216.0	181.7	161.0
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°	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2	5194.2
2.5°	5203.1	5211.9	5228.6	5233.5	5221.7	5243.3	5263.9	5282.6	5281.6	5288.5	5313.0
5°	5214.9	5233.5	5251.2	5282.6	5313.0	5330.7	5347.4	5363.1	5368.0	5382.8	5397.5
7.5°	5251.2	5269.8	5310.1	5365.1	5367.0	5411.2	5439.7	5444.6	5448.5	5448.5	5482.9
10°	5307.2	5341.5	5406.3	5444.6	5479.0	5464.3	5493.7	5475.1	5461.3	5467.2	5490.8
12.5°	5403.4	5433.8	5527.1	5569.3	5537.9	5532.0	5502.5	5460.3	5412.2	5407.3	5428.9
15°	5554.6	5611.5	5695.0	5735.3	5656.7	5587.0	5487.8	5401.4	5308.1	5273.8	5287.5
17.5°	5798.1	5866.8	5958.1	5930.7	5787.3	5649.8	5485.9	5303.2	5122.6	4996.9	5029.3
20°	6154.5	6205.6	6280.2	6169.3	5960.1	5733.3	5464.3	5175.6	4870.2	4641.4	4614.9
22.5°	6528.6	6606.2	6561.0	6355.8	6081.9	5765.7	5419.1	4990.0	4517.7	4231.0	4187.8
25°	6979.3	7004.8	6848.7	6539.4	6116.2	5714.6	5272.8	4719.0	4157.3	3887.3	3874.6
27.5°	7457.5	7399.6	7108.9	6623.9	6077.9	5563.4	4979.2	4290.9	3831.4	3592.8	3555.4
30°	7997.5	7863.0	7324.0	6632.7	5933.6	5268.9	4608.0	3956.1	3566.2	3326.7	3288.4
32.5°	8692.7	8375.6	7523.3	6541.4	5629.2	4836.8	4162.3	3670.3	3327.6	3087.1	3052.7
35°	9581.3	9046.2	7734.4	6376.4	5254.1	4404.8	3793.1	3427.8	3134.2	2844.6	2798.4
37.5°	10605.5	9982.0	7986.7	6168.3	4842.7	4024.8	3543.7	3273.6	2990.9	2662.9	2607.9
40°	11795.5	10918.7	8375.6	5919.9	4473.5	3750.8	3422.9	3220.6	2911.3	2569.6	2506.8
42.5°	12826.5	11909.4	8838.1	5652.8	4124.9	3523.0	3368.9	3185.3	2861.2	2499.9	2428.2
45°	13779.9	12727.3	9289.7	5328.8	3757.7	3366.9	3304.1	3096.9	2772.9	2413.5	2338.9
47.5°	14554.7	13388.2	9682.5	5031.2	3464.1	3223.6	3162.7	2929.0	2624.6	2309.4	2254.4
50°	15149.7	13885.0	9897.5	4794.6	3153.9	3060.6	2980.1	2739.5	2446.9	2174.9	2127.8
52.5°	15758.5	14382.8	10003.6	4806.4	2865.2	2818.0	2735.6	2529.4	2305.5	2096.3	2045.3
55°	16112.9	14587.1	9891.6	4520.7	2600.1	2545.1	2473.4	2366.4	2232.8	2047.3	1999.1
57.5°	16320.1	14713.7	9550.9	3687.0	2280.9	2228.9	2240.7	2231.9	2121.9	1926.5	1882.3
60°	16469.3	14438.8	8852.8	2710.0	2009.0	1969.7	2066.9	2035.5	1940.2	1788.0	1750.7
62.5°	16348.6	13915.4	7596.0	2037.4	1787.1	1870.5	1955.9	1898.0	1768.4	1629.9	1586.7
65°	15612.2	12888.4	5773.6	1636.8	1715.4	1830.3	1899.0	1805.7	1674.1	1510.2	1490.5
67.5°	14271.9	11026.7	3405.2	1500.3	1661.4	1783.1	1840.1	1716.4	1600.5	1443.4	1419.8
70°	12226.6	8254.8	1521.0	1397.2	1567.1	1687.9	1725.2	1608.3	1482.7	1335.4	1311.8
72.5°	9100.2	4977.2	1025.1	1290.2	1427.7	1534.7	1575.9	1452.2	1362.9	1296.1	1289.2
75°	5053.8	1728.1	945.6	1168.5	1275.5	1371.7	1422.8	1335.4	1264.7	1173.4	1136.1
77.5°	1609.3	734.5	898.4	1044.7	1180.2	1259.8	1251.9	1120.3	1097.8	986.8	977.0
80°	642.2	640.2	830.7	855.2	1007.4	1074.2	1056.5	890.6	920.0	855.2	829.7
82.5°	503.7	586.2	665.7	653.0	783.6	862.1	837.6	653.9	739.4	679.5	621.5
85°	382.9	513.5	427.1	425.2	546.9	640.2	655.9	502.7	503.7	458.5	408.5
87.5°	197.4	189.5	164.0	163.0	182.6	260.2	319.1	285.7	225.8	169.9	163.0
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)