

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: P510640

Luminaire Tested: **CTN-CA6-230-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510640
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-CA6-230-722-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24849 lumens
Efficiency: N/A
Efficacy: 109.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

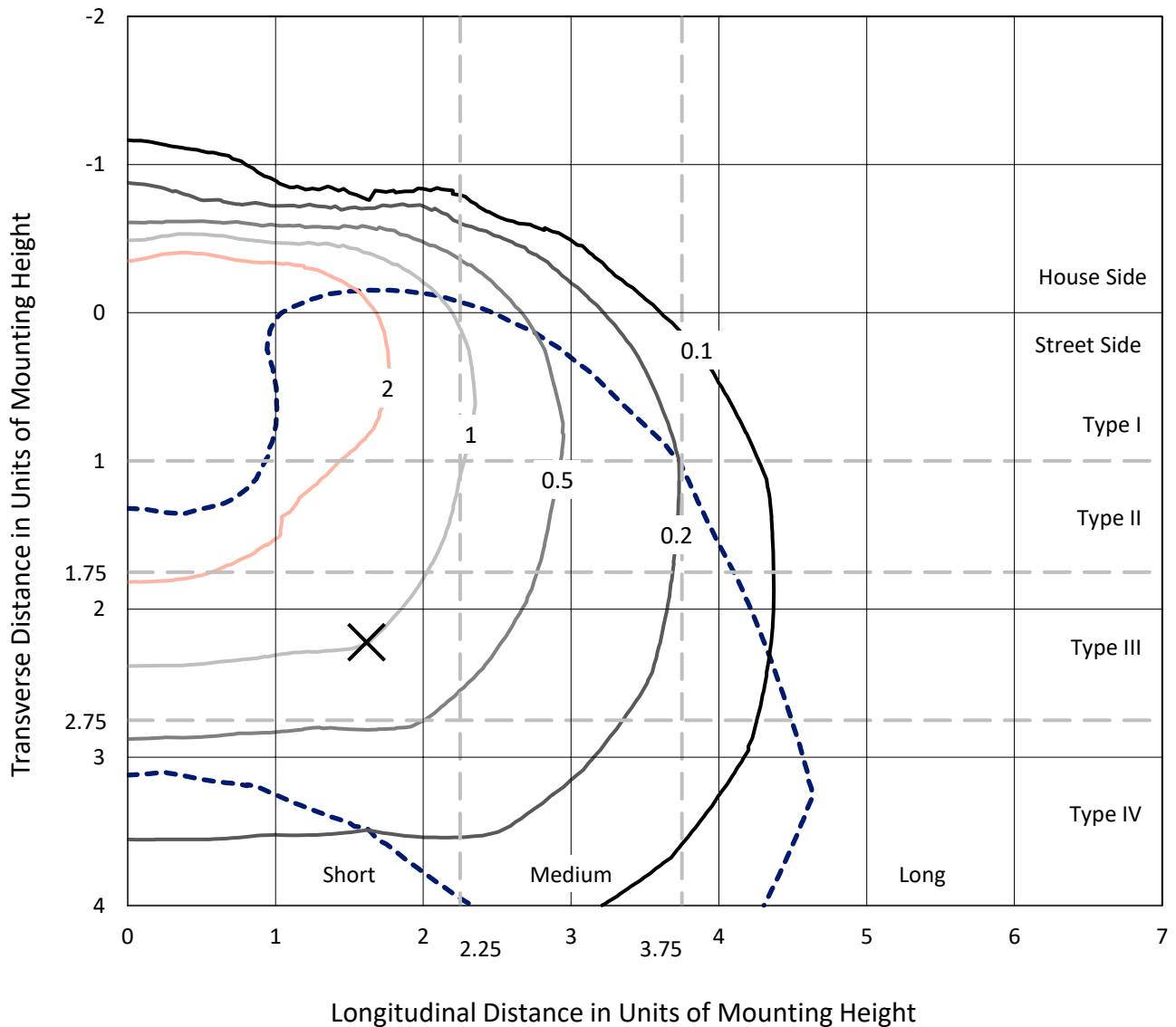
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

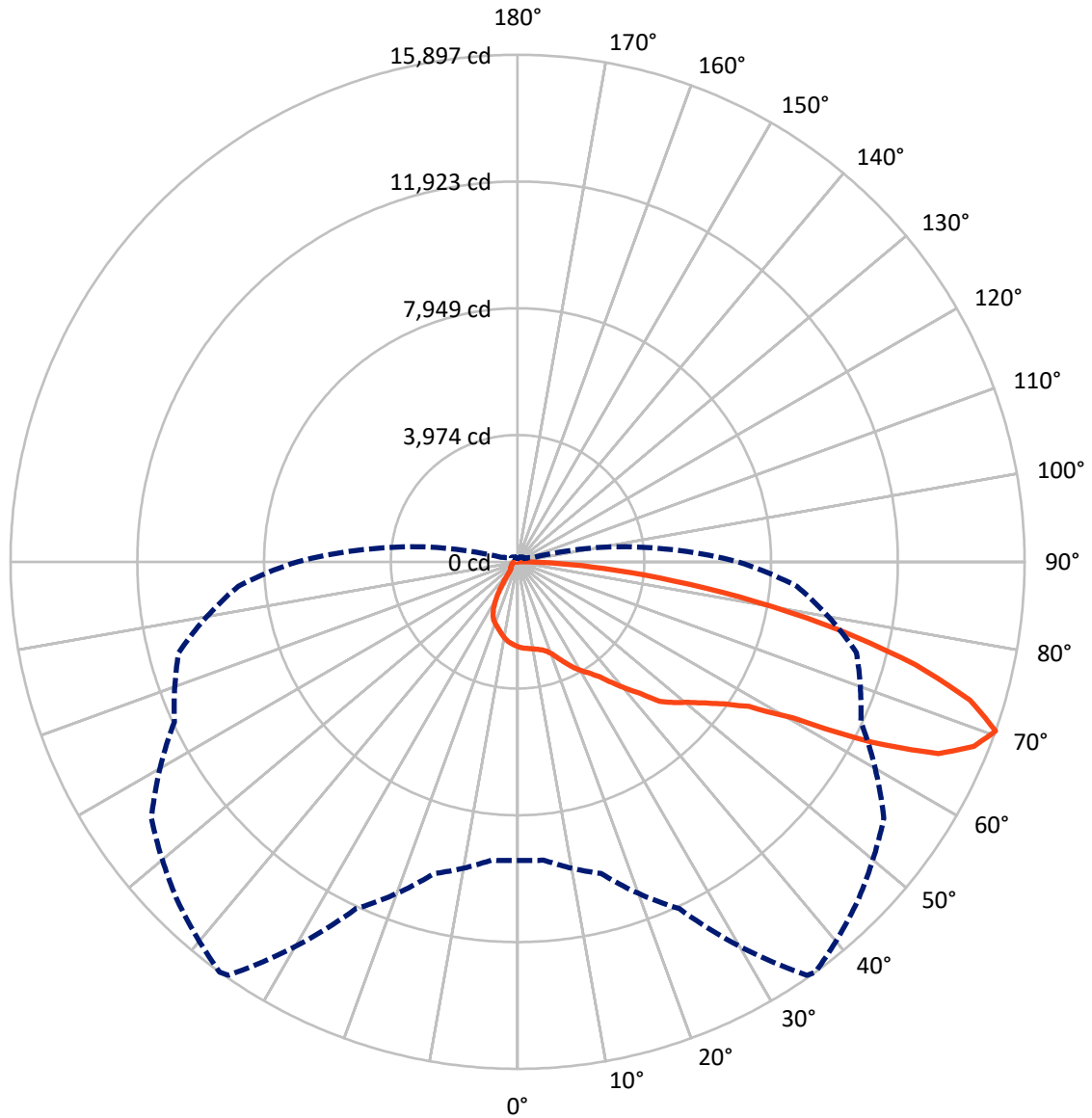
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 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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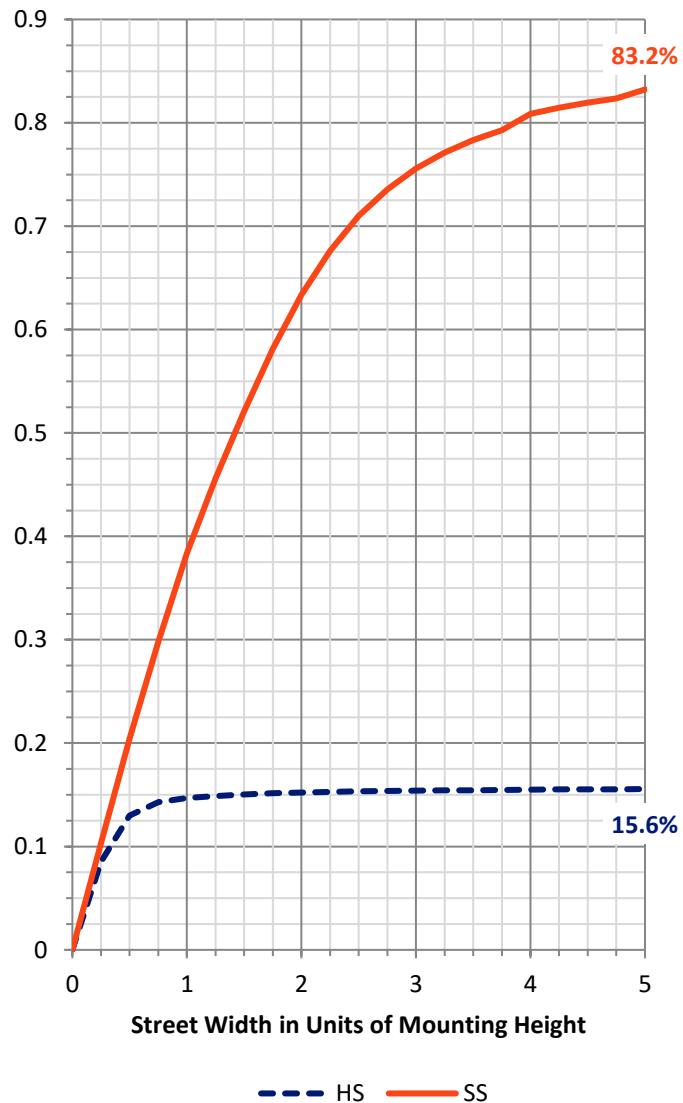
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3921.4	0.0	3921.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	20927.6	0.0	20927.6
	% Fixture	84.2	0.0	84.2
Total	Lumens	24849.0	0.0	24849.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.5	1.0
10°-20°	750.9	3.0
20°-30°	1350.4	5.4
30°-40°	2136.9	8.6
40°-50°	3339.6	13.4
50°-60°	4795.6	19.3
60°-70°	6504.8	26.2
70°-80°	4814.3	19.4
80°-90°	904.0	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°	24849.0	100.0
0°-180°	24849.0	100.0

Coefficient of Utilization

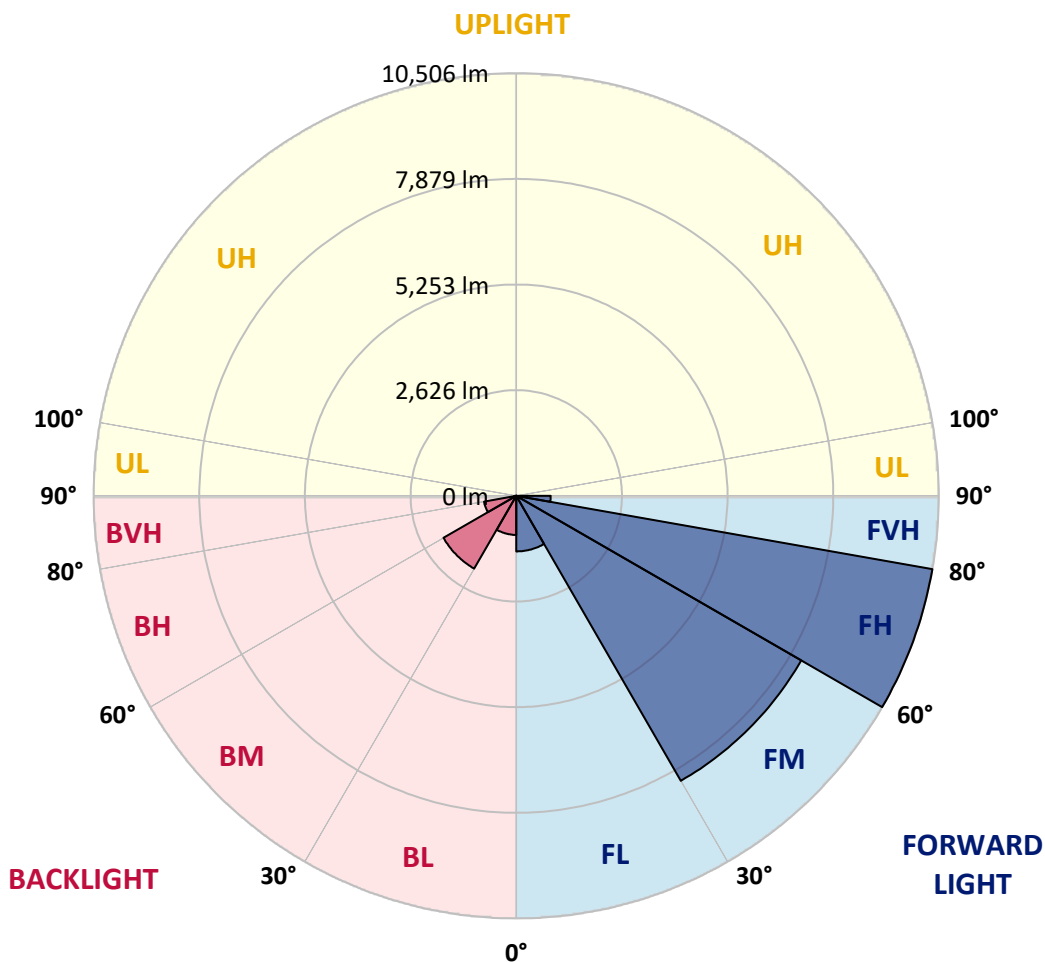


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1382.1	5.6			
FM	(30°-60°)	8182.6	32.9			
FH	(60°-80°)	10505.9	42.3			G4/12000
FVH	(80°-90°)	857.1	3.4			G5
BL	(0°-30°)	971.7	3.9	B2/1000		
BM	(30°-60°)	2089.6	8.4	B2/2500		
BH	(60°-80°)	813.2	3.3	B2/1000		G2/1000
BVH	(80°-90°)	46.9	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4
2.5°	2716.4	2710.6	2706.0	2707.8	2704.3	2706.6	2701.5	2695.1	2680.2	2673.9	2671.1
5°	2740.5	2738.7	2734.2	2730.7	2724.4	2722.1	2716.4	2721.5	2713.5	2692.9	2680.8
7.5°	2754.8	2754.2	2749.1	2741.6	2745.1	2747.9	2753.7	2745.6	2735.3	2725.6	2700.9
10°	2761.1	2761.1	2754.8	2758.8	2776.6	2778.3	2781.2	2786.4	2776.6	2762.3	2737.6
12.5°	2777.2	2776.0	2778.3	2791.5	2809.9	2813.9	2828.2	2828.2	2829.4	2820.8	2792.1
15°	2817.3	2817.3	2822.5	2834.6	2866.1	2868.4	2889.6	2908.6	2910.8	2898.2	2876.4
17.5°	2910.3	2908.0	2905.1	2912.6	2946.4	2947.6	2984.3	3008.4	3014.7	3028.5	3025.0
20°	3087.0	3084.7	3084.1	3084.7	3082.4	3078.9	3115.1	3140.9	3173.0	3197.1	3209.2
22.5°	3340.0	3334.8	3334.8	3306.7	3284.9	3288.3	3294.1	3308.4	3350.9	3393.3	3438.6
25°	3612.5	3609.0	3611.9	3540.2	3510.9	3522.4	3514.9	3537.3	3593.0	3629.7	3677.9
27.5°	3835.0	3840.2	3824.1	3768.5	3749.6	3758.2	3741.0	3805.2	3866.6	3930.9	4003.7
30°	4112.1	4084.6	4045.0	3977.3	3970.4	3971.6	3970.4	4073.7	4201.1	4292.8	4393.8
32.5°	4474.1	4478.7	4389.8	4230.3	4171.8	4163.8	4186.7	4338.2	4510.3	4713.9	4847.0
35°	4840.1	4847.6	4782.8	4616.4	4449.5	4424.2	4390.4	4587.1	4835.5	5244.0	5444.8
37.5°	5228.5	5254.9	5178.0	5029.4	4831.5	4808.0	4648.0	4841.3	5208.4	5871.6	6134.9
40°	5748.3	5720.2	5627.2	5438.5	5254.3	5216.5	5030.6	5132.1	5688.0	6657.6	6848.6
42.5°	6131.5	6123.5	6044.9	5858.4	5673.1	5642.7	5493.0	5603.1	6292.1	7454.4	7539.9
45°	6435.5	6484.9	6483.2	6366.1	6261.7	6244.5	6156.2	6318.5	7022.4	8206.5	8164.6
47.5°	6705.7	6736.1	6687.4	6636.3	6587.6	6593.3	6658.7	6992.6	7768.8	8863.3	8678.0
50°	7148.0	7109.0	6890.5	6851.5	6920.3	6923.2	7122.2	7636.2	8590.9	9431.3	9112.9
52.5°	7737.8	7695.3	7246.1	7179.6	7342.5	7354.6	7685.6	8277.6	9438.7	9974.0	9545.5
55°	8615.5	8516.8	8035.5	7737.2	7811.8	7860.6	8261.6	8894.3	10102.5	10452.4	9873.0
57.5°	9693.5	9765.2	9518.5	8844.4	8534.1	8552.4	8920.7	9484.6	10688.2	10871.2	10064.6
60°	10832.8	10815.6	10918.8	10634.9	10040.5	9941.9	9754.3	10087.0	11142.0	11224.0	10262.0
62.5°	11457.0	11557.3	11901.6	11958.3	12494.7	12442.5	11163.8	10833.9	11666.3	11445.5	10315.9
65°	11453.5	11497.1	12137.9	12842.4	14518.1	14503.2	13908.9	11914.2	12057.0	11563.7	10208.1
67.5°	10713.5	10781.2	11530.4	12906.6	15453.2	15435.4	15024.7	13432.7	12179.8	11421.4	9704.9
70°	9364.2	9387.1	10118.0	12001.9	15829.0	15897.2	15063.1	14015.6	11874.6	10998.6	8787.6
72.5°	7725.2	7677.6	8392.4	10249.4	14872.1	14831.3	14426.3	13319.7	11360.6	10177.6	7167.0
75°	5688.0	5820.6	6461.9	8229.4	12733.4	12882.5	13062.1	12254.9	10089.9	8387.8	4956.0
77.5°	3755.9	3924.5	4572.8	6170.5	10080.7	10312.5	10777.7	10423.2	8208.2	6016.8	2360.1
80°	1940.8	2068.1	2651.5	4094.4	7226.6	7561.1	8414.2	7894.4	5819.4	2720.4	528.4
82.5°	734.3	717.7	1188.1	2343.5	4633.6	4937.7	5557.8	4734.0	2071.0	477.9	245.5
85°	322.4	341.3	492.2	1068.8	2649.3	2688.8	3148.4	1845.5	303.5	228.3	166.9
87.5°	139.4	160.1	206.5	307.5	893.8	1032.0	1277.0	586.3	91.8	79.2	83.8
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°	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4
2.5°	2665.9	2662.4	2656.7	2642.4	2618.8	2616.0	2613.7	2611.4	2606.8	2609.1	2622.3
5°	2671.6	2665.3	2644.7	2624.0	2603.4	2585.0	2562.6	2554.0	2542.5	2535.1	2548.9
7.5°	2691.1	2677.9	2647.5	2619.4	2563.2	2536.2	2507.6	2473.7	2449.6	2434.1	2447.9
10°	2723.8	2707.2	2669.3	2611.4	2545.4	2471.4	2420.9	2364.7	2318.8	2306.2	2318.8
12.5°	2777.2	2752.5	2708.3	2629.7	2512.7	2415.8	2320.0	2246.0	2172.0	2150.7	2157.0
15°	2863.8	2844.3	2776.6	2668.2	2513.3	2365.3	2223.0	2103.7	2006.7	1972.9	1970.6
17.5°	3002.6	2982.0	2904.0	2744.5	2533.9	2325.7	2127.8	1945.9	1799.1	1724.5	1712.4
20°	3201.7	3173.0	3054.8	2856.9	2578.7	2308.5	2039.4	1795.0	1566.7	1426.7	1405.5
22.5°	3423.1	3392.7	3218.3	2943.5	2610.8	2274.6	1955.1	1628.1	1327.5	1156.5	1132.4
25°	3698.5	3632.0	3375.0	3025.6	2603.4	2203.5	1818.0	1401.5	1075.6	927.6	911.6
27.5°	3970.4	3886.1	3534.4	3068.6	2570.7	2090.5	1617.2	1136.5	842.2	737.2	724.0
30°	4307.8	4144.8	3676.1	3088.7	2488.0	1921.3	1348.1	864.0	630.5	558.2	545.6
32.5°	4708.8	4462.1	3809.2	3066.3	2350.4	1663.1	1048.1	632.8	468.7	423.4	422.8
35°	5237.7	4851.0	3955.5	2992.9	2139.3	1384.9	734.9	432.6	365.4	349.9	352.8
37.5°	5856.1	5377.7	4104.1	2872.4	1900.6	1059.6	489.9	333.3	321.3	321.8	322.4
40°	6508.4	5959.4	4304.3	2703.2	1610.9	767.0	352.8	299.5	298.9	304.6	306.3
42.5°	7131.4	6524.5	4551.0	2477.7	1307.4	507.1	305.8	285.7	278.2	280.5	282.3
45°	7710.3	7009.2	4761.0	2258.0	982.1	362.0	300.0	269.6	258.2	257.0	258.2
47.5°	8176.7	7397.6	4888.9	1999.8	699.9	300.6	288.0	254.7	238.7	235.2	233.5
50°	8531.8	7686.2	4935.4	1707.3	473.3	286.8	271.9	237.5	218.0	218.6	218.6
52.5°	8878.3	7948.3	4881.4	1412.4	348.2	274.8	261.0	223.7	203.1	214.0	216.9
55°	9127.8	8058.5	4724.3	1093.4	290.3	259.9	249.0	207.7	193.3	211.1	216.9
57.5°	9273.5	8145.1	4435.7	789.4	266.2	245.5	233.5	192.8	179.6	184.2	187.0
60°	9364.2	8024.1	4054.2	539.8	253.6	234.1	218.0	183.0	165.2	154.3	152.6
62.5°	9314.3	7721.2	3551.6	371.2	240.4	221.4	204.8	173.8	150.3	136.0	134.8
65°	8907.5	7160.7	2726.7	300.6	232.3	215.7	196.8	165.2	140.0	126.2	124.5
67.5°	8153.1	6153.3	1592.5	267.3	228.9	210.0	190.5	157.2	134.2	119.3	117.0
70°	6913.4	4628.4	533.5	238.7	228.3	209.4	185.3	151.5	127.9	112.4	110.1
72.5°	4987.6	2792.7	259.9	210.0	213.4	200.8	181.3	146.9	123.9	104.4	100.4
75°	2834.6	909.3	234.6	181.3	198.5	191.6	179.0	147.4	125.6	94.7	90.1
77.5°	806.6	265.6	226.6	154.3	187.6	197.9	167.5	133.1	128.5	87.8	82.0
80°	272.5	236.4	218.6	119.9	151.5	163.5	145.1	117.0	129.7	79.7	74.0
82.5°	218.6	237.5	183.6	95.8	115.3	123.9	115.3	105.0	105.0	71.1	66.5
85°	175.0	220.3	116.5	76.3	86.1	95.2	81.5	78.6	73.4	59.7	57.9
87.5°	101.5	68.8	48.2	39.0	36.1	36.7	31.6	37.9	46.5	40.7	40.2
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)