

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: P510700

Luminaire Tested: **CTN-CA8-230-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510700
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-CA8-230-722-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25852 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

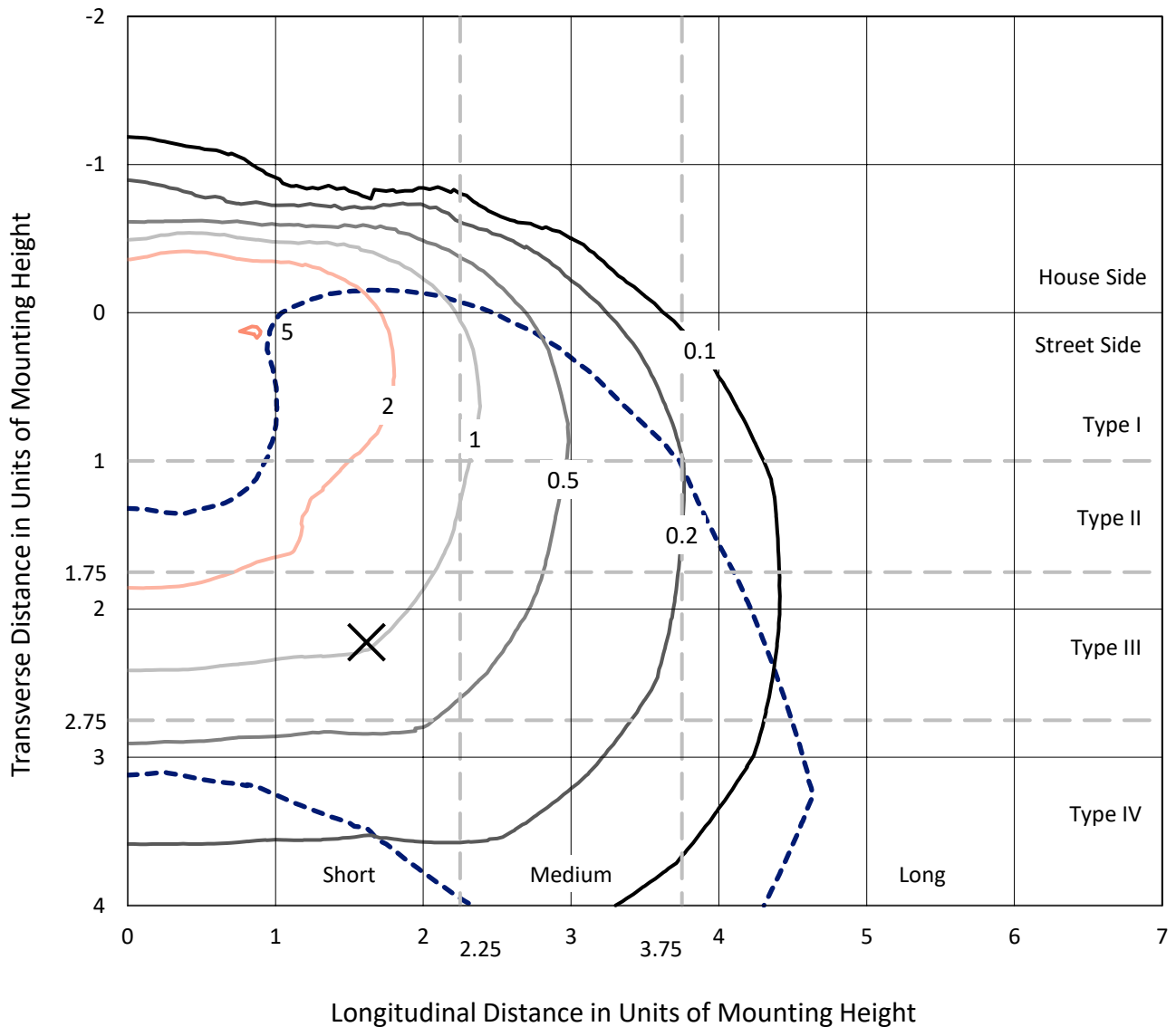
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

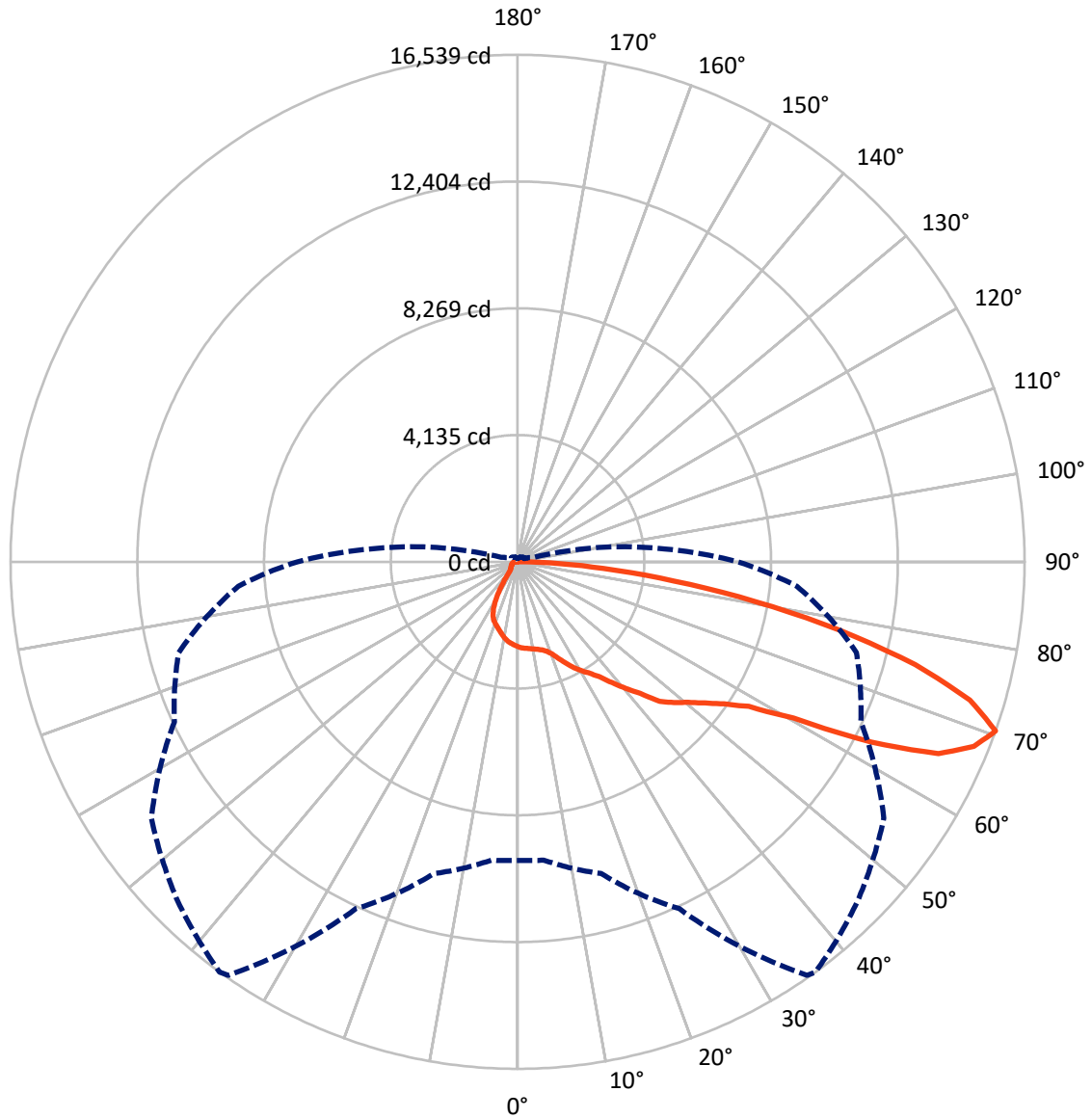
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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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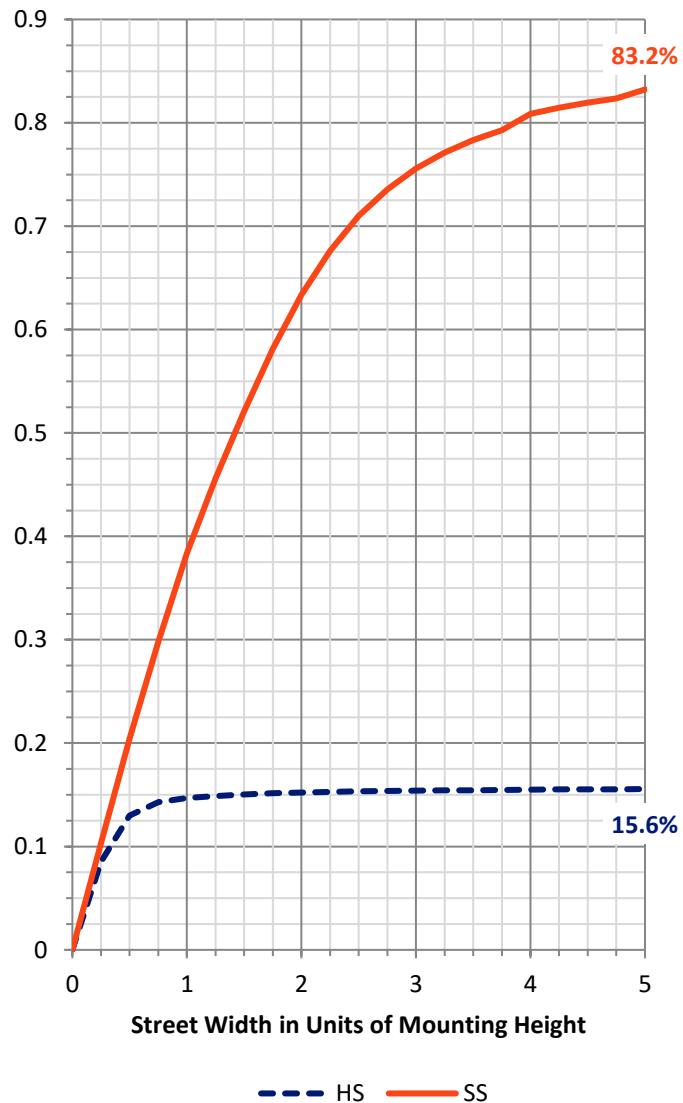
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4079.6	0.0	4079.6
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	21772.4	0.0	21772.4
	% Fixture	84.2	0.0	84.2
Total	Lumens	25852.0	0.0	25852.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.7	1.0
10°-20°	781.2	3.0
20°-30°	1404.9	5.4
30°-40°	2223.2	8.6
40°-50°	3474.4	13.4
50°-60°	4989.2	19.3
60°-70°	6767.4	26.2
70°-80°	5008.6	19.4
80°-90°	940.5	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°	25852.0	100.0
0°-180°	25852.0	100.0

Coefficient of Utilization



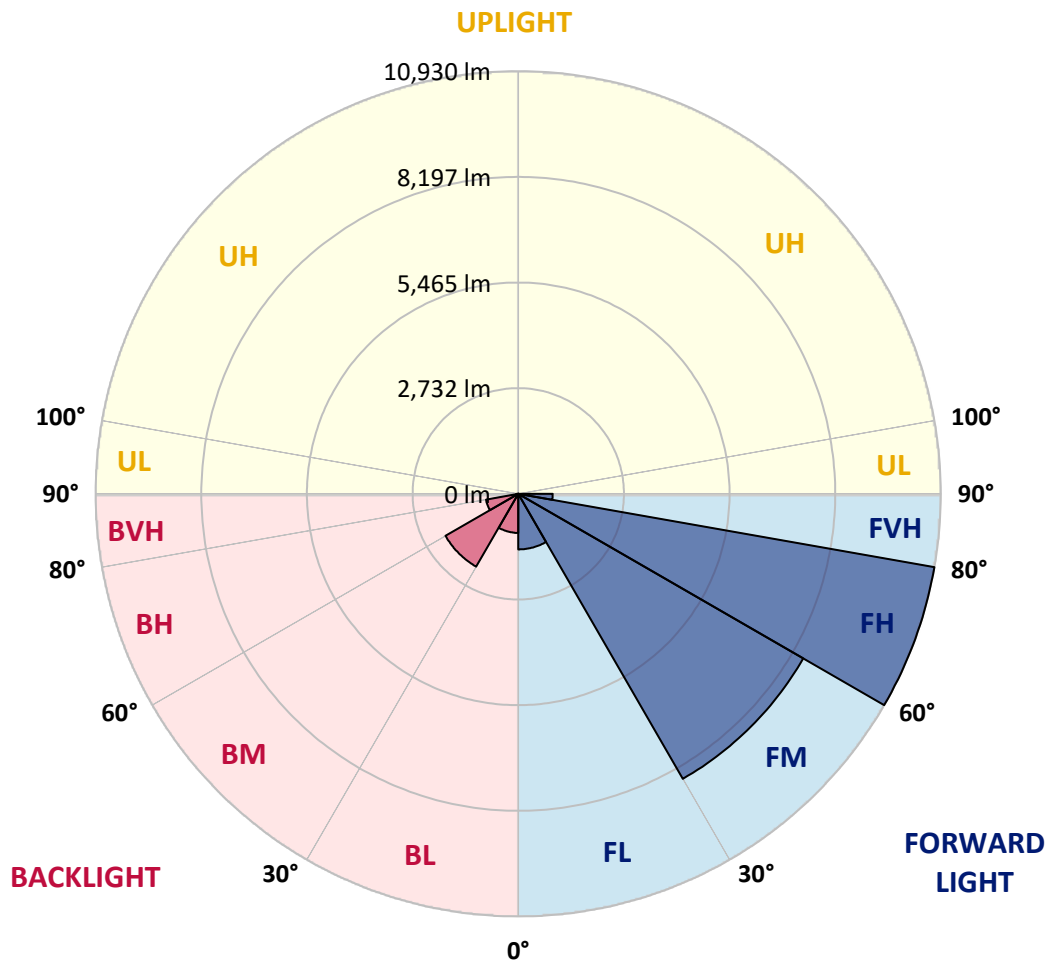
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1437.9	5.6			
FM (30°-60°)	8512.8	32.9			
FH (60°-80°)	10930.0	42.3			G4/12000
FVH (80°-90°)	891.7	3.4			G5
BL (0°-30°)	1010.9	3.9	B3/2500		
BM (30°-60°)	2173.9	8.4	B2/2500		
BH (60°-80°)	846.0	3.3	B2/1000		G2/1000
BVH (80°-90°)	48.8	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9
2.5°	2826.0	2820.0	2815.3	2817.1	2813.5	2815.9	2810.5	2803.9	2788.4	2781.8	2778.9
5°	2851.1	2849.3	2844.5	2840.9	2834.4	2832.0	2826.0	2831.4	2823.0	2801.5	2789.0
7.5°	2866.0	2865.4	2860.0	2852.3	2855.9	2858.8	2864.8	2856.5	2845.7	2835.6	2809.9
10°	2872.6	2872.6	2866.0	2870.2	2888.7	2890.5	2893.5	2898.8	2888.7	2873.8	2848.1
12.5°	2889.3	2888.1	2890.5	2904.2	2923.3	2927.5	2942.4	2942.4	2943.6	2934.6	2904.8
15°	2931.1	2931.1	2936.4	2949.0	2981.8	2984.2	3006.3	3026.0	3028.3	3015.2	2992.5
17.5°	3027.7	3025.4	3022.4	3030.1	3065.3	3066.5	3104.7	3129.8	3136.4	3150.7	3147.1
20°	3211.6	3209.2	3208.6	3209.2	3206.8	3203.2	3240.8	3267.7	3301.1	3326.2	3338.7
22.5°	3474.8	3469.4	3469.4	3440.2	3417.5	3421.1	3427.0	3441.9	3486.1	3530.3	3577.4
25°	3758.3	3754.7	3757.7	3683.1	3652.6	3664.6	3656.8	3680.1	3738.0	3776.2	3826.3
27.5°	3989.8	3995.2	3978.5	3920.6	3900.9	3909.9	3892.0	3958.8	4022.7	4089.5	4165.3
30°	4278.1	4249.5	4208.3	4137.9	4130.7	4131.9	4130.7	4238.1	4370.6	4466.1	4571.2
32.5°	4654.7	4659.5	4567.0	4401.1	4340.2	4331.8	4355.7	4513.3	4692.3	4904.2	5042.7
35°	5035.5	5043.3	4975.8	4802.7	4629.1	4602.8	4567.6	4772.3	5030.7	5455.7	5664.6
37.5°	5439.6	5467.0	5387.0	5232.5	5026.5	5002.1	4835.6	5036.7	5418.7	6108.6	6382.6
40°	5980.3	5951.0	5854.4	5658.0	5466.4	5427.0	5233.6	5339.3	5917.6	6926.3	7125.0
42.5°	6379.0	6370.6	6288.9	6094.9	5902.1	5870.5	5714.7	5829.3	6546.1	7755.3	7844.2
45°	6695.3	6746.6	6744.8	6623.1	6514.5	6496.6	6404.6	6573.5	7305.9	8537.7	8494.2
47.5°	6976.4	7008.0	6957.3	6904.2	6853.5	6859.4	6927.5	7274.8	8082.3	9221.1	9028.3
50°	7436.6	7396.0	7168.6	7128.0	7199.6	7202.6	7409.7	7944.5	8937.6	9812.0	9480.7
52.5°	8050.1	8005.9	7538.6	7469.4	7638.9	7651.4	7995.8	8611.7	9819.7	10376.6	9930.7
55°	8963.3	8860.6	8359.9	8049.5	8127.1	8177.8	8595.0	9253.3	10510.3	10874.3	10271.5
57.5°	10084.7	10159.3	9902.7	9201.4	8878.5	8897.6	9280.8	9867.5	11119.6	11310.0	10470.9
60°	11270.0	11252.1	11359.6	11064.1	10445.8	10343.2	10148.0	10494.2	11591.7	11677.1	10676.2
62.5°	11919.4	12023.8	12381.9	12441.0	12999.1	12944.8	11614.4	11271.2	12137.2	11907.5	10732.3
65°	11915.8	11961.2	12627.8	13360.8	15104.1	15088.6	14470.3	12395.1	12543.7	12030.4	10620.1
67.5°	11145.9	11216.3	11995.8	13427.6	16077.0	16058.5	15631.1	13974.9	12671.4	11882.4	10096.7
70°	9742.1	9766.0	10526.4	12486.4	16467.9	16538.9	15671.1	14581.3	12353.9	11442.5	9142.3
72.5°	8037.0	7987.4	8731.1	10663.1	15472.4	15430.0	15008.6	13857.3	11819.1	10588.5	7456.3
75°	5917.6	6055.5	6722.8	8561.6	13247.4	13402.5	13589.3	12749.6	10497.1	8726.3	5156.1
77.5°	3907.5	4083.0	4757.4	6419.6	10487.6	10728.7	11212.7	10843.9	8539.5	6259.6	2455.4
80°	2019.1	2151.6	2758.6	4259.6	7518.3	7866.3	8753.8	8213.1	6054.3	2830.2	549.7
82.5°	763.9	746.6	1236.0	2438.1	4820.6	5137.0	5782.1	4925.1	2154.6	497.2	255.4
85°	335.4	355.1	512.1	1111.9	2756.2	2797.4	3275.4	1920.0	315.7	237.5	173.7
87.5°	145.0	166.5	214.9	319.9	929.9	1073.7	1328.6	610.0	95.5	82.4	87.1
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°	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9	2769.9
2.5°	2773.5	2769.9	2763.9	2749.0	2724.6	2721.6	2719.2	2716.8	2712.0	2714.4	2728.1
5°	2779.5	2772.9	2751.4	2729.9	2708.4	2689.3	2666.1	2657.1	2645.2	2637.4	2651.7
7.5°	2799.8	2786.0	2754.4	2725.2	2666.7	2638.6	2608.8	2573.6	2548.5	2532.4	2546.7
10°	2833.8	2816.5	2777.1	2716.8	2648.2	2571.2	2518.6	2460.2	2412.4	2399.3	2412.4
12.5°	2889.3	2863.6	2817.7	2735.9	2614.1	2513.3	2413.6	2336.6	2259.6	2237.5	2244.1
15°	2979.4	2959.1	2888.7	2775.9	2614.7	2460.8	2312.7	2188.6	2087.7	2052.5	2050.1
17.5°	3123.8	3102.4	3021.2	2855.3	2636.2	2419.6	2213.7	2024.5	1871.7	1794.1	1781.6
20°	3330.9	3301.1	3178.1	2972.2	2682.8	2401.7	2121.7	1867.5	1630.0	1484.3	1462.2
22.5°	3561.3	3529.7	3348.2	3062.4	2716.2	2366.5	2034.0	1693.8	1381.1	1203.2	1178.2
25°	3847.8	3778.6	3511.2	3147.7	2708.4	2292.4	1891.4	1458.1	1119.1	965.1	948.4
27.5°	4130.7	4043.0	3677.1	3192.5	2674.4	2174.9	1682.5	1182.3	876.2	766.9	753.2
30°	4481.6	4312.1	3824.5	3213.4	2588.5	1998.8	1402.6	898.8	655.9	580.7	567.6
32.5°	4898.8	4642.2	3963.0	3190.1	2445.2	1730.2	1090.4	658.3	487.6	440.5	439.9
35°	5449.1	5046.8	4115.2	3113.7	2225.6	1440.8	764.5	450.0	380.2	364.1	367.1
37.5°	6092.5	5594.7	4269.8	2988.4	1977.3	1102.4	509.7	346.8	334.2	334.8	335.4
40°	6771.1	6199.9	4478.1	2812.3	1675.9	798.0	367.1	311.5	311.0	316.9	318.7
42.5°	7419.3	6787.8	4734.7	2577.7	1360.2	527.6	318.1	297.2	289.5	291.9	293.6
45°	8021.5	7292.1	4953.1	2349.1	1021.8	376.6	312.1	280.5	268.6	267.4	268.6
47.5°	8506.7	7696.2	5086.2	2080.6	728.1	312.7	299.6	265.0	248.3	244.7	242.9
50°	8876.1	7996.4	5134.6	1776.2	492.4	298.4	282.9	247.1	226.8	227.4	227.4
52.5°	9236.6	8269.2	5078.5	1469.4	362.3	285.9	271.6	232.8	211.3	222.6	225.6
55°	9496.2	8383.7	4914.9	1137.6	302.0	270.4	259.0	216.1	201.1	219.6	225.6
57.5°	9647.8	8473.9	4614.7	821.2	276.9	255.4	242.9	200.5	186.8	191.6	194.6
60°	9742.1	8347.9	4217.8	561.6	263.8	243.5	226.8	190.4	171.9	160.5	158.8
62.5°	9690.2	8032.8	3695.0	386.2	250.1	230.4	213.1	180.8	156.4	141.4	140.3
65°	9267.1	7449.7	2836.8	312.7	241.7	224.4	204.7	171.9	145.6	131.3	129.5
67.5°	8482.2	6401.7	1656.8	278.1	238.1	218.4	198.1	163.5	139.7	124.1	121.8
70°	7192.5	4815.3	555.1	248.3	237.5	217.8	192.8	157.6	133.1	117.0	114.6
72.5°	5188.9	2905.4	270.4	218.4	222.0	208.9	188.6	152.8	128.9	108.6	104.4
75°	2949.0	946.0	244.1	188.6	206.5	199.3	186.2	153.4	130.7	98.5	93.7
77.5°	839.2	276.3	235.7	160.5	195.2	205.9	174.3	138.5	133.7	91.3	85.3
80°	283.5	245.9	227.4	124.7	157.6	170.1	151.0	121.8	134.9	83.0	77.0
82.5°	227.4	247.1	191.0	99.7	120.0	128.9	120.0	109.2	109.2	74.0	69.2
85°	182.0	229.2	121.2	79.4	89.5	99.1	84.8	81.8	76.4	62.1	60.3
87.5°	105.6	71.6	50.1	40.6	37.6	38.2	32.8	39.4	48.3	42.4	41.8
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)