

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: STREETWORKS

Report Number: P510400

Luminaire Tested: **CST-CA10-210-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510400
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: STREETWORKS
Catalog Number: CST-CA10-210-722-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25171 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

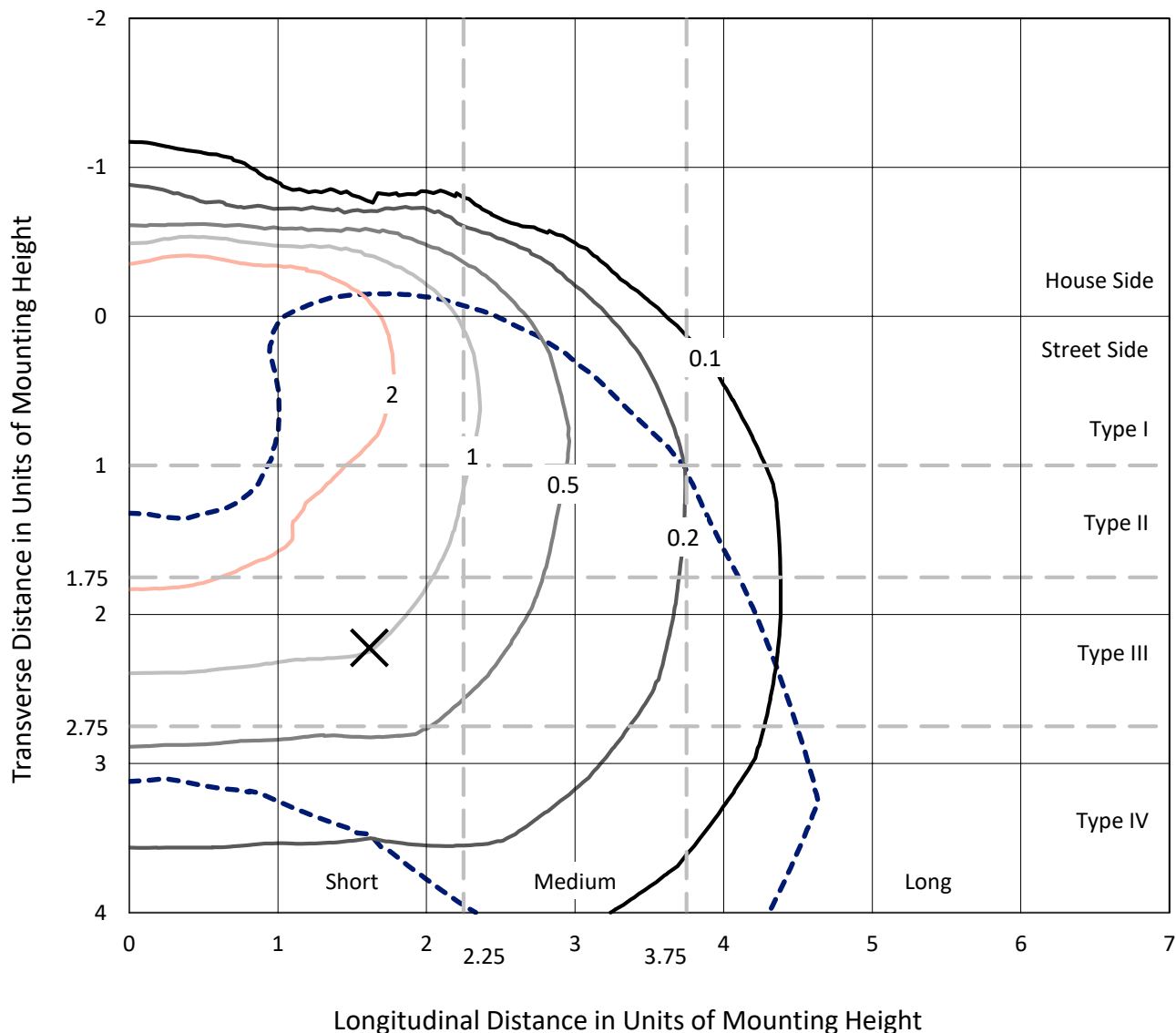
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

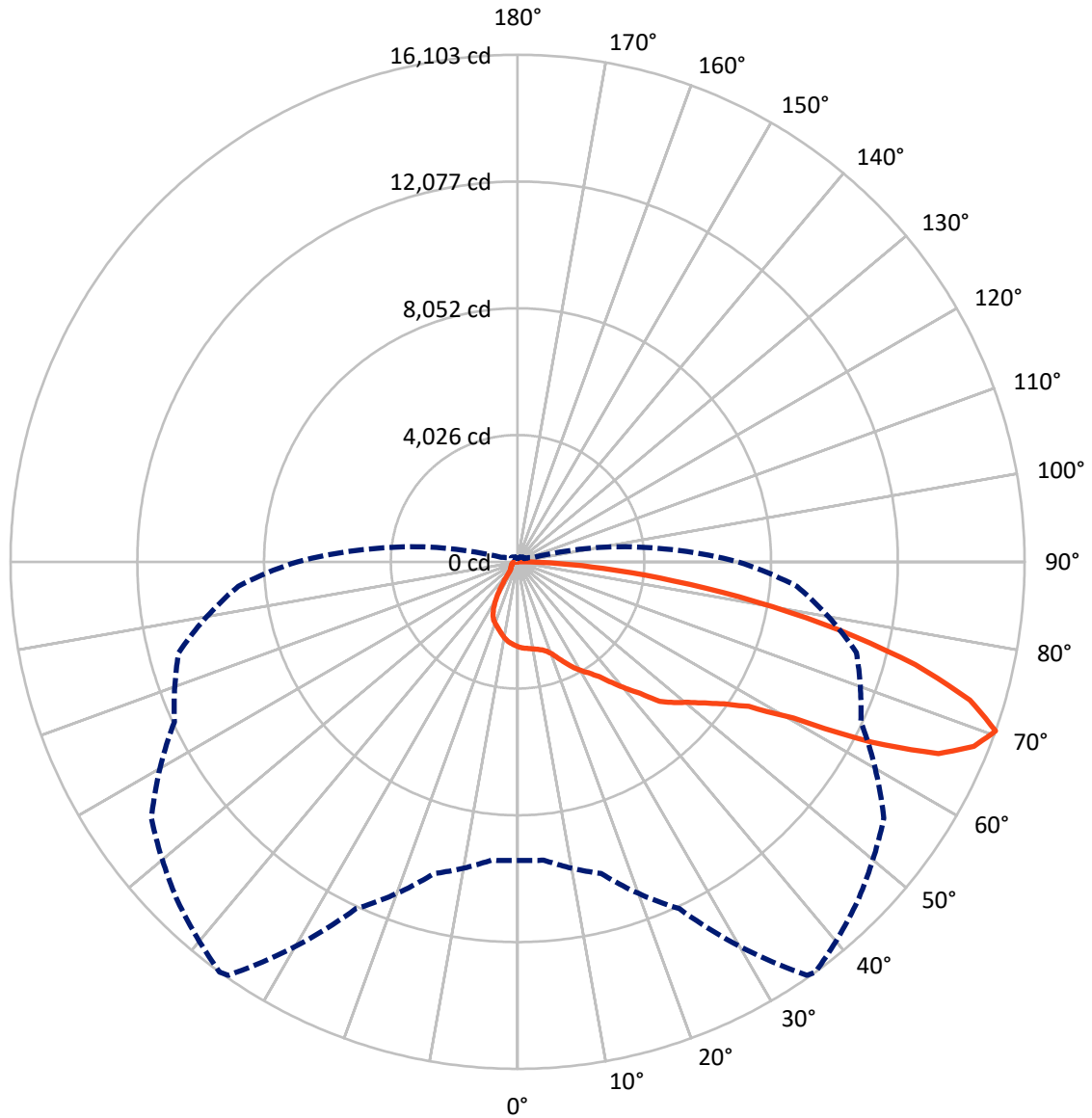
✕ Max cd
 - - - 1/2 Max cd



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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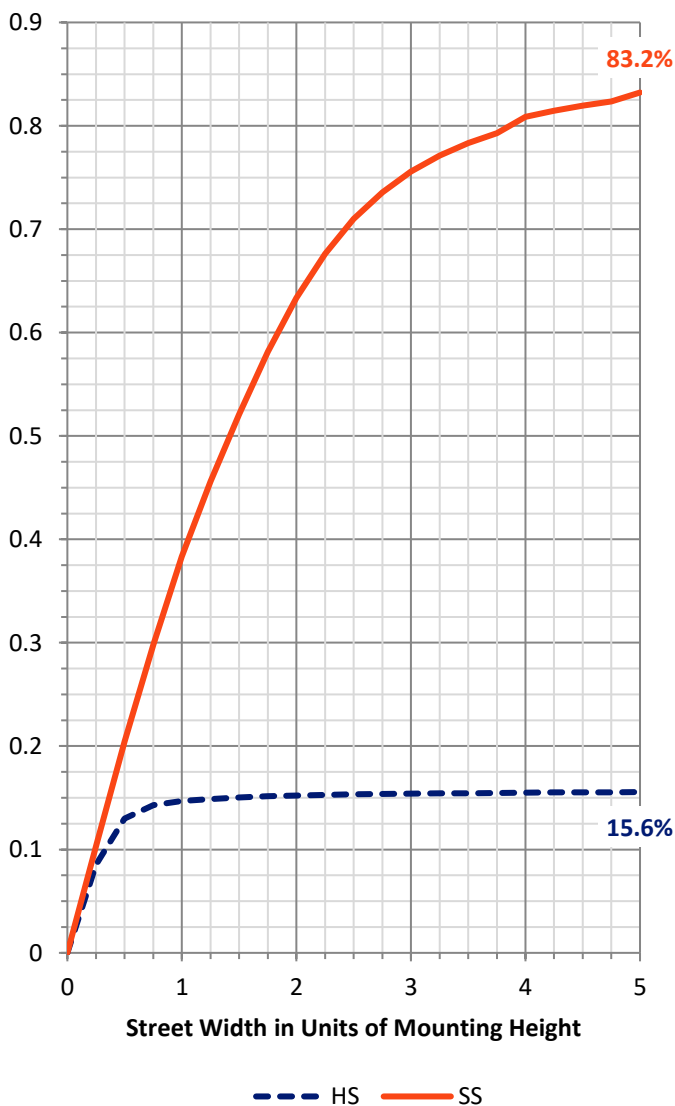
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3972.2	0.0	3972.2
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	21198.8	0.0	21198.8
	% Fixture	84.2	0.0	84.2
Total	Lumens	25171.0	0.0	25171.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	255.8	1.0
10°-20°	760.6	3.0
20°-30°	1367.9	5.4
30°-40°	2164.6	8.6
40°-50°	3382.9	13.4
50°-60°	4857.8	19.3
60°-70°	6589.1	26.2
70°-80°	4876.7	19.4
80°-90°	915.7	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°	25171.0	100.0
0°-180°	25171.0	100.0

Coefficient of Utilization

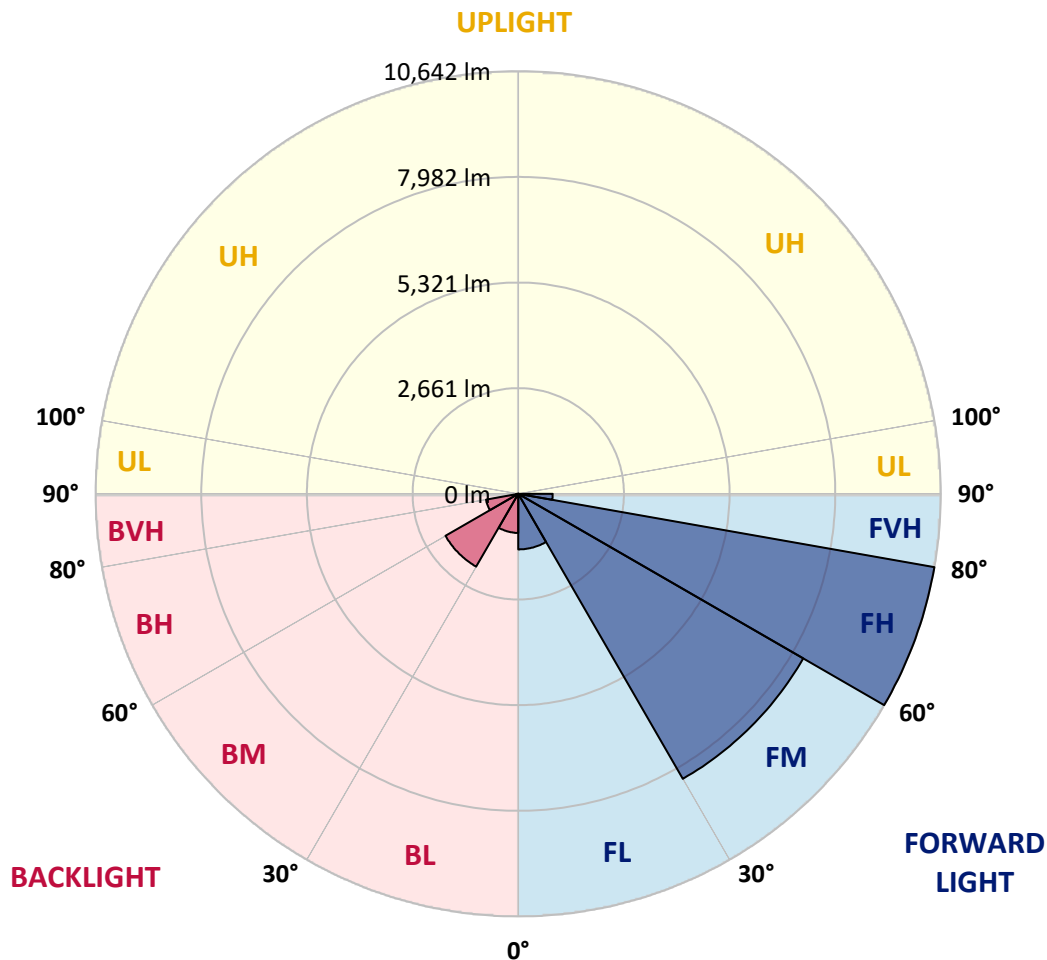


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1400.0	5.6			
FM (30°-60°)	8288.6	32.9			
FH (60°-80°)	10642.1	42.3			G4/12000
FVH (80°-90°)	868.2	3.4			G5
BL (0°-30°)	984.3	3.9	B2/1000		
BM (30°-60°)	2116.7	8.4	B2/2500		
BH (60°-80°)	823.7	3.3	B2/1000		G2/1000
BVH (80°-90°)	47.5	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°	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9
2.5°	2751.6	2745.8	2741.1	2742.9	2739.4	2741.7	2736.5	2730.1	2715.0	2708.6	2705.7
5°	2776.0	2774.2	2769.6	2766.1	2759.7	2757.4	2751.6	2756.8	2748.7	2727.7	2715.5
7.5°	2790.5	2789.9	2784.7	2777.1	2780.6	2783.5	2789.3	2781.2	2770.7	2760.9	2735.9
10°	2796.9	2796.9	2790.5	2794.6	2812.6	2814.3	2817.2	2822.5	2812.6	2798.1	2773.1
12.5°	2813.2	2812.0	2814.3	2827.7	2846.3	2850.4	2864.9	2864.9	2866.1	2857.3	2828.3
15°	2853.8	2853.8	2859.1	2871.3	2903.2	2905.6	2927.1	2946.2	2948.6	2935.8	2913.7
17.5°	2948.0	2945.7	2942.8	2950.3	2984.6	2985.8	3023.0	3047.4	3053.8	3067.7	3064.2
20°	3127.0	3124.6	3124.1	3124.6	3122.3	3118.8	3155.4	3181.6	3214.1	3238.5	3250.7
22.5°	3383.2	3378.0	3378.0	3349.5	3327.5	3330.9	3336.8	3351.3	3394.3	3437.3	3483.2
25°	3659.3	3655.8	3658.7	3586.1	3556.4	3568.0	3560.5	3583.1	3639.5	3676.7	3725.5
27.5°	3884.7	3890.0	3873.7	3817.3	3798.2	3806.9	3789.4	3854.5	3916.7	3981.8	4055.6
30°	4165.4	4137.5	4097.4	4028.9	4021.9	4023.0	4021.9	4126.5	4255.5	4348.5	4450.7
32.5°	4532.1	4536.8	4446.7	4285.1	4225.9	4217.7	4241.0	4394.4	4568.7	4775.0	4909.8
35°	4902.9	4910.4	4844.7	4676.2	4507.1	4481.5	4447.3	4646.6	4898.2	5312.0	5515.3
37.5°	5296.3	5323.0	5245.1	5094.6	4894.1	4870.3	4708.2	4904.0	5275.9	5947.7	6214.4
40°	5822.8	5794.3	5700.1	5509.0	5322.4	5284.1	5095.8	5198.6	5761.7	6743.8	6937.3
42.5°	6210.9	6202.8	6123.2	5934.3	5746.6	5715.8	5564.2	5675.7	6373.7	7551.0	7637.6
45°	6518.9	6568.9	6567.2	6448.6	6342.9	6325.4	6235.9	6400.4	7113.4	8312.8	8270.4
47.5°	6792.6	6823.4	6774.0	6722.3	6672.9	6678.7	6745.0	7083.2	7869.4	8978.2	8790.5
50°	7240.7	7201.2	6979.8	6940.2	7010.0	7012.9	7214.5	7735.2	8702.2	9553.5	9231.0
52.5°	7838.1	7795.1	7340.0	7272.6	7437.7	7449.9	7785.2	8384.9	9561.1	10103.2	9669.1
55°	8727.2	8627.2	8139.7	7837.5	7913.0	7962.4	8368.6	9009.6	10233.4	10587.9	10001.0
57.5°	9819.1	9891.7	9641.8	8959.0	8644.6	8663.2	9036.3	9607.5	10826.7	11012.1	10195.1
60°	10973.2	10955.7	11060.3	10772.7	10170.6	10070.7	9880.7	10217.7	11286.4	11369.5	10395.0
62.5°	11605.4	11707.1	12055.8	12113.3	12656.6	12603.8	11308.5	10974.3	11817.5	11593.8	10449.6
65°	11601.9	11646.1	12295.2	13008.8	14706.2	14691.1	14089.1	12068.6	12213.3	11713.5	10340.3
67.5°	10852.3	10920.9	11679.8	13073.9	15653.5	15635.4	15219.4	13606.8	12337.6	11569.4	9830.7
70°	9485.5	9508.8	10249.1	12157.5	16034.1	16103.2	15258.3	14197.2	12028.5	11141.1	8901.5
72.5°	7825.3	7777.0	8501.1	10382.2	15064.8	15023.5	14613.3	13492.3	11507.8	10309.5	7259.8
75°	5761.7	5896.0	6545.7	8336.1	12898.4	13049.5	13231.4	12413.7	10220.6	8496.5	5020.2
77.5°	3804.5	3975.4	4632.1	6250.5	10211.3	10446.1	10917.4	10558.2	8314.6	6094.7	2390.7
80°	1965.9	2094.9	2685.9	4147.4	7320.3	7659.1	8523.2	7996.7	5894.8	2755.6	535.2
82.5°	743.8	727.0	1203.5	2373.8	4693.7	5001.6	5629.8	4795.3	2097.8	484.1	248.7
85°	326.6	345.8	498.6	1082.6	2683.6	2723.7	3189.2	1869.4	307.4	231.3	169.1
87.5°	141.2	162.1	209.2	311.5	905.4	1045.4	1293.6	593.9	93.0	80.2	84.8
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°	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9	2696.9
2.5°	2700.4	2696.9	2691.1	2676.6	2652.8	2649.9	2647.6	2645.2	2640.6	2642.9	2656.3
5°	2706.2	2699.9	2678.9	2658.0	2637.1	2618.5	2595.8	2587.1	2575.5	2567.9	2581.9
7.5°	2726.0	2712.6	2681.8	2653.4	2596.4	2569.1	2540.0	2505.8	2481.4	2465.7	2479.6
10°	2759.1	2742.3	2703.9	2645.2	2578.4	2503.4	2452.3	2395.3	2348.9	2336.1	2348.9
12.5°	2813.2	2788.2	2743.4	2663.8	2545.3	2447.1	2350.0	2275.1	2200.1	2178.6	2185.0
15°	2900.9	2881.2	2812.6	2702.8	2545.9	2395.9	2251.8	2130.9	2032.7	1998.4	1996.1
17.5°	3041.5	3020.6	2941.6	2780.0	2566.8	2355.8	2155.3	1971.1	1822.4	1746.8	1734.6
20°	3243.2	3214.1	3094.4	2893.9	2612.1	2338.4	2065.9	1818.3	1587.0	1445.2	1423.7
22.5°	3467.5	3436.7	3260.0	2981.7	2644.6	2304.1	1980.4	1649.2	1344.7	1171.5	1147.1
25°	3746.4	3679.0	3418.7	3064.8	2637.1	2232.1	1841.5	1419.7	1089.6	939.7	923.4
27.5°	4021.9	3936.5	3580.2	3108.4	2604.0	2117.6	1638.2	1151.2	853.1	746.7	733.4
30°	4363.6	4198.5	3723.8	3128.7	2520.3	1946.1	1365.6	875.2	638.6	565.4	552.6
32.5°	4769.8	4519.9	3858.6	3106.1	2380.8	1684.6	1061.7	641.0	474.8	428.9	428.3
35°	5305.6	4913.9	4006.8	3031.7	2167.0	1402.8	744.4	438.2	370.2	354.5	357.4
37.5°	5932.0	5447.4	4157.3	2909.6	1925.2	1073.3	496.3	337.6	325.4	326.0	326.6
40°	6592.7	6036.6	4360.1	2738.2	1631.8	776.9	357.4	303.3	302.8	308.6	310.3
42.5°	7223.8	6609.0	4610.0	2509.8	1324.4	513.7	309.7	289.4	281.8	284.2	285.9
45°	7810.2	7100.0	4822.7	2287.3	994.9	366.7	303.9	273.1	261.5	260.3	261.5
47.5°	8282.6	7493.5	4952.2	2025.8	709.0	304.5	291.7	258.0	241.7	238.3	236.5
50°	8642.3	7785.8	4999.3	1729.4	479.4	290.6	275.4	240.6	220.8	221.4	221.4
52.5°	8993.3	8051.3	4944.7	1430.7	352.7	278.4	264.4	226.6	205.7	216.8	219.7
55°	9246.1	8162.9	4785.5	1107.6	294.0	263.2	252.2	210.4	195.8	213.8	219.7
57.5°	9393.7	8250.6	4493.2	799.6	269.6	248.7	236.5	195.3	181.9	186.5	189.4
60°	9485.5	8128.0	4106.7	546.8	256.9	237.1	220.8	185.4	167.4	156.3	154.6
62.5°	9435.0	7821.2	3597.7	376.0	243.5	224.3	207.5	176.1	152.3	137.7	136.6
65°	9022.9	7253.5	2762.0	304.5	235.4	218.5	199.3	167.4	141.8	127.8	126.1
67.5°	8258.8	6233.0	1613.2	270.8	231.9	212.7	192.9	159.2	136.0	120.9	118.5
70°	7003.0	4688.4	540.4	241.7	231.3	212.1	187.7	153.4	129.6	113.9	111.6
72.5°	5052.2	2828.9	263.2	212.7	216.2	203.4	183.6	148.8	125.5	105.8	101.7
75°	2871.3	921.1	237.7	183.6	201.1	194.1	181.3	149.3	127.3	95.9	91.2
77.5°	817.0	269.1	229.5	156.3	190.0	200.5	169.7	134.8	130.2	88.9	83.1
80°	276.0	239.4	221.4	121.5	153.4	165.6	147.0	118.5	131.3	80.8	75.0
82.5°	221.4	240.6	186.0	97.0	116.8	125.5	116.8	106.3	106.3	72.1	67.4
85°	177.2	223.1	118.0	77.3	87.2	96.5	82.5	79.6	74.4	60.4	58.7
87.5°	102.9	69.7	48.8	39.5	36.6	37.2	32.0	38.4	47.1	41.3	40.7
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)