

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: P591104

Luminaire Tested: **CTN-CA10-210-722-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591104
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-CA10-210-722-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15436 lumens
Efficiency: N/A
Efficacy: 72.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

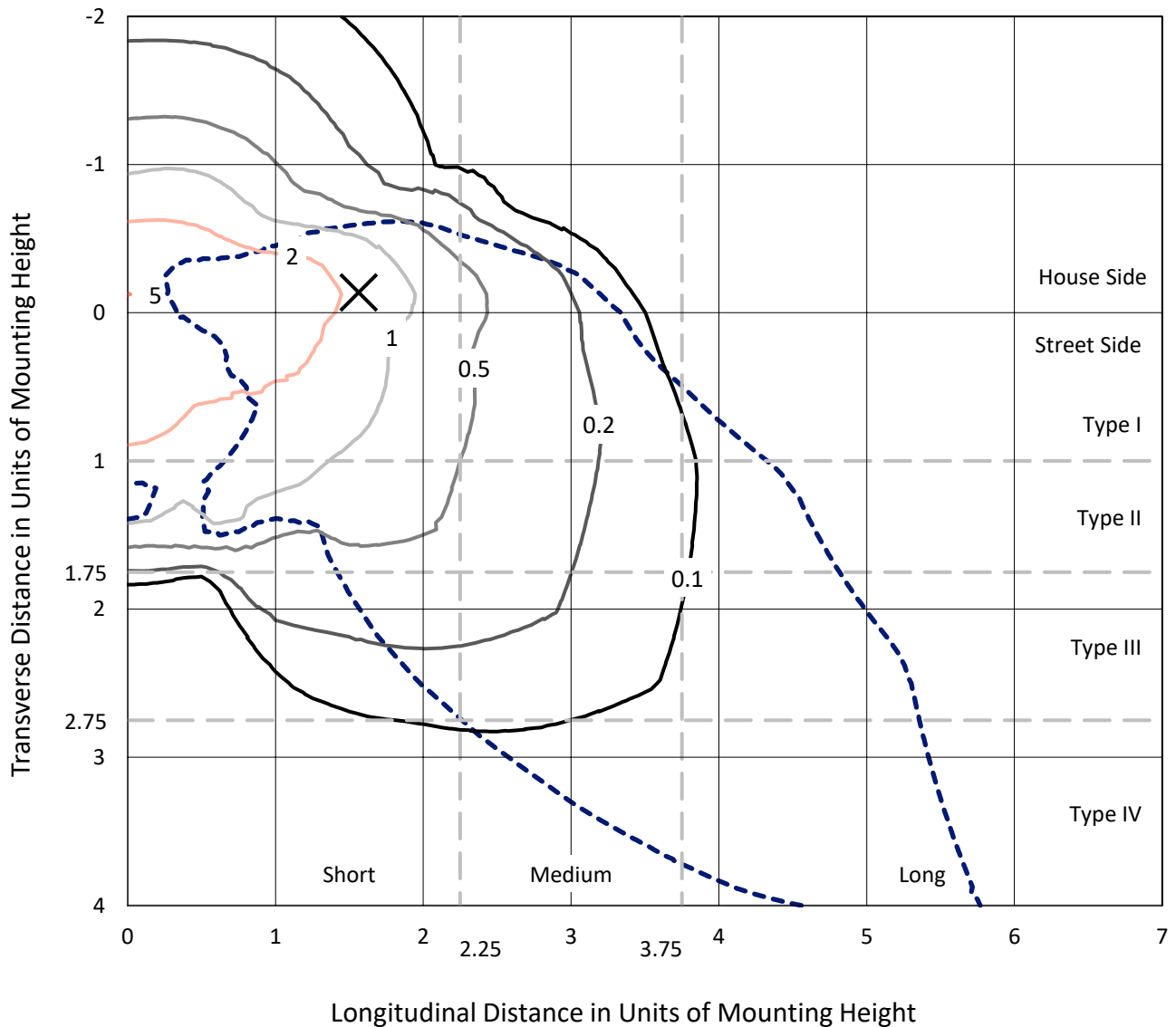
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

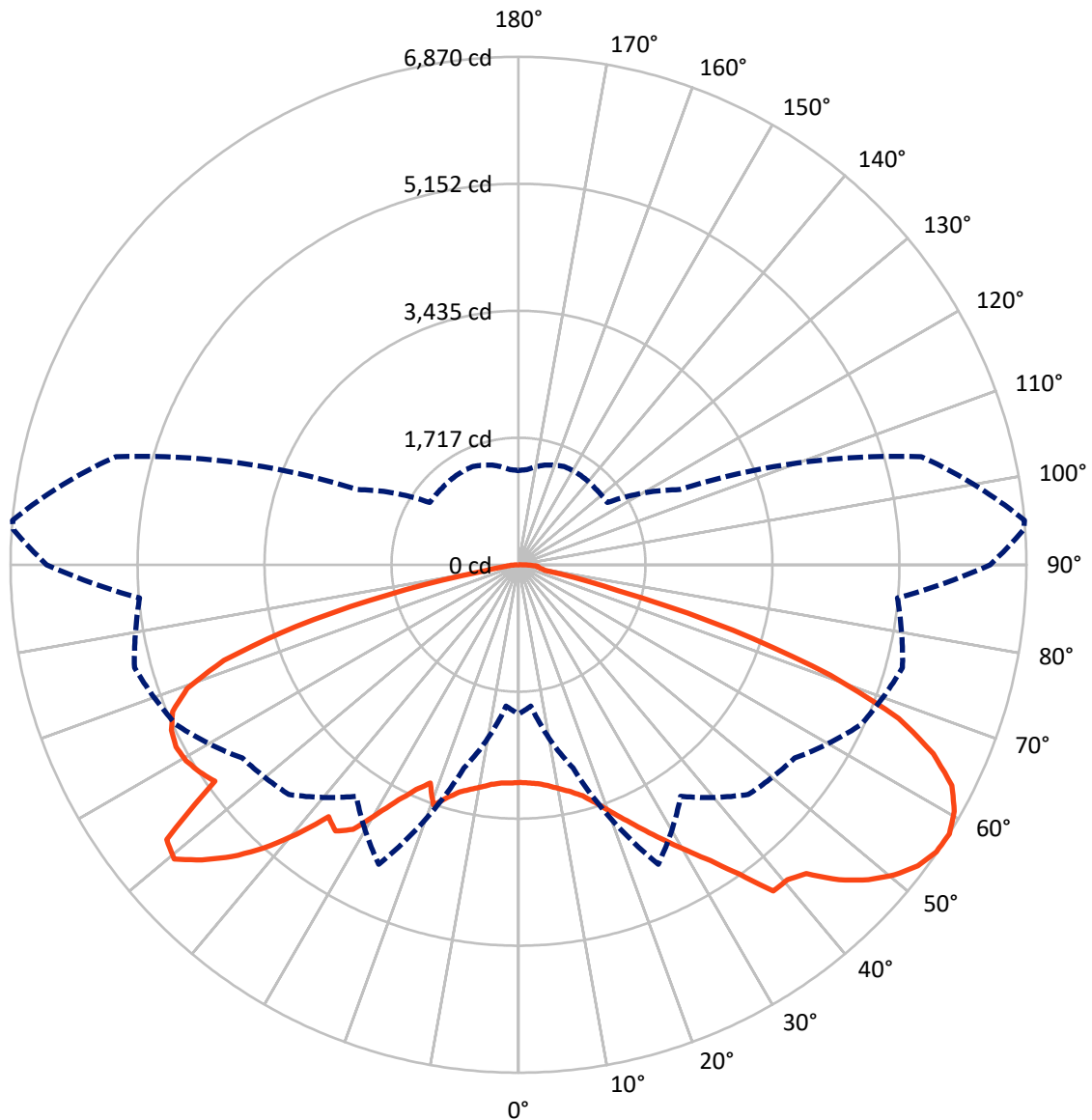
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 95-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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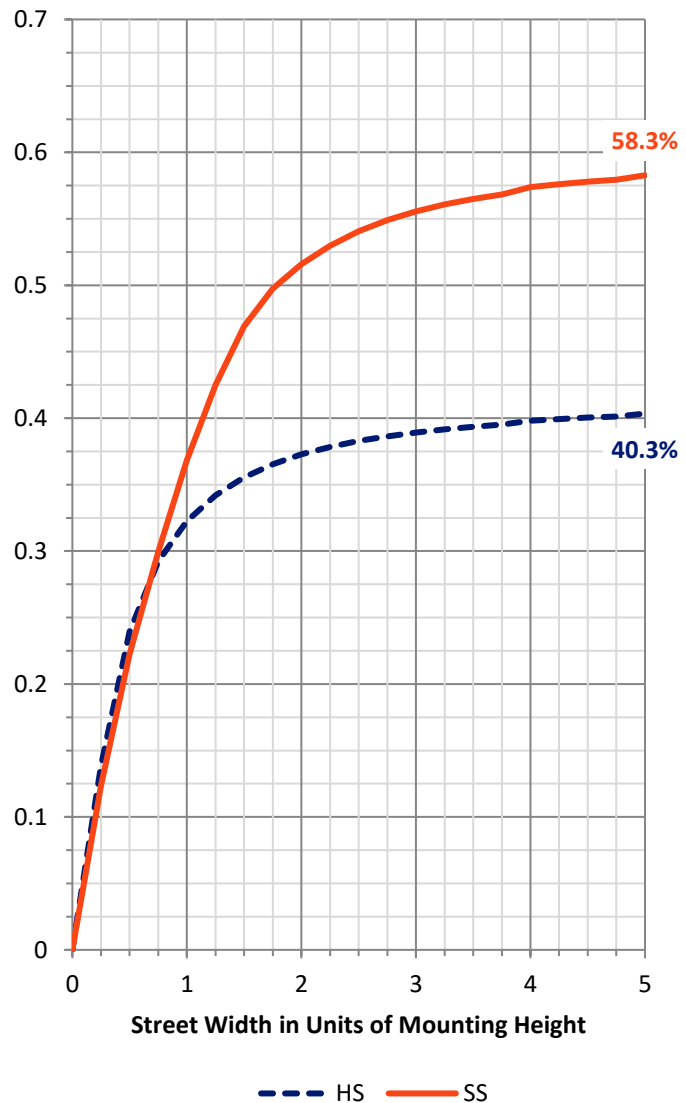
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6357.6	0.0	6357.6
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	9078.4	0.0	9078.4
	% Fixture	58.8	0.0	58.8
Total	Lumens	15436.0	0.0	15436.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	287.6	1.9
10°-20°	879.5	5.7
20°-30°	1389.7	9.0
30°-40°	1920.3	12.4
40°-50°	2589.3	16.8
50°-60°	3050.1	19.8
60°-70°	2724.9	17.7
70°-80°	2034.6	13.2
80°-90°	560.0	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°	15436.0	100.0
0°-180°	15436.0	100.0

Coefficient of Utilization



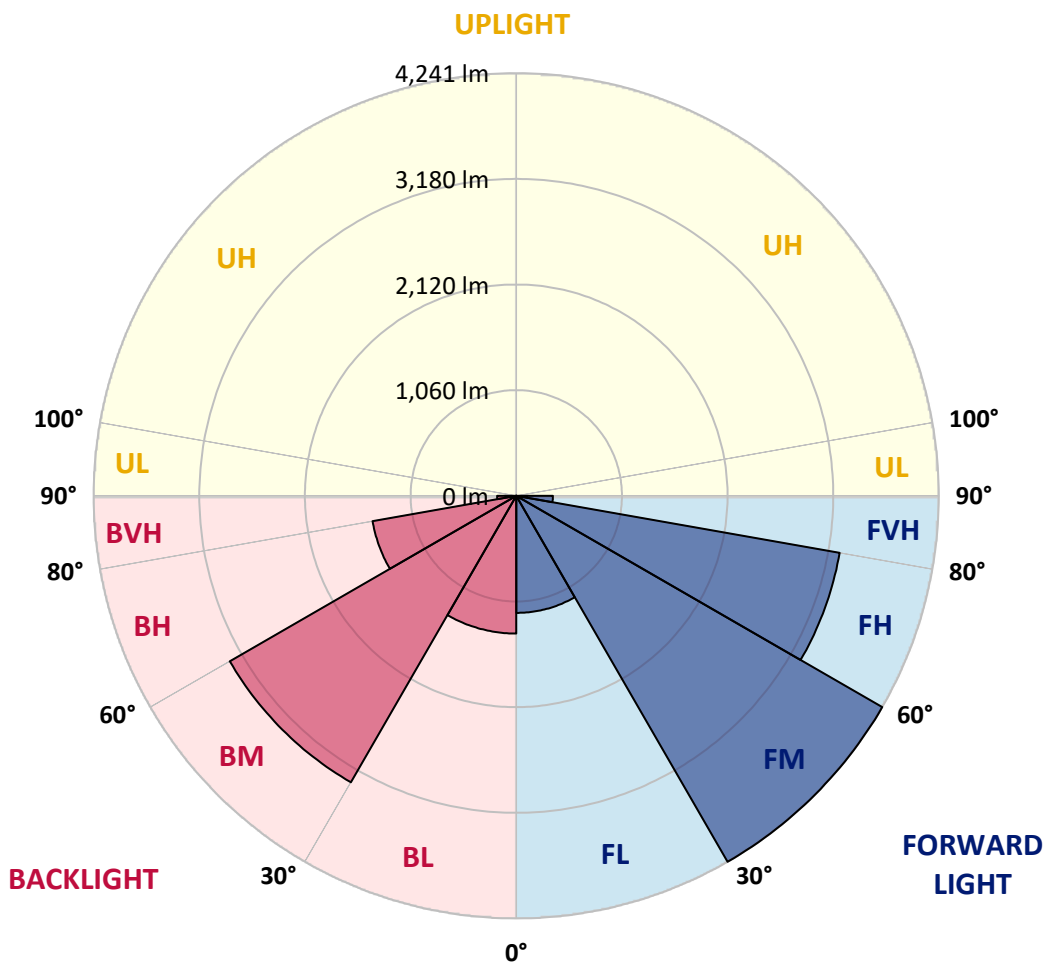
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1174.9	7.6			
FM	(30°-60°)	4240.6	27.5			
FH	(60°-80°)	3295.1	21.3			G2/5000
FVH	(80°-90°)	367.9	2.4			G3/500
BL	(0°-30°)	1381.9	9.0	B3/2500		
BM	(30°-60°)	3319.2	21.5	B3/5000		
BH	(60°-80°)	1464.3	9.5	B3/2500		G3/2500
BVH	(80°-90°)	192.2	1.2			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1
2.5°	2906.4	2887.9	2888.8	2914.3	2876.5	2903.8	2900.2	2942.4	2936.3	2953.0	2958.3
5°	2882.7	2866.8	2867.7	2900.2	2874.7	2899.4	2882.7	2921.3	2935.4	2960.9	2966.2
7.5°	2888.8	2874.7	2880.0	2910.8	2879.1	2903.8	2905.5	2941.6	2948.6	2992.5	2999.6
10°	2904.6	2889.7	2893.2	2917.8	2897.6	2941.6	2936.3	2983.8	2985.5	3047.0	3055.8
12.5°	2883.5	2873.0	2873.0	2903.8	2914.3	2958.3	2971.4	3020.7	3031.2	3102.4	3113.9
15°	2845.7	2828.1	2853.6	2899.4	2920.5	2987.3	3011.9	3085.7	3098.0	3171.9	3196.5
17.5°	2780.7	2771.0	2865.1	2879.1	2799.1	2850.1	2954.7	3161.3	3203.5	3290.6	3336.3
20°	2586.4	2477.4	2225.9	2271.7	2517.8	2701.6	2734.1	2833.4	3014.5	3447.9	3519.1
22.5°	1901.5	1995.6	2327.9	2355.2	2347.3	2499.4	2841.3	2937.2	3023.3	3182.4	3655.4
25°	1969.2	1964.0	2126.6	2472.1	2459.8	2488.8	2632.1	3098.0	3184.2	3342.4	3834.7
27.5°	2029.9	2034.3	2022.0	2347.3	2577.6	2607.5	2651.4	2969.7	3386.4	3567.5	4030.8
30°	2150.3	2131.9	2098.5	2097.6	2680.5	2724.4	2799.1	2905.5	3572.8	3860.2	4276.1
32.5°	2353.4	2332.3	2288.4	2218.9	2316.5	2845.7	2948.6	3084.0	3296.7	4219.8	4563.5
35°	2503.7	2488.8	2458.9	2410.6	2332.3	2906.4	3094.5	3273.9	3555.2	4369.3	4940.7
37.5°	2689.2	2668.1	2633.9	2574.1	2515.2	2491.4	3235.2	3489.2	3915.6	4268.2	5022.4
40°	2899.4	2887.0	2824.6	2747.3	2682.2	2616.3	3331.9	3770.6	4378.9	4721.8	4947.7
42.5°	3057.6	3047.9	3011.0	2948.6	2885.3	2843.1	2953.0	4116.1	4883.5	5160.5	5326.6
45°	3195.6	3185.1	3185.1	3168.4	3150.8	3154.3	3201.8	4364.0	5362.7	5535.0	5685.3
47.5°	3302.0	3283.5	3209.7	3224.6	3250.1	3326.6	3470.8	3794.3	5748.6	5853.2	5986.8
50°	3561.3	3533.2	3294.1	3349.5	3432.1	3555.2	3740.7	4147.7	5367.9	6124.9	6229.5
52.5°	3800.5	3670.3	2720.9	3533.2	3626.4	3808.4	4028.2	4530.1	4940.7	6037.0	6415.0
55°	3390.8	3258.0	2735.0	3870.8	3855.0	4084.4	4298.9	4844.0	5172.8	5042.7	6368.4
57.5°	2018.5	1918.3	2845.7	4470.4	3821.6	4393.0	4558.3	5112.1	5376.7	5143.8	6380.7
60°	1045.3	1098.9	1056.7	2645.3	3290.6	4528.4	4826.4	5370.6	5514.8	5219.4	6388.6
62.5°	140.7	101.1	42.2	1935.0	2338.5	3773.2	5163.1	5616.7	5615.9	5244.9	6333.2
65°	8.8	9.7	19.3	1925.3	2579.4	4476.5	5720.5	5815.4	5666.0	5200.0	6148.6
67.5°	3.5	4.4	17.6	1912.1	2783.3	4706.0	6376.3	5878.7	5671.2	5079.6	5743.3
70°	3.5	4.4	17.6	1781.1	2922.2	4746.4	6487.1	5855.0	5606.2	4783.3	4989.9
72.5°	4.4	5.3	15.8	1547.3	2837.8	4636.5	6306.0	5806.6	5373.2	4187.3	3874.3
75°	4.4	5.3	15.8	1250.1	2510.8	4396.5	6162.7	5402.2	4710.4	3128.8	2512.5
77.5°	3.5	4.4	15.8	975.8	2093.2	3896.3	5590.4	4697.2	3724.9	1820.7	992.5
80°	3.5	4.4	15.8	679.6	1594.7	3193.9	4553.9	3658.0	2095.0	520.4	279.6
82.5°	3.5	4.4	14.9	423.7	1127.9	2349.0	3112.1	1686.2	449.2	203.1	218.0
85°	3.5	3.5	11.4	207.5	720.9	1560.4	1550.8	282.2	178.5	131.9	165.3
87.5°	1.8	2.6	6.2	94.9	402.6	822.9	618.0	108.1	76.5	53.6	92.3
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):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1	2945.1
2.5°	2960.0	2955.6	2967.9	2999.6	2997.8	3021.6	3003.1	3039.1	3045.3	3037.4	3049.7
5°	2975.8	2977.6	3011.0	3044.4	3032.1	3070.8	3078.7	3132.3	3134.1	3127.0	3142.9
7.5°	3015.4	3021.6	3055.0	3094.5	3112.1	3144.6	3140.2	3209.7	3203.5	3200.0	3218.5
10°	3070.8	3082.2	3118.3	3180.7	3172.8	3222.9	3200.0	3246.6	3244.9	3237.8	3258.0
12.5°	3138.5	3149.9	3195.6	3255.4	3256.3	3259.8	3241.3	3265.1	3257.2	3240.5	3256.3
15°	3229.9	3243.1	3305.5	3349.5	3311.7	3302.0	3266.8	3253.6	3223.8	3179.8	3193.0
17.5°	3374.1	3384.6	3455.0	3479.6	3414.5	3375.8	3275.6	3200.9	3116.5	3055.0	3066.4
20°	3556.1	3565.7	3622.9	3616.7	3529.7	3434.7	3279.1	3152.5	2995.2	2874.7	2871.2
22.5°	3756.5	3762.7	3817.2	3762.7	3607.9	3469.9	3272.1	3077.8	2813.2	2657.6	2640.9
25°	3977.2	3982.4	3981.6	3860.2	3652.8	3449.7	3207.0	2953.0	2613.6	2447.5	2429.9
27.5°	4224.2	4225.1	4128.4	3935.8	3633.4	3375.0	3081.3	2728.8	2430.8	2286.6	2273.4
30°	4487.1	4485.3	4262.9	3942.9	3558.7	3233.4	2887.0	2516.9	2266.4	2138.0	2119.6
32.5°	4786.8	4771.9	4382.4	3918.3	3422.4	3030.3	2636.5	2339.4	2137.2	1990.3	1963.1
35°	5171.0	5134.1	4484.4	3833.0	3220.2	2756.1	2404.4	2184.6	2012.3	1862.9	1835.6
37.5°	5646.6	5599.1	4644.4	3712.5	2987.3	2529.2	2233.9	2080.0	1922.6	1752.1	1716.9
40°	5509.5	5600.9	4835.2	3582.4	2762.2	2348.1	2133.6	2029.9	1868.1	1679.1	1645.7
42.5°	5721.3	5709.9	5096.3	3428.6	2545.9	2206.6	2093.2	2015.0	1839.1	1647.5	1608.8
45°	6081.8	6079.2	5377.6	3279.1	2335.0	2093.2	2062.4	1974.5	1797.8	1607.9	1565.7
47.5°	6374.5	6365.7	5646.6	3114.7	2139.8	2004.4	2000.0	1892.8	1724.0	1547.3	1508.6
50°	6578.5	6591.7	5796.1	2956.5	1955.2	1913.0	1896.3	1777.6	1620.2	1474.3	1444.4
52.5°	6739.4	6764.0	5861.1	2941.6	1793.4	1795.2	1766.2	1658.0	1535.0	1417.1	1385.5
55°	6818.5	6856.3	5794.3	2844.8	1635.2	1645.7	1617.6	1549.0	1476.1	1367.9	1345.1
57.5°	6851.0	6869.5	5639.6	2406.2	1465.5	1463.7	1472.5	1465.5	1396.9	1290.6	1273.9
60°	6795.6	6771.0	5302.9	1828.6	1293.2	1301.1	1357.4	1350.3	1289.7	1208.8	1185.9
62.5°	6625.1	6576.7	4686.6	1352.1	1155.2	1219.3	1279.1	1258.9	1185.1	1111.2	1093.6
65°	6299.8	6163.5	3734.5	1055.8	1089.2	1177.1	1232.5	1202.6	1118.2	1031.2	1020.7
67.5°	5716.1	5545.5	2451.0	946.8	1061.1	1141.1	1199.1	1149.0	1067.3	973.2	958.2
70°	4664.6	4477.4	1160.4	882.6	997.8	1076.9	1119.1	1068.1	984.6	890.6	880.0
72.5°	3252.8	3040.0	625.1	813.2	924.8	993.4	1021.5	959.1	886.2	844.8	842.2
75°	1621.1	1385.5	567.0	742.0	830.8	890.6	938.0	894.9	830.8	755.2	735.8
77.5°	431.7	371.0	533.6	662.9	756.0	823.7	851.0	806.2	732.3	668.1	656.7
80°	299.8	305.9	498.5	549.5	659.3	720.0	745.5	688.4	651.4	588.1	570.6
82.5°	254.1	267.3	402.6	414.1	524.0	589.0	633.8	624.2	571.4	520.4	513.4
85°	238.2	253.2	257.6	286.6	375.4	451.9	529.2	533.6	498.5	433.4	412.3
87.5°	137.1	135.4	124.0	145.9	205.7	250.6	303.3	289.2	235.6	204.0	199.6
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)