

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: P510680

Luminaire Tested: **CTN-CA6-230-750-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510680
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-CA6-230-750-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31048 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

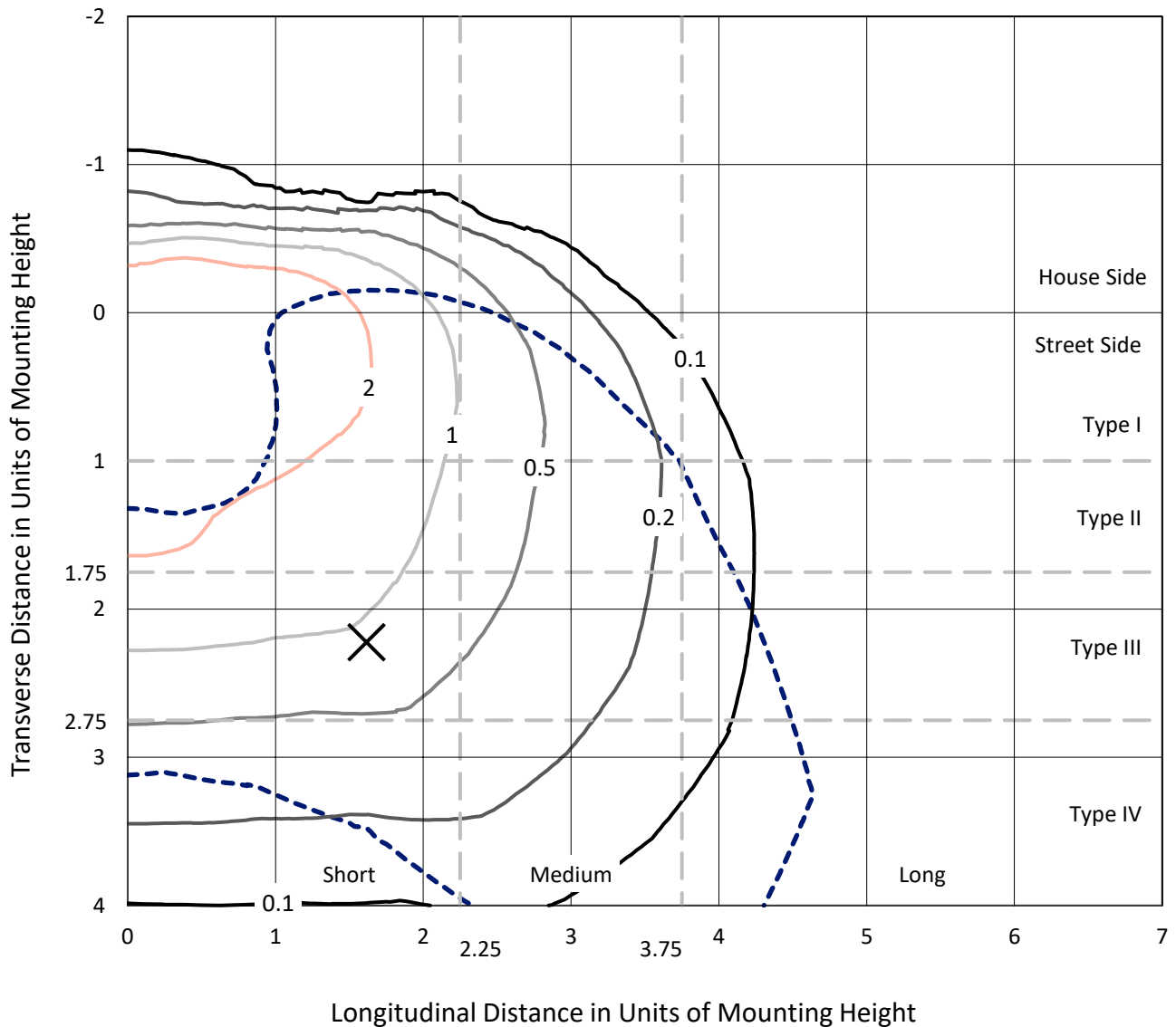
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

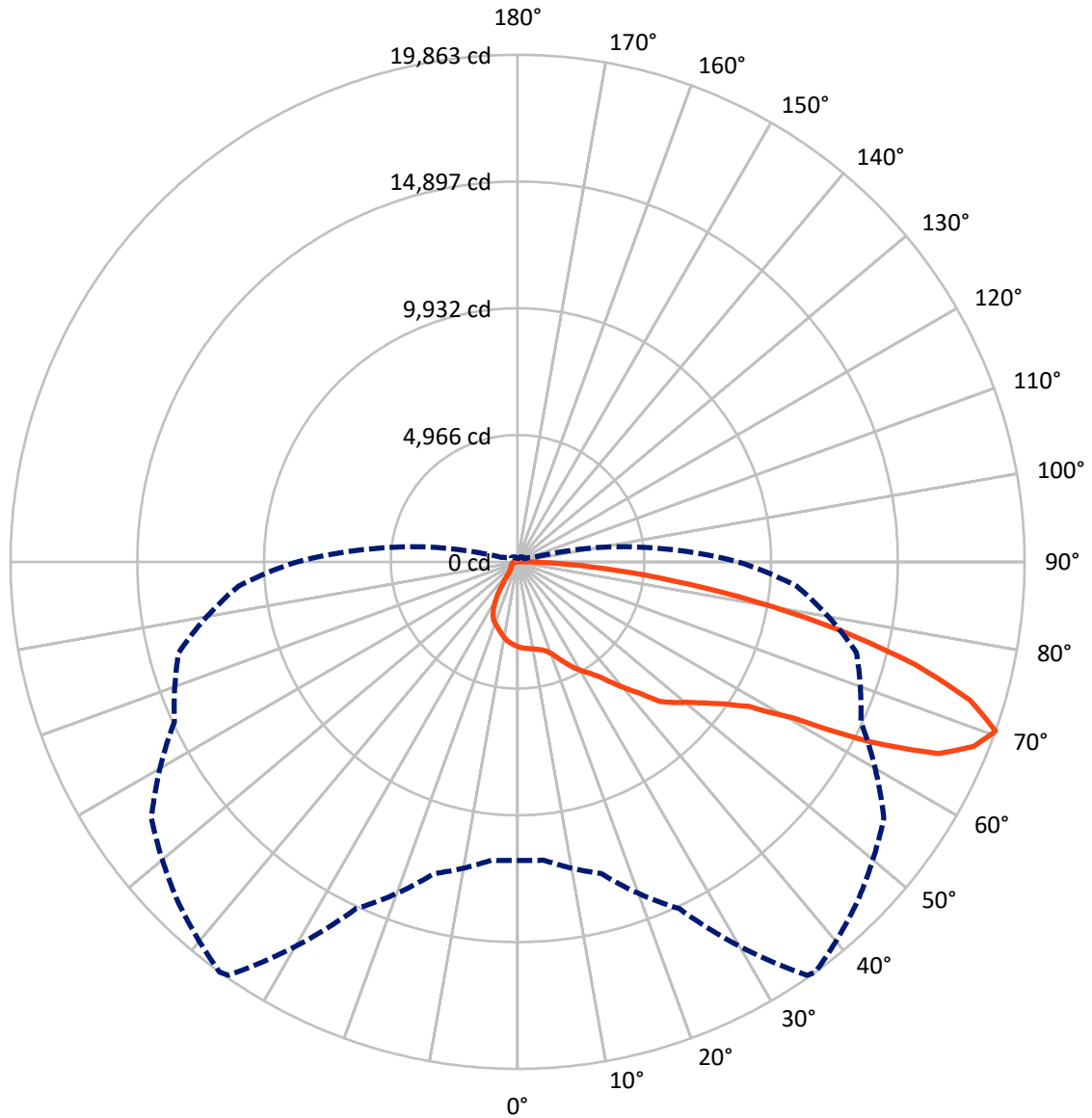
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.2 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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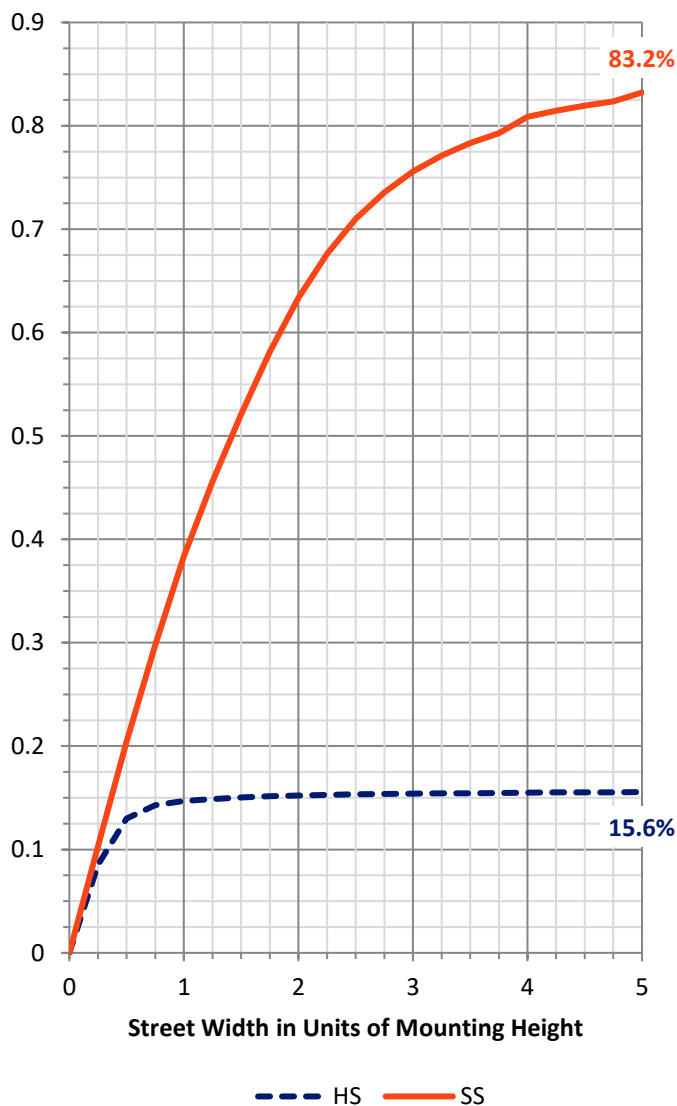
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4899.6	0.0	4899.6
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	26148.4	0.0	26148.4
	% Fixture	84.2	0.0	84.2
Total	Lumens	31048.0	0.0	31048.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.5	1.0
10°-20°	938.2	3.0
20°-30°	1687.2	5.4
30°-40°	2670.0	8.6
40°-50°	4172.7	13.4
50°-60°	5992.0	19.3
60°-70°	8127.6	26.2
70°-80°	6015.3	19.4
80°-90°	1129.5	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°	31048.0	100.0
0°-180°	31048.0	100.0

Coefficient of Utilization

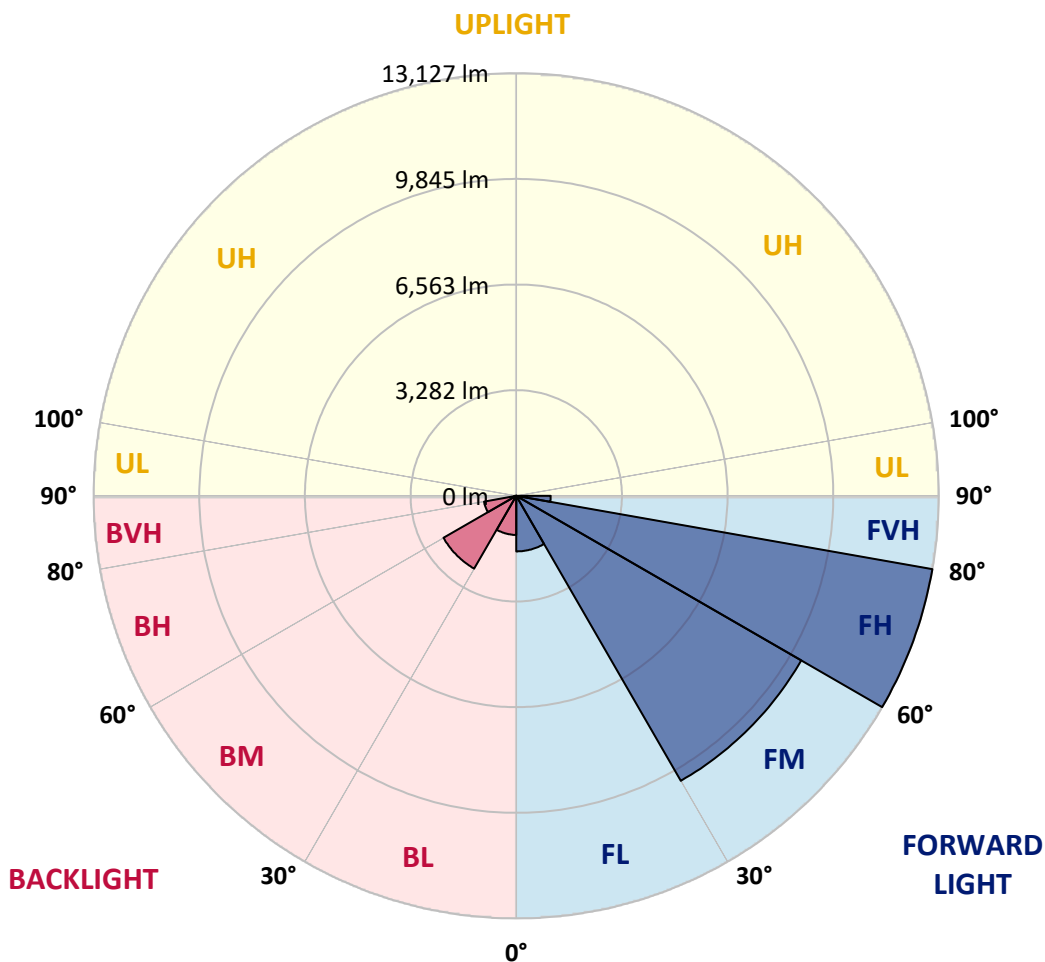


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1726.9	5.6			
FM (30°-60°)	10223.8	32.9			
FH (60°-80°)	13126.8	42.3			G5
FVH (80°-90°)	1070.9	3.4			G5
BL (0°-30°)	1214.1	3.9	B3/2500		
BM (30°-60°)	2610.9	8.4	B3/5000		
BH (60°-80°)	1016.0	3.3	B3/2500		G3/2500
BVH (80°-90°)	58.6	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°	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6
2.5°	3394.0	3386.8	3381.1	3383.3	3379.0	3381.8	3375.4	3367.5	3348.9	3341.0	3337.4
5°	3424.1	3422.0	3416.2	3411.9	3404.1	3401.2	3394.0	3400.5	3390.4	3364.6	3349.6
7.5°	3442.0	3441.3	3434.9	3425.6	3429.9	3433.4	3440.6	3430.6	3417.7	3405.5	3374.7
10°	3449.9	3449.9	3442.0	3447.1	3469.3	3471.4	3475.0	3481.5	3469.3	3451.4	3420.5
12.5°	3470.0	3468.6	3471.4	3487.9	3510.9	3515.9	3533.8	3533.8	3535.2	3524.5	3488.6
15°	3520.2	3520.2	3526.6	3541.7	3581.1	3584.0	3610.5	3634.1	3637.0	3621.2	3594.0
17.5°	3636.3	3633.4	3629.8	3639.2	3681.5	3682.9	3728.8	3758.9	3766.7	3784.0	3779.7
20°	3857.1	3854.2	3853.5	3854.2	3851.3	3847.0	3892.2	3924.4	3964.6	3994.7	4009.7
22.5°	4173.2	4166.7	4166.7	4131.6	4104.4	4108.7	4115.8	4133.7	4186.8	4239.8	4296.5
25°	4513.6	4509.3	4512.9	4423.3	4386.8	4401.1	4391.8	4419.7	4489.3	4535.2	4595.4
27.5°	4791.8	4798.2	4778.1	4708.6	4685.0	4695.7	4674.2	4754.5	4831.2	4911.5	5002.5
30°	5138.0	5103.6	5054.1	4969.5	4960.9	4962.4	4960.9	5090.0	5249.1	5363.8	5489.9
32.5°	5590.3	5596.0	5484.9	5285.6	5212.5	5202.5	5231.2	5420.4	5635.4	5889.9	6056.2
35°	6047.6	6056.9	5975.9	5768.0	5559.5	5527.9	5485.6	5731.5	6041.9	6552.2	6803.1
37.5°	6532.9	6565.8	6469.8	6284.1	6036.8	6007.4	5807.5	6049.0	6507.8	7336.4	7665.4
40°	7182.3	7147.1	7031.0	6795.2	6565.1	6517.8	6285.6	6412.4	7107.0	8318.4	8557.1
42.5°	7661.1	7651.1	7552.9	7319.9	7088.4	7050.4	6863.3	7000.9	7861.8	9314.0	9420.8
45°	8041.0	8102.6	8100.5	7954.3	7823.8	7802.3	7691.9	7894.8	8774.3	10253.7	10201.4
47.5°	8378.6	8416.6	8355.7	8291.9	8230.9	8238.1	8319.8	8737.0	9706.8	11074.5	10842.9
50°	8931.2	8882.5	8609.4	8560.7	8646.7	8650.3	8899.0	9541.2	10734.0	11784.1	11386.3
52.5°	9668.1	9615.1	9053.8	8970.7	9174.2	9189.3	9602.9	10342.6	11793.4	12462.2	11926.7
55°	10764.8	10641.5	10040.1	9667.4	9760.6	9821.5	10322.5	11113.2	12622.7	13060.0	12336.0
57.5°	12111.7	12201.3	11893.0	11050.8	10663.0	10686.0	11146.1	11850.7	13354.6	13583.2	12575.4
60°	13535.2	13513.7	13642.7	13287.9	12545.3	12422.0	12187.6	12603.4	13921.6	14024.1	12822.0
62.5°	14315.1	14440.5	14870.6	14941.6	15611.8	15546.5	13948.8	13536.6	14576.7	14300.7	12889.4
65°	14310.8	14365.3	15165.9	16046.1	18139.9	18121.3	17378.7	14886.4	15064.8	14448.4	12754.6
67.5°	13386.1	13470.7	14406.8	16126.4	19308.3	19286.0	18772.8	16783.7	15218.2	14270.6	12126.0
70°	11700.2	11728.9	12642.1	14996.0	19777.8	19863.1	18820.8	17512.0	14836.9	13742.4	10979.8
72.5°	9652.3	9592.8	10486.0	12806.2	18582.2	18531.3	18025.2	16642.5	14194.7	12716.6	8954.9
75°	7107.0	7272.6	8074.0	10282.4	15909.9	16096.3	16320.7	15312.1	12607.0	10480.2	6192.4
77.5°	4692.8	4903.6	5713.6	7709.8	12595.5	12885.1	13466.4	13023.4	10255.9	7517.7	2948.9
80°	2424.9	2584.0	3313.0	5115.8	9029.4	9447.3	10513.2	9863.8	7271.2	3399.0	660.2
82.5°	917.5	896.7	1484.5	2928.1	5789.5	6169.4	6944.3	5915.0	2587.6	597.1	306.8
85°	402.8	426.5	615.0	1335.4	3310.2	3359.6	3933.8	2305.9	379.2	285.3	208.6
87.5°	174.2	200.0	258.0	384.2	1116.8	1289.5	1595.6	732.6	114.7	98.9	104.7
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°	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6	3326.6
2.5°	3330.9	3326.6	3319.5	3301.6	3272.2	3268.6	3265.7	3262.8	3257.1	3260.0	3276.5
5°	3338.1	3330.2	3304.4	3278.6	3252.8	3229.9	3201.9	3191.2	3176.8	3167.5	3184.7
7.5°	3362.5	3346.0	3308.0	3272.9	3202.6	3168.9	3133.1	3090.8	3060.7	3041.4	3058.6
10°	3403.3	3382.5	3335.2	3262.8	3180.4	3087.9	3024.9	2954.6	2897.3	2881.5	2897.3
12.5°	3470.0	3439.2	3384.0	3285.8	3139.6	3018.4	2898.7	2806.2	2713.8	2687.3	2695.1
15°	3578.2	3553.9	3469.3	3333.8	3140.3	2955.3	2777.6	2628.5	2507.3	2465.1	2462.2
17.5°	3751.7	3725.9	3628.4	3429.1	3166.1	2905.9	2658.6	2431.4	2247.9	2154.7	2139.6
20°	4000.4	3964.6	3816.9	3569.6	3222.0	2884.4	2548.2	2242.8	1957.6	1782.7	1756.1
22.5°	4277.1	4239.1	4021.2	3677.9	3262.1	2842.1	2442.8	2034.3	1658.7	1445.1	1415.0
25°	4621.2	4538.0	4216.9	3780.4	3252.8	2753.2	2271.5	1751.1	1344.0	1159.1	1139.0
27.5°	4960.9	4855.6	4416.2	3834.1	3212.0	2612.0	2020.6	1420.0	1052.3	921.1	904.6
30°	5382.4	5178.8	4593.2	3859.2	3108.7	2400.5	1684.5	1079.5	787.8	697.4	681.7
32.5°	5883.4	5575.2	4759.5	3831.3	2936.7	2078.0	1309.6	790.6	585.6	529.0	528.3
35°	6544.3	6061.2	4942.3	3739.5	2672.9	1730.3	918.2	540.5	456.6	437.2	440.8
37.5°	7317.0	6719.2	5127.9	3589.0	2374.7	1323.9	612.1	416.5	401.4	402.1	402.8
40°	8132.0	7446.1	5378.1	3377.5	2012.8	958.4	440.8	374.2	373.4	380.6	382.8
42.5°	8910.5	8152.1	5686.3	3095.8	1633.6	633.6	382.1	357.0	347.6	350.5	352.7
45°	9633.7	8757.8	5948.7	2821.3	1227.2	452.3	374.9	336.9	322.6	321.1	322.6
47.5°	10216.5	9243.1	6108.5	2498.7	874.5	375.6	359.8	318.3	298.2	293.9	291.7
50°	10660.2	9603.6	6166.6	2133.2	591.4	358.4	339.8	296.8	272.4	273.1	273.1
52.5°	11093.1	9931.2	6099.2	1764.7	435.1	343.3	326.1	279.5	253.7	267.4	270.9
55°	11404.9	10068.8	5902.8	1366.2	362.7	324.7	311.1	259.5	241.6	263.8	270.9
57.5°	11587.0	10177.0	5542.2	986.3	332.6	306.8	291.7	240.8	224.4	230.1	233.7
60°	11700.2	10025.8	5065.6	674.5	316.8	292.5	272.4	228.7	206.4	192.8	190.7
62.5°	11637.9	9647.3	4437.7	463.8	300.3	276.7	255.9	217.2	187.8	169.9	168.4
65°	11129.7	8947.0	3406.9	375.6	290.3	269.5	245.9	206.4	174.9	157.7	155.5
67.5°	10187.1	7688.3	1989.8	334.0	286.0	262.3	238.0	196.4	167.7	149.1	146.2
70°	8638.1	5783.1	666.6	298.2	285.3	261.6	231.5	189.2	159.8	140.5	137.6
72.5°	6231.8	3489.4	324.7	262.3	266.6	250.9	226.5	183.5	154.8	130.5	125.4
75°	3541.7	1136.1	293.2	226.5	248.0	239.4	223.6	184.2	157.0	118.3	112.5
77.5°	1007.8	331.9	283.1	192.8	234.4	247.3	209.3	166.3	160.6	109.7	102.5
80°	340.5	295.3	273.1	149.8	189.2	204.3	181.3	146.2	162.0	99.6	92.5
82.5°	273.1	296.8	229.4	119.7	144.1	154.8	144.1	131.2	131.2	88.9	83.1
85°	218.6	275.2	145.5	95.3	107.5	119.0	101.8	98.2	91.7	74.5	72.4
87.5°	126.9	86.0	60.2	48.7	45.2	45.9	39.4	47.3	58.1	50.9	50.2
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)