

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: P510660

Luminaire Tested: **CTN-CA6-230-730-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510660  
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-CA6-230-730-U-T4-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (6) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29937 lumens  
Efficiency: N/A  
Efficacy: 131.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

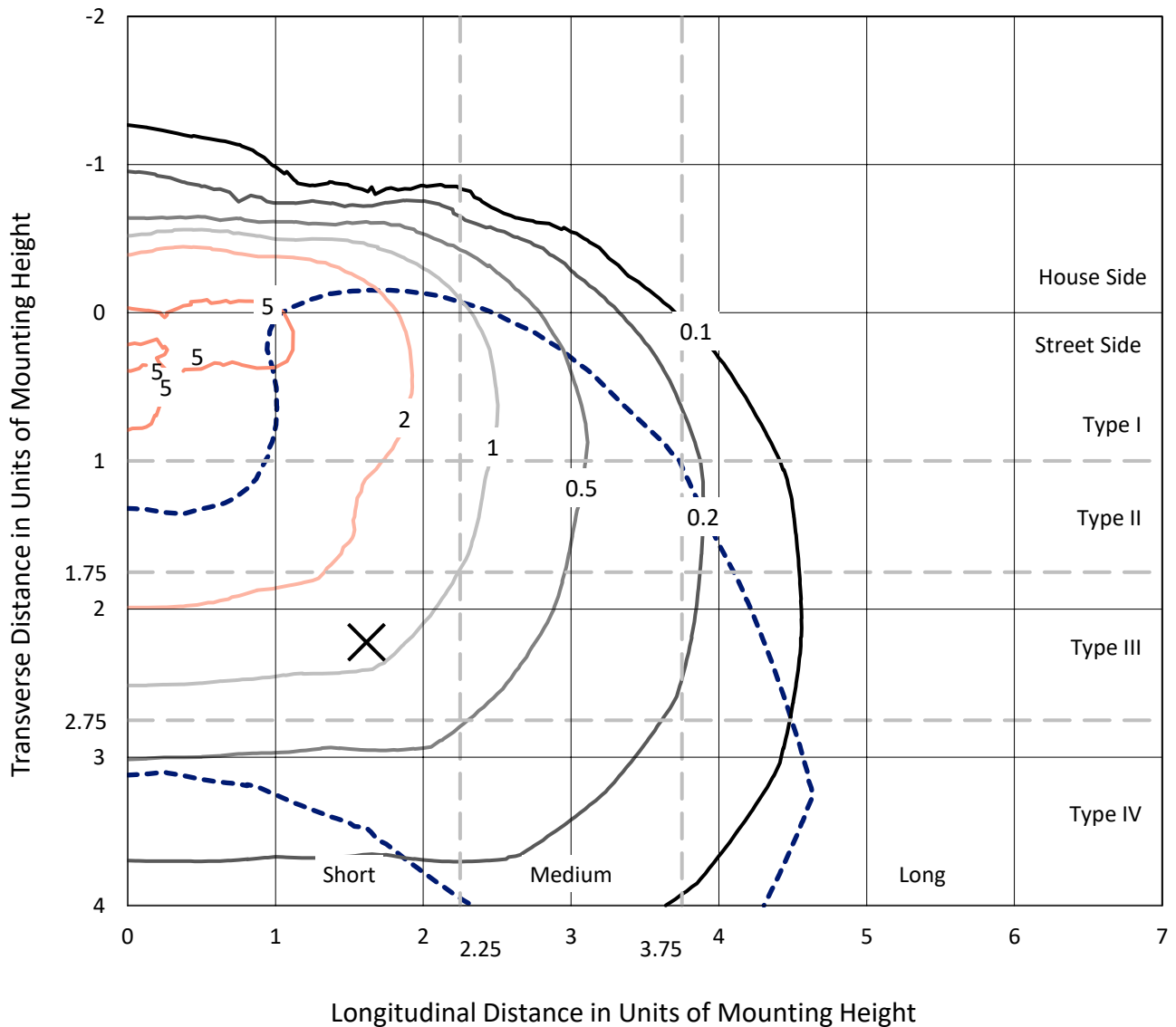
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

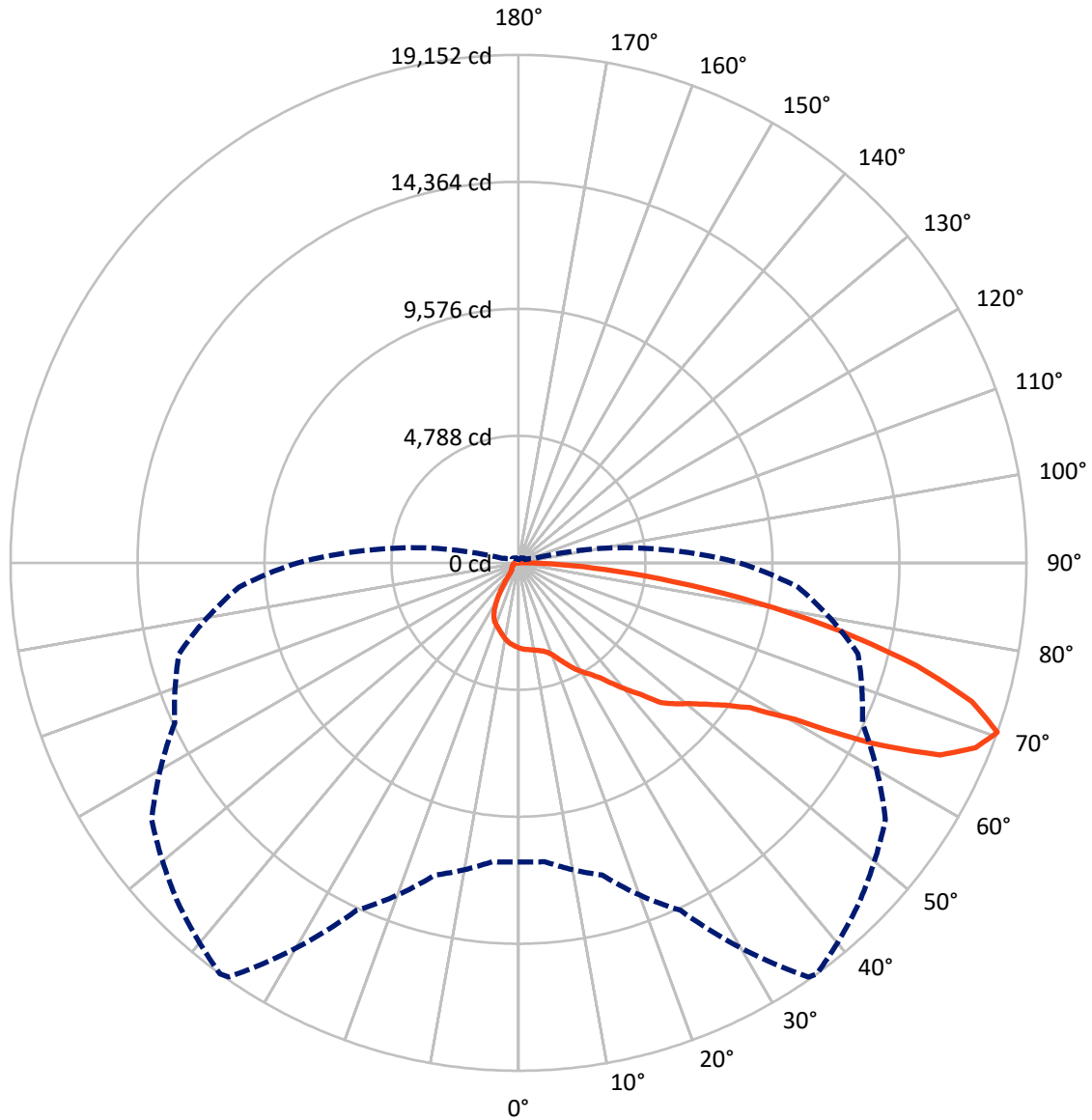
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 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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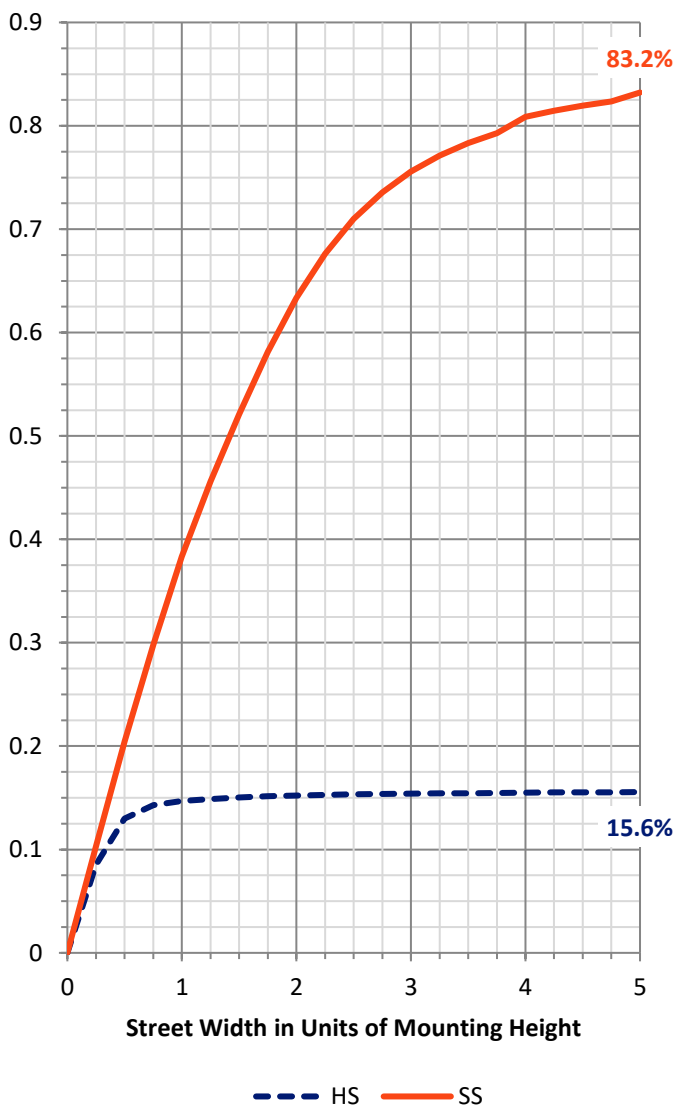
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4724.3	0.0	4724.3
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	25212.7	0.0	25212.7
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	29937.0	0.0	29937.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	304.2	1.0
10°-20°	904.7	3.0
20°-30°	1626.9	5.4
30°-40°	2574.5	8.6
40°-50°	4023.4	13.4
50°-60°	5777.6	19.3
60°-70°	7836.7	26.2
70°-80°	5800.0	19.4
80°-90°	1089.1	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°	29937.0	100.0
0°-180°	29937.0	100.0

**Coefficient of Utilization**



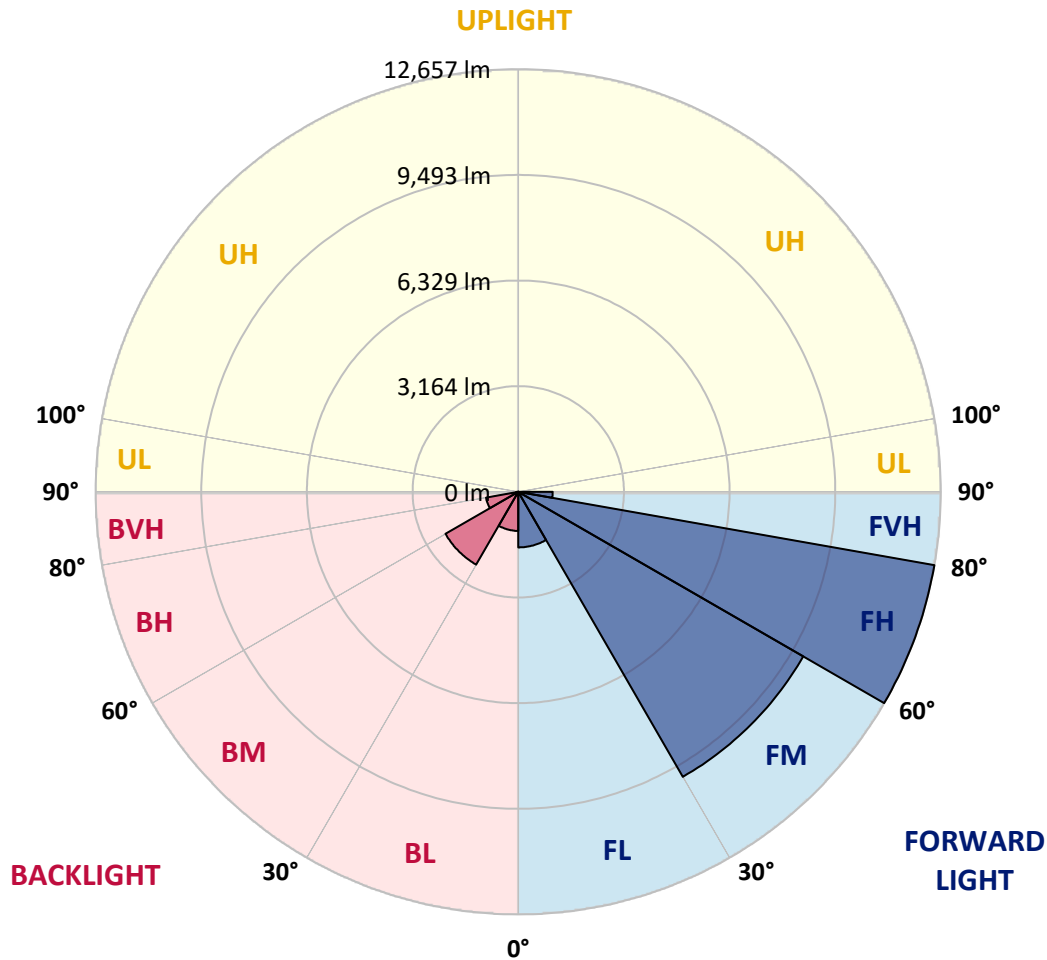
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1665.1	5.6			
FM (30°-60°)	9858.0	32.9			
FH (60°-80°)	12657.1	42.3			G5
FVH (80°-90°)	1032.6	3.4			G5
BL (0°-30°)	1170.7	3.9	B3/2500		
BM (30°-60°)	2517.5	8.4	B3/5000		
BH (60°-80°)	979.7	3.3	B2/1000		G2/1000
BVH (80°-90°)	56.5	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: 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°	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6
2.5°	3272.6	3265.7	3260.1	3262.2	3258.1	3260.8	3254.6	3247.0	3229.0	3221.4	3218.0
5°	3301.6	3299.5	3294.0	3289.8	3282.2	3279.5	3272.6	3278.8	3269.1	3244.2	3229.7
7.5°	3318.9	3318.2	3312.0	3303.0	3307.1	3310.6	3317.5	3307.8	3295.4	3283.6	3253.9
10°	3326.5	3326.5	3318.9	3323.7	3345.1	3347.2	3350.7	3356.9	3345.1	3327.9	3298.1
12.5°	3345.8	3344.4	3347.2	3363.1	3385.2	3390.1	3407.3	3407.3	3408.7	3398.4	3363.8
15°	3394.2	3394.2	3400.4	3414.9	3453.0	3455.7	3481.3	3504.1	3506.9	3491.7	3465.4
17.5°	3506.2	3503.4	3500.0	3508.9	3549.7	3551.1	3595.3	3624.4	3632.0	3648.6	3644.4
20°	3719.0	3716.3	3715.6	3716.3	3713.5	3709.4	3752.9	3784.0	3822.7	3851.7	3866.3
22.5°	4023.8	4017.6	4017.6	3983.8	3957.5	3961.6	3968.6	3985.8	4037.0	4088.1	4142.7
25°	4352.1	4348.0	4351.4	4265.1	4229.8	4243.6	4234.6	4261.6	4328.6	4372.9	4430.9
27.5°	4620.3	4626.5	4607.2	4540.1	4517.3	4527.7	4507.0	4584.4	4658.3	4735.7	4823.5
30°	4954.1	4920.9	4873.3	4791.7	4783.4	4784.8	4783.4	4907.8	5061.2	5171.8	5293.5
32.5°	5390.2	5395.8	5288.6	5096.5	5026.0	5016.3	5044.0	5226.4	5433.8	5679.1	5839.5
35°	5831.2	5840.2	5762.1	5561.6	5360.5	5330.1	5289.3	5526.4	5825.7	6317.7	6559.6
37.5°	6299.1	6330.9	6238.3	6059.3	5820.8	5792.5	5599.7	5832.6	6274.9	7073.9	7391.1
40°	6925.3	6891.4	6779.4	6552.0	6330.2	6284.6	6060.6	6183.0	6852.7	8020.7	8250.9
42.5°	7386.9	7377.3	7282.6	7058.0	6834.7	6798.1	6617.7	6750.4	7580.5	8980.7	9083.7
45°	7753.3	7812.7	7810.6	7669.6	7543.8	7523.1	7416.7	7612.3	8460.3	9886.8	9836.4
47.5°	8078.8	8115.4	8056.7	7995.2	7936.4	7943.3	8022.1	8424.4	9359.5	10678.2	10454.9
50°	8611.7	8564.7	8301.3	8254.3	8337.3	8340.7	8580.6	9199.8	10349.9	11362.4	10978.8
52.5°	9322.2	9271.0	8729.8	8649.7	8846.0	8860.5	9259.3	9972.5	11371.4	12016.2	11499.9
55°	10379.6	10260.7	9680.9	9321.5	9411.3	9470.1	9953.2	10715.5	12171.0	12592.6	11894.6
57.5°	11678.3	11764.7	11467.5	10655.4	10281.5	10303.6	10747.3	11426.7	12876.7	13097.2	12125.4
60°	13050.9	13030.1	13154.5	12812.4	12096.4	11977.5	11751.5	12152.4	13423.4	13522.2	12363.2
62.5°	13802.8	13923.8	14338.5	14406.9	15053.1	14990.2	13449.7	13052.3	14055.1	13789.0	12428.2
65°	13798.7	13851.2	14623.2	15472.0	17490.8	17472.8	16756.8	14353.7	14525.8	13931.4	12298.2
67.5°	12907.1	12988.7	13891.3	15549.4	18617.4	18595.9	18101.1	16183.1	14673.7	13760.0	11692.1
70°	11281.5	11309.2	12189.7	14459.4	19070.1	19152.3	18147.4	16885.3	14306.0	13250.6	10586.9
72.5°	9306.9	9249.6	10110.7	12348.0	17917.2	17868.2	17380.2	16047.0	13686.7	12261.6	8634.5
75°	6852.7	7012.3	7785.0	9914.5	15340.6	15520.3	15736.7	14764.2	12155.8	10105.2	5970.8
77.5°	4524.9	4728.1	5509.1	7433.9	12144.8	12424.0	12984.5	12557.4	9888.9	7248.7	2843.4
80°	2338.1	2491.6	3194.5	4932.7	8706.3	9109.3	10137.0	9510.8	7011.0	3277.4	636.5
82.5°	884.7	864.6	1431.4	2823.3	5582.4	5948.7	6695.8	5703.3	2495.0	575.7	295.8
85°	388.4	411.2	593.0	1287.6	3191.7	3239.4	3793.0	2223.4	365.6	275.1	201.1
87.5°	167.9	192.8	248.8	370.5	1076.8	1243.4	1538.5	706.3	110.6	95.4	100.9
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°	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6	3207.6
2.5°	3211.7	3207.6	3200.7	3183.4	3155.1	3151.6	3148.9	3146.1	3140.6	3143.3	3159.2
5°	3218.7	3211.1	3186.2	3161.3	3136.4	3114.3	3087.3	3077.0	3063.2	3054.2	3070.8
7.5°	3242.2	3226.3	3189.6	3155.8	3088.0	3055.5	3021.0	2980.2	2951.2	2932.5	2949.1
10°	3281.6	3261.5	3215.9	3146.1	3066.6	2977.4	2916.6	2848.9	2793.6	2778.4	2793.6
12.5°	3345.8	3316.1	3262.9	3168.2	3027.2	2910.4	2795.0	2705.8	2616.7	2591.1	2598.7
15°	3450.2	3426.7	3345.1	3214.5	3027.9	2849.6	2678.2	2534.4	2417.6	2376.8	2374.1
17.5°	3617.4	3592.6	3498.6	3306.4	3052.8	2801.9	2563.5	2344.4	2167.4	2077.6	2063.1
20°	3857.3	3822.7	3680.3	3441.9	3106.7	2781.2	2457.0	2162.6	1887.5	1718.9	1693.3
22.5°	4124.1	4087.4	3877.3	3546.3	3145.4	2740.4	2355.4	1961.5	1599.3	1393.3	1364.3
25°	4455.8	4375.6	4066.0	3645.1	3136.4	2654.7	2190.2	1688.5	1295.9	1117.6	1098.2
27.5°	4783.4	4681.8	4258.1	3696.9	3097.0	2518.5	1948.3	1369.2	1014.6	888.1	872.2
30°	5189.8	4993.5	4428.9	3721.1	2997.5	2314.6	1624.2	1040.9	759.6	672.5	657.3
32.5°	5672.9	5375.7	4589.2	3694.2	2831.6	2003.6	1262.7	762.3	564.7	510.1	509.4
35°	6310.1	5844.3	4765.4	3605.7	2577.3	1668.4	885.4	521.1	440.3	421.6	425.1
37.5°	7055.2	6478.8	4944.4	3460.6	2289.8	1276.5	590.2	401.6	387.0	387.7	388.4
40°	7841.0	7179.6	5185.7	3256.7	1940.7	924.1	425.1	360.8	360.1	367.0	369.1
42.5°	8591.6	7860.4	5482.8	2985.1	1575.1	611.0	368.4	344.2	335.2	338.0	340.0
45°	9289.0	8444.4	5735.8	2720.3	1183.2	436.1	361.5	324.8	311.0	309.6	311.0
47.5°	9850.9	8912.3	5889.9	2409.3	843.2	362.2	347.0	306.9	287.5	283.4	281.3
50°	10278.7	9260.0	5945.9	2056.8	570.2	345.6	327.6	286.1	262.6	263.3	263.3
52.5°	10696.1	9575.8	5880.9	1701.6	419.5	331.1	314.5	269.5	244.7	257.8	261.3
55°	10996.8	9708.5	5691.6	1317.3	349.7	313.1	300.0	250.2	232.9	254.3	261.3
57.5°	11172.3	9812.9	5343.9	951.0	320.7	295.8	281.3	232.2	216.3	221.9	225.3
60°	11281.5	9667.0	4884.3	650.4	305.5	282.0	262.6	220.5	199.0	185.9	183.8
62.5°	11221.4	9302.1	4278.9	447.2	289.6	266.8	246.7	209.4	181.1	163.8	162.4
65°	10731.4	8626.9	3285.0	362.2	279.9	259.9	237.1	199.0	168.6	152.1	150.0
67.5°	9822.5	7413.2	1918.6	322.1	275.8	253.0	229.5	189.4	161.7	143.8	141.0
70°	8329.0	5576.2	642.8	287.5	275.1	252.3	223.2	182.5	154.1	135.5	132.7
72.5°	6008.8	3364.5	313.1	253.0	257.1	241.9	218.4	176.9	149.3	125.8	121.0
75°	3414.9	1095.5	282.7	218.4	239.1	230.8	215.6	177.6	151.4	114.0	108.5
77.5°	971.7	320.0	273.0	185.9	226.0	238.4	201.8	160.3	154.8	105.7	98.8
80°	328.3	284.8	263.3	144.4	182.5	197.0	174.9	141.0	156.2	96.1	89.2
82.5°	263.3	286.1	221.2	115.4	138.9	149.3	138.9	126.5	126.5	85.7	80.2
85°	210.8	265.4	140.3	91.9	103.7	114.7	98.1	94.7	88.5	71.9	69.8
87.5°	122.3	82.9	58.1	47.0	43.5	44.2	38.0	45.6	56.0	49.1	48.4
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)