

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: P510730

Luminaire Tested: **CTN-CA8-230-740-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510730
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-CA8-230-740-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31720 lumens
Efficiency: N/A
Efficacy: 138.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

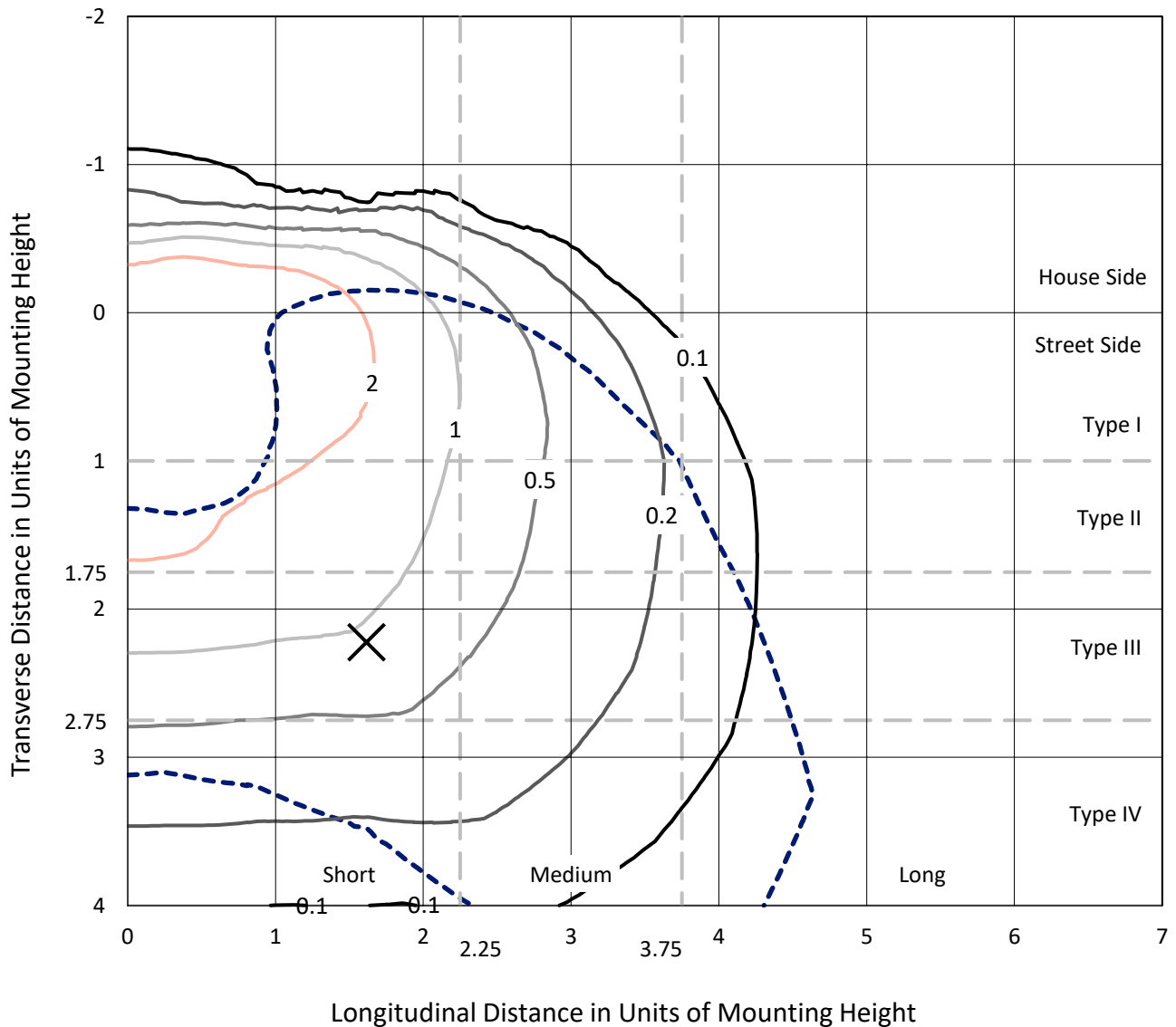
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

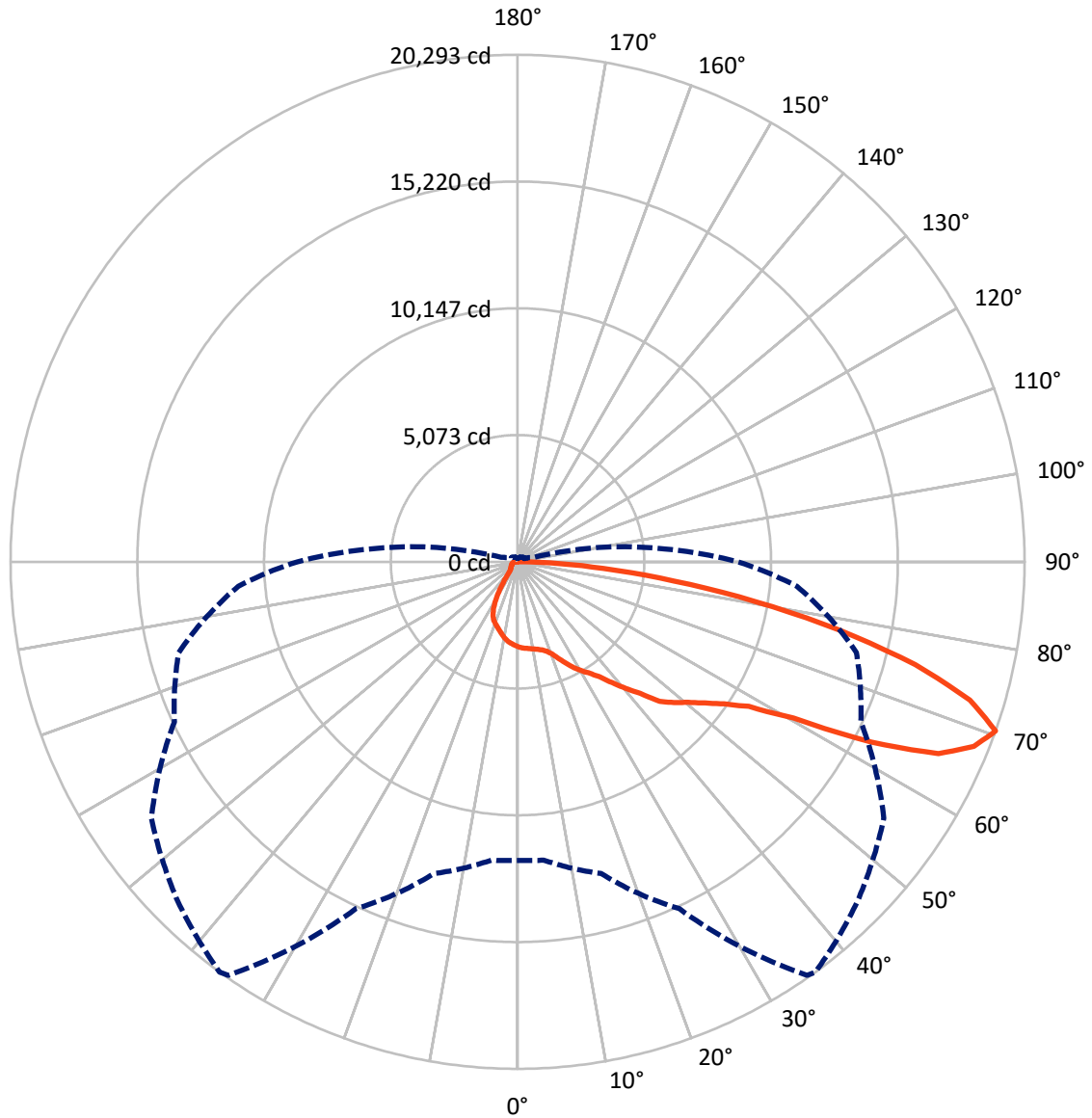
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.3 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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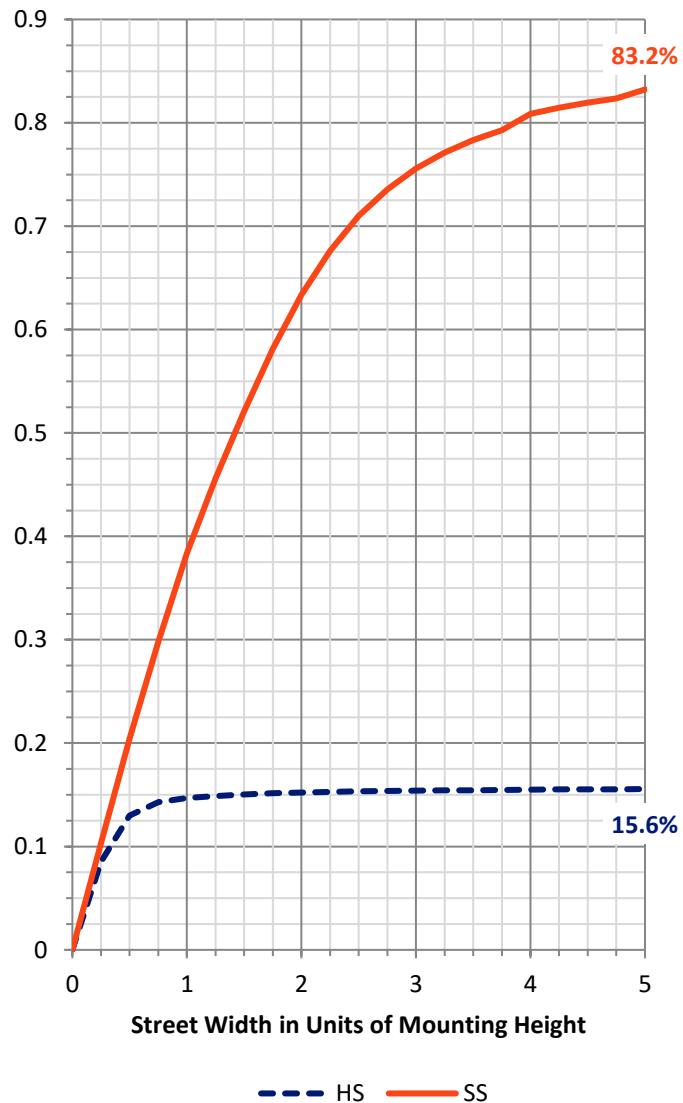
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5005.6	0.0	5005.6
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	26714.3	0.0	26714.3
	% Fixture	84.2	0.0	84.2
Total	Lumens	31720.0	0.0	31720.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.3	1.0
10°-20°	958.6	3.0
20°-30°	1723.7	5.4
30°-40°	2727.8	8.6
40°-50°	4263.0	13.4
50°-60°	6121.7	19.3
60°-70°	8303.5	26.2
70°-80°	6145.5	19.4
80°-90°	1153.9	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°	31720.0	100.0
0°-180°	31720.0	100.0

Coefficient of Utilization

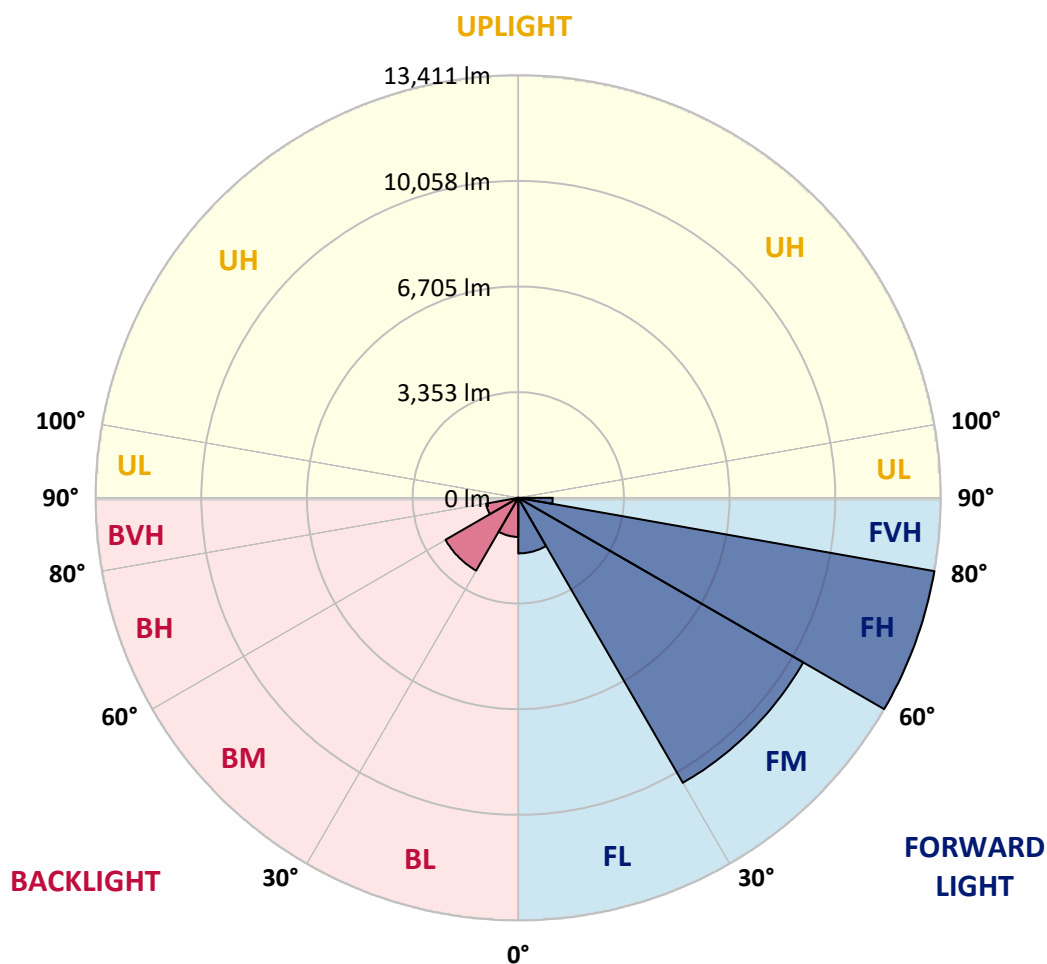


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1764.3	5.6			
FM (30°-60°)	10445.1	32.9			
FH (60°-80°)	13410.9	42.3			G5
FVH (80°-90°)	1094.1	3.4			G5
BL (0°-30°)	1240.4	3.9	B3/2500		
BM (30°-60°)	2667.4	8.4	B3/5000		
BH (60°-80°)	1038.0	3.3	B3/2500		G3/2500
BVH (80°-90°)	59.8	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°	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6
2.5°	3467.5	3460.2	3454.3	3456.5	3452.1	3455.0	3448.4	3440.4	3421.3	3413.3	3409.6
5°	3498.2	3496.0	3490.2	3485.8	3477.7	3474.8	3467.5	3474.1	3463.8	3437.5	3422.1
7.5°	3516.5	3515.8	3509.2	3499.7	3504.1	3507.8	3515.1	3504.8	3491.6	3479.2	3447.7
10°	3524.6	3524.6	3516.5	3521.7	3544.4	3546.6	3550.2	3556.8	3544.4	3526.1	3494.6
12.5°	3545.1	3543.6	3546.6	3563.4	3586.8	3592.0	3610.3	3610.3	3611.7	3600.8	3564.1
15°	3596.4	3596.4	3603.0	3618.3	3658.6	3661.5	3688.6	3712.8	3715.7	3699.6	3671.8
17.5°	3715.0	3712.1	3708.4	3717.9	3761.1	3762.6	3809.5	3840.2	3848.3	3865.9	3861.5
20°	3940.5	3937.6	3936.9	3937.6	3934.7	3930.3	3976.4	4009.4	4050.4	4081.2	4096.5
22.5°	4263.5	4256.9	4256.9	4221.0	4193.2	4197.6	4204.9	4223.2	4277.4	4331.6	4389.5
25°	4611.3	4606.9	4610.6	4519.1	4481.7	4496.4	4486.8	4515.4	4586.4	4633.3	4694.8
27.5°	4895.5	4902.1	4881.6	4810.5	4786.4	4797.3	4775.4	4857.4	4935.8	5017.8	5110.8
30°	5249.2	5214.0	5163.5	5077.1	5068.3	5069.8	5068.3	5200.1	5362.7	5479.9	5608.7
32.5°	5711.3	5717.1	5603.6	5400.0	5325.3	5315.1	5344.4	5537.7	5757.4	6017.4	6187.3
35°	6178.5	6188.0	6105.2	5892.9	5679.8	5647.6	5604.4	5855.5	6172.6	6694.0	6950.3
37.5°	6674.3	6707.9	6609.8	6420.1	6167.5	6137.5	5933.2	6179.9	6648.6	7495.2	7831.3
40°	7337.7	7301.8	7183.2	6942.3	6707.2	6658.9	6421.6	6551.2	7260.8	8498.4	8742.3
42.5°	7826.9	7816.7	7716.3	7478.3	7241.8	7203.0	7011.8	7152.4	8032.0	9515.6	9624.7
45°	8215.0	8278.0	8275.8	8126.4	7993.1	7971.2	7858.4	8065.6	8964.2	10475.7	10422.2
47.5°	8559.9	8598.8	8536.5	8471.3	8409.1	8416.4	8499.9	8926.1	9916.9	11314.2	11077.6
50°	9124.6	9074.8	8795.7	8746.0	8833.8	8837.5	9091.6	9747.7	10966.3	12039.1	11632.7
52.5°	9877.4	9823.2	9249.8	9164.8	9372.8	9388.2	9810.7	10566.5	12048.7	12731.9	12184.9
55°	10997.8	10871.8	10257.4	9876.6	9971.8	10034.1	10546.0	11353.7	12895.9	13342.6	12603.0
57.5°	12373.8	12465.3	12150.4	11290.0	10893.8	10917.2	11387.4	12107.2	13643.6	13877.2	12847.6
60°	13828.2	13806.2	13938.0	13575.5	12816.8	12690.9	12451.4	12876.2	14222.9	14327.6	13099.5
62.5°	14624.9	14753.1	15192.5	15265.0	15949.7	15883.0	14250.7	13829.6	14892.2	14610.3	13168.4
65°	14620.5	14676.2	15494.2	16393.4	18532.5	18513.5	17754.8	15208.6	15390.9	14761.1	13030.7
67.5°	13675.8	13762.3	14718.7	16475.5	19726.2	19703.5	19179.1	17147.0	15547.6	14579.5	12388.4
70°	11953.5	11982.8	12915.7	15320.6	20205.8	20293.0	19228.2	17891.0	15158.0	14039.8	11217.5
72.5°	9861.3	9800.5	10712.9	13083.4	18984.3	18932.4	18415.3	17002.7	14501.9	12991.9	9148.7
75°	7260.8	7430.0	8248.7	10505.0	16254.3	16444.7	16673.9	15643.6	12879.8	10707.1	6326.4
77.5°	4794.4	5009.7	5837.2	7876.7	12868.1	13164.0	13757.9	13305.3	10477.9	7680.4	3012.7
80°	2477.4	2640.0	3384.7	5226.5	9224.9	9651.8	10740.8	10077.3	7428.5	3472.6	674.5
82.5°	937.4	916.1	1516.6	2991.5	5914.8	6303.0	7094.6	6043.0	2643.6	610.0	313.4
85°	411.6	435.7	628.3	1364.3	3381.8	3432.3	4018.9	2355.8	387.4	291.5	213.1
87.5°	178.0	204.3	263.6	392.5	1140.9	1317.4	1630.1	748.4	117.2	101.1	106.9
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°	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6	3398.6
2.5°	3403.0	3398.6	3391.3	3373.0	3343.0	3339.3	3336.4	3333.5	3327.6	3330.5	3347.4
5°	3410.4	3402.3	3375.9	3349.6	3323.2	3299.8	3271.2	3260.2	3245.6	3236.1	3253.6
7.5°	3435.3	3418.4	3379.6	3343.7	3272.0	3237.5	3200.9	3157.7	3127.0	3107.2	3124.8
10°	3477.0	3455.8	3407.4	3333.5	3249.2	3154.8	3090.3	3018.6	2960.0	2943.9	2960.0
12.5°	3545.1	3513.6	3457.2	3356.9	3207.5	3083.7	2961.5	2867.0	2772.5	2745.4	2753.5
15°	3655.7	3630.8	3544.4	3406.0	3208.2	3019.3	2837.7	2685.4	2561.6	2518.4	2515.5
17.5°	3832.9	3806.5	3706.9	3503.4	3234.6	2968.8	2716.1	2484.0	2296.5	2201.3	2185.9
20°	4087.0	4050.4	3899.5	3646.9	3291.7	2946.8	2603.4	2291.4	1999.9	1821.2	1794.2
22.5°	4369.7	4330.9	4108.2	3757.5	3332.7	2903.6	2495.7	2078.3	1694.6	1476.3	1445.6
25°	4721.2	4636.2	4308.2	3862.2	3323.2	2812.8	2320.7	1789.0	1373.1	1184.1	1163.6
27.5°	5068.3	4960.7	4511.7	3917.1	3281.5	2668.5	2064.4	1450.7	1075.0	941.0	924.2
30°	5498.9	5290.9	4692.6	3942.7	3176.0	2452.5	1720.9	1102.9	804.8	712.5	696.4
32.5°	6010.8	5695.9	4862.5	3914.2	3000.3	2123.0	1337.9	807.7	598.3	540.4	539.7
35°	6686.0	6192.4	5049.3	3820.4	2730.8	1767.8	938.1	552.2	466.5	446.7	450.4
37.5°	7475.4	6864.7	5238.9	3666.7	2426.1	1352.6	625.4	425.5	410.1	410.8	411.6
40°	8308.0	7607.2	5494.5	3450.6	2056.3	979.1	450.4	382.3	381.5	388.9	391.1
42.5°	9103.3	8328.5	5809.4	3162.8	1668.9	647.4	390.3	364.7	355.2	358.1	360.3
45°	9842.2	8947.3	6077.4	2882.4	1253.7	462.1	383.0	344.2	329.5	328.1	329.5
47.5°	10437.6	9443.1	6240.7	2552.8	893.4	383.7	367.6	325.1	304.6	300.2	298.0
50°	10890.9	9811.5	6300.0	2179.3	604.2	366.2	347.1	303.2	278.3	279.0	279.0
52.5°	11333.2	10146.1	6231.2	1802.9	444.5	350.8	333.2	285.6	259.2	273.2	276.8
55°	11651.7	10286.7	6030.6	1395.8	370.5	331.7	317.8	265.1	246.8	269.5	276.8
57.5°	11837.8	10397.3	5662.2	1007.7	339.8	313.4	298.0	246.1	229.2	235.1	238.7
60°	11953.5	10242.8	5175.2	689.1	323.7	298.8	278.3	233.6	210.9	197.0	194.8
62.5°	11889.7	9856.1	4533.7	473.8	306.8	282.7	261.4	221.9	191.9	173.6	172.1
65°	11370.5	9140.7	3480.7	383.7	296.6	275.3	251.2	210.9	178.7	161.1	158.9
67.5°	10407.6	7854.7	2032.9	341.3	292.2	268.0	243.1	200.7	171.4	152.3	149.4
70°	8825.0	5908.3	681.0	304.6	291.5	267.3	236.5	193.3	163.3	143.5	140.6
72.5°	6366.7	3564.9	331.7	268.0	272.4	256.3	231.4	187.5	158.2	133.3	128.2
75°	3618.3	1160.7	299.5	231.4	253.4	244.6	228.5	188.2	160.4	120.8	115.0
77.5°	1029.6	339.1	289.3	197.0	239.5	252.6	213.8	169.9	164.0	112.0	104.7
80°	347.8	301.7	279.0	153.1	193.3	208.7	185.3	149.4	165.5	101.8	94.5
82.5°	279.0	303.2	234.3	122.3	147.2	158.2	147.2	134.0	134.0	90.8	84.9
85°	223.4	281.2	148.7	97.4	109.8	121.6	104.0	100.3	93.7	76.2	74.0
87.5°	129.6	87.9	61.5	49.8	46.1	46.9	40.3	48.3	59.3	52.0	51.3
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)