

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: P510670

Luminaire Tested: **CTN-CA6-230-740-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510670
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-CA6-230-740-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30489 lumens
Efficiency: N/A
Efficacy: 133.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

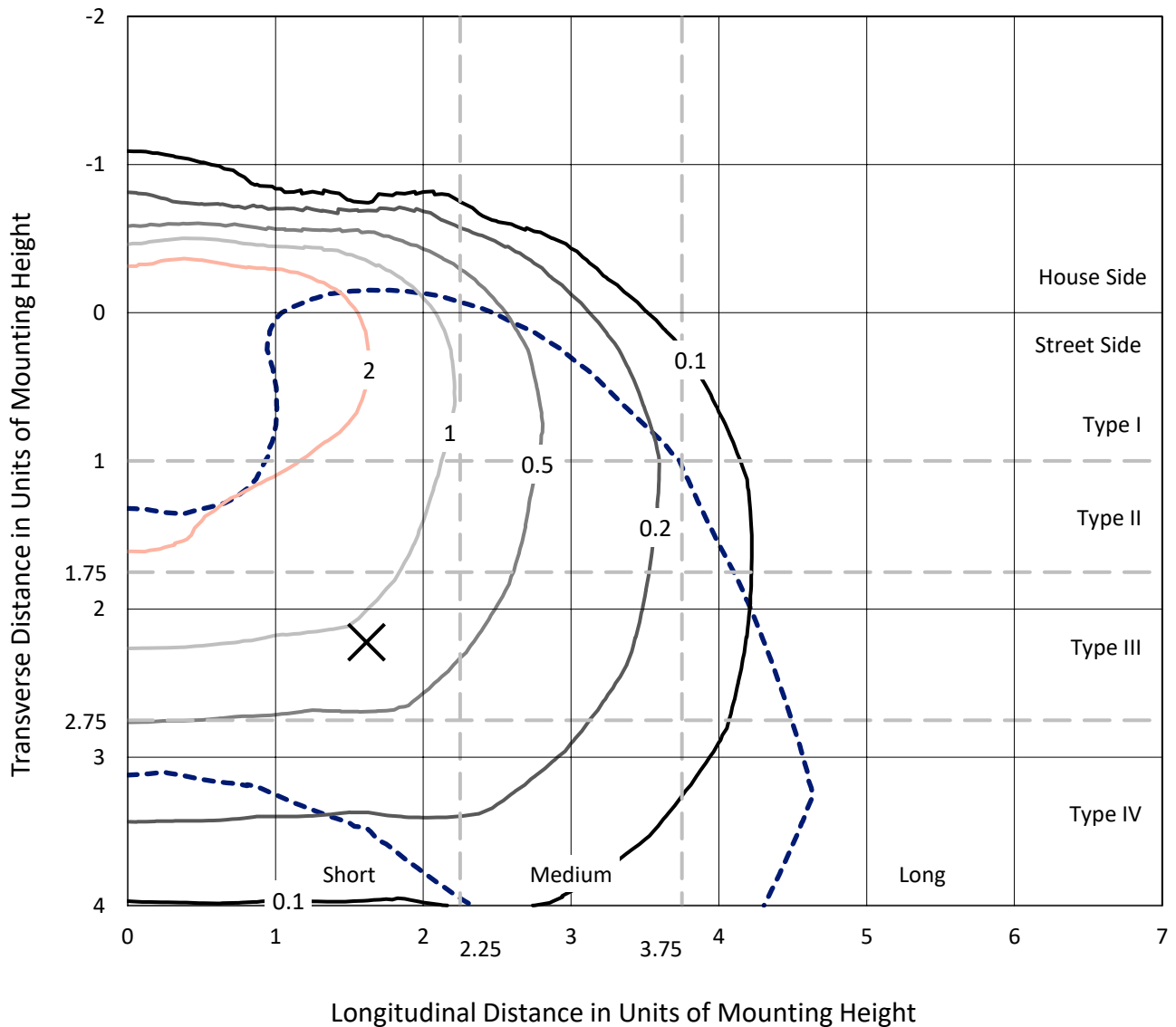
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

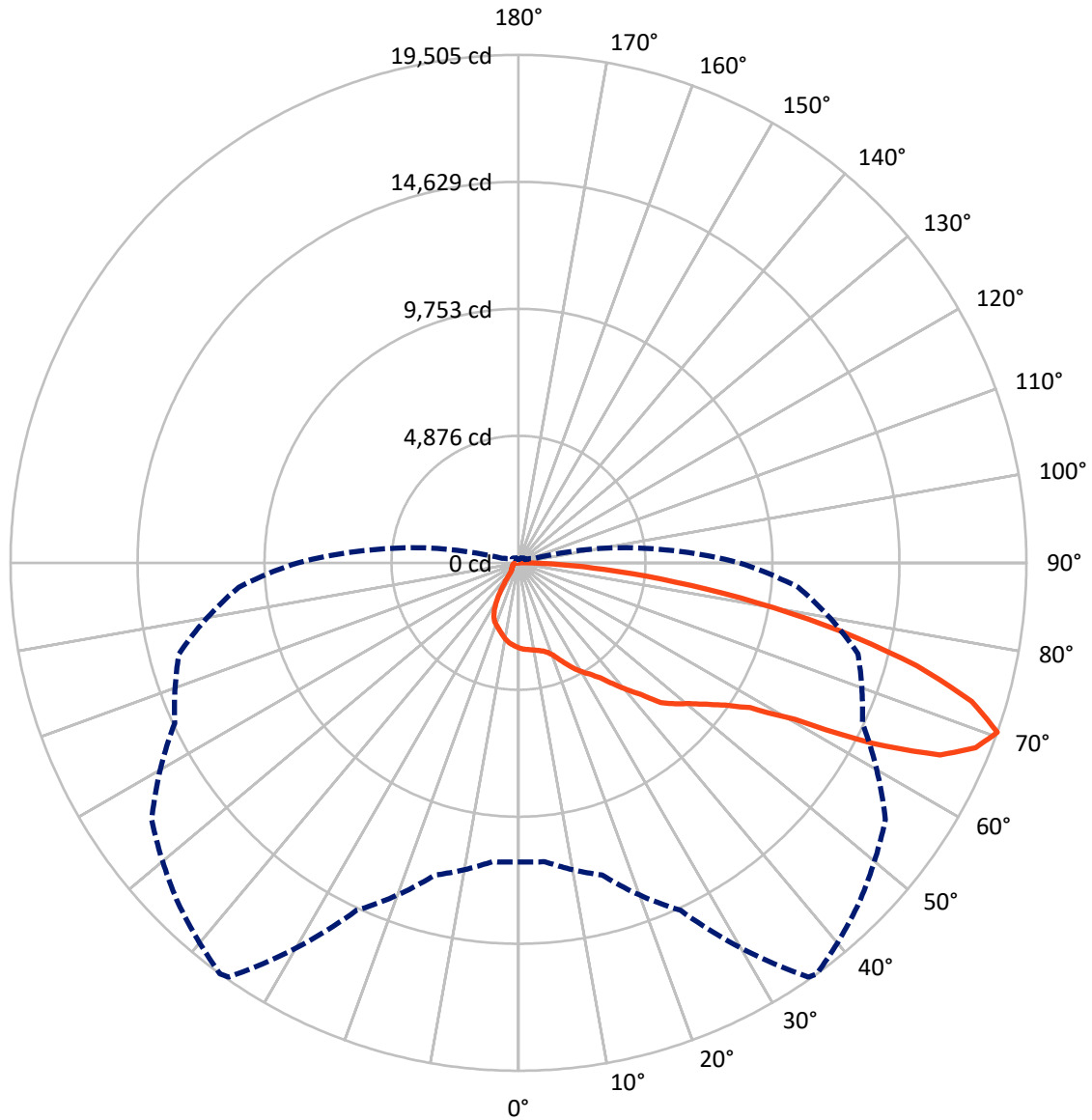
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.1 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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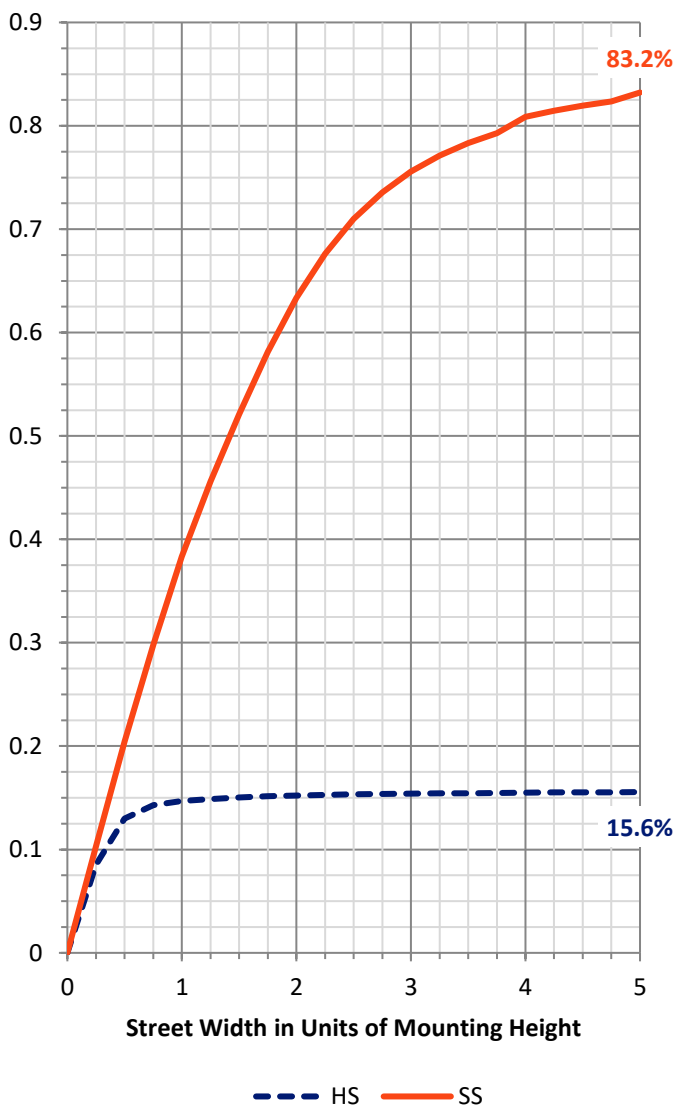
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4811.4	0.0	4811.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	25677.6	0.0	25677.6
	% Fixture	84.2	0.0	84.2
Total	Lumens	30489.0	0.0	30489.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.8	1.0
10°-20°	921.4	3.0
20°-30°	1656.9	5.4
30°-40°	2621.9	8.6
40°-50°	4097.6	13.4
50°-60°	5884.1	19.3
60°-70°	7981.2	26.2
70°-80°	5907.0	19.4
80°-90°	1109.1	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°	30489.0	100.0
0°-180°	30489.0	100.0

Coefficient of Utilization



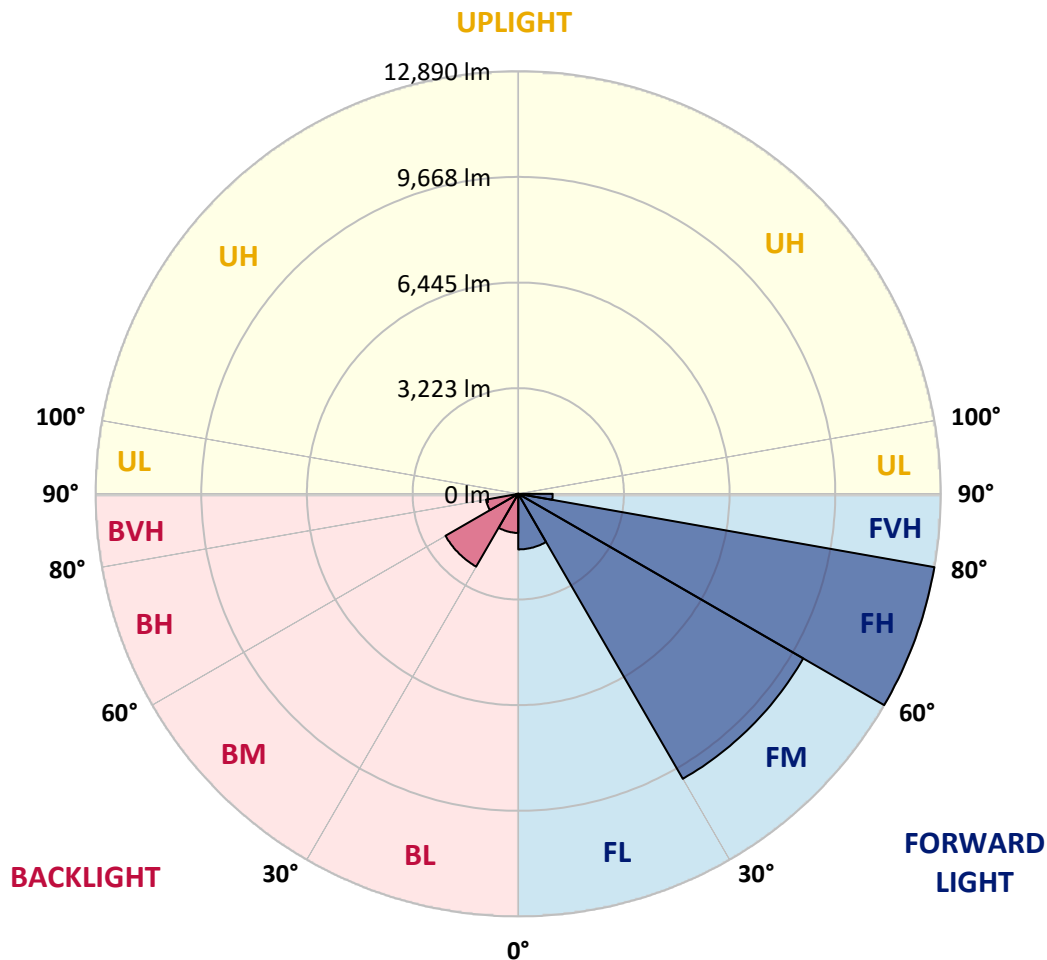
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1695.8	5.6			
FM (30°-60°)	10039.8	32.9			
FH (60°-80°)	12890.4	42.3			G5
FVH (80°-90°)	1051.6	3.4			G5
BL (0°-30°)	1192.2	3.9	B3/2500		
BM (30°-60°)	2563.9	8.4	B3/5000		
BH (60°-80°)	997.7	3.3	B2/1000		G2/1000
BVH (80°-90°)	57.5	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°	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7
2.5°	3332.9	3325.9	3320.2	3322.4	3318.1	3320.9	3314.6	3306.9	3288.6	3280.8	3277.3
5°	3362.5	3360.4	3354.7	3350.5	3342.8	3339.9	3332.9	3339.2	3329.4	3304.1	3289.3
7.5°	3380.1	3379.4	3373.0	3363.9	3368.1	3371.6	3378.7	3368.8	3356.1	3344.2	3313.9
10°	3387.8	3387.8	3380.1	3385.0	3406.8	3408.9	3412.4	3418.8	3406.8	3389.2	3359.0
12.5°	3407.5	3406.1	3408.9	3425.1	3447.6	3452.6	3470.2	3470.2	3471.6	3461.0	3425.8
15°	3456.8	3456.8	3463.1	3477.9	3516.6	3519.4	3545.5	3568.7	3571.5	3556.0	3529.3
17.5°	3570.8	3568.0	3564.5	3573.6	3615.2	3616.6	3661.6	3691.2	3698.9	3715.8	3711.6
20°	3787.6	3784.8	3784.1	3784.8	3782.0	3777.8	3822.1	3853.8	3893.2	3922.8	3937.5
22.5°	4098.0	4091.7	4091.7	4057.2	4030.5	4034.7	4041.7	4059.3	4111.4	4163.5	4219.1
25°	4432.4	4428.2	4431.7	4343.7	4307.8	4321.9	4312.7	4340.2	4408.5	4453.5	4512.6
27.5°	4705.5	4711.8	4692.1	4623.8	4600.6	4611.2	4590.1	4668.9	4744.2	4823.0	4912.4
30°	5045.5	5011.7	4963.1	4880.1	4871.6	4873.0	4871.6	4998.3	5154.6	5267.2	5391.1
32.5°	5489.6	5495.3	5386.2	5190.5	5118.7	5108.8	5137.0	5322.8	5534.0	5783.8	5947.2
35°	5938.7	5947.9	5868.3	5664.2	5459.4	5428.4	5386.9	5628.3	5933.1	6434.2	6680.6
37.5°	6415.2	6447.6	6353.3	6171.0	5928.1	5899.3	5702.9	5940.1	6390.6	7204.3	7527.4
40°	7053.0	7018.5	6904.4	6672.9	6446.9	6400.5	6172.4	6297.0	6979.0	8168.6	8403.0
42.5°	7523.2	7513.3	7416.9	7188.1	6960.7	6923.4	6739.7	6874.9	7720.2	9146.3	9251.2
45°	7896.2	7956.8	7954.6	7811.0	7682.9	7661.8	7553.4	7752.6	8616.3	10069.1	10017.7
47.5°	8227.7	8265.1	8205.2	8142.6	8082.7	8089.8	8170.0	8579.7	9532.1	10875.1	10647.7
50°	8770.4	8722.6	8454.4	8406.5	8491.0	8494.5	8738.8	9369.5	10540.7	11571.9	11181.3
52.5°	9494.0	9442.0	8890.8	8809.2	9009.1	9023.8	9430.0	10156.4	11581.1	12237.8	11712.0
55°	10571.0	10449.9	9859.4	9493.3	9584.8	9644.7	10136.7	10913.1	12395.5	12824.8	12113.9
57.5°	11893.6	11981.6	11678.9	10851.8	10471.0	10493.6	10945.5	11637.4	13114.1	13338.7	12349.0
60°	13291.5	13270.4	13397.1	13048.7	12319.4	12198.4	11968.2	12376.5	13670.9	13771.6	12591.1
62.5°	14057.3	14180.5	14602.9	14672.5	15330.7	15266.6	13697.7	13292.9	14314.3	14043.3	12657.3
65°	14053.1	14106.6	14892.9	15757.2	17813.3	17795.0	17065.8	14618.3	14793.6	14188.3	12525.0
67.5°	13145.1	13228.2	14147.4	15836.1	18960.6	18938.8	18434.8	16481.5	14944.2	14013.7	11907.7
70°	11489.6	11517.7	12414.5	14726.0	19421.7	19505.4	18482.0	17196.7	14569.8	13494.9	10782.2
72.5°	9478.6	9420.1	10297.2	12575.7	18247.6	18197.6	17700.7	16342.9	13939.1	12487.7	8793.7
75°	6979.0	7141.6	7928.6	10097.3	15623.5	15806.5	16026.8	15036.5	12380.0	10291.5	6080.9
77.5°	4608.4	4815.3	5610.7	7571.0	12368.7	12653.1	13223.9	12788.9	10071.2	7382.4	2895.8
80°	2381.3	2537.5	3253.4	5023.6	8866.9	9277.2	10323.9	9686.2	7140.2	3337.8	648.3
82.5°	901.0	880.6	1457.8	2875.4	5685.3	6058.4	6819.3	5808.5	2541.0	586.3	301.3
85°	395.6	418.8	603.9	1311.3	3250.6	3299.1	3862.9	2264.4	372.4	280.1	204.8
87.5°	171.0	196.4	253.4	377.3	1096.7	1266.3	1566.9	719.4	112.6	97.1	102.8
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°	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7	3266.7
2.5°	3271.0	3266.7	3259.7	3242.1	3213.2	3209.7	3206.9	3204.1	3198.5	3201.3	3217.5
5°	3278.0	3270.3	3244.9	3219.6	3194.2	3171.7	3144.3	3133.7	3119.6	3110.5	3127.4
7.5°	3301.9	3285.7	3248.4	3214.0	3145.0	3111.9	3076.7	3035.2	3005.6	2986.6	3003.5
10°	3342.1	3321.6	3275.2	3204.1	3123.2	3032.3	2970.4	2901.4	2845.1	2829.6	2845.1
12.5°	3407.5	3377.3	3323.1	3226.6	3083.0	2964.1	2846.5	2755.7	2664.9	2638.9	2646.6
15°	3513.8	3489.9	3406.8	3273.8	3083.7	2902.1	2727.6	2581.2	2462.2	2420.7	2417.9
17.5°	3684.2	3658.8	3563.1	3367.4	3109.1	2853.6	2610.7	2387.6	2207.4	2115.9	2101.1
20°	3928.4	3893.2	3748.2	3505.4	3164.0	2832.4	2502.3	2202.5	1922.3	1750.6	1724.5
22.5°	4200.1	4162.8	3948.8	3611.6	3203.4	2790.9	2398.9	1997.6	1628.8	1419.0	1389.5
25°	4538.0	4456.3	4141.0	3712.3	3194.2	2703.6	2230.6	1719.6	1319.8	1138.2	1118.5
27.5°	4871.6	4768.1	4336.7	3765.1	3154.1	2565.0	1984.3	1394.4	1033.3	904.5	888.3
30°	5285.5	5085.6	4510.5	3789.7	3052.8	2357.3	1654.1	1060.1	773.6	684.9	669.4
32.5°	5777.5	5474.8	4673.8	3762.3	2883.8	2040.6	1286.0	776.4	575.1	519.5	518.8
35°	6426.5	5952.1	4853.3	3672.2	2624.8	1699.2	901.7	530.7	448.4	429.4	432.9
37.5°	7185.3	6598.2	5035.6	3524.4	2332.0	1300.1	601.1	409.0	394.2	394.9	395.6
40°	7985.6	7312.0	5281.3	3316.7	1976.5	941.1	432.9	367.4	366.7	373.8	375.9
42.5°	8750.0	8005.3	5583.9	3040.1	1604.2	622.2	375.2	350.5	341.4	344.2	346.3
45°	9460.3	8600.1	5841.6	2770.5	1205.1	444.2	368.1	330.8	316.7	315.3	316.7
47.5°	10032.5	9076.6	5998.5	2453.8	858.7	368.8	353.4	312.5	292.8	288.6	286.5
50°	10468.2	9430.7	6055.5	2094.8	580.7	351.9	333.6	291.4	267.5	268.2	268.2
52.5°	10893.4	9752.4	5989.4	1733.0	427.3	337.2	320.3	274.5	249.2	262.6	266.1
55°	11199.6	9887.5	5796.5	1341.6	356.2	318.9	305.5	254.8	237.2	259.0	266.1
57.5°	11378.4	9993.8	5442.5	968.5	326.6	301.3	286.5	236.5	220.3	225.9	229.5
60°	11489.6	9845.3	4974.4	662.4	311.1	287.2	267.5	224.5	202.7	189.3	187.2
62.5°	11428.3	9473.6	4357.8	455.4	294.9	271.7	251.3	213.3	184.4	166.8	165.4
65°	10929.3	8785.9	3345.6	368.8	285.1	264.7	241.4	202.7	171.7	154.9	152.7
67.5°	10003.7	7549.9	1954.0	328.0	280.9	257.6	233.7	192.9	164.7	146.4	143.6
70°	8482.6	5679.0	654.6	292.8	280.1	256.9	227.4	185.8	157.0	138.0	135.1
72.5°	6119.6	3426.5	318.9	257.6	261.8	246.4	222.4	180.2	152.0	128.1	123.2
75°	3477.9	1115.7	287.9	222.4	243.5	235.1	219.6	180.9	154.2	116.1	110.5
77.5°	989.7	325.9	278.0	189.3	230.2	242.8	205.5	163.3	157.7	107.7	100.7
80°	334.3	290.0	268.2	147.1	185.8	200.6	178.1	143.6	159.1	97.8	90.8
82.5°	268.2	291.4	225.2	117.5	141.5	152.0	141.5	128.8	128.8	87.3	81.7
85°	214.7	270.3	142.9	93.6	105.6	116.8	100.0	96.4	90.1	73.2	71.1
87.5°	124.6	84.5	59.1	47.9	44.3	45.0	38.7	46.5	57.0	50.0	49.3
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)