

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: P510430

Luminaire Tested: **CTN-CA10-210-740-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510430
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-CA10-210-740-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30885 lumens
Efficiency: N/A
Efficacy: 145.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

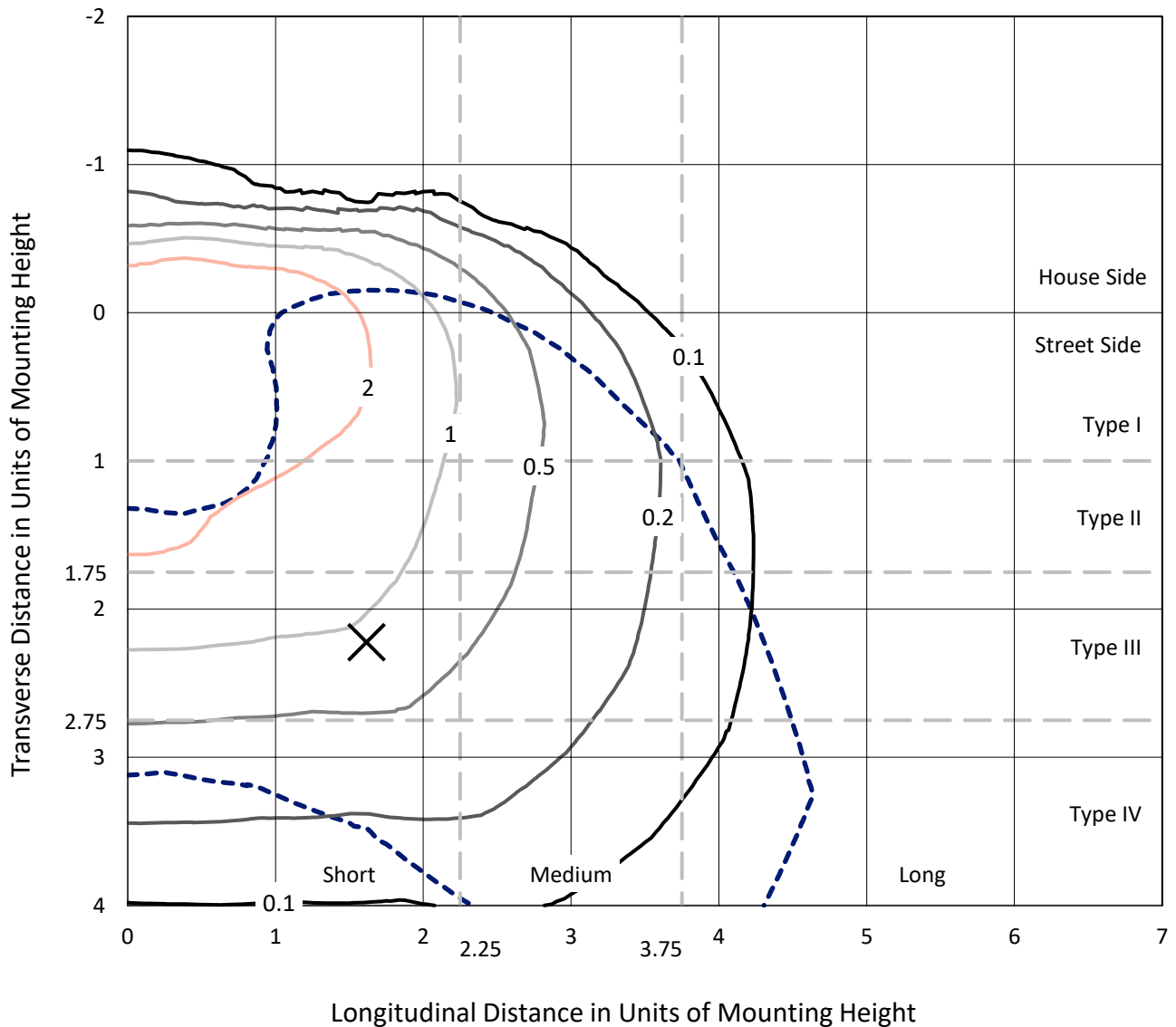
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

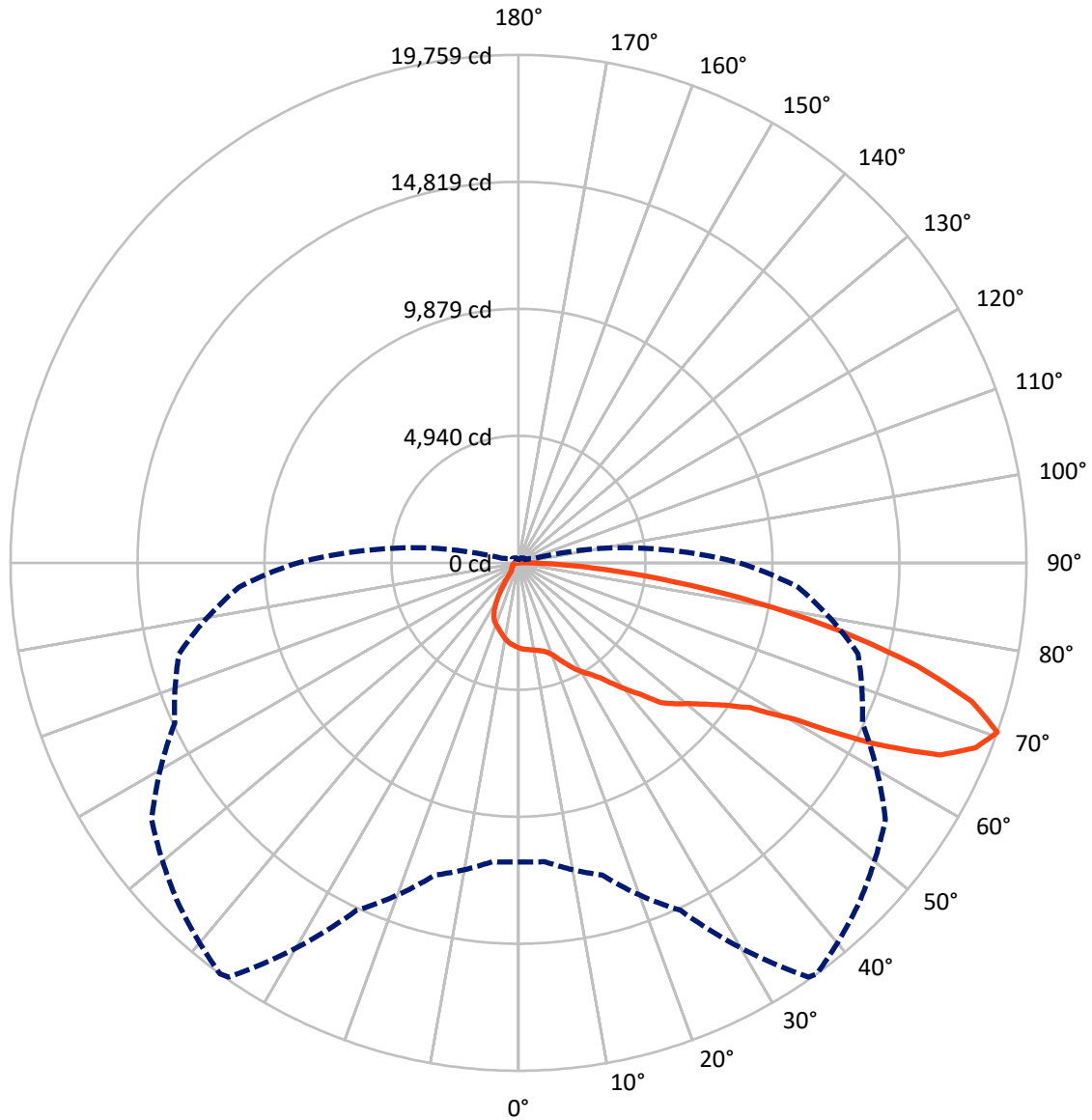
× Max cd
 - - - 1/2 Max cd



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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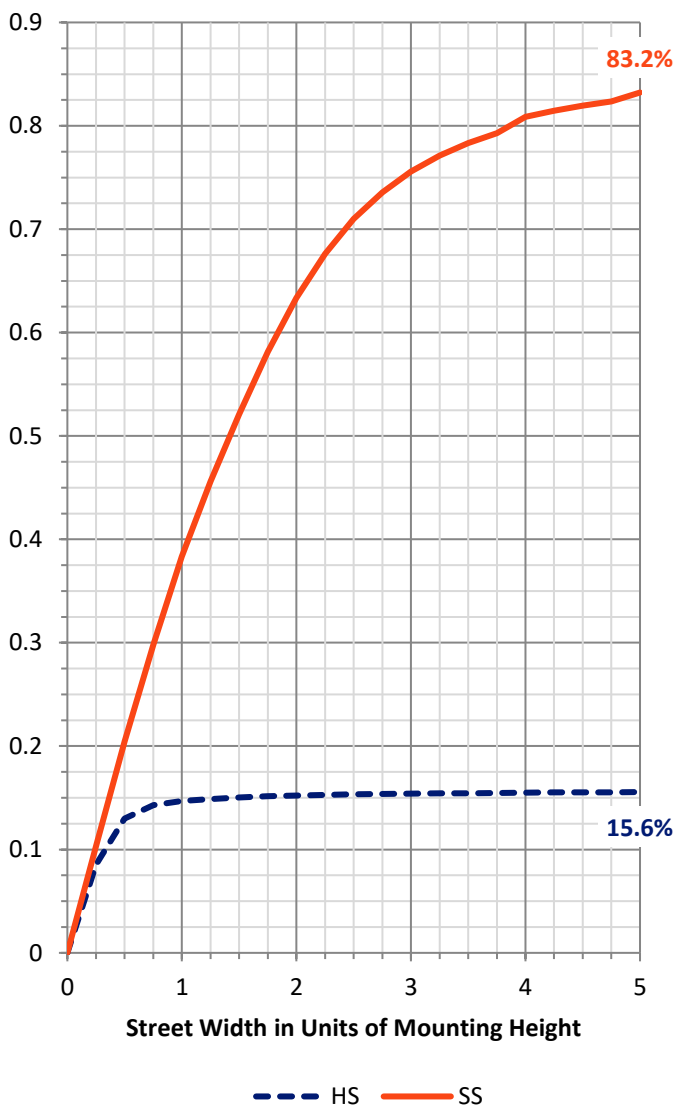
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4873.9	0.0	4873.9
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	26011.1	0.0	26011.1
	% Fixture	84.2	0.0	84.2
Total	Lumens	30885.0	0.0	30885.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.8	1.0
10°-20°	933.3	3.0
20°-30°	1678.4	5.4
30°-40°	2656.0	8.6
40°-50°	4150.8	13.4
50°-60°	5960.5	19.3
60°-70°	8084.9	26.2
70°-80°	5983.7	19.4
80°-90°	1123.6	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°	30885.0	100.0
0°-180°	30885.0	100.0

Coefficient of Utilization



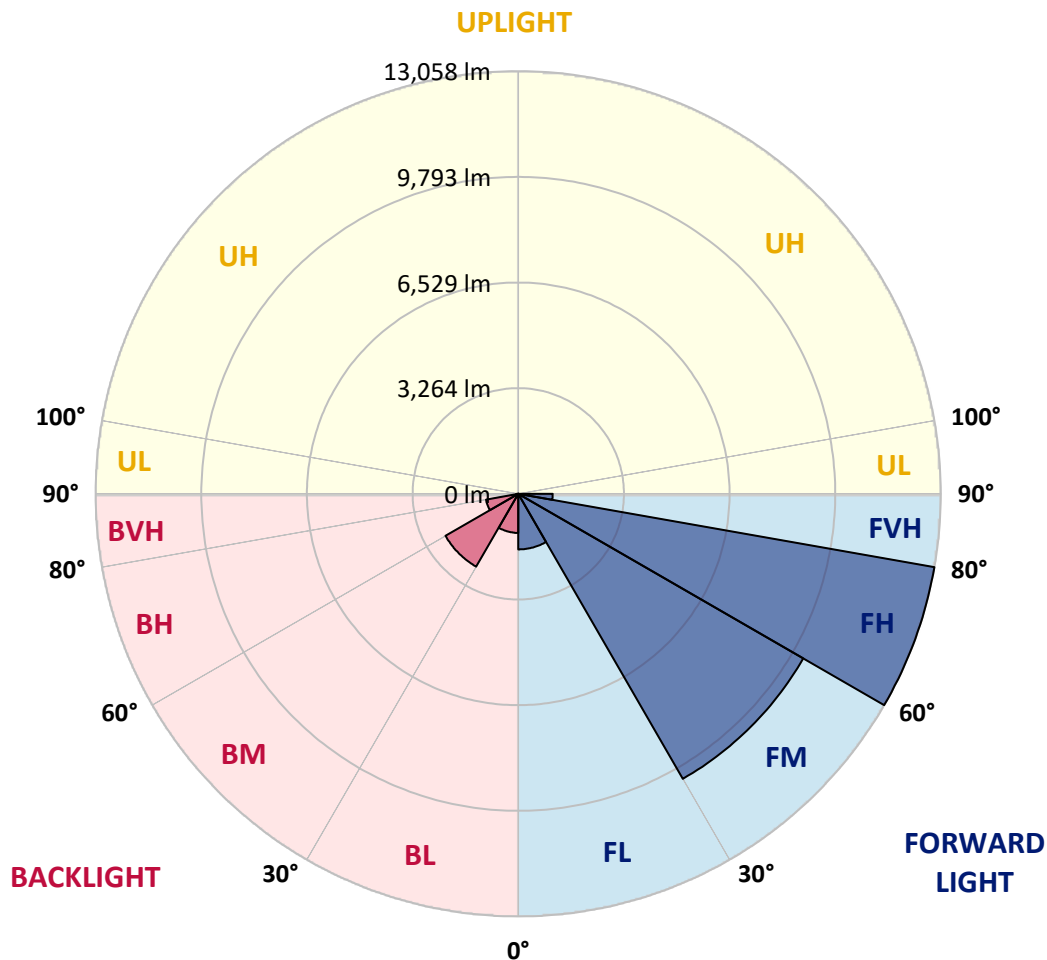
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1717.8	5.6			
FM (30°-60°)	10170.2	32.9			
FH (60°-80°)	13057.9	42.3			G5
FVH (80°-90°)	1065.3	3.4			G5
BL (0°-30°)	1207.7	3.9	B3/2500		
BM (30°-60°)	2597.2	8.4	B3/5000		
BH (60°-80°)	1010.7	3.3	B3/2500		G3/2500
BVH (80°-90°)	58.3	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°	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2
2.5°	3376.2	3369.1	3363.4	3365.5	3361.2	3364.1	3357.7	3349.8	3331.3	3323.4	3319.9
5°	3406.1	3404.0	3398.3	3394.0	3386.2	3383.3	3376.2	3382.6	3372.6	3347.0	3332.0
7.5°	3424.0	3423.3	3416.8	3407.6	3411.9	3415.4	3422.5	3412.6	3399.7	3387.6	3356.9
10°	3431.8	3431.8	3424.0	3429.0	3451.1	3453.2	3456.8	3463.2	3451.1	3433.2	3402.6
12.5°	3451.8	3450.4	3453.2	3469.6	3492.4	3497.4	3515.2	3515.2	3516.7	3506.0	3470.3
15°	3501.7	3501.7	3508.1	3523.1	3562.3	3565.2	3591.5	3615.1	3617.9	3602.2	3575.1
17.5°	3617.2	3614.4	3610.8	3620.1	3662.1	3663.5	3709.2	3739.1	3747.0	3764.1	3759.8
20°	3836.8	3834.0	3833.3	3834.0	3831.1	3826.8	3871.8	3903.8	3943.8	3973.7	3988.7
22.5°	4151.3	4144.8	4144.8	4109.9	4082.8	4087.1	4094.2	4112.0	4164.8	4217.6	4273.9
25°	4490.0	4485.7	4489.2	4400.1	4363.7	4378.0	4368.7	4396.5	4465.7	4511.3	4571.2
27.5°	4766.6	4773.0	4753.1	4683.9	4660.4	4671.1	4649.7	4729.5	4805.8	4885.7	4976.2
30°	5111.0	5076.8	5027.6	4943.4	4934.9	4936.3	4934.9	5063.2	5221.5	5335.6	5461.1
32.5°	5560.9	5566.6	5456.1	5257.9	5185.2	5175.2	5203.7	5391.9	5605.8	5859.0	6024.4
35°	6015.8	6025.1	5944.5	5737.8	5530.3	5498.9	5456.8	5701.4	6010.1	6517.8	6767.4
37.5°	6498.6	6531.4	6435.8	6251.1	6005.1	5975.9	5777.0	6017.3	6473.6	7297.9	7625.1
40°	7144.6	7109.6	6994.1	6759.5	6530.6	6483.6	6252.6	6378.8	7069.7	8274.7	8512.2
42.5°	7620.9	7610.9	7513.2	7281.5	7051.2	7013.4	6827.3	6964.2	7820.5	9265.1	9371.4
45°	7998.8	8060.1	8058.0	7912.5	7782.7	7761.3	7651.5	7853.3	8728.2	10199.9	10147.8
47.5°	8334.6	8372.4	8311.8	8248.3	8187.7	8194.9	8276.1	8691.1	9655.9	11016.3	10786.0
50°	8884.4	8835.9	8564.2	8515.7	8601.3	8604.9	8852.3	9491.1	10677.6	11722.2	11326.5
52.5°	9617.4	9564.6	9006.3	8923.6	9126.1	9141.0	9552.5	10288.3	11731.5	12396.7	11864.1
55°	10708.3	10585.6	9987.4	9616.6	9709.3	9769.9	10268.4	11054.8	12556.5	12991.4	12271.3
57.5°	12048.1	12137.2	11830.6	10992.8	10607.0	10629.9	11087.6	11788.5	13284.5	13511.9	12509.4
60°	13464.2	13442.8	13571.1	13218.2	12479.5	12356.8	12123.7	12537.2	13848.5	13950.4	12754.7
62.5°	14239.9	14364.7	14792.5	14863.1	15529.8	15464.9	13875.6	13465.6	14500.2	14225.7	12821.7
65°	14235.7	14289.8	15086.3	15961.9	18044.7	18026.1	17287.4	14808.2	14985.8	14372.6	12687.7
67.5°	13315.8	13400.0	14331.2	16041.8	19206.9	19184.8	18674.3	16695.6	15138.3	14195.7	12062.3
70°	11638.8	11667.3	12575.7	14917.3	19673.9	19758.8	18722.0	17420.0	14759.0	13670.2	10922.2
72.5°	9601.7	9542.5	10430.9	12739.0	18484.6	18434.0	17930.6	16555.1	14120.1	12649.9	8907.9
75°	7069.7	7234.4	8031.6	10228.4	15826.4	16011.8	16235.0	15231.8	12540.8	10425.2	6159.9
77.5°	4668.2	4877.8	5683.6	7669.4	12529.4	12817.4	13395.7	12955.0	10202.0	7478.3	2933.4
80°	2412.2	2570.5	3295.6	5088.9	8982.0	9397.7	10458.0	9812.0	7233.0	3381.2	656.7
82.5°	912.7	892.0	1476.7	2912.7	5759.1	6137.1	6907.8	5883.9	2574.0	594.0	305.2
85°	400.7	424.3	611.8	1328.4	3292.8	3342.0	3913.1	2293.8	377.2	283.8	207.5
87.5°	173.3	198.9	256.7	382.2	1110.9	1282.7	1587.2	728.7	114.1	98.4	104.1
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°	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2	3309.2
2.5°	3313.5	3309.2	3302.0	3284.2	3255.0	3251.4	3248.6	3245.7	3240.0	3242.9	3259.3
5°	3320.6	3312.7	3287.1	3261.4	3235.7	3212.9	3185.1	3174.4	3160.2	3150.9	3168.0
7.5°	3344.8	3328.4	3290.6	3255.7	3185.8	3152.3	3116.7	3074.6	3044.6	3025.4	3042.5
10°	3385.5	3364.8	3317.7	3245.7	3163.7	3071.7	3009.0	2939.1	2882.1	2866.4	2882.1
12.5°	3451.8	3421.1	3366.2	3268.5	3123.1	3002.6	2883.5	2791.5	2699.5	2673.2	2681.0
15°	3559.4	3535.2	3451.1	3316.3	3123.8	2939.8	2763.0	2614.7	2494.2	2452.1	2449.3
17.5°	3732.0	3706.3	3609.4	3411.1	3149.5	2890.6	2644.6	2418.6	2236.1	2143.4	2128.4
20°	3979.4	3943.8	3796.9	3550.9	3205.1	2869.2	2534.8	2231.1	1947.3	1773.3	1746.9
22.5°	4254.7	4216.9	4000.1	3658.6	3245.0	2827.2	2430.0	2023.6	1650.0	1437.5	1407.5
25°	4596.9	4514.2	4194.8	3760.5	3235.7	2738.7	2259.6	1741.9	1336.9	1153.0	1133.0
27.5°	4934.9	4830.1	4393.0	3814.0	3195.1	2598.3	2010.0	1412.5	1046.7	916.2	899.8
30°	5354.1	5151.6	4569.1	3839.0	3092.4	2387.9	1675.6	1073.8	783.6	693.8	678.1
32.5°	5852.6	5546.0	4734.5	3811.1	2921.3	2067.1	1302.7	786.5	582.5	526.2	525.5
35°	6510.0	6029.4	4916.3	3719.9	2658.9	1721.3	913.4	537.6	454.2	434.9	438.5
37.5°	7278.6	6683.9	5101.0	3570.1	2362.3	1317.0	608.9	414.3	399.3	400.0	400.7
40°	8089.3	7407.0	5349.9	3359.8	2002.2	953.3	438.5	372.2	371.5	378.6	380.8
42.5°	8863.7	8109.3	5656.5	3079.6	1625.0	630.3	380.0	355.1	345.8	348.7	350.8
45°	9583.1	8711.8	5917.4	2806.5	1220.7	449.9	372.9	335.1	320.9	319.4	320.9
47.5°	10162.8	9194.5	6076.4	2485.6	869.9	373.6	357.9	316.6	296.6	292.3	290.2
50°	10604.2	9553.2	6134.2	2122.0	588.3	356.5	338.0	295.2	271.0	271.7	271.7
52.5°	11034.9	9879.0	6067.2	1755.5	432.8	341.5	324.4	278.1	252.4	266.0	269.5
55°	11345.0	10015.9	5871.8	1359.0	360.8	323.0	309.5	258.1	240.3	262.4	269.5
57.5°	11526.1	10123.6	5513.2	981.1	330.8	305.2	290.2	239.6	223.2	228.9	232.4
60°	11638.8	9973.2	5039.0	671.0	315.2	290.9	271.0	227.5	205.4	191.8	189.7
62.5°	11576.8	9596.7	4414.4	461.3	298.8	275.2	254.6	216.0	186.8	169.0	167.6
65°	11071.2	8900.0	3389.0	373.6	288.8	268.1	244.6	205.4	174.0	156.9	154.7
67.5°	10133.6	7648.0	1979.4	332.3	284.5	261.0	236.7	195.4	166.8	148.3	145.5
70°	8592.7	5752.7	663.1	296.6	283.8	260.3	230.3	188.2	159.0	139.8	136.9
72.5°	6199.1	3471.0	323.0	261.0	265.2	249.6	225.3	182.5	154.0	129.8	124.8
75°	3523.1	1130.2	291.6	225.3	246.7	238.2	222.5	183.2	156.2	117.7	111.9
77.5°	1002.5	330.1	281.6	191.8	233.2	246.0	208.2	165.4	159.7	109.1	102.0
80°	338.7	293.8	271.7	149.0	188.2	203.2	180.4	145.5	161.1	99.1	92.0
82.5°	271.7	295.2	228.2	119.1	143.3	154.0	143.3	130.5	130.5	88.4	82.7
85°	217.5	273.8	144.7	94.8	107.0	118.4	101.3	97.7	91.3	74.2	72.0
87.5°	126.2	85.6	59.9	48.5	44.9	45.6	39.2	47.1	57.8	50.6	49.9
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)