

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: STREETWORKS

Report Number: P510760

Luminaire Tested: **CST-CA8-330-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510760
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: STREETWORKS
Catalog Number: CST-CA8-330-722-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35302 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

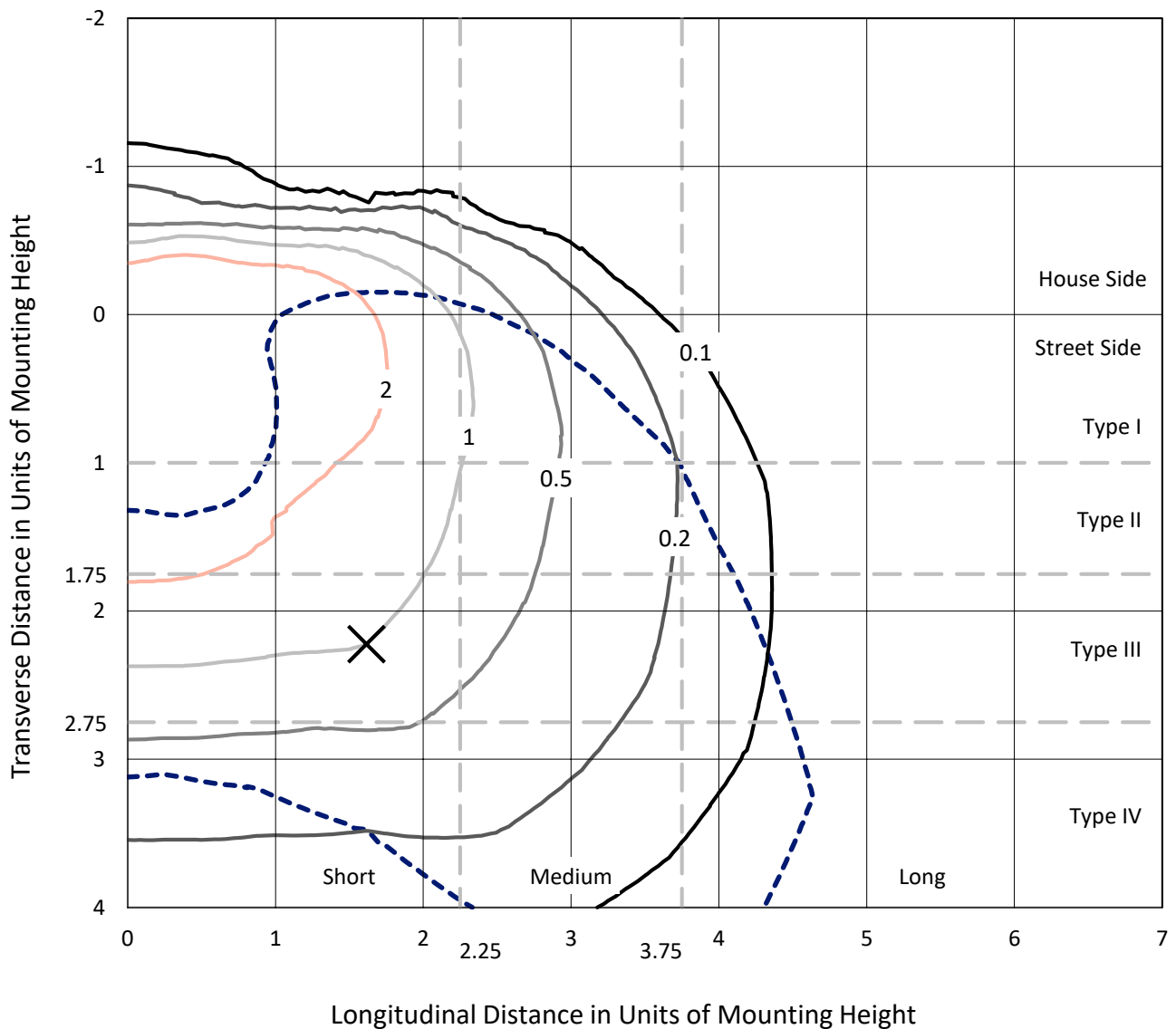
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

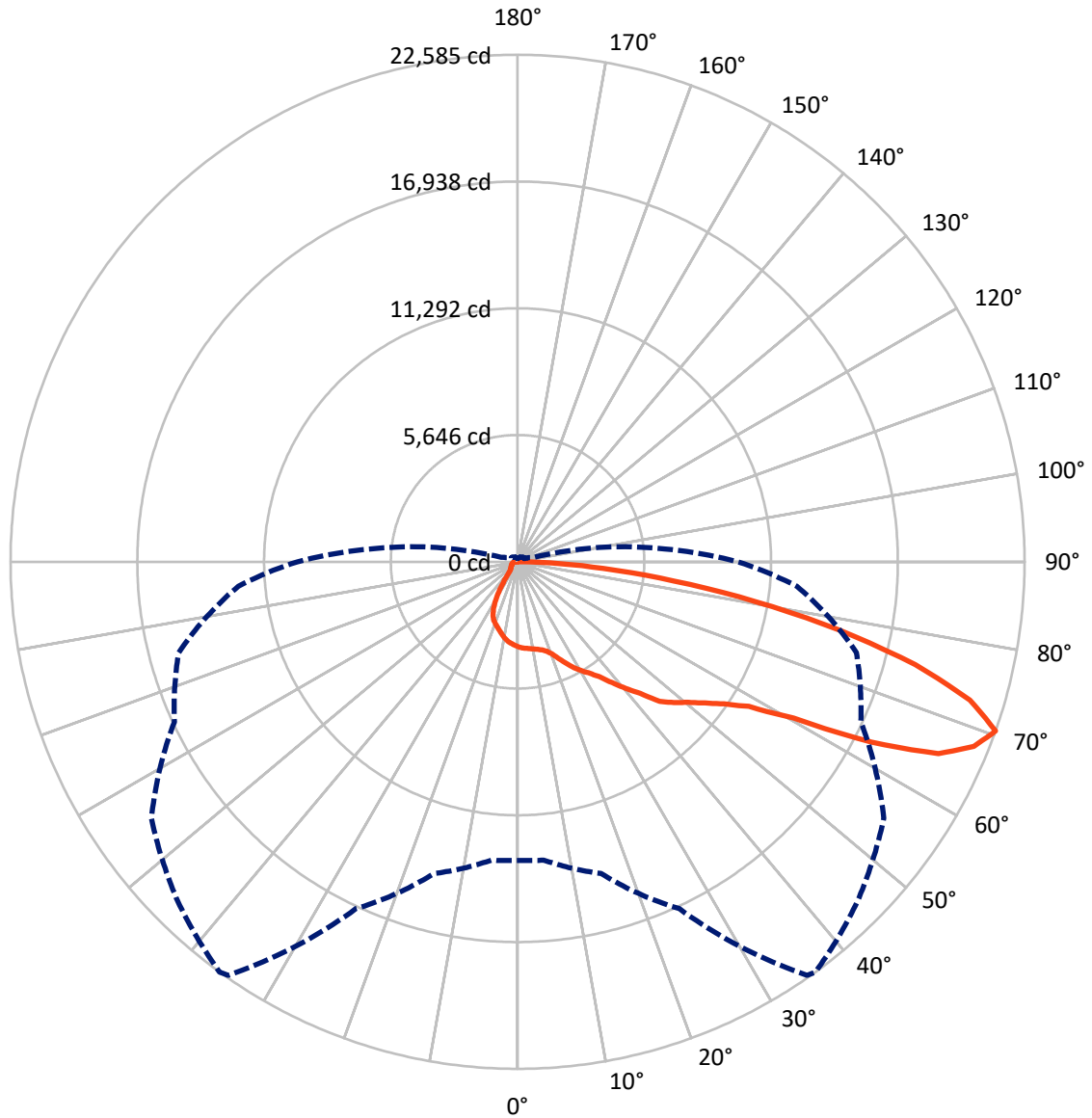
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.8 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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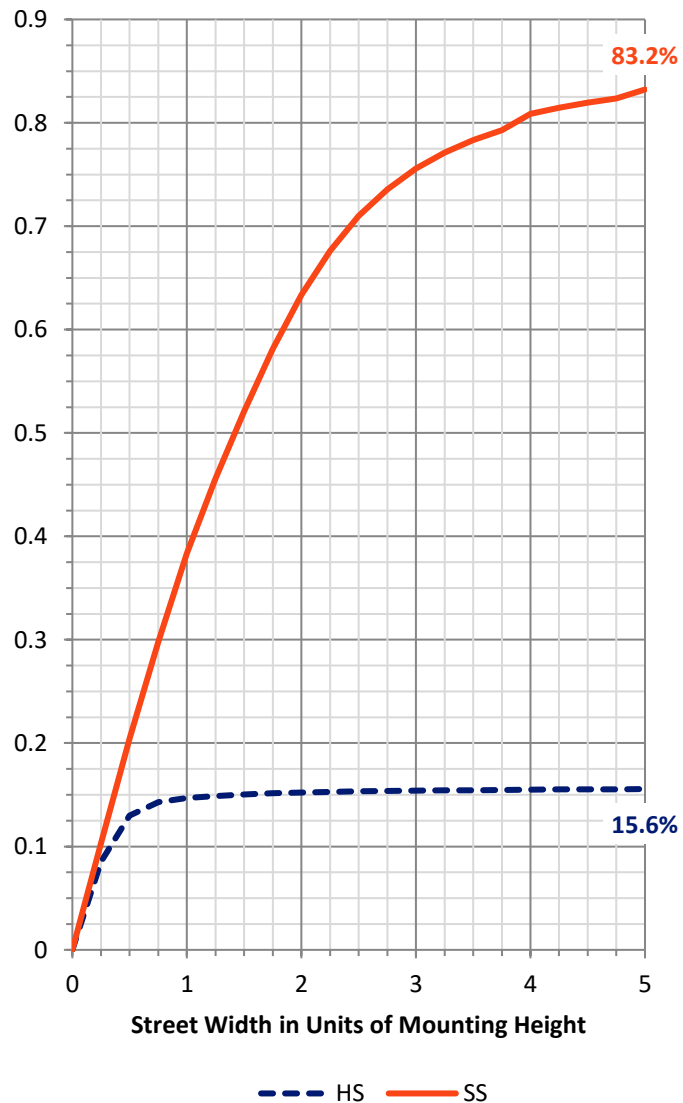
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5570.9	0.0	5570.9
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	29731.1	0.0	29731.1
	% Fixture	84.2	0.0	84.2
Total	Lumens	35302.0	0.0	35302.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	358.7	1.0
10°-20°	1066.8	3.0
20°-30°	1918.4	5.4
30°-40°	3035.8	8.6
40°-50°	4744.5	13.4
50°-60°	6813.0	19.3
60°-70°	9241.2	26.2
70°-80°	6839.4	19.4
80°-90°	1284.2	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°	35302.0	100.0
0°-180°	35302.0	100.0

Coefficient of Utilization

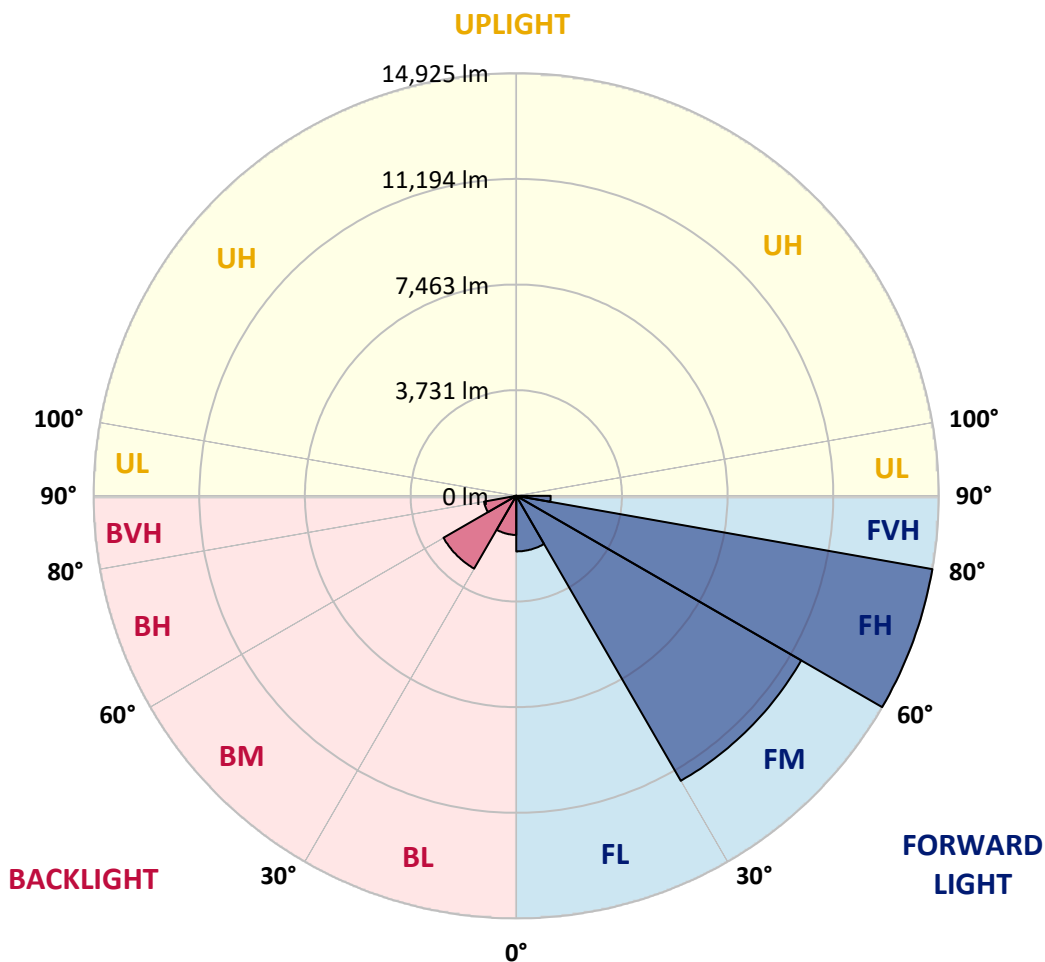


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1963.5	5.6			
FM (30°-60°)	11624.6	32.9			
FH (60°-80°)	14925.3	42.3			G5
FVH (80°-90°)	1217.6	3.4			G5
BL (0°-30°)	1380.4	3.9	B3/2500		
BM (30°-60°)	2968.6	8.4	B3/5000		
BH (60°-80°)	1155.2	3.3	B3/2500		G3/2500
BVH (80°-90°)	66.6	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°	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4
2.5°	3859.0	3850.9	3844.4	3846.8	3841.9	3845.2	3837.9	3828.9	3807.7	3798.7	3794.7
5°	3893.3	3890.8	3884.3	3879.4	3870.5	3867.2	3859.0	3866.4	3855.0	3825.6	3808.5
7.5°	3913.6	3912.8	3905.5	3894.9	3899.8	3903.9	3912.0	3900.6	3885.9	3872.1	3837.0
10°	3922.6	3922.6	3913.6	3919.4	3944.6	3947.1	3951.1	3958.5	3944.6	3924.2	3889.2
12.5°	3945.4	3943.8	3947.1	3965.8	3991.9	3997.6	4018.0	4018.0	4019.6	4007.4	3966.6
15°	4002.5	4002.5	4009.8	4026.9	4071.8	4075.0	4105.2	4132.1	4135.3	4117.4	4086.4
17.5°	4134.5	4131.3	4127.2	4137.8	4185.9	4187.5	4239.7	4273.9	4282.8	4302.4	4297.5
20°	4385.5	4382.3	4381.5	4382.3	4379.0	4374.1	4425.5	4462.1	4507.8	4542.0	4559.1
22.5°	4745.0	4737.6	4737.6	4697.7	4666.7	4671.6	4679.8	4700.1	4760.4	4820.7	4885.1
25°	5132.1	5127.2	5131.3	5029.4	4987.8	5004.1	4993.5	5025.3	5104.4	5156.5	5225.0
27.5°	5448.3	5455.6	5432.8	5353.8	5326.9	5339.1	5314.6	5405.9	5493.1	5584.4	5687.9
30°	5841.9	5802.8	5746.6	5650.4	5640.6	5642.3	5640.6	5787.3	5968.3	6098.7	6242.1
32.5°	6356.2	6362.7	6236.4	6009.8	5926.7	5915.3	5947.9	6163.1	6407.6	6696.9	6886.0
35°	6876.2	6886.8	6794.7	6558.3	6321.2	6285.3	6237.2	6516.8	6869.7	7450.0	7735.2
37.5°	7427.9	7465.4	7356.2	7145.1	6864.0	6830.5	6603.2	6877.8	7399.4	8341.6	8715.7
40°	8166.3	8126.4	7994.4	7726.2	7464.6	7410.8	7146.8	7291.0	8080.8	9458.1	9729.5
42.5°	8710.8	8699.4	8587.7	8322.8	8059.6	8016.4	7803.7	7960.1	8939.0	10590.2	10711.6
45°	9142.7	9212.8	9210.4	9044.1	8895.8	8871.3	8745.8	8976.5	9976.5	11658.6	11599.1
47.5°	9526.6	9569.8	9500.5	9428.0	9358.7	9366.8	9459.8	9934.1	11036.8	12591.8	12328.6
50°	10154.9	10099.5	9789.0	9733.6	9831.4	9835.5	10118.3	10848.5	12204.7	13398.7	12946.3
52.5°	10992.8	10932.5	10294.3	10199.8	10431.2	10448.4	10918.6	11759.7	13409.3	14169.7	13560.9
55°	12239.7	12099.5	11415.8	10992.0	11097.9	11167.2	11736.9	12635.8	14352.2	14849.4	14026.2
57.5°	13771.1	13873.0	13522.5	12564.9	12124.0	12150.1	12673.3	13474.5	15184.3	15444.3	14298.4
60°	15389.7	15365.3	15512.0	15108.5	14264.2	14124.0	13857.5	14330.2	15829.0	15945.6	14578.8
62.5°	16276.4	16419.1	16908.1	16988.8	17750.8	17676.6	15860.0	15391.3	16573.9	16260.1	14655.4
65°	16271.6	16333.5	17243.9	18244.7	20625.3	20604.1	19759.8	16926.0	17128.9	16428.0	14502.2
67.5°	15220.2	15316.4	16380.8	18336.0	21953.8	21928.5	21345.0	19083.3	17303.3	16225.9	13787.4
70°	13303.3	13335.9	14374.2	17050.7	22487.6	22584.6	21399.6	19911.4	16869.8	15625.3	12484.2
72.5°	10974.8	10907.2	11922.7	14560.9	21128.2	21070.3	20494.9	18922.8	16139.5	14459.0	10181.8
75°	8080.8	8269.0	9180.2	11691.2	18089.8	18301.7	18556.8	17410.1	14334.3	11916.2	7040.8
77.5°	5335.8	5575.4	6496.4	8766.2	14321.2	14650.5	15311.5	14807.8	11661.1	8547.8	3352.9
80°	2757.2	2938.1	3766.9	5816.7	10266.6	10741.8	11953.7	11215.3	8267.4	3864.7	750.6
82.5°	1043.2	1019.6	1687.9	3329.3	6582.8	7014.7	7895.8	6725.4	2942.2	678.9	348.8
85°	458.0	484.9	699.3	1518.4	3763.7	3819.9	4472.7	2621.9	431.1	324.4	237.2
87.5°	198.0	227.4	293.4	436.8	1269.8	1466.2	1814.2	832.9	130.4	112.5	119.0
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°	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4	3782.4
2.5°	3787.3	3782.4	3774.3	3753.9	3720.5	3716.4	3713.2	3709.9	3703.4	3706.6	3725.4
5°	3795.5	3786.5	3757.2	3727.8	3698.5	3672.4	3640.6	3628.4	3612.1	3601.5	3621.1
7.5°	3823.2	3804.4	3761.2	3721.3	3641.4	3603.1	3562.4	3514.3	3480.1	3458.1	3477.6
10°	3869.6	3846.0	3792.2	3709.9	3616.2	3511.0	3439.3	3359.4	3294.2	3276.3	3294.2
12.5°	3945.4	3910.4	3847.6	3736.0	3569.7	3432.0	3295.9	3190.7	3085.6	3055.4	3064.4
15°	4068.5	4040.8	3944.6	3790.6	3570.5	3360.3	3158.1	2988.6	2850.9	2802.8	2799.5
17.5°	4265.7	4236.4	4125.6	3899.0	3599.9	3304.0	3022.8	2764.5	2555.9	2449.9	2432.8
20°	4548.5	4507.8	4339.9	4058.7	3663.4	3279.6	2897.3	2550.1	2225.8	2026.9	1996.8
22.5°	4863.1	4819.9	4572.2	4181.8	3709.1	3231.5	2777.5	2313.0	1885.9	1643.0	1608.8
25°	5254.3	5159.8	4794.7	4298.3	3698.5	3130.4	2582.7	1991.1	1528.1	1317.9	1295.0
27.5°	5640.6	5520.8	5021.2	4359.5	3652.0	2969.9	2297.5	1614.5	1196.4	1047.3	1028.5
30°	6119.9	5888.4	5222.5	4388.0	3534.7	2729.4	1915.3	1227.4	895.7	793.0	775.1
32.5°	6689.6	6339.1	5411.6	4356.2	3339.1	2362.7	1489.0	898.9	665.9	601.5	600.7
35°	7441.0	6891.7	5619.5	4251.9	3039.1	1967.4	1044.0	614.5	519.2	497.2	501.2
37.5°	8319.6	7639.8	5830.5	4080.7	2700.1	1505.3	696.0	473.5	456.4	457.2	458.0
40°	9246.2	8466.3	6115.0	3840.3	2288.5	1089.7	501.2	425.4	424.6	432.8	435.2
42.5°	10131.3	9269.0	6465.4	3520.0	1857.4	720.5	434.4	405.9	395.3	398.5	401.0
45°	10953.7	9957.7	6763.7	3207.9	1395.3	514.3	426.2	383.1	366.8	365.1	366.8
47.5°	11616.3	10509.5	6945.5	2841.1	994.3	427.1	409.1	361.9	339.0	334.2	331.7
50°	12120.7	10919.4	7011.5	2425.5	672.4	407.5	386.3	337.4	309.7	310.5	310.5
52.5°	12613.0	11291.9	6934.9	2006.5	494.7	390.4	370.8	317.9	288.5	304.0	308.1
55°	12967.5	11448.4	6711.6	1553.4	412.4	369.2	353.7	295.0	274.7	299.9	308.1
57.5°	13174.5	11571.4	6301.6	1121.4	378.2	348.8	331.7	273.8	255.1	261.6	265.7
60°	13303.3	11399.5	5759.6	766.9	360.2	332.5	309.7	260.0	234.7	219.2	216.8
62.5°	13232.4	10969.1	5045.7	527.3	341.5	314.6	291.0	246.9	213.5	193.2	191.5
65°	12654.6	10172.9	3873.7	427.1	330.1	306.4	279.5	234.7	198.9	179.3	176.9
67.5°	11582.8	8741.7	2262.5	379.8	325.2	298.3	270.6	223.3	190.7	169.5	166.3
70°	9821.6	6575.5	758.0	339.0	324.4	297.5	263.2	215.2	181.7	159.7	156.5
72.5°	7085.6	3967.4	369.2	298.3	303.2	285.3	257.5	208.6	176.0	148.3	142.6
75°	4026.9	1291.8	333.3	257.5	282.0	272.2	254.3	209.5	178.5	134.5	128.0
77.5°	1145.9	377.3	321.9	219.2	266.5	281.2	238.0	189.1	182.6	124.7	116.5
80°	387.1	335.8	310.5	170.3	215.2	232.3	206.2	166.3	184.2	113.3	105.1
82.5°	310.5	337.4	260.8	136.1	163.8	176.0	163.8	149.1	149.1	101.1	94.5
85°	248.6	313.0	165.4	108.4	122.3	135.3	115.7	111.7	104.3	84.8	82.3
87.5°	144.3	97.8	68.5	55.4	51.3	52.2	44.8	53.8	66.0	57.9	57.1
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)