

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: P510460

Luminaire Tested: **CST-CA10-310-722-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510460
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-CA10-310-722-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34944 lumens
Efficiency: N/A
Efficacy: 111.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

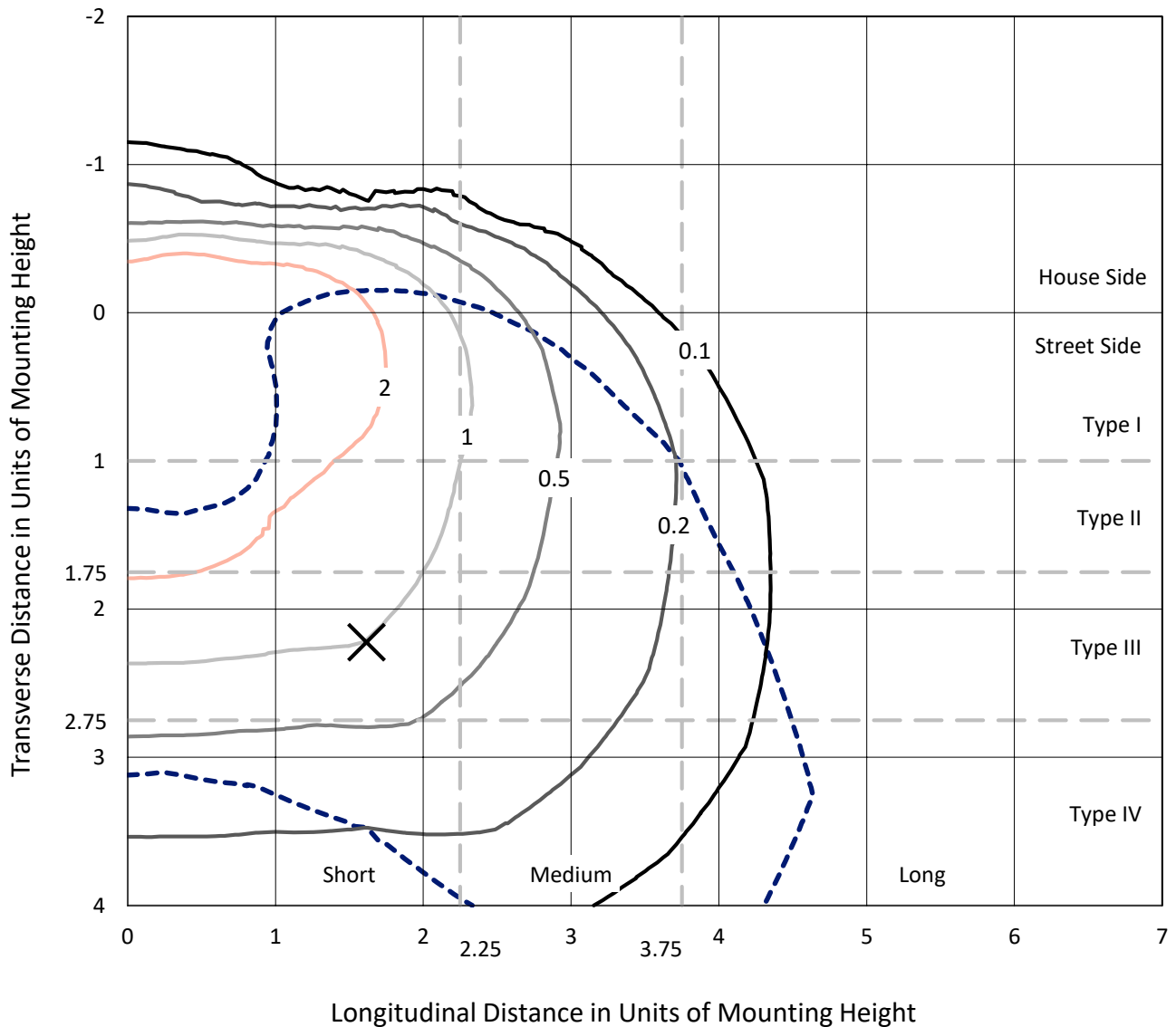
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

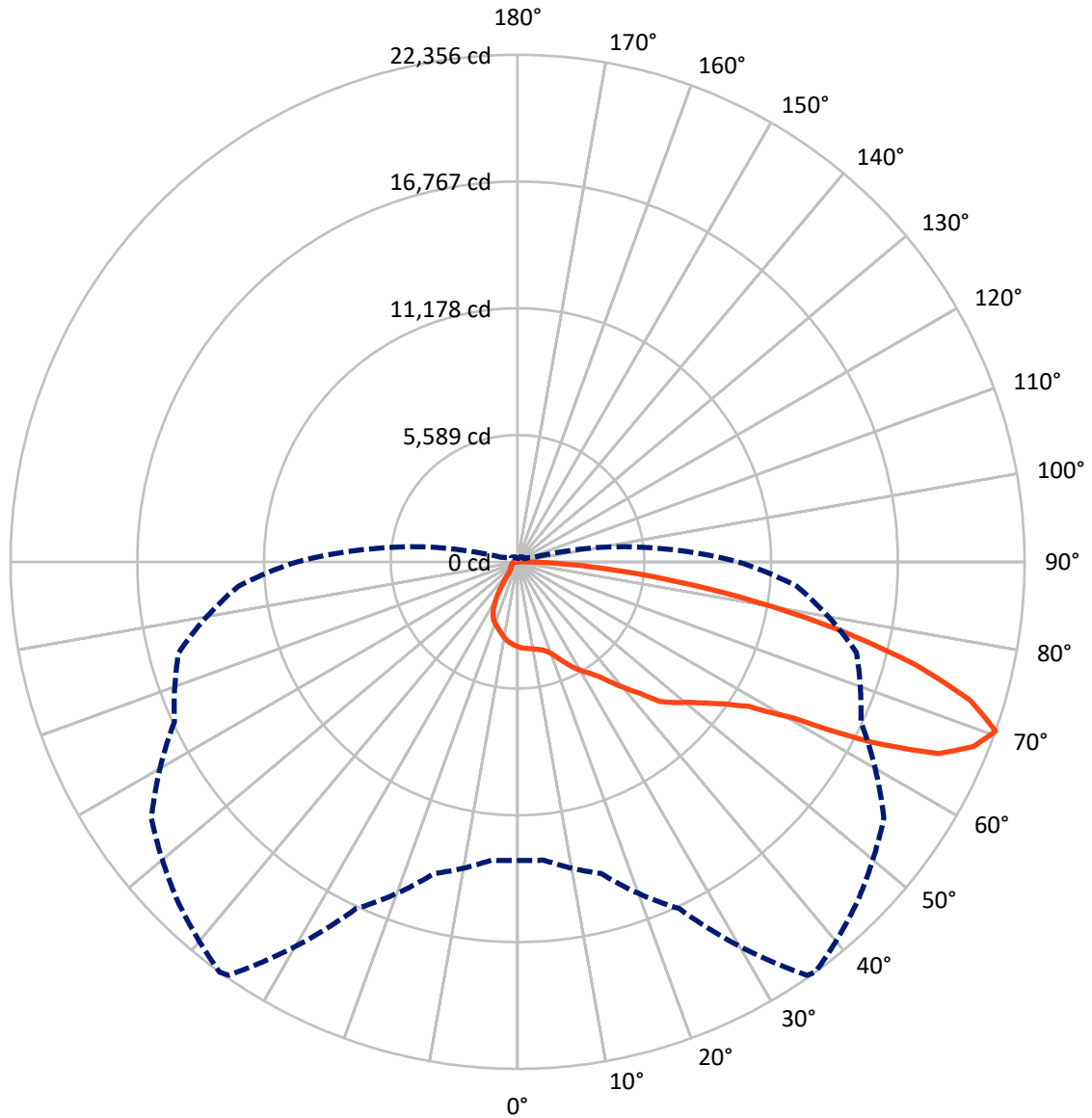
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 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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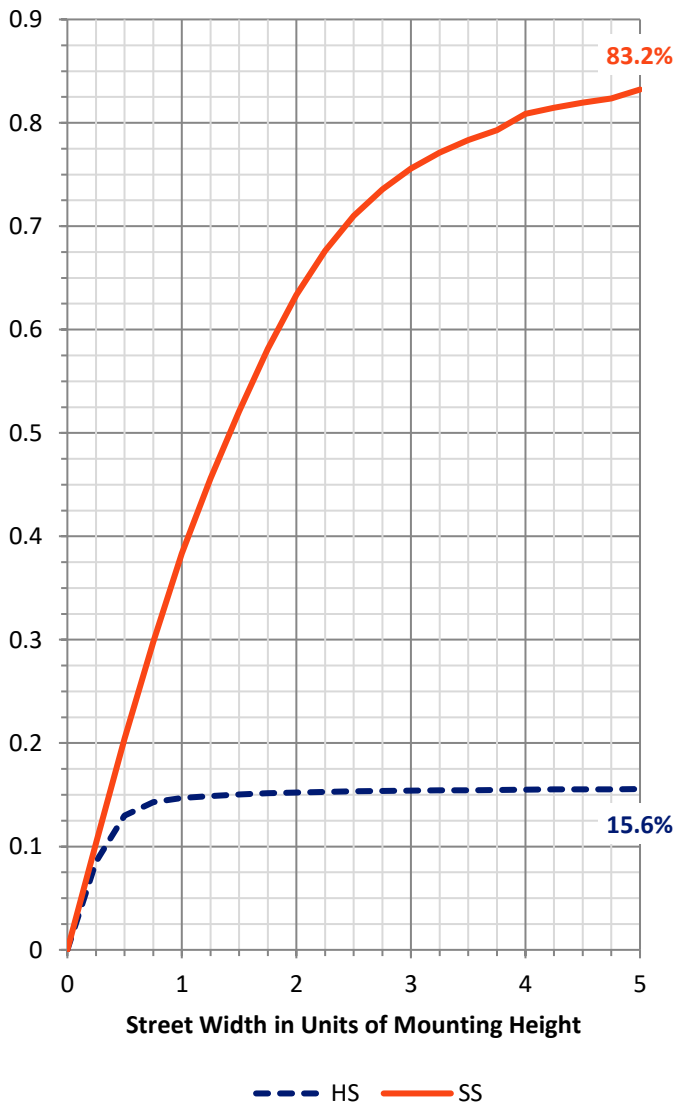
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5514.4	0.0	5514.4
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	29429.6	0.0	29429.6
	% Fixture	84.2	0.0	84.2
Total	Lumens	34944.0	0.0	34944.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	355.1	1.0
10°-20°	1056.0	3.0
20°-30°	1899.0	5.4
30°-40°	3005.0	8.6
40°-50°	4696.3	13.4
50°-60°	6743.9	19.3
60°-70°	9147.4	26.2
70°-80°	6770.1	19.4
80°-90°	1271.2	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°	34944.0	100.0
0°-180°	34944.0	100.0

Coefficient of Utilization



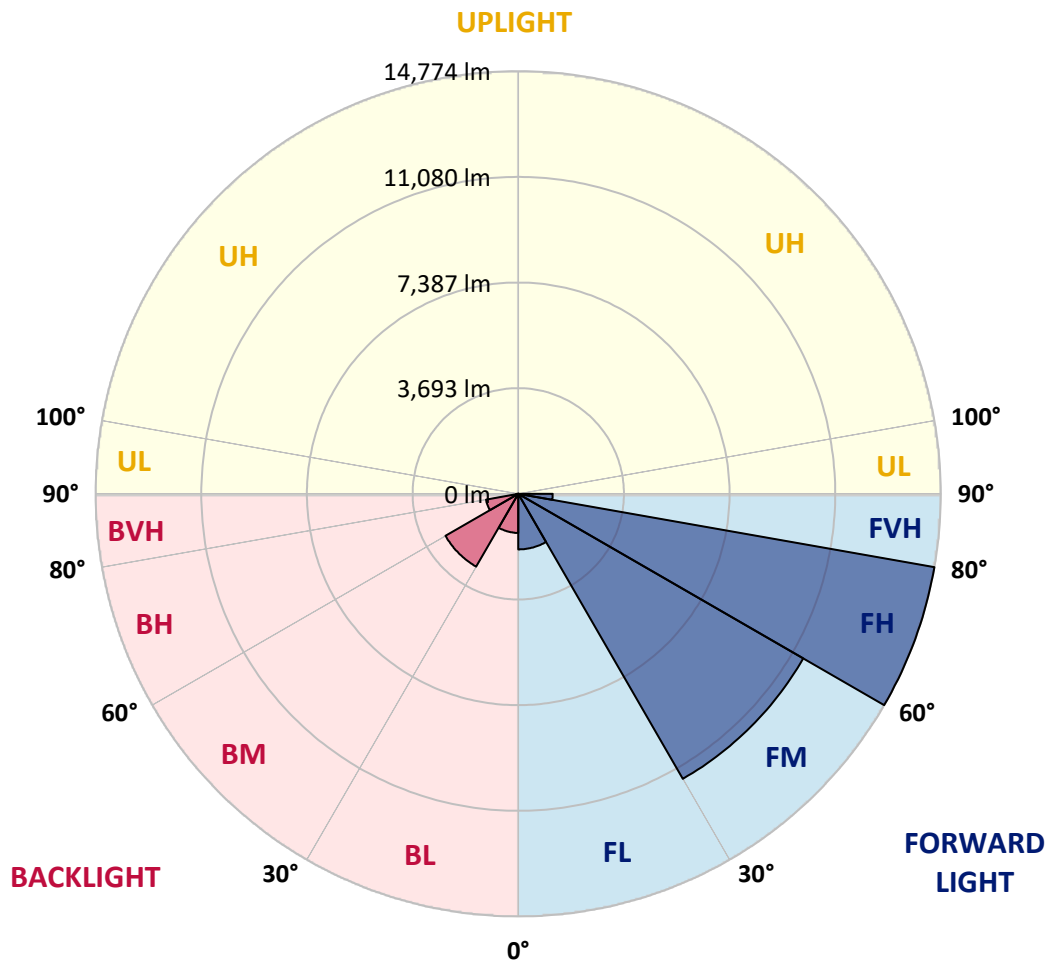
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1943.6	5.6			
FM (30°-60°)	11506.7	32.9			
FH (60°-80°)	14774.0	42.3			G5
FVH (80°-90°)	1205.3	3.4			G5
BL (0°-30°)	1366.4	3.9	B3/2500		
BM (30°-60°)	2938.5	8.4	B3/5000		
BH (60°-80°)	1143.5	3.3	B3/2500		G3/2500
BVH (80°-90°)	65.9	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°	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1
2.5°	3819.9	3811.8	3805.4	3807.8	3803.0	3806.2	3798.9	3790.1	3769.1	3760.2	3756.2
5°	3853.8	3851.4	3844.9	3840.1	3831.2	3828.0	3819.9	3827.2	3815.9	3786.8	3769.9
7.5°	3874.0	3873.2	3865.9	3855.4	3860.2	3864.3	3872.3	3861.1	3846.5	3832.8	3798.1
10°	3882.8	3882.8	3874.0	3879.6	3904.6	3907.0	3911.1	3918.3	3904.6	3884.4	3849.8
12.5°	3905.4	3903.8	3907.0	3925.6	3951.4	3957.1	3977.2	3977.2	3978.8	3966.7	3926.4
15°	3961.9	3961.9	3969.2	3986.1	4030.5	4033.7	4063.5	4090.2	4093.4	4075.6	4045.0
17.5°	4092.6	4089.4	4085.3	4095.8	4143.4	4145.0	4196.7	4230.5	4239.4	4258.8	4253.9
20°	4341.1	4337.8	4337.0	4337.8	4334.6	4329.8	4380.6	4416.9	4462.1	4496.0	4512.9
22.5°	4696.8	4689.6	4689.6	4650.0	4619.4	4624.2	4632.3	4652.5	4712.2	4771.9	4835.6
25°	5080.0	5075.2	5079.2	4978.4	4937.2	4953.4	4942.9	4974.4	5052.6	5104.2	5172.0
27.5°	5393.0	5400.3	5377.7	5299.5	5272.8	5284.9	5260.7	5351.1	5437.4	5527.8	5630.2
30°	5782.7	5744.0	5688.3	5593.1	5583.4	5585.1	5583.4	5728.7	5907.7	6036.8	6178.8
32.5°	6291.8	6298.2	6173.2	5948.9	5866.6	5855.3	5887.6	6100.6	6342.6	6629.0	6816.1
35°	6806.5	6816.9	6725.8	6491.8	6257.1	6221.6	6174.0	6450.7	6800.0	7374.4	7656.8
37.5°	7352.6	7389.7	7281.6	7072.7	6794.4	6761.3	6536.2	6808.1	7324.4	8257.0	8627.3
40°	8083.5	8044.0	7913.3	7647.9	7388.9	7335.7	7074.3	7217.1	7998.8	9362.2	9630.8
42.5°	8622.4	8611.1	8500.6	8238.4	7977.8	7935.1	7724.5	7879.4	8848.3	10482.8	10603.0
45°	9050.0	9119.4	9117.0	8952.4	8805.6	8781.4	8657.1	8885.4	9875.3	11540.4	11481.5
47.5°	9430.0	9472.7	9404.2	9332.4	9263.8	9271.9	9363.8	9833.3	10924.9	12464.1	12203.5
50°	10052.0	9997.1	9689.7	9634.9	9731.7	9735.7	10015.7	10738.5	12080.9	13262.8	12815.0
52.5°	10881.3	10821.6	10189.9	10096.3	10325.5	10342.4	10807.9	11640.4	13273.3	14026.0	13423.3
55°	12115.6	11976.8	11300.0	10880.5	10985.4	11053.9	11617.8	12507.7	14206.7	14698.8	13884.0
57.5°	13631.5	13732.3	13385.4	12437.5	12001.0	12026.9	12544.8	13337.8	15030.4	15287.7	14153.4
60°	15233.7	15209.4	15354.7	14955.3	14119.5	13980.8	13717.0	14184.9	15668.5	15783.8	14430.9
62.5°	16111.4	16252.6	16736.6	16816.5	17570.8	17497.4	15699.1	15235.3	16405.8	16095.2	14506.8
65°	16106.5	16167.9	17069.0	18059.7	20416.1	20395.2	19559.4	16754.4	16955.2	16261.4	14355.1
67.5°	15065.8	15161.0	16214.6	18150.0	21731.1	21706.1	21128.5	18889.8	17127.9	16061.4	13647.6
70°	13168.4	13200.7	14228.5	16877.8	22259.5	22355.5	21182.5	19709.4	16698.7	15466.8	12357.6
72.5°	10863.5	10796.6	11801.8	14413.2	20913.9	20856.6	20287.1	18730.9	15975.9	14312.4	10078.6
75°	7998.8	8185.2	9087.1	11572.7	17906.4	18116.1	18368.6	17233.6	14188.9	11795.3	6969.4
77.5°	5281.7	5518.9	6430.5	8677.3	14176.0	14501.9	15156.2	14657.6	11542.8	8461.1	3318.9
80°	2729.2	2908.3	3728.7	5757.7	10162.5	10632.8	11832.4	11101.5	8183.6	3825.6	743.0
82.5°	1032.6	1009.2	1670.8	3295.5	6516.0	6943.6	7815.7	6657.2	2912.3	672.0	345.3
85°	453.4	480.0	692.2	1503.0	3725.5	3781.2	4427.4	2595.3	426.8	321.1	234.8
87.5°	196.0	225.1	290.4	432.4	1256.9	1451.3	1795.8	824.5	129.1	111.3	117.8
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°	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1	3744.1
2.5°	3748.9	3744.1	3736.0	3715.8	3682.8	3678.7	3675.5	3672.3	3665.8	3669.0	3687.6
5°	3757.0	3748.1	3719.1	3690.0	3661.0	3635.2	3603.7	3591.6	3575.5	3565.0	3584.3
7.5°	3784.4	3765.9	3723.1	3683.6	3604.5	3566.6	3526.3	3478.7	3444.8	3423.0	3442.4
10°	3830.4	3807.0	3753.8	3672.3	3579.5	3475.4	3404.4	3325.4	3260.8	3243.1	3260.8
12.5°	3905.4	3870.7	3808.6	3698.1	3533.5	3397.2	3262.5	3158.4	3054.3	3024.5	3033.3
15°	4027.2	3999.8	3904.6	3752.1	3534.3	3326.2	3126.1	2958.3	2822.0	2774.4	2771.1
17.5°	4222.5	4193.4	4083.7	3859.4	3563.4	3270.5	2992.2	2736.5	2529.9	2425.1	2408.1
20°	4502.4	4462.1	4295.9	4017.6	3626.3	3246.3	2868.0	2524.3	2203.2	2006.4	1976.5
22.5°	4813.8	4771.1	4525.8	4139.4	3671.5	3198.7	2749.4	2289.5	1866.8	1626.4	1592.5
25°	5201.0	5107.5	4746.0	4254.7	3661.0	3098.7	2556.6	1970.9	1512.6	1304.5	1281.9
27.5°	5583.4	5464.8	4970.3	4315.2	3615.0	2939.8	2274.2	1598.1	1184.3	1036.7	1018.1
30°	6057.8	5828.7	5169.6	4343.5	3498.8	2701.8	1895.8	1214.9	886.6	785.0	767.2
32.5°	6621.7	6274.8	5356.7	4312.0	3305.2	2338.7	1473.9	889.8	659.1	595.4	594.6
35°	7365.5	6821.8	5562.5	4208.8	3008.3	1947.5	1033.4	608.3	513.9	492.1	496.1
37.5°	8235.2	7562.4	5771.4	4039.3	2672.7	1490.0	689.0	468.7	451.8	452.6	453.4
40°	9152.5	8380.4	6053.0	3801.4	2265.3	1078.6	496.1	421.1	420.3	428.4	430.8
42.5°	10028.6	9175.0	6399.9	3484.3	1838.6	713.2	430.0	401.8	391.3	394.5	396.9
45°	10842.6	9856.7	6695.1	3175.3	1381.1	509.1	421.9	379.2	363.0	361.4	363.0
47.5°	11498.5	10402.9	6875.0	2812.3	984.2	422.7	405.0	358.2	335.6	330.8	328.3
50°	11997.8	10808.7	6940.4	2400.9	665.6	403.4	382.4	334.0	306.6	307.4	307.4
52.5°	12485.1	11177.4	6864.5	1986.2	489.7	386.4	367.1	314.6	285.6	300.9	304.9
55°	12836.0	11332.3	6643.5	1537.6	408.2	365.5	350.1	292.0	271.9	296.9	304.9
57.5°	13040.9	11454.1	6237.7	1110.1	374.3	345.3	328.3	271.1	252.5	259.0	263.0
60°	13168.4	11283.9	5701.2	759.1	356.6	329.1	306.6	257.3	232.3	217.0	214.6
62.5°	13098.2	10857.9	4994.5	522.0	338.0	311.4	288.0	244.4	211.4	191.2	189.6
65°	12526.2	10069.7	3834.4	422.7	326.7	303.3	276.7	232.3	196.8	177.5	175.1
67.5°	11465.4	8653.1	2239.5	375.9	321.9	295.3	267.8	221.0	188.8	167.8	164.6
70°	9722.0	6508.8	750.3	335.6	321.1	294.5	260.6	213.0	179.9	158.1	154.9
72.5°	7013.8	3927.2	365.5	295.3	300.1	282.4	254.9	206.5	174.3	146.8	141.2
75°	3986.1	1278.7	330.0	254.9	279.1	269.5	251.7	207.3	176.7	133.1	126.7
77.5°	1134.3	373.5	318.7	217.0	263.8	278.3	235.6	187.2	180.7	123.4	115.4
80°	383.2	332.4	307.4	168.6	213.0	229.9	204.1	164.6	182.3	112.1	104.1
82.5°	307.4	334.0	258.2	134.7	162.2	174.3	162.2	147.6	147.6	100.0	93.6
85°	246.1	309.8	163.8	107.3	121.0	133.9	114.6	110.5	103.3	83.9	81.5
87.5°	142.8	96.8	67.8	54.9	50.8	51.6	44.4	53.2	65.3	57.3	56.5
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)