

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: P510451

Luminaire Tested: **CST-CA10-210-760-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510451
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-210-760-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34325 lumens
Efficiency: N/A
Efficacy: 161.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

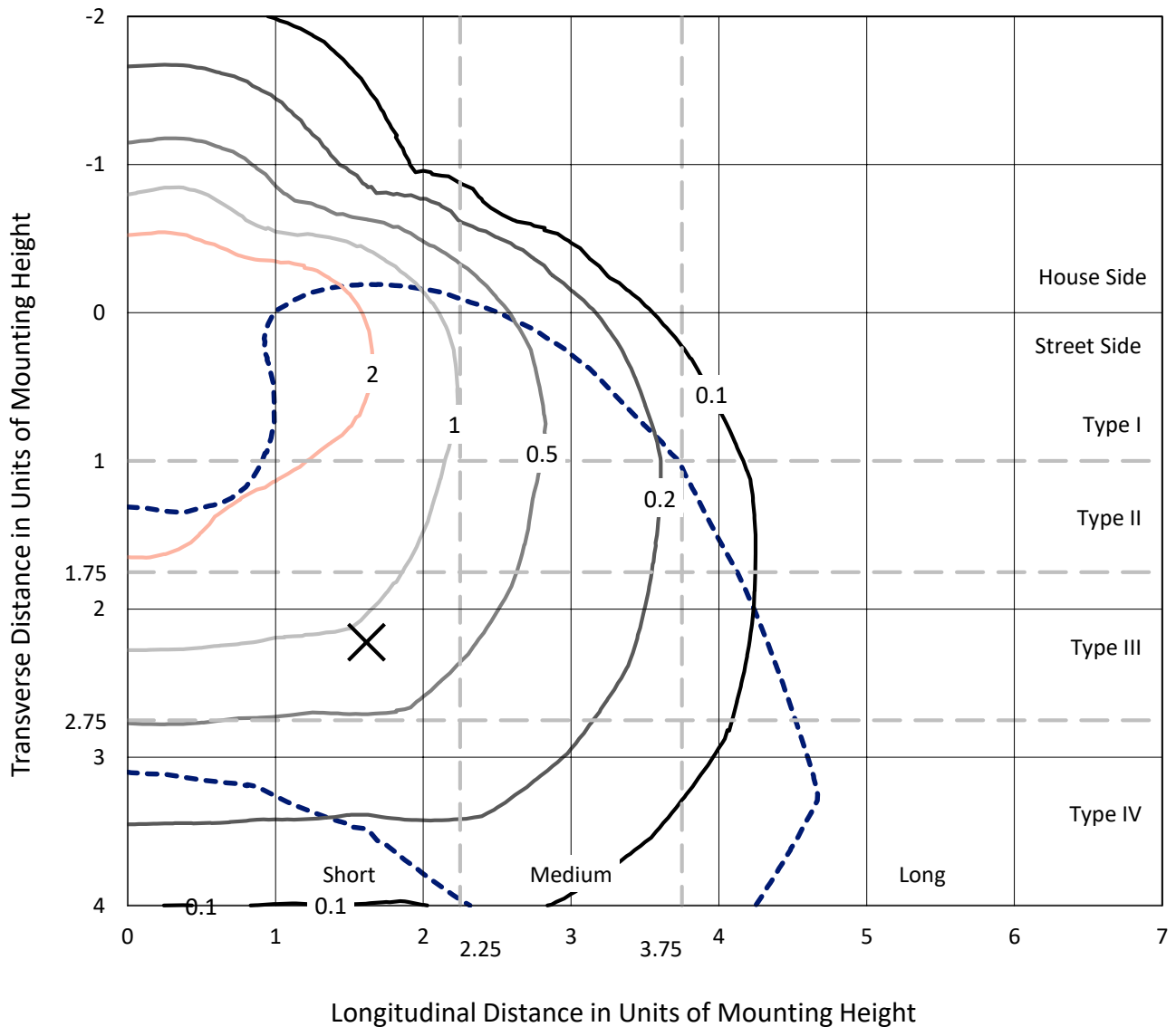
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

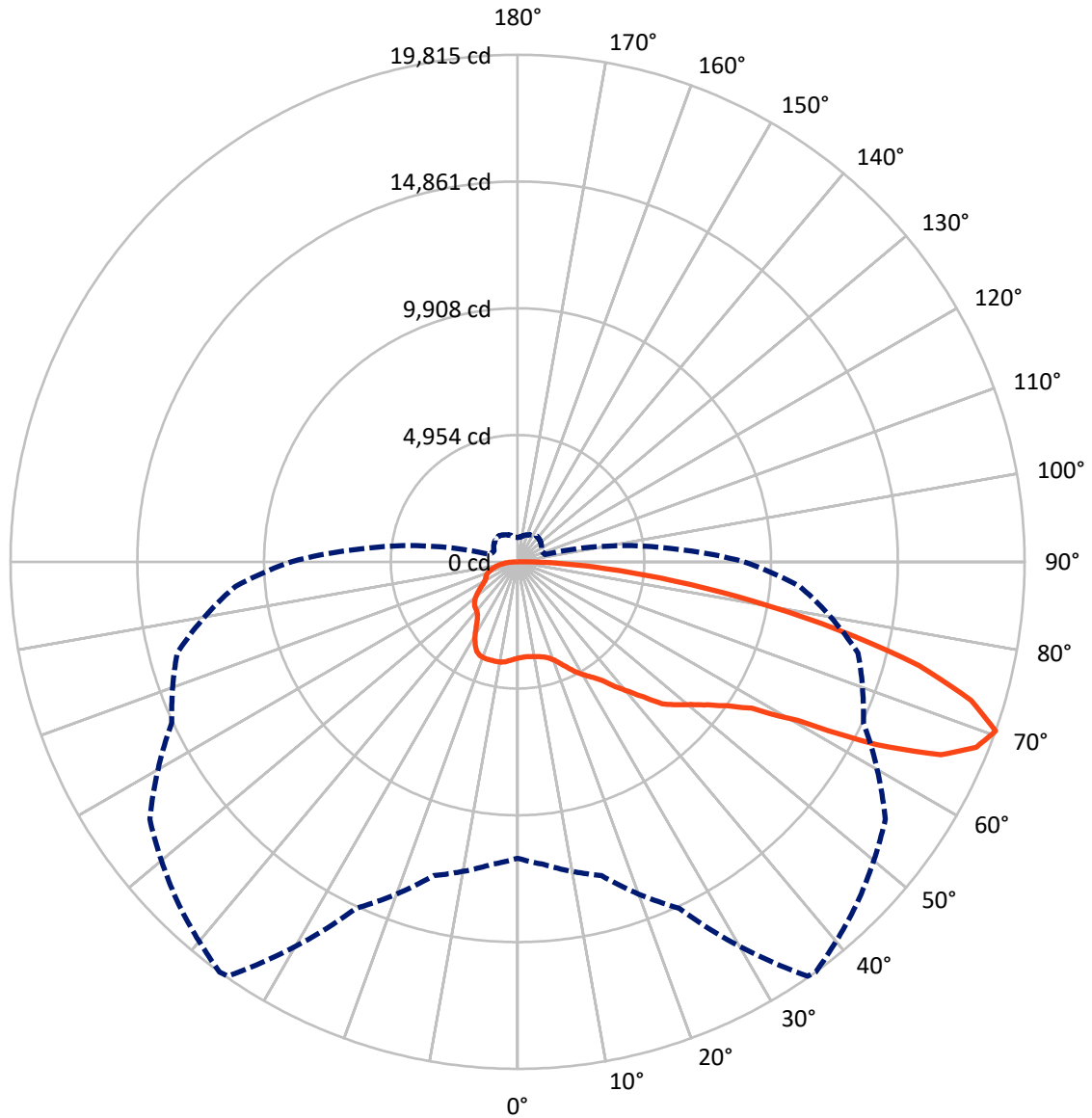
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.4 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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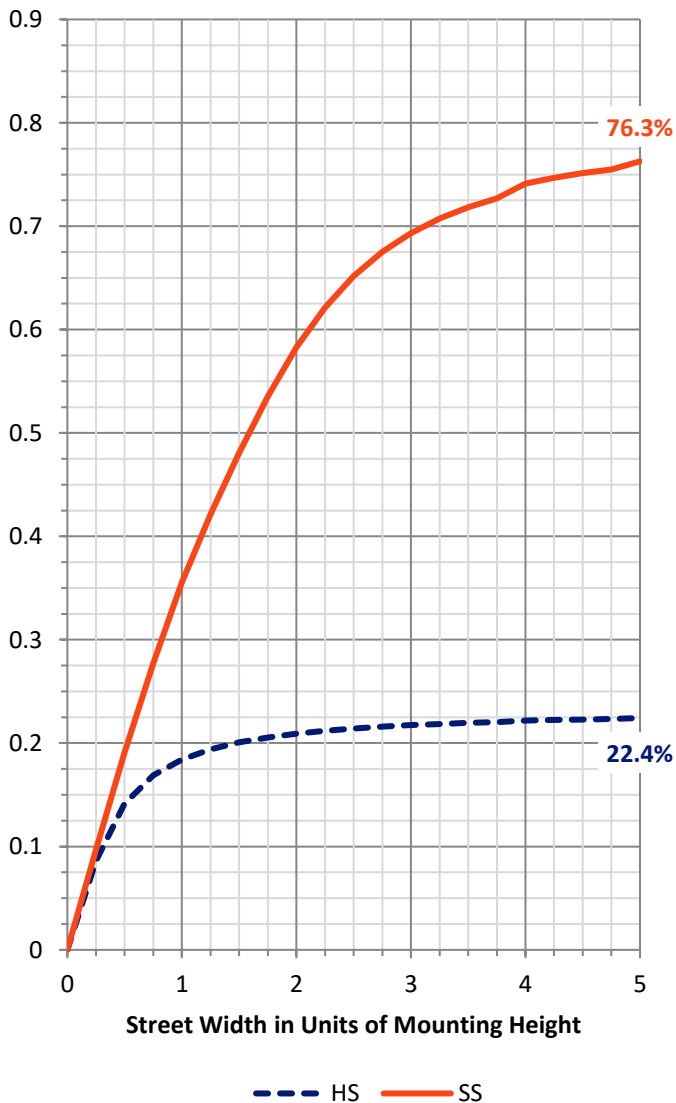
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7820.8	0.0	7820.8
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	26504.3	0.0	26504.3
	% Fixture	77.2	0.0	77.2
Total	Lumens	34325.0	0.0	34325.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	364.2	1.1
10°-20°	1126.0	3.3
20°-30°	2031.1	5.9
30°-40°	3145.9	9.2
40°-50°	4778.6	13.9
50°-60°	6623.4	19.3
60°-70°	8612.7	25.1
70°-80°	6360.4	18.5
80°-90°	1282.7	3.7
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°	34325.0	100.0
0°-180°	34325.0	100.0

Coefficient of Utilization



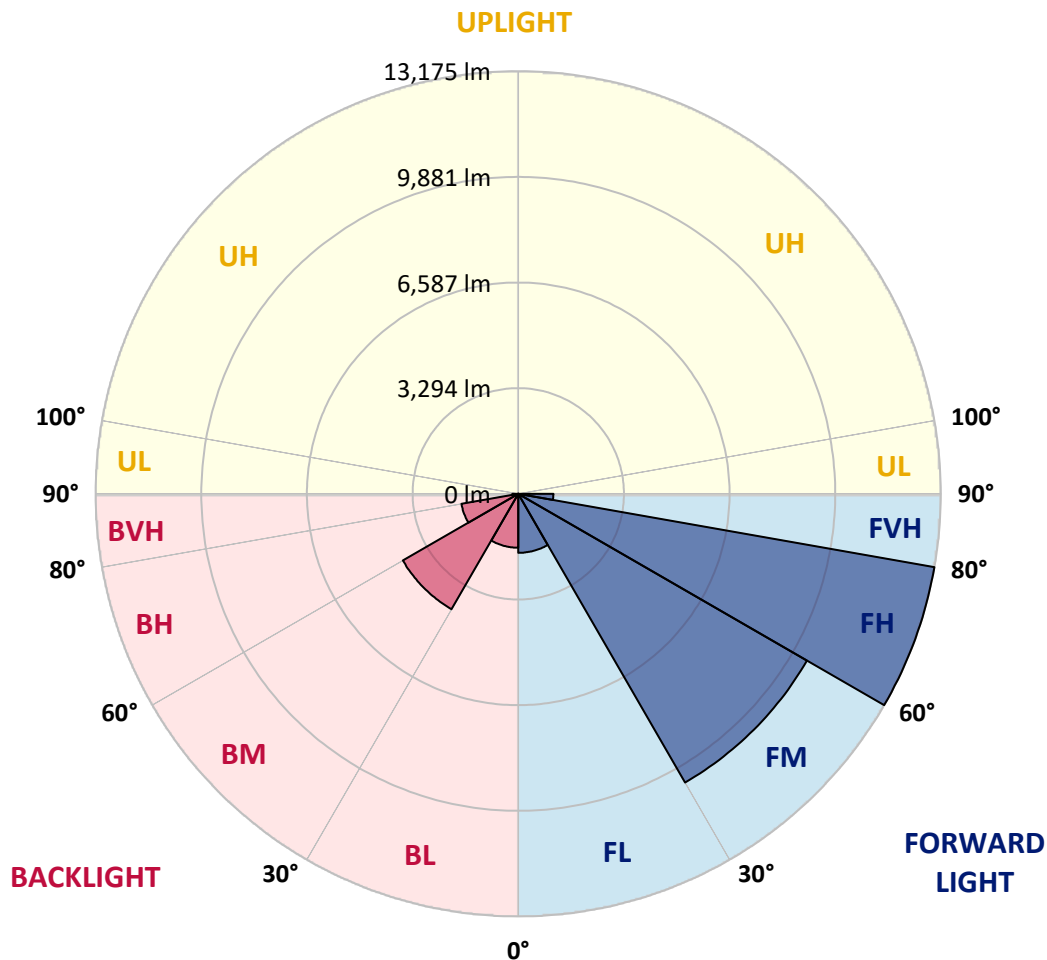
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1840.2	5.4			
FM (30°-60°)	10393.5	30.3			
FH (60°-80°)	13174.7	38.4			G5
FVH (80°-90°)	1095.9	3.2			G5
BL (0°-30°)	1681.3	4.9	B3/2500		
BM (30°-60°)	4154.3	12.1	B3/5000		
BH (60°-80°)	1798.4	5.2	B3/2500		G3/2500
BVH (80°-90°)	186.9	0.5			G2/225
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°	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6
2.5°	3736.9	3731.9	3729.1	3734.7	3736.9	3737.6	3739.0	3737.6	3734.0	3746.8	3762.5
5°	3737.6	3734.7	3729.1	3724.1	3724.1	3724.1	3724.8	3741.1	3748.2	3746.8	3766.0
7.5°	3743.3	3741.1	3730.5	3726.9	3735.4	3738.3	3752.5	3747.5	3755.3	3768.1	3784.5
10°	3744.0	3741.1	3731.9	3739.7	3763.9	3768.1	3774.5	3788.7	3791.6	3807.2	3823.6
12.5°	3751.1	3751.1	3754.6	3771.7	3797.3	3802.3	3826.4	3837.8	3854.8	3862.7	3882.6
15°	3788.7	3788.0	3796.6	3815.8	3857.0	3859.8	3889.7	3923.8	3936.6	3955.8	3987.7
17.5°	3878.3	3882.6	3883.3	3897.5	3946.5	3947.9	3997.0	4029.0	4058.1	4092.2	4165.4
20°	4090.8	4083.0	4074.5	4074.5	4093.6	4103.6	4141.3	4192.4	4252.1	4312.5	4398.5
22.5°	4358.0	4373.7	4342.4	4326.0	4335.3	4323.9	4352.3	4393.6	4463.2	4553.5	4662.2
25°	4677.1	4678.5	4676.4	4610.3	4589.7	4596.8	4620.3	4658.6	4751.0	4822.8	4980.6
27.5°	4988.4	4982.0	4959.3	4889.6	4869.7	4879.7	4879.0	4984.9	5079.4	5171.1	5356.6
30°	5271.3	5288.3	5247.8	5130.6	5132.7	5131.3	5164.0	5300.4	5473.1	5643.7	5834.1
32.5°	5770.2	5718.3	5663.6	5431.9	5389.2	5384.3	5403.5	5606.7	5862.6	6150.4	6379.3
35°	6240.0	6227.2	6173.2	5937.9	5691.3	5687.0	5660.7	5908.1	6267.7	6800.7	7086.4
37.5°	6720.4	6701.9	6648.6	6448.2	6203.0	6179.5	5958.5	6229.3	6715.4	7561.2	7968.4
40°	7293.2	7281.8	7199.4	6942.8	6691.3	6655.7	6426.2	6566.9	7280.4	8573.9	8861.0
42.5°	7795.7	7793.6	7699.0	7460.9	7247.0	7211.5	7016.0	7162.4	8065.8	9566.0	9735.2
45°	8164.5	8220.7	8224.9	8089.2	7941.4	7910.1	7858.2	8060.1	8974.0	10466.5	10441.6
47.5°	8475.8	8524.2	8473.7	8404.0	8353.6	8355.7	8436.0	8836.9	9870.9	11251.1	11057.8
50°	8996.1	8966.2	8704.0	8662.7	8726.7	8764.4	8997.5	9675.5	10897.9	11987.4	11610.7
52.5°	9746.6	9632.1	9117.6	9033.7	9276.1	9290.3	9661.3	10425.3	11924.1	12619.2	12116.7
55°	10773.5	10679.0	10097.6	9710.3	9832.6	9928.5	10450.9	11193.5	12762.1	13213.4	12506.2
57.5°	12291.6	12298.7	11824.7	11102.6	10686.8	10789.2	11197.1	11940.5	13454.3	13710.9	12749.3
60°	13508.3	13733.6	13592.2	13262.4	12665.4	12595.8	12285.2	12718.7	14045.6	14133.7	12981.7
62.5°	14351.9	14454.2	14940.4	15010.0	15692.3	15721.4	14233.9	13630.5	14695.2	14410.9	13030.7
65°	14309.3	14372.5	15140.8	16076.1	18091.6	18181.9	17311.3	15010.0	15140.1	14534.6	12887.9
67.5°	13312.9	13408.1	14384.6	16132.9	19370.2	19336.1	18783.8	16930.3	15286.5	14336.3	12207.0
70°	11582.3	11875.8	12696.0	14934.0	19769.6	19815.1	18797.3	17543.7	14909.1	13775.5	11072.0
72.5°	9546.1	9638.5	10413.2	12917.7	18601.9	18535.1	18026.9	16734.2	14226.8	12761.4	9085.6
75°	7259.8	7259.8	8197.9	10294.5	15974.4	16209.0	16406.5	15156.4	12603.6	10401.1	6186.7
77.5°	4819.3	4992.0	5747.4	7736.0	12644.8	12818.2	13500.5	12919.1	10319.4	7627.2	2825.7
80°	2556.4	2577.7	3387.9	5140.5	9044.4	9371.3	10309.4	9964.0	7422.6	3573.4	714.3
82.5°	894.1	975.8	1489.6	2979.3	5959.2	6163.2	6839.1	5920.9	2621.8	791.0	395.2
85°	444.2	459.8	656.0	1418.6	3355.2	3454.0	3995.6	2306.2	422.2	345.4	268.6
87.5°	213.9	218.9	251.6	507.4	1458.4	1525.9	1615.4	750.5	156.4	131.5	116.6
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°	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6	3759.6
2.5°	3766.0	3772.4	3784.5	3788.0	3779.5	3795.1	3810.1	3823.6	3822.9	3827.8	3845.6
5°	3774.5	3788.0	3800.8	3823.6	3845.6	3858.4	3870.5	3881.9	3885.4	3896.1	3906.7
7.5°	3800.8	3814.3	3843.5	3883.3	3884.7	3916.7	3937.3	3940.8	3943.7	3943.7	3968.6
10°	3841.3	3866.2	3913.1	3940.8	3965.7	3955.1	3976.4	3962.9	3952.9	3957.2	3974.2
12.5°	3911.0	3933.0	4000.5	4031.1	4008.4	4004.1	3982.8	3952.2	3917.4	3913.8	3929.5
15°	4020.4	4061.7	4122.1	4151.2	4094.4	4043.9	3972.1	3909.6	3842.1	3817.2	3827.1
17.5°	4196.7	4246.4	4312.5	4292.6	4188.9	4089.4	3970.7	3838.5	3707.7	3616.8	3640.2
20°	4454.7	4491.6	4545.6	4465.3	4314.0	4149.8	3955.1	3746.1	3525.1	3359.5	3340.3
22.5°	4725.5	4781.6	4748.9	4600.4	4402.1	4173.2	3922.4	3611.8	3269.9	3062.4	3031.1
25°	5051.7	5070.1	4957.1	4733.3	4427.0	4136.3	3816.5	3415.6	3009.1	2813.7	2804.4
27.5°	5397.8	5355.8	5145.5	4794.4	4399.2	4026.8	3604.0	3105.8	2773.2	2600.5	2573.5
30°	5788.7	5691.3	5301.1	4800.8	4294.8	3813.6	3335.3	2863.4	2581.3	2407.9	2380.1
32.5°	6291.8	6062.3	5445.4	4734.7	4074.5	3500.9	3012.7	2656.6	2408.6	2234.4	2209.6
35°	6935.0	6547.7	5598.2	4615.3	3803.0	3188.2	2745.4	2481.1	2268.6	2058.9	2025.5
37.5°	7676.3	7225.0	5780.8	4464.6	3505.2	2913.2	2564.9	2369.5	2164.8	1927.4	1887.6
40°	8537.7	7903.0	6062.3	4284.8	3238.0	2714.9	2477.5	2331.1	2107.2	1859.9	1814.4
42.5°	9283.9	8620.1	6397.0	4091.5	2985.7	2550.0	2438.4	2305.5	2071.0	1809.4	1757.6
45°	9974.0	9212.1	6723.9	3857.0	2719.9	2437.0	2391.5	2241.6	2007.0	1746.9	1692.9
47.5°	10534.7	9690.4	7008.2	3641.6	2507.4	2333.2	2289.2	2120.0	1899.7	1671.6	1631.8
50°	10965.4	10050.0	7163.9	3470.4	2282.8	2215.3	2157.0	1982.9	1771.1	1574.2	1540.1
52.5°	11406.0	10410.4	7240.6	3478.9	2073.8	2039.7	1980.0	1830.8	1668.7	1517.3	1480.4
55°	11662.6	10558.2	7159.6	3272.1	1881.9	1842.1	1790.3	1712.8	1616.1	1481.8	1447.0
57.5°	11812.6	10649.9	6913.0	2668.7	1651.0	1613.3	1621.8	1615.4	1535.8	1394.4	1362.4
60°	11920.6	10450.9	6407.7	1961.5	1454.1	1425.7	1496.0	1473.3	1404.3	1294.2	1267.2
62.5°	11833.2	10072.1	5498.0	1474.7	1293.5	1353.9	1415.7	1373.8	1280.0	1179.8	1148.5
65°	11300.2	9328.7	4178.9	1184.7	1241.6	1324.7	1374.5	1307.0	1211.7	1093.1	1078.8
67.5°	10330.0	7981.2	2464.7	1086.0	1202.5	1290.6	1331.9	1242.3	1158.4	1044.7	1027.7
70°	8849.7	5974.9	1100.9	1011.3	1134.3	1221.7	1248.7	1164.1	1073.2	966.6	949.5
72.5°	6586.8	3602.5	742.0	933.9	1033.4	1110.8	1140.7	1051.1	986.5	938.1	933.2
75°	3658.0	1250.8	684.4	845.7	923.2	992.8	1029.8	966.6	915.4	849.3	822.3
77.5°	1164.8	531.6	650.3	756.2	854.3	911.8	906.1	810.9	794.6	714.3	707.1
80°	464.8	463.4	601.3	619.0	729.2	777.5	764.7	644.6	665.9	619.0	600.5
82.5°	364.6	424.3	481.9	472.6	567.1	624.0	606.2	473.3	535.2	491.8	449.9
85°	277.2	371.7	309.2	307.7	395.9	463.4	474.7	363.9	364.6	331.9	295.7
87.5°	142.9	137.2	118.7	118.0	132.2	188.3	231.0	206.8	163.5	123.0	118.0
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)