

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: P591392

Luminaire Tested: **CTN-CA10-210-740-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-210-740-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18940 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

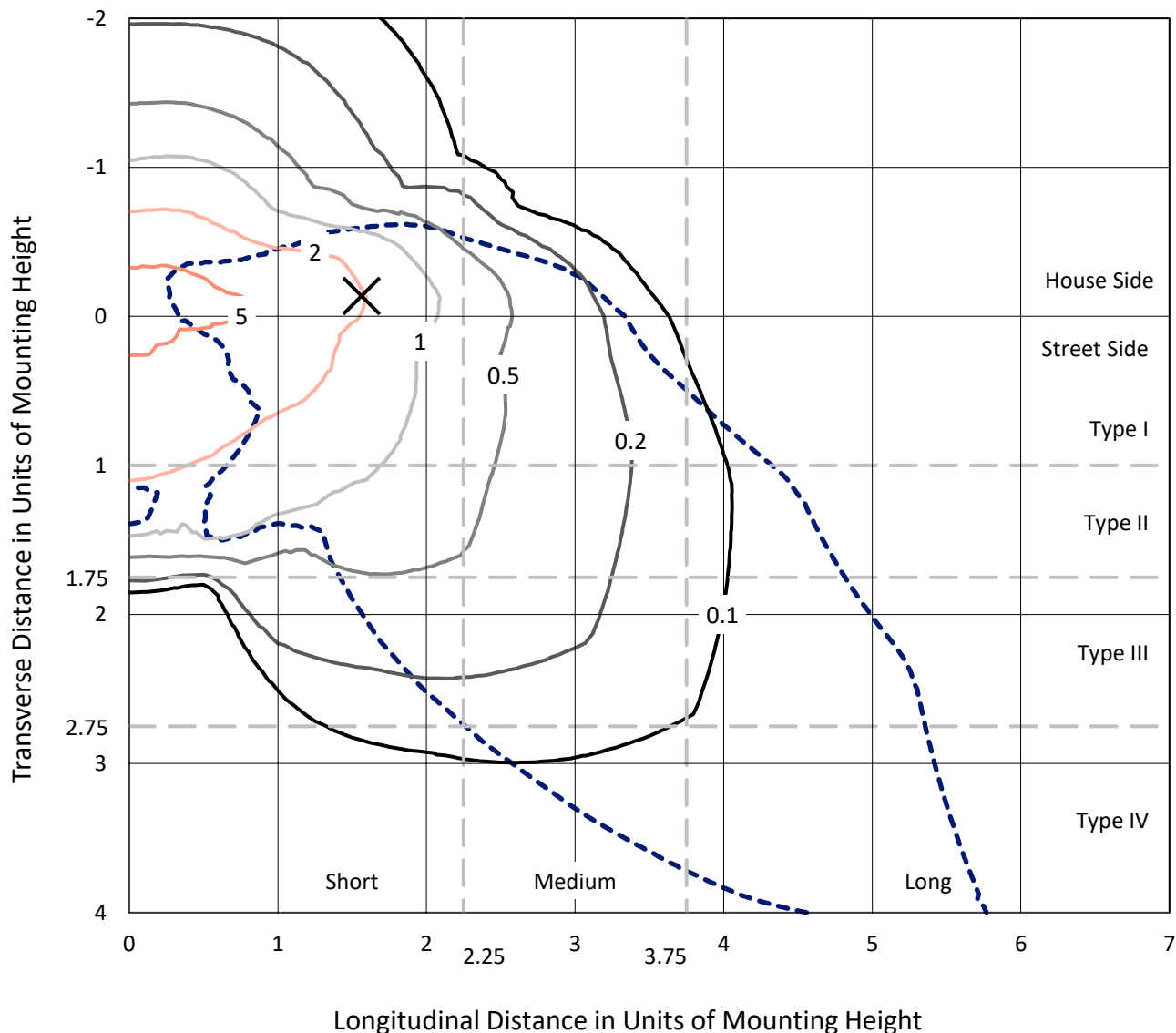
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

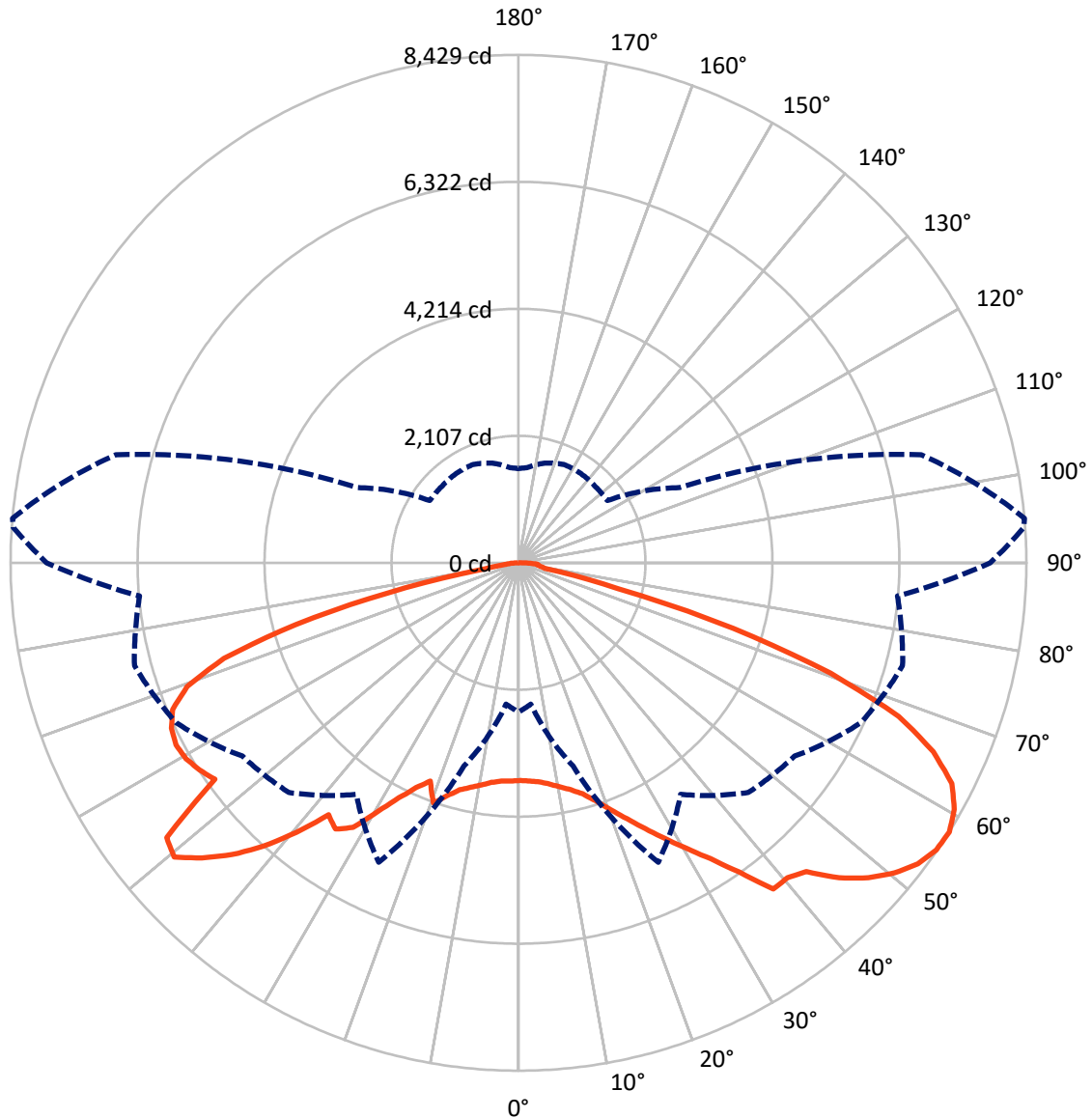
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 95-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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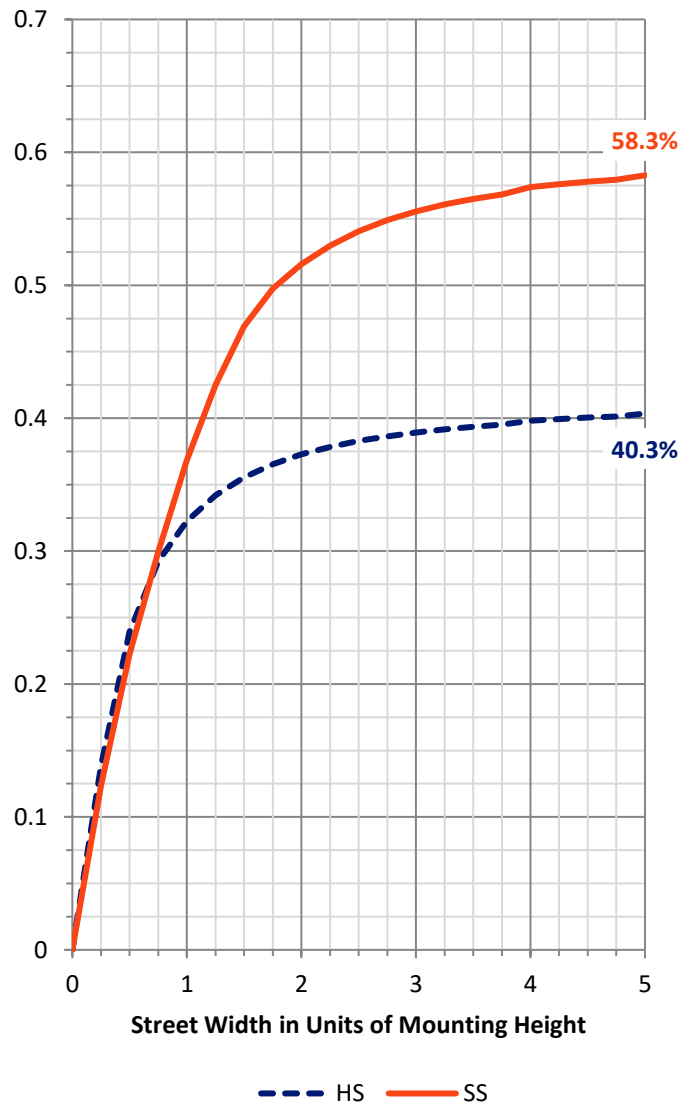
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7800.8	0.0	7800.8
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	11139.2	0.0	11139.2
	% Fixture	58.8	0.0	58.8
Total	Lumens	18940.0	0.0	18940.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.9	1.9
10°-20°	1079.1	5.7
20°-30°	1705.2	9.0
30°-40°	2356.3	12.4
40°-50°	3177.0	16.8
50°-60°	3742.5	19.8
60°-70°	3343.4	17.7
70°-80°	2496.4	13.2
80°-90°	687.2	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°	18940.0	100.0
0°-180°	18940.0	100.0

Coefficient of Utilization



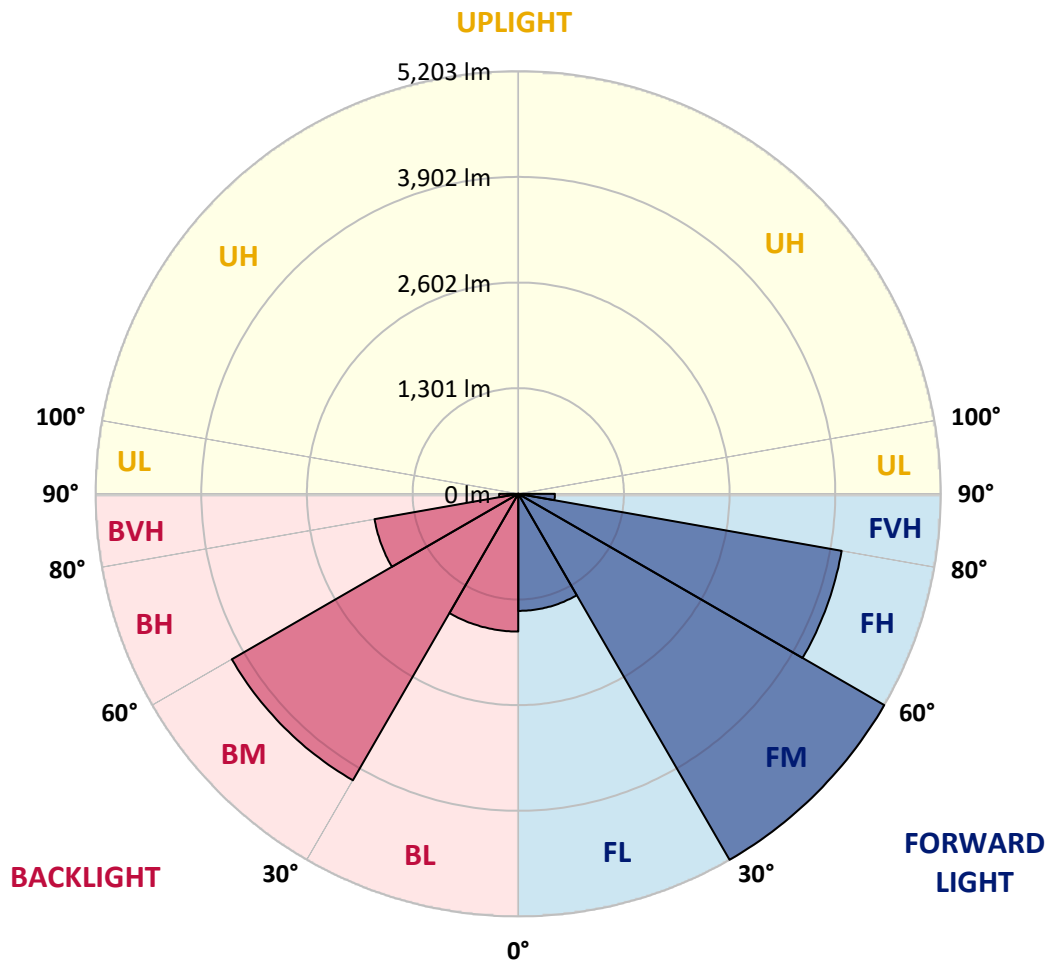
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1441.6	7.6			
FM (30°-60°)	5203.2	27.5			
FH (60°-80°)	4043.1	21.3			G2/5000
FVH (80°-90°)	451.4	2.4			G3/500
BL (0°-30°)	1695.6	9.0	B3/2500		
BM (30°-60°)	4072.6	21.5	B3/5000		
BH (60°-80°)	1796.8	9.5	B3/2500		G3/2500
BVH (80°-90°)	235.8	1.2			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6
2.5°	3566.1	3543.5	3544.6	3575.9	3529.5	3562.9	3558.6	3610.4	3602.8	3623.3	3629.8
5°	3537.0	3517.6	3518.7	3558.6	3527.3	3557.5	3537.0	3584.5	3601.7	3633.0	3639.5
7.5°	3544.6	3527.3	3533.8	3571.5	3532.7	3562.9	3565.1	3609.3	3617.9	3671.9	3680.5
10°	3564.0	3545.6	3550.0	3580.2	3555.4	3609.3	3602.8	3661.1	3663.2	3738.7	3749.5
12.5°	3538.1	3525.2	3525.2	3562.9	3575.9	3629.8	3646.0	3706.4	3719.3	3806.7	3820.7
15°	3491.7	3470.1	3501.4	3557.5	3583.4	3665.4	3695.6	3786.2	3801.3	3891.9	3922.1
17.5°	3411.9	3400.0	3515.4	3532.7	3434.5	3497.1	3625.5	3879.0	3930.7	4037.5	4093.6
20°	3173.5	3039.7	2731.2	2787.3	3089.4	3314.8	3354.7	3476.6	3698.8	4230.6	4318.0
22.5°	2333.2	2448.6	2856.4	2889.8	2880.1	3066.7	3486.3	3603.9	3709.6	3904.9	4485.2
25°	2416.3	2409.8	2609.3	3033.3	3018.2	3053.8	3229.6	3801.3	3907.0	4101.2	4705.2
27.5°	2490.7	2496.1	2481.0	2880.1	3162.7	3199.4	3253.3	3643.8	4155.1	4377.3	4945.8
30°	2638.5	2615.8	2574.8	2573.8	3288.9	3342.9	3434.5	3565.1	4383.8	4736.5	5246.7
32.5°	2887.6	2861.8	2807.8	2722.6	2842.3	3491.7	3617.9	3784.0	4045.1	5177.7	5599.5
35°	3072.1	3053.8	3017.1	2957.8	2861.8	3566.1	3797.0	4017.0	4362.2	5361.1	6062.2
37.5°	3299.7	3273.8	3231.7	3158.4	3086.1	3057.0	3969.6	4281.3	4804.5	5237.0	6162.5
40°	3557.5	3542.4	3465.8	3370.9	3291.1	3210.2	4088.2	4626.5	5372.9	5793.6	6070.9
42.5°	3751.7	3739.8	3694.5	3617.9	3540.3	3488.5	3623.3	5050.4	5992.1	6331.9	6535.8
45°	3921.0	3908.1	3908.1	3887.6	3866.0	3870.3	3928.6	5354.6	6580.0	6791.4	6975.9
47.5°	4051.6	4028.9	3938.3	3956.6	3987.9	4081.8	4258.7	4655.6	7053.5	7181.9	7345.9
50°	4369.8	4335.2	4041.8	4109.8	4211.2	4362.2	4589.8	5089.3	6586.5	7515.2	7643.6
52.5°	4663.2	4503.5	3338.5	4335.2	4449.6	4672.9	4942.5	5558.5	6062.2	7407.4	7871.2
55°	4160.5	3997.6	3355.8	4749.5	4730.0	5011.6	5274.8	5943.6	6347.0	6187.4	7814.0
57.5°	2476.7	2353.7	3491.7	5485.1	4689.1	5390.2	5593.0	6272.6	6597.3	6311.4	7829.1
60°	1282.6	1348.4	1296.6	3245.8	4037.5	5556.3	5922.0	6589.7	6766.6	6404.2	7838.8
62.5°	172.6	124.0	51.8	2374.2	2869.3	4629.7	6335.1	6891.7	6890.7	6435.5	7770.9
65°	10.8	11.9	23.7	2362.3	3164.9	5492.7	7019.0	7135.5	6952.1	6380.4	7544.3
67.5°	4.3	5.4	21.6	2346.1	3415.1	5774.2	7823.7	7213.2	6958.6	6232.7	7047.1
70°	4.3	5.4	21.6	2185.4	3585.6	5823.8	7959.6	7184.1	6878.8	5869.1	6122.6
72.5°	5.4	6.5	19.4	1898.5	3482.0	5689.0	7737.4	7124.7	6592.9	5137.8	4753.8
75°	5.4	6.5	19.4	1533.9	3080.7	5394.5	7561.6	6628.5	5779.6	3839.1	3082.9
77.5°	4.3	5.4	19.4	1197.3	2568.4	4780.7	6859.4	5763.4	4570.4	2234.0	1217.8
80°	4.3	5.4	19.4	833.8	1956.7	3918.9	5587.6	4488.4	2570.5	638.6	343.0
82.5°	4.3	5.4	18.3	519.9	1384.0	2882.3	3818.6	2068.9	551.2	249.2	267.5
85°	4.3	4.3	14.0	254.6	884.5	1914.7	1902.8	346.3	219.0	161.8	202.8
87.5°	2.2	3.2	7.6	116.5	494.0	1009.7	758.3	132.7	93.8	65.8	113.3
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):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6	3613.6
2.5°	3631.9	3626.5	3641.7	3680.5	3678.3	3707.5	3684.8	3729.0	3736.6	3726.9	3742.0
5°	3651.4	3653.5	3694.5	3735.5	3720.4	3767.9	3777.6	3843.4	3845.5	3836.9	3856.3
7.5°	3699.9	3707.5	3748.4	3797.0	3818.6	3858.5	3853.1	3938.3	3930.7	3926.4	3949.1
10°	3767.9	3781.9	3826.1	3902.7	3893.0	3954.5	3926.4	3983.6	3981.4	3972.8	3997.6
12.5°	3850.9	3864.9	3921.0	3994.4	3995.5	3999.8	3977.1	4006.2	3996.5	3976.0	3995.5
15°	3963.1	3979.3	4055.9	4109.8	4063.4	4051.6	4008.4	3992.2	3955.5	3901.6	3917.8
17.5°	4140.0	4152.9	4239.2	4269.4	4189.6	4142.2	4019.2	3927.5	3823.9	3748.4	3762.5
20°	4363.3	4375.2	4445.3	4437.7	4330.9	4214.4	4023.5	3868.2	3675.1	3527.3	3523.0
22.5°	4609.2	4616.8	4683.7	4616.8	4426.9	4257.6	4014.9	3776.5	3451.8	3260.9	3240.4
25°	4880.0	4886.5	4885.4	4736.5	4481.9	4232.8	3935.1	3623.3	3206.9	3003.1	2981.5
27.5°	5183.1	5184.2	5065.5	4829.3	4458.2	4141.1	3780.8	3348.2	2982.6	2805.7	2789.5
30°	5505.6	5503.5	5230.6	4837.9	4366.5	3967.4	3542.4	3088.3	2780.9	2623.4	2600.7
32.5°	5873.5	5855.1	5377.3	4807.7	4199.3	3718.2	3235.0	2870.4	2622.3	2442.2	2408.7
35°	6344.8	6299.5	5502.4	4703.1	3951.2	3381.7	2950.2	2680.5	2469.1	2285.7	2252.3
37.5°	6928.4	6870.2	5698.7	4555.3	3665.4	3103.4	2740.9	2552.2	2359.1	2149.8	2106.7
40°	6760.1	6872.3	5932.8	4395.7	3389.2	2881.2	2618.0	2490.7	2292.2	2060.3	2019.3
42.5°	7020.1	7006.1	6253.2	4206.9	3123.9	2707.5	2568.4	2472.4	2256.6	2021.5	1974.0
45°	7462.4	7459.1	6598.3	4023.5	2865.0	2568.4	2530.6	2422.7	2205.9	1972.9	1921.1
47.5°	7821.6	7810.8	6928.4	3821.8	2625.5	2459.4	2454.0	2322.4	2115.3	1898.5	1851.0
50°	8071.8	8088.0	7111.8	3627.6	2399.0	2347.2	2326.7	2181.1	1988.0	1809.0	1772.3
52.5°	8269.2	8299.4	7191.6	3609.3	2200.5	2202.7	2167.1	2034.4	1883.4	1738.8	1700.0
55°	8366.3	8412.7	7109.6	3490.6	2006.4	2019.3	1984.8	1900.6	1811.1	1678.4	1650.4
57.5°	8406.2	8428.9	6919.8	2952.4	1798.2	1796.0	1806.8	1798.2	1714.0	1583.5	1563.0
60°	8338.3	8308.1	6506.6	2243.7	1586.8	1596.5	1665.5	1656.9	1582.4	1483.2	1455.2
62.5°	8129.0	8069.7	5750.5	1659.0	1417.4	1496.1	1569.5	1544.7	1454.1	1363.5	1341.9
65°	7729.9	7562.7	4582.3	1295.5	1336.5	1444.4	1512.3	1475.6	1372.1	1265.3	1252.4
67.5°	7013.6	6804.4	3007.4	1161.7	1302.0	1400.1	1471.3	1409.8	1309.5	1194.1	1175.8
70°	5723.5	5493.8	1423.9	1083.0	1224.3	1321.4	1373.2	1310.6	1208.1	1092.7	1079.8
72.5°	3991.1	3730.1	766.9	997.8	1134.8	1218.9	1253.4	1176.8	1087.3	1036.6	1033.4
75°	1989.1	1700.0	695.8	910.4	1019.4	1092.7	1151.0	1098.1	1019.4	926.6	902.9
77.5°	529.6	455.2	654.8	813.3	927.7	1010.7	1044.2	989.2	898.5	819.8	805.8
80°	367.8	375.4	611.6	674.2	809.0	883.4	914.7	844.6	799.3	721.6	700.1
82.5°	311.7	327.9	494.0	508.1	642.9	722.7	777.7	765.9	701.1	638.6	630.0
85°	292.3	310.7	316.1	351.7	460.6	554.4	649.4	654.8	611.6	531.8	505.9
87.5°	168.3	166.1	152.1	179.1	252.4	307.4	372.1	354.9	289.1	250.3	244.9
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)