

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: P591203

Luminaire Tested: **CTN-CA10-310-727-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591203
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-727-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23870 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

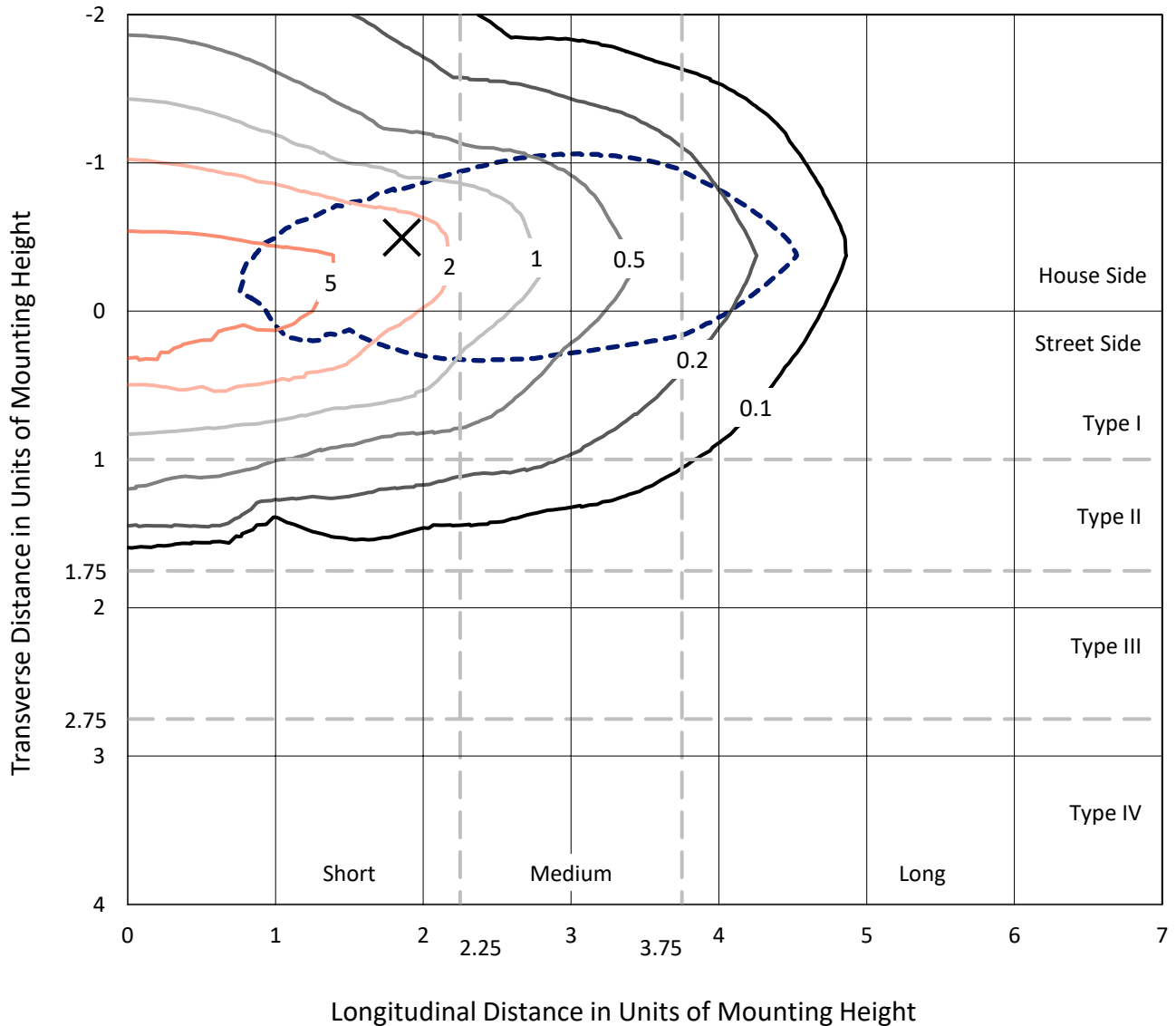
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P591203
 CATALOG NUMBER: CTN-CA10-310-727-U-T1-SSS-HM-EX120

Iso-Footcandle Lines of Horizontal Illumination

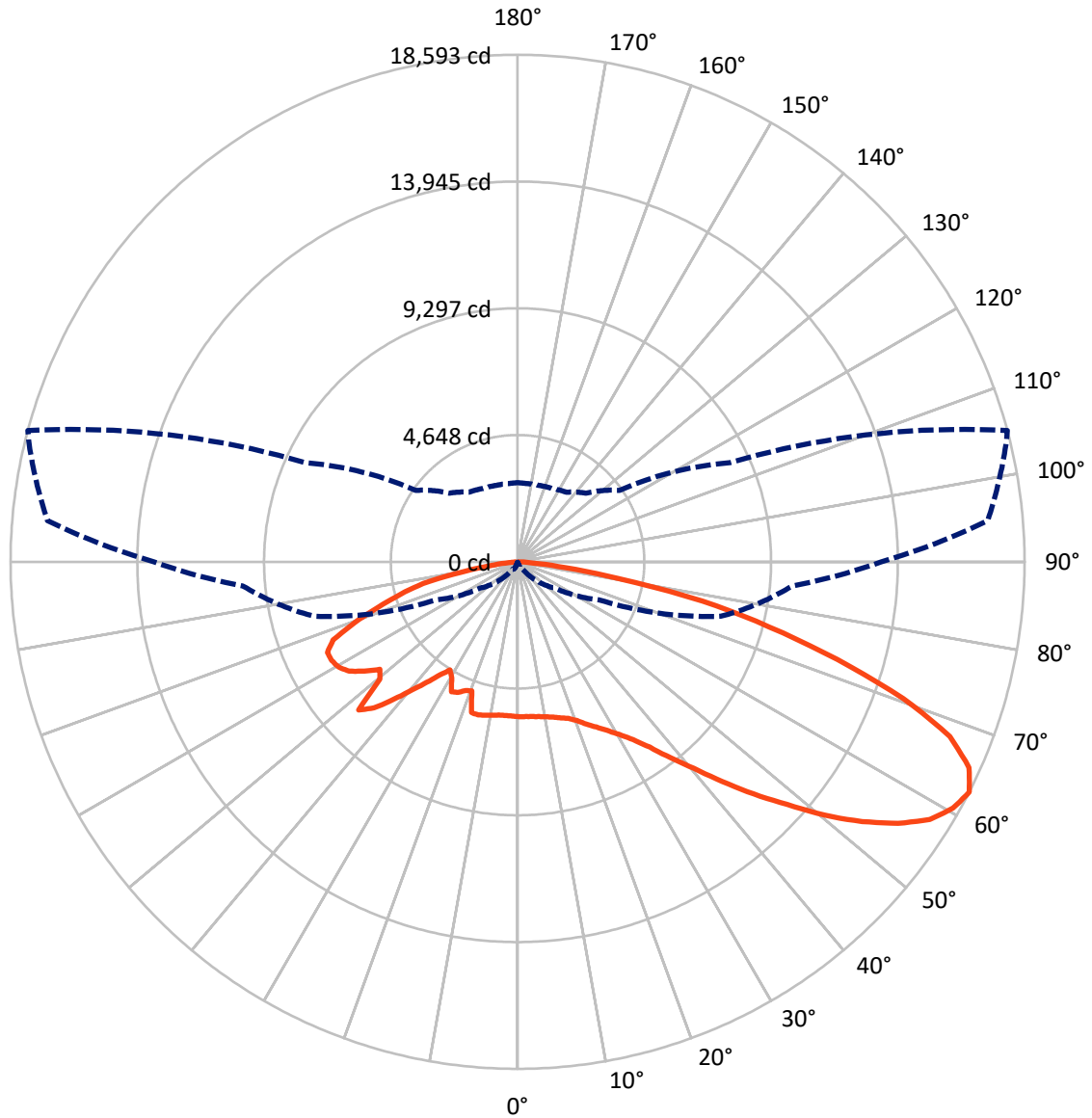
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type I - Short - N/A

REPORT NUMBER: P591203
CATALOG NUMBER: CTN-CA10-310-727-U-T1-SSS-HM-EX120

Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P591203
 CATALOG NUMBER: CTN-CA10-310-727-U-T1-SSS-HM-EX120

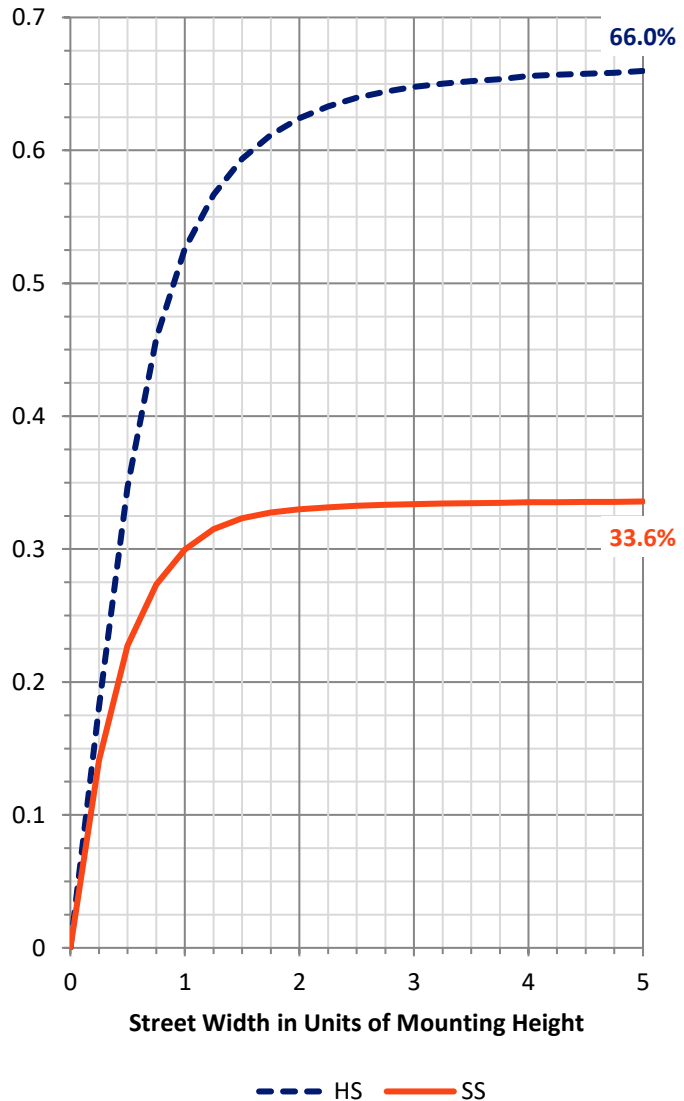
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15882.8	0.0	15882.8
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	7987.2	0.0	7987.2
	% Fixture	33.5	0.0	33.5
Total	Lumens	23870.0	0.0	23870.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	541.8	2.3
10°-20°	1530.3	6.4
20°-30°	2156.7	9.0
30°-40°	2930.3	12.3
40°-50°	3986.2	16.7
50°-60°	4722.5	19.8
60°-70°	4630.9	19.4
70°-80°	2920.8	12.2
80°-90°	450.5	1.9
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°	23870.0	100.0
0°-180°	23870.0	100.0

Coefficient of Utilization

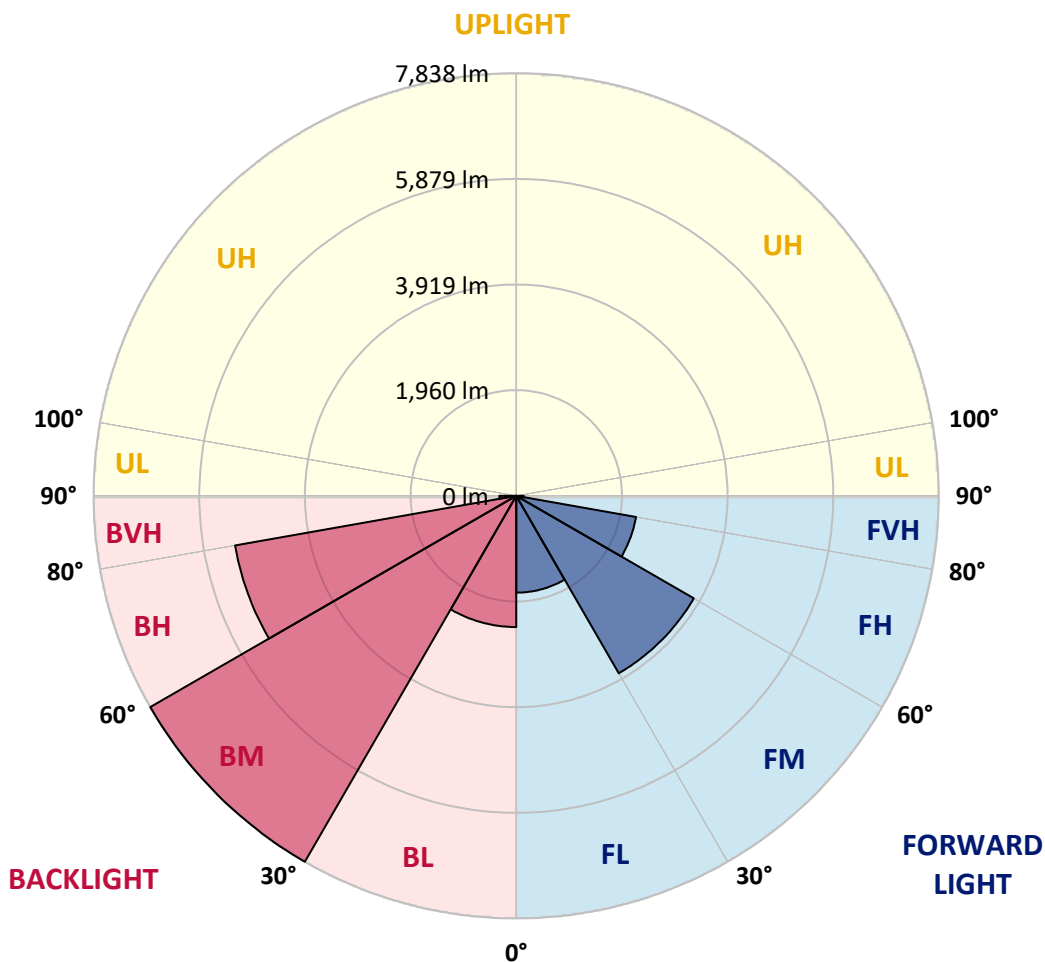


REPORT NUMBER: P591203
 CATALOG NUMBER: CTN-CA10-310-727-U-T1-SSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1795.4	7.5			
FM (30°-60°)	3800.7	15.9			
FH (60°-80°)	2255.2	9.4			G2/5000
FVH (80°-90°)	135.9	0.6			G2/225
BL (0°-30°)	2433.4	10.2	B3/2500		
BM (30°-60°)	7838.3	32.8	B4/8500		
BH (60°-80°)	5296.5	22.2	B5		G5
BVH (80°-90°)	314.6	1.3			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type I Short





REPORT NUMBER: P591203

CATALOG NUMBER: CTN-CA10-310-727-U-T1-SSS-HM-EX120

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3
2.5°	5682.1	5637.7	5669.4	5717.6	5645.3	5687.2	5617.4	5674.5	5660.5	5664.3	5691.0
5°	5637.7	5590.8	5628.8	5692.2	5621.2	5668.1	5611.1	5659.3	5654.2	5672.0	5693.5
7.5°	5595.9	5551.5	5590.8	5632.6	5595.9	5641.5	5598.4	5658.0	5661.8	5701.1	5718.9
10°	5551.5	5507.1	5545.1	5593.3	5562.9	5620.0	5602.2	5674.5	5702.4	5754.4	5769.6
12.5°	5453.8	5414.5	5446.2	5502.0	5507.1	5590.8	5602.2	5713.8	5748.0	5816.5	5839.3
15°	4866.7	4909.9	5078.5	5240.8	5310.6	5465.3	5550.2	5749.3	5797.5	5895.1	5930.6
17.5°	3937.3	3856.1	3593.6	3662.1	4047.6	4567.5	4764.0	5258.6	5781.0	5994.0	6039.7
20°	2326.9	2493.0	3006.5	3163.8	3305.8	3865.0	4525.6	4819.8	5020.2	5777.2	6189.3
22.5°	1918.5	1930.0	2297.7	3023.0	3182.8	3402.2	3913.2	4882.0	5088.7	5239.5	5698.6
25°	1779.1	1790.5	1853.9	2414.4	3095.3	3348.9	3573.3	4462.2	5264.9	5451.3	5810.2
27.5°	1667.5	1682.7	1741.0	1898.3	2886.1	3333.7	3617.7	3957.6	5343.5	5702.4	6038.4
30°	1583.8	1590.1	1649.7	1801.9	2182.3	3337.5	3682.4	4045.1	4894.6	6020.7	6358.0
32.5°	1507.7	1511.5	1573.6	1722.0	1951.5	3091.5	3780.0	4227.7	4674.0	6281.9	6796.7
35°	1449.4	1446.8	1502.6	1648.5	1876.7	2367.4	3889.1	4447.0	5026.5	6034.6	7451.0
37.5°	1393.6	1389.8	1438.0	1572.4	1810.8	2216.5	3762.3	4710.8	5532.5	6222.3	7397.8
40°	1350.5	1342.9	1383.4	1503.9	1742.3	2178.5	2963.4	4989.7	6087.9	7189.8	7845.4
42.5°	1312.4	1307.4	1341.6	1438.0	1672.5	2132.8	2761.8	5140.6	6779.0	8308.2	9003.1
45°	1255.4	1263.0	1301.0	1393.6	1597.7	2068.2	2782.1	4128.7	7510.6	9278.3	10157.0
47.5°	1231.3	1230.0	1254.1	1341.6	1533.1	1978.1	2768.1	3786.4	7970.9	10294.0	11286.8
50°	1193.2	1186.9	1034.7	1280.7	1467.1	1866.6	2709.8	3885.3	6633.1	11290.6	12324.1
52.5°	1122.2	997.9	905.4	1237.6	1399.9	1744.8	2579.2	3928.4	6404.9	11113.1	13215.5
55°	596.0	664.5	857.2	1176.7	1321.3	1635.8	2387.7	3898.0	6898.1	8886.4	12268.3
57.5°	528.8	526.2	545.3	929.5	688.5	1516.6	2156.9	3758.5	7364.8	9292.2	12497.8
60°	41.8	43.1	50.7	309.4	365.2	1067.7	1908.4	3586.0	7612.1	9771.5	13054.5
62.5°	20.3	22.8	30.4	276.4	333.5	971.3	1684.0	3291.8	7716.0	10117.7	13329.7
65°	5.1	6.3	13.9	243.5	290.4	864.8	1458.2	2946.9	7724.9	10131.7	13551.6
67.5°	3.8	6.3	13.9	220.6	265.0	771.0	1260.4	2706.0	7347.0	10079.7	13440.0
70°	3.8	6.3	13.9	197.8	239.7	668.3	1085.4	2470.1	6382.1	9885.7	13060.8
72.5°	3.8	7.6	13.9	173.7	210.5	566.8	921.9	2210.2	5356.2	9075.4	12216.3
75°	3.8	7.6	15.2	140.8	180.1	451.4	757.0	1893.2	4454.6	7869.5	10816.4
77.5°	3.8	7.6	15.2	109.1	145.8	337.3	573.2	1500.1	3554.3	5803.8	7599.4
80°	3.8	7.6	15.2	77.4	119.2	237.1	417.2	1023.3	2120.2	3050.9	3870.1
82.5°	3.8	7.6	15.2	55.8	86.2	171.2	257.4	504.7	1011.9	1464.6	1837.4
85°	2.5	6.3	13.9	36.8	45.6	104.0	153.4	224.4	303.1	400.7	541.5
87.5°	2.5	3.8	8.9	13.9	19.0	36.8	57.1	50.7	57.1	119.2	171.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P591203

CATALOG NUMBER: CTN-CA10-310-727-U-T1-SSS-HM-EX120

CANDELA DISTRIBUTION (continued):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3	5678.3
2.5°	5687.2	5682.1	5683.4	5711.3	5687.2	5692.2	5650.4	5734.1	5726.5	5715.1	5748.0
5°	5693.5	5691.0	5701.1	5725.2	5688.4	5694.8	5655.5	5753.1	5729.0	5725.2	5764.5
7.5°	5725.2	5721.4	5731.5	5743.0	5702.4	5702.4	5668.1	5745.5	5731.5	5706.2	5750.6
10°	5782.3	5768.3	5778.5	5784.8	5722.7	5720.1	5656.7	5748.0	5712.5	5699.8	5756.9
12.5°	5862.2	5830.5	5845.7	5835.5	5753.1	5737.9	5652.9	5712.5	5668.1	5660.5	5712.5
15°	5969.9	5928.1	5939.5	5920.5	5816.5	5772.1	5635.2	5660.5	5589.5	5583.2	5621.2
17.5°	6070.1	6044.8	6038.4	6038.4	5916.7	5806.4	5618.7	5583.2	5489.4	5483.0	5502.0
20°	6251.4	6217.2	6213.4	6183.0	6002.9	5834.3	5592.1	5483.0	5343.5	5311.8	5347.3
22.5°	6309.8	6475.9	6464.5	6330.1	6075.2	5857.1	5537.5	5357.5	5166.0	5105.1	5122.9
25°	6483.5	6733.3	6713.0	6517.7	6148.7	5869.8	5471.6	5219.3	4955.5	4849.0	4852.8
27.5°	6758.7	7013.5	6999.6	6718.1	6240.0	5873.6	5398.1	5073.4	4746.3	4606.8	4618.2
30°	7108.6	7366.1	7345.8	6941.3	6378.2	5881.2	5342.3	4898.4	4554.8	4403.9	4401.4
32.5°	7595.6	7828.9	7769.3	7239.2	6544.4	5912.9	5268.7	4732.3	4379.8	4221.3	4208.6
35°	8331.0	8417.3	8343.7	7594.3	6720.6	5933.2	5150.8	4570.0	4217.5	4061.5	4050.1
37.5°	9325.2	9218.7	9119.8	7993.7	6903.2	5928.1	5001.2	4412.8	4078.0	3929.7	3929.7
40°	9422.8	10139.3	9956.7	8414.7	7068.1	5900.2	4859.1	4259.4	3965.2	3844.7	3863.7
42.5°	9880.6	11266.5	11010.4	8821.8	7187.3	5819.0	4707.0	4119.9	3859.9	3762.3	3769.9
45°	11005.3	12292.4	12142.8	9214.9	7251.9	5675.8	4530.7	3982.9	3742.0	3664.6	3679.9
47.5°	12215.0	13512.3	13292.9	9577.5	7216.4	5464.0	4343.0	3857.4	3619.0	3569.5	3597.4
50°	13358.8	14795.5	14612.9	9832.4	7059.2	5167.3	4142.7	3724.2	3522.6	3483.3	3497.3
52.5°	14481.0	15960.8	15823.9	9970.6	6744.7	4856.6	3957.6	3597.4	3432.6	3383.1	3402.2
55°	15406.7	17065.3	16932.2	9956.7	6271.7	4532.0	3773.7	3460.5	3341.3	3296.9	3312.1
57.5°	16129.5	17925.0	17829.9	9744.9	5721.4	4234.0	3565.7	3326.1	3220.8	3181.5	3194.2
60°	16776.2	18470.3	18347.3	9277.0	5138.1	3905.6	3351.4	3166.3	3078.8	3047.1	3067.4
62.5°	17306.2	18481.7	18593.3	8599.9	4566.2	3558.1	3113.0	2969.8	2906.4	2887.3	2900.0
65°	17441.9	18141.9	18196.4	7763.0	3986.7	3213.2	2826.5	2732.6	2706.0	2694.6	2719.9
67.5°	17254.2	17425.4	17100.8	7055.4	3457.9	2822.7	2517.1	2458.7	2475.2	2477.8	2510.7
70°	16769.9	15508.1	15007.3	6463.2	2964.7	2390.3	2177.2	2158.2	2202.6	2239.4	2263.5
72.5°	15534.8	12732.4	12255.6	5626.3	2337.0	1829.8	1714.4	1775.3	1760.0	1776.5	1819.6
75°	13374.0	9827.3	9531.9	4578.9	1780.3	1330.2	1175.5	1181.8	1200.8	1284.5	1330.2
77.5°	9526.8	7068.1	6936.2	3512.5	1179.3	782.4	809.0	899.0	925.7	928.2	959.9
80°	5048.1	3939.8	3761.0	2069.4	779.8	559.2	608.7	648.0	683.5	720.2	729.1
82.5°	2274.9	1781.6	1732.1	1028.4	494.5	431.1	442.5	509.8	538.9	545.3	551.6
85°	883.8	615.0	585.8	427.3	324.6	291.6	323.4	391.8	419.7	407.0	403.2
87.5°	235.9	144.6	131.9	143.3	152.2	161.0	183.9	209.2	239.7	230.8	223.2
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)