

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: P591242

Luminaire Tested: **CTN-CA6-230-727-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591242
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-727-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17870 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

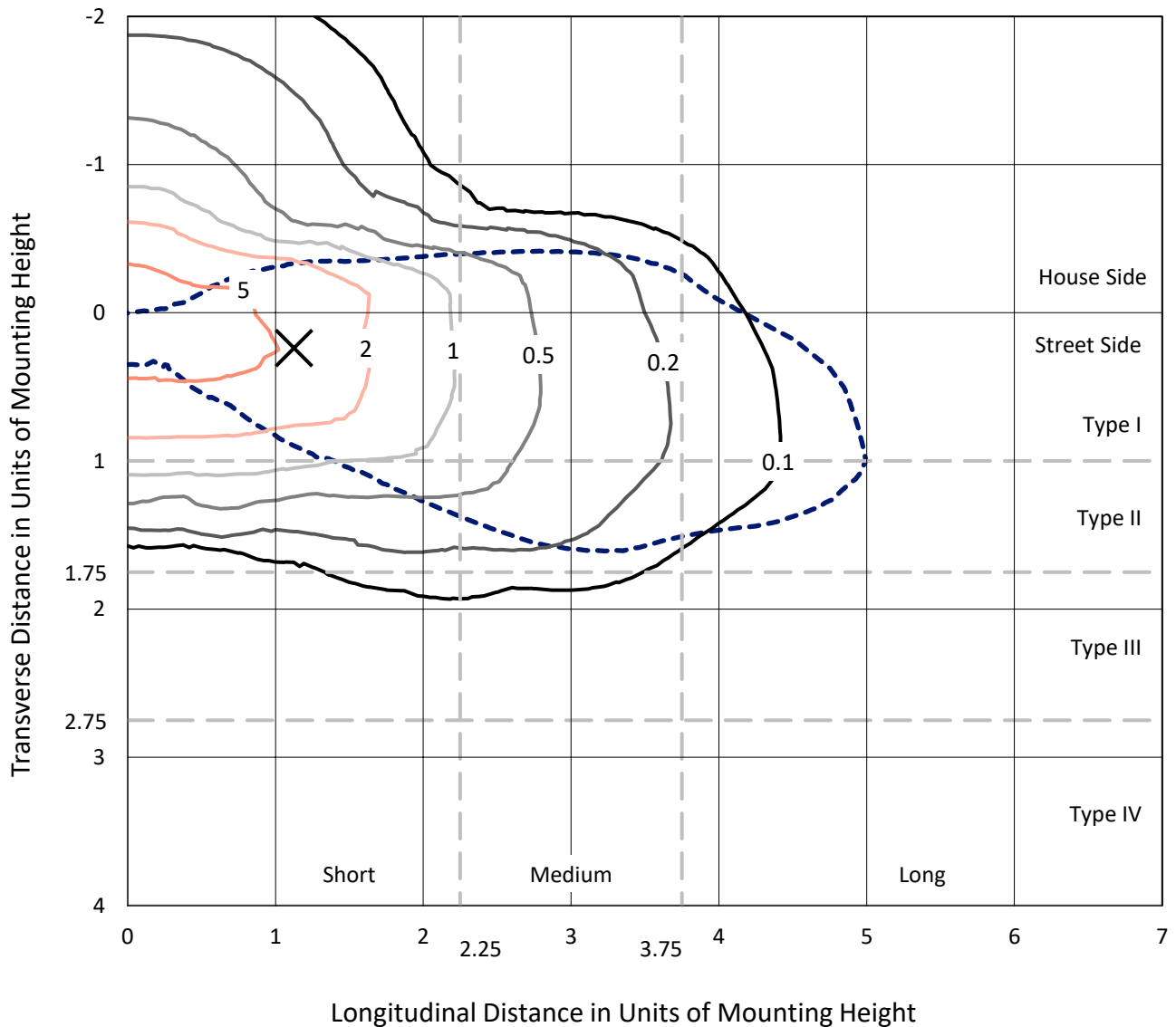
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

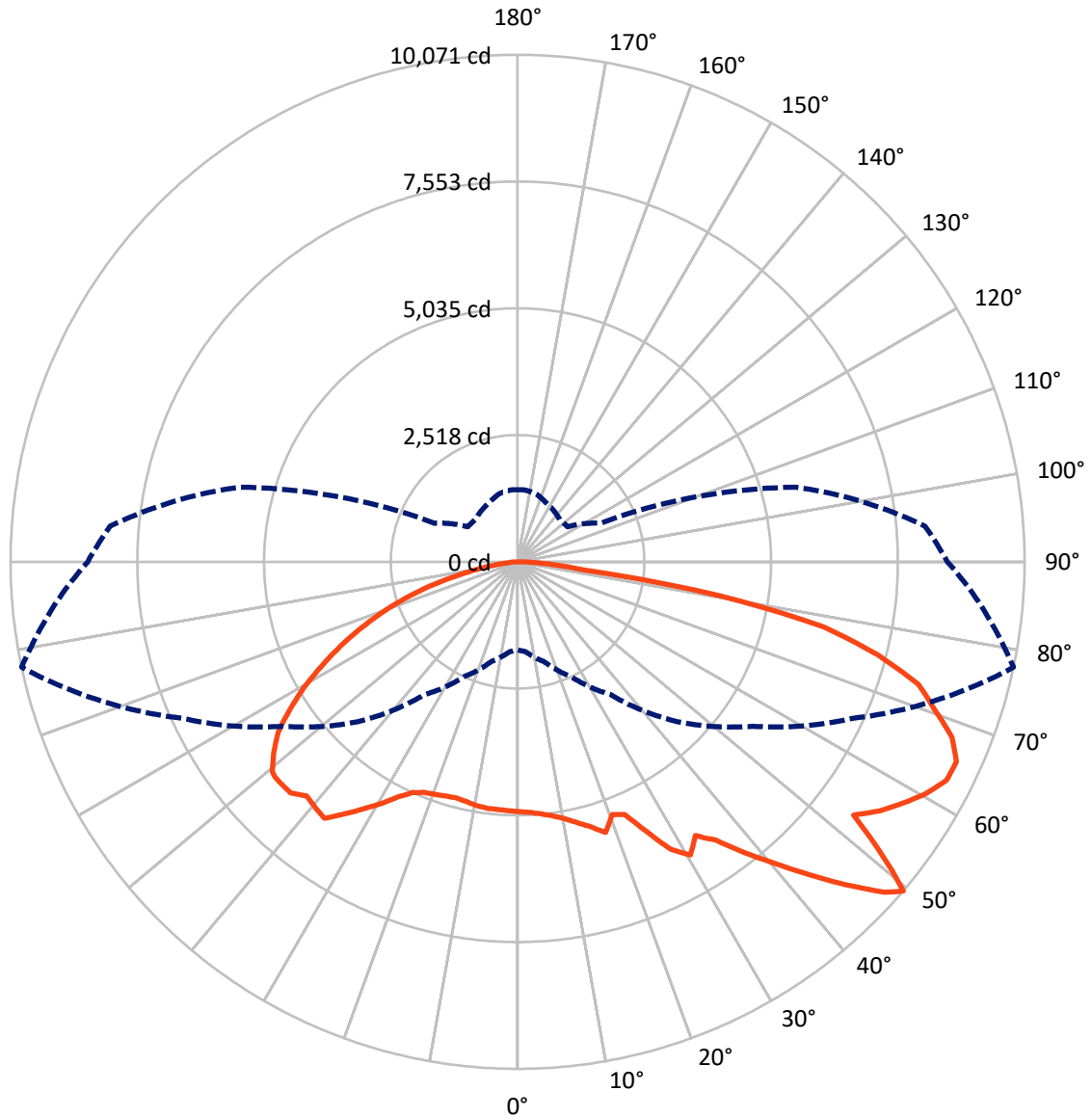
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

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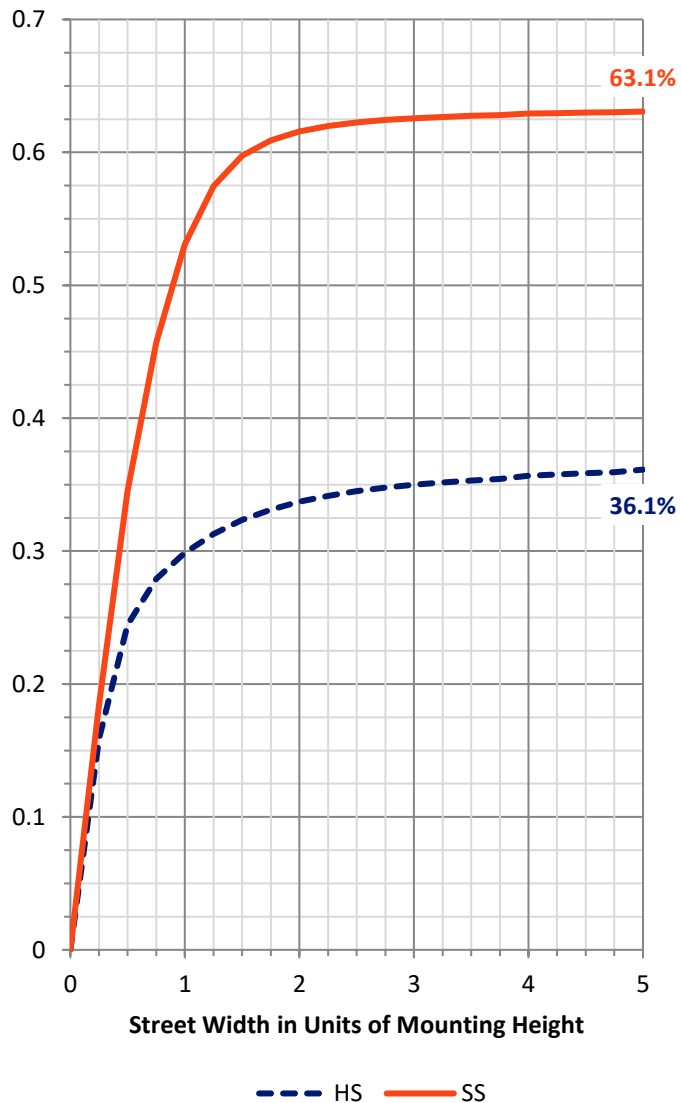
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6616.6	0.0	6616.6
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	11253.4	0.0	11253.4
	% Fixture	63.0	0.0	63.0
Total	Lumens	17870.0	0.0	17870.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	481.0	2.7
10°-20°	1415.5	7.9
20°-30°	2020.7	11.3
30°-40°	2601.3	14.6
40°-50°	3051.3	17.1
50°-60°	3147.9	17.6
60°-70°	2858.2	16.0
70°-80°	1898.2	10.6
80°-90°	395.8	2.2
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°	17870.0	100.0
0°-180°	17870.0	100.0

Coefficient of Utilization



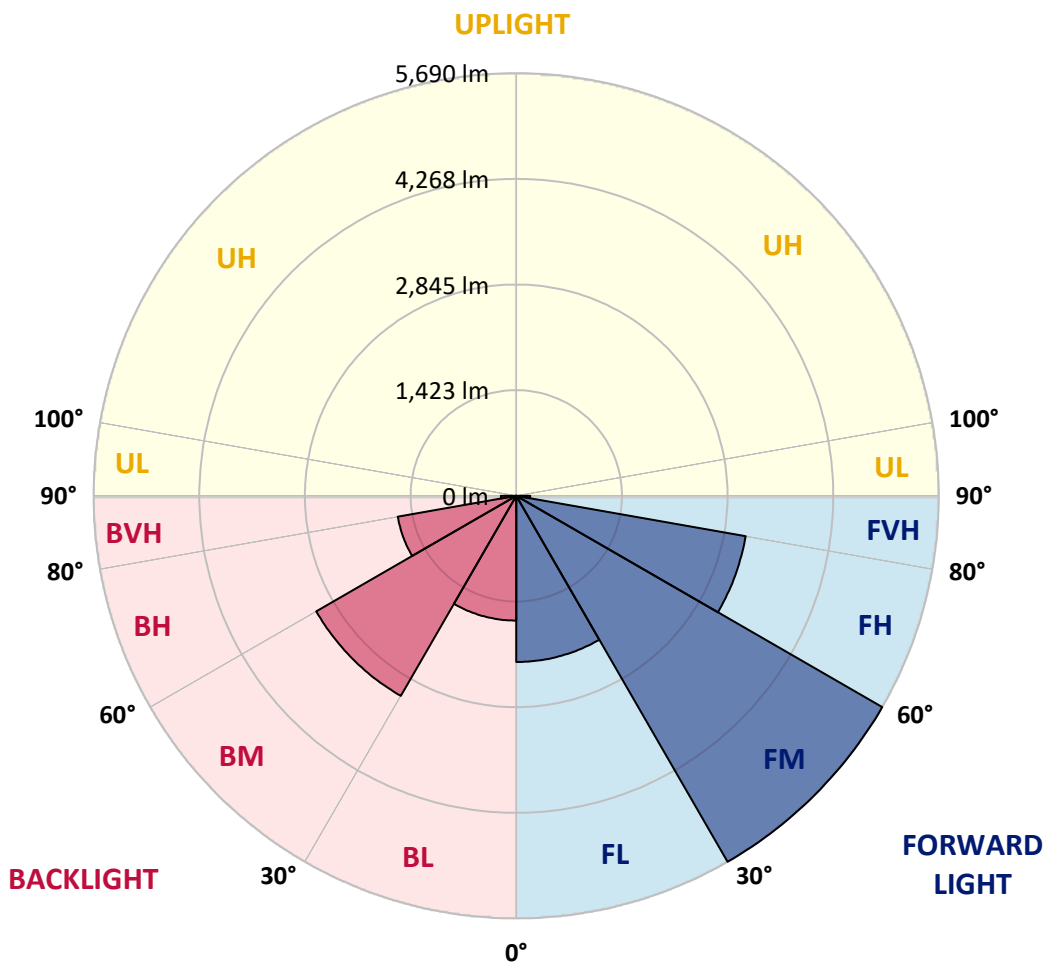
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2237.6	12.5			
FM (30°-60°)	5690.3	31.8			
FH (60°-80°)	3136.9	17.6			G2/5000
FVH (80°-90°)	188.6	1.1			G2/225
BL (0°-30°)	1679.7	9.4	B3/2500		
BM (30°-60°)	3110.2	17.4	B3/5000		
BH (60°-80°)	1619.6	9.1	B3/2500		G3/2500
BVH (80°-90°)	207.2	1.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3
2.5°	5165.2	5125.5	5138.2	5159.8	5061.5	5083.2	5040.8	5057.9	5005.6	4985.8	4994.8
5°	5530.4	5488.0	5503.4	5510.6	5368.1	5310.4	5177.8	5149.9	5067.8	5031.8	5028.1
7.5°	5710.8	5664.8	5668.4	5672.9	5559.3	5567.4	5447.5	5304.1	5151.7	5096.7	5072.3
10°	6007.4	5943.4	5921.8	5912.8	5759.5	5695.4	5590.8	5512.4	5274.3	5191.4	5129.1
12.5°	6190.5	6143.6	6143.6	6134.6	5972.3	5922.7	5736.0	5653.1	5418.6	5320.3	5213.0
15°	6223.9	6192.3	6232.9	6224.8	6118.4	6060.6	5977.7	5804.5	5564.7	5462.8	5336.5
17.5°	5846.9	5763.1	5602.6	5626.9	5627.8	5745.0	5688.2	5807.3	5736.9	5654.0	5517.8
20°	4801.8	4830.7	5087.7	5025.4	5002.0	5250.9	5505.2	5512.4	5372.6	5359.1	5543.0
22.5°	4183.2	4080.4	4366.3	4782.0	4808.1	5140.9	5437.5	5794.6	5571.0	5451.1	5310.4
25°	3562.8	3600.7	4031.7	4570.1	4950.6	5024.5	5365.4	5935.3	6030.9	5920.0	5626.0
27.5°	3455.5	3453.7	3641.3	4238.2	5019.1	5296.9	5409.6	5855.9	6522.3	6460.1	6088.6
30°	3432.1	3417.6	3515.9	4011.9	4700.8	5542.1	5756.8	5916.4	6483.6	6760.4	6606.2
32.5°	3329.3	3316.6	3421.2	3680.9	4445.6	5721.6	6087.7	6325.8	6351.9	6482.7	7152.7
35°	3167.8	3177.8	3322.9	3605.2	4076.8	5290.6	6426.8	6786.6	6881.2	6791.1	6883.9
37.5°	3002.8	3013.6	3156.1	3476.2	4012.8	5110.2	6645.9	7232.0	7428.6	7332.1	6902.9
40°	2798.1	2815.3	2980.3	3340.1	3938.8	4703.5	6195.9	7737.9	8004.8	7878.6	7400.6
42.5°	2565.5	2572.7	2760.2	3132.7	3845.1	4727.9	5731.5	8205.0	8563.9	8494.5	7891.2
45°	2363.5	2363.5	2533.9	2865.8	3631.3	4681.9	5534.9	7856.9	9250.1	9151.8	8382.6
47.5°	2088.4	2112.8	2313.0	2642.1	3379.7	4575.5	5647.6	7075.1	9889.5	9807.4	8875.9
49°	1749.4	1790.9	2055.1	2519.5	3218.3	4487.1	5692.7	7351.0	9448.5	10070.7	9196.0
50°	1610.5	1632.2	1634.9	2432.0	3098.4	4406.8	5713.5	7563.0	8704.6	9646.0	9420.6
52.5°	1394.1	1257.9	1118.2	2189.4	2857.6	4110.2	5726.1	8138.3	8526.0	8357.4	9245.6
55°	588.8	771.0	980.2	1790.9	2597.9	3743.2	5684.6	8770.4	8918.3	8732.5	7927.3
57.5°	445.5	474.3	526.6	1389.6	1861.2	3324.7	5544.8	9170.8	9249.2	9038.2	8249.2
60°	64.9	66.7	93.8	563.6	1065.9	2373.4	5041.7	9159.1	9495.4	9333.1	8526.9
62.5°	27.1	28.0	36.1	461.7	821.5	1826.9	4602.5	9005.8	9734.4	9560.3	8787.5
65°	4.5	5.4	15.3	408.5	679.0	1707.0	4121.0	9036.4	9649.6	9577.5	8888.5
67.5°	3.6	4.5	14.4	367.0	560.0	1562.7	3645.8	8548.6	9340.3	9308.7	8618.9
70°	3.6	4.5	15.3	331.8	484.2	1377.0	3058.7	7873.2	8773.1	8785.7	8166.2
72.5°	4.5	4.5	15.3	296.7	421.1	1176.8	2420.3	6971.4	8258.2	8327.6	7522.4
75°	4.5	4.5	14.4	257.9	361.6	981.1	1743.1	5126.4	7406.1	7385.3	6597.2
77.5°	4.5	4.5	14.4	204.7	300.3	807.1	1135.3	2887.4	6132.8	6220.3	5516.0
80°	4.5	4.5	14.4	149.7	235.4	605.1	688.0	1478.0	3274.2	4053.4	3794.6
82.5°	4.5	4.5	14.4	101.0	161.4	349.0	396.8	748.5	1175.9	1288.6	1507.7
85°	3.6	3.6	10.8	60.4	83.0	123.5	191.2	398.6	642.9	671.8	655.6
87.5°	1.8	1.8	5.4	21.6	36.1	45.1	85.7	160.5	236.3	241.7	210.1
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°	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3	4962.3
2.5°	4994.8	4965.9	4939.8	4944.3	4888.4	4872.1	4809.9	4842.4	4810.8	4782.9	4809.0
5°	5002.9	4967.7	4919.9	4873.9	4745.9	4686.4	4611.5	4630.5	4588.1	4554.7	4583.6
7.5°	5026.3	4983.1	4909.1	4778.4	4626.0	4531.3	4446.5	4529.5	4519.6	4494.3	4524.1
10°	5037.2	5000.2	4873.0	4719.7	4506.9	4447.4	4370.8	4369.9	4372.6	4377.1	4406.8
12.5°	5066.0	5010.1	4809.0	4630.5	4433.0	4312.2	4256.2	4301.3	4220.2	4172.4	4193.1
15°	5134.6	5032.7	4765.7	4505.1	4318.5	4218.4	4039.8	4055.2	4038.0	3991.1	4011.9
17.5°	5269.8	5095.8	4763.9	4425.8	4172.4	4009.2	3853.2	3779.2	3755.8	3759.4	3777.4
20°	5435.7	5207.6	4767.5	4323.9	4020.0	3830.6	3589.9	3538.5	3460.9	3462.7	3467.2
22.5°	5330.2	5336.5	4769.3	4207.6	3829.7	3592.6	3337.4	3236.4	3176.9	3161.5	3184.1
25°	5616.1	5587.2	4797.3	4145.3	3629.5	3311.2	3044.3	2915.3	2826.1	2818.9	2844.1
27.5°	5996.6	5944.3	4941.6	4011.0	3417.6	2974.0	2684.5	2587.1	2510.5	2483.4	2501.4
30°	6459.2	6397.9	5140.9	3906.4	3131.8	2611.5	2363.5	2296.8	2221.0	2171.4	2175.9
32.5°	6942.6	6811.8	5345.6	3818.0	2838.7	2294.0	2082.1	2022.6	1933.3	1869.3	1884.7
35°	7429.5	7243.7	5573.7	3662.0	2480.7	2014.5	1843.2	1762.9	1689.9	1632.2	1622.2
37.5°	7044.5	7748.7	5794.6	3516.8	2200.3	1801.7	1607.8	1551.0	1507.7	1462.6	1461.7
40°	7076.0	7237.4	5925.4	3259.8	1887.4	1583.5	1388.7	1408.5	1426.6	1392.3	1392.3
42.5°	7388.9	7159.0	5873.1	2919.0	1654.7	1365.2	1276.0	1356.2	1413.0	1388.7	1387.8
45°	7829.9	7531.4	5962.4	2534.8	1428.4	1230.9	1244.4	1342.7	1416.6	1412.1	1410.3
47.5°	8297.9	7955.2	5791.0	2078.5	1272.4	1189.4	1244.4	1322.9	1411.2	1432.0	1427.5
49°	8538.6	8122.9	5722.5	1812.5	1210.1	1184.0	1246.2	1306.6	1401.3	1432.9	1428.4
50°	8685.6	8213.1	5634.1	1661.0	1176.8	1184.9	1249.8	1296.7	1392.3	1427.5	1424.8
52.5°	9016.6	8350.2	5195.9	1397.7	1122.7	1187.6	1273.3	1286.8	1358.9	1396.8	1416.6
55°	8679.3	8663.1	4636.8	1276.9	1093.8	1181.3	1283.2	1295.8	1331.0	1351.7	1367.0
57.5°	8627.0	8799.3	3932.5	1211.9	1068.6	1172.3	1271.5	1294.9	1315.6	1312.0	1305.7
60°	8792.9	8918.3	3206.6	1147.9	1039.7	1157.8	1232.7	1267.0	1273.3	1264.3	1249.8
62.5°	8819.1	8950.7	2464.5	1083.0	1008.2	1122.7	1175.9	1210.1	1210.1	1187.6	1182.2
65°	8697.4	8747.9	1816.1	1008.2	970.3	1082.1	1109.1	1134.4	1146.1	1116.4	1118.2
67.5°	8348.4	8056.2	1378.8	918.9	924.3	1026.2	1045.1	1062.3	1065.0	1047.8	1046.0
70°	7646.8	7282.5	985.6	783.6	840.4	937.8	966.7	992.8	983.8	954.0	949.5
72.5°	6589.1	6265.3	670.0	627.6	739.4	853.1	871.1	872.0	854.0	875.6	890.9
75°	5668.4	4893.8	499.6	500.5	592.4	735.8	791.7	796.2	804.4	923.4	947.7
77.5°	4504.2	3188.6	425.6	395.0	454.5	612.3	700.7	733.1	973.0	1055.0	1044.2
80°	2766.6	1914.4	330.0	312.9	369.7	470.7	602.4	749.4	992.8	933.3	901.7
82.5°	1295.8	873.8	238.1	239.9	275.0	343.6	476.1	872.0	857.6	707.9	698.9
85°	501.4	302.1	144.3	163.2	184.9	232.7	365.2	860.3	666.4	599.7	555.5
87.5°	128.9	58.6	63.1	66.7	82.1	122.6	199.3	450.9	350.8	307.5	302.1
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)