

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: P591194

Luminaire Tested: **CTN-CA10-210-727-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591194
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-CA10-210-727-U-T2-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: 18101 lumens
Efficiency: N/A
Efficacy: 85.0 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): 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

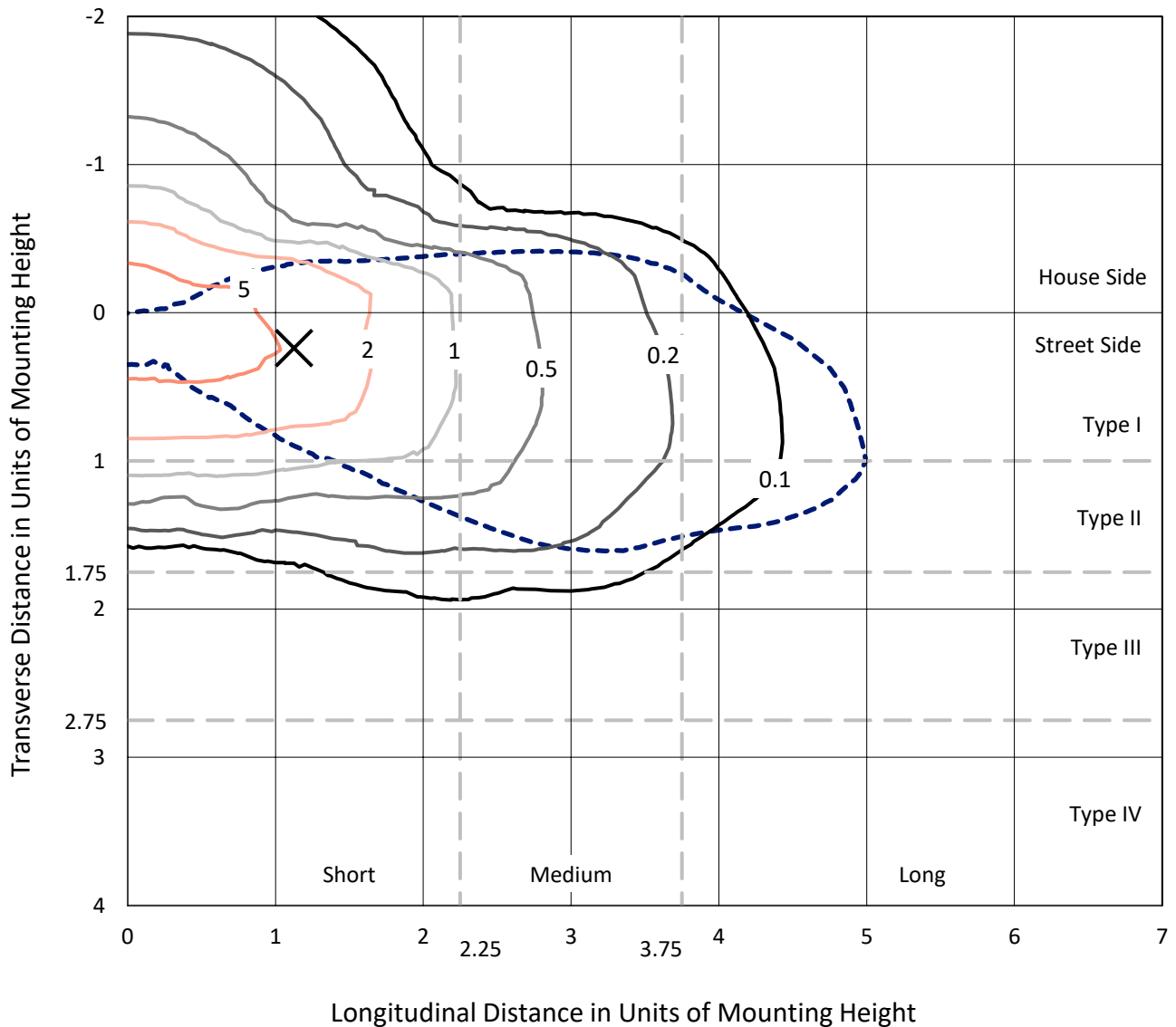




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Iso-Footcandle Lines of Horizontal Illumination

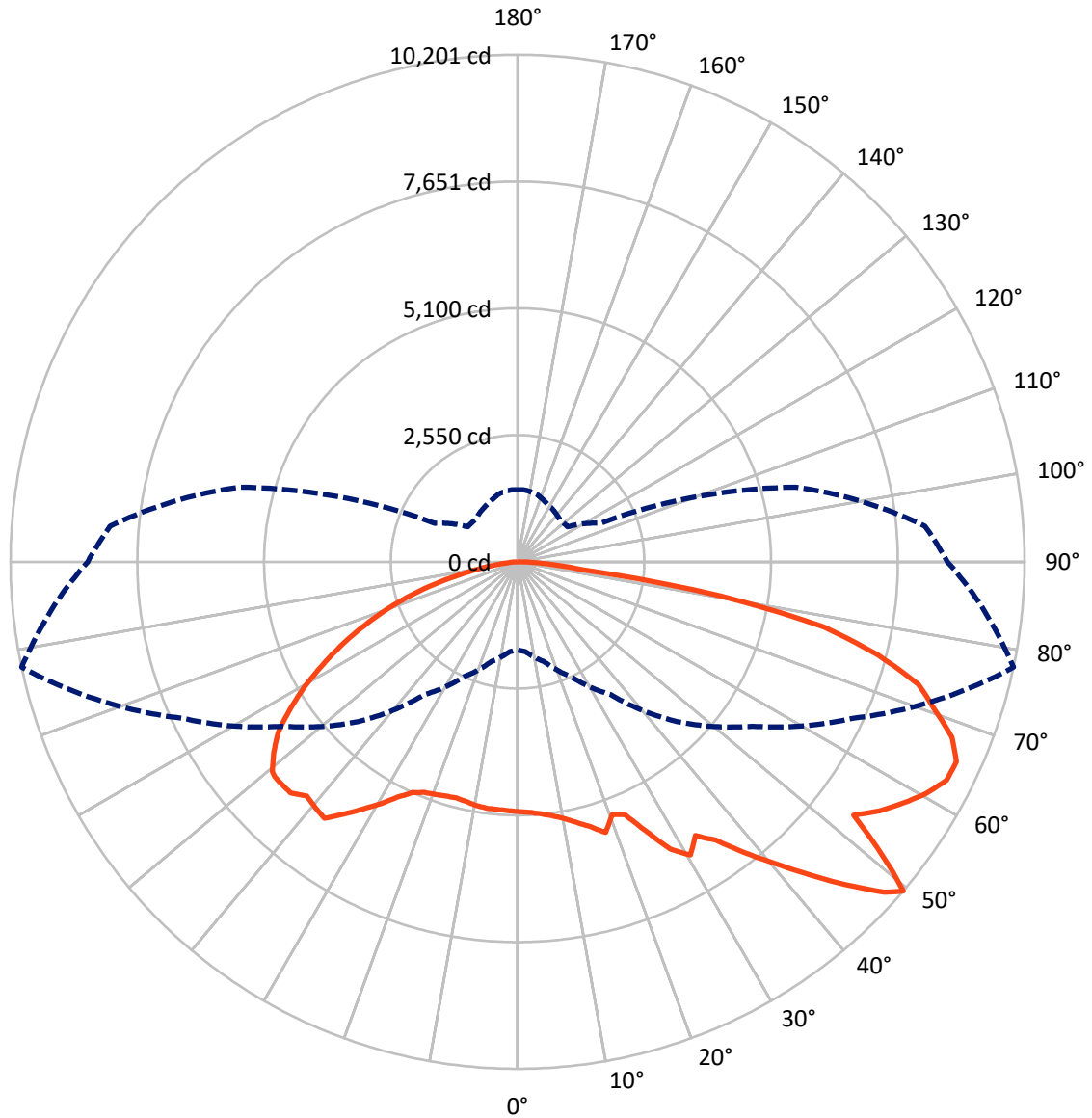
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 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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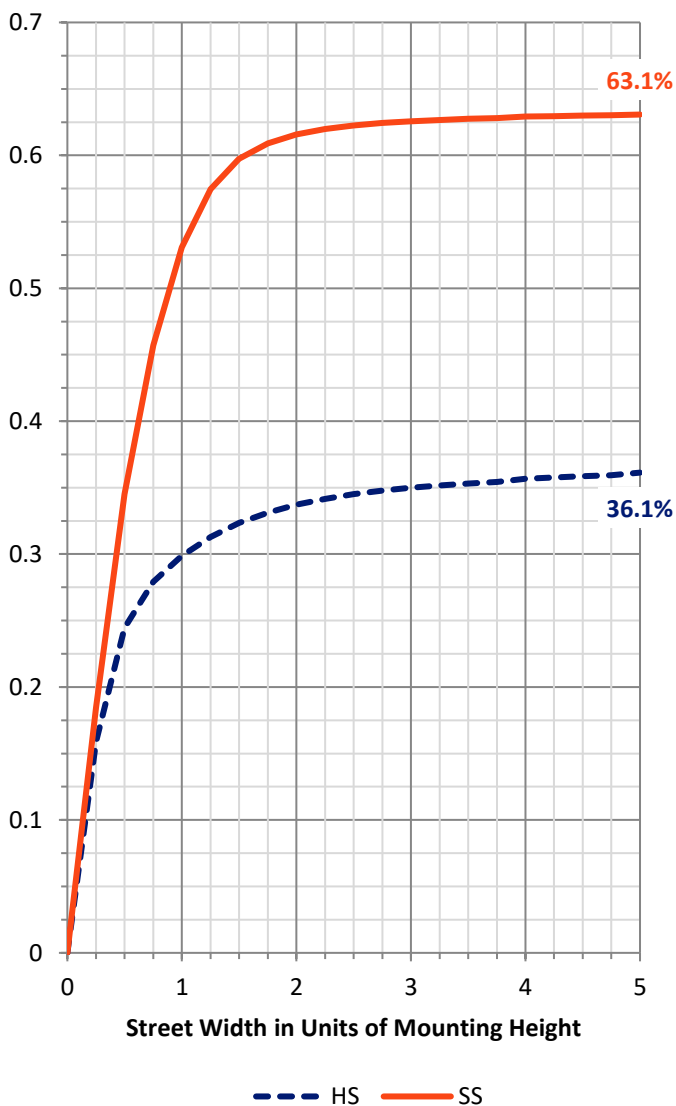
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6702.1	0.0	6702.1
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	11398.9	0.0	11398.9
	% Fixture	63.0	0.0	63.0
Total	Lumens	18101.0	0.0	18101.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	487.2	2.7
10°-20°	1433.8	7.9
20°-30°	2046.8	11.3
30°-40°	2634.9	14.6
40°-50°	3090.8	17.1
50°-60°	3188.6	17.6
60°-70°	2895.2	16.0
70°-80°	1922.7	10.6
80°-90°	400.9	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°	18101.0	100.0
0°-180°	18101.0	100.0

Coefficient of Utilization



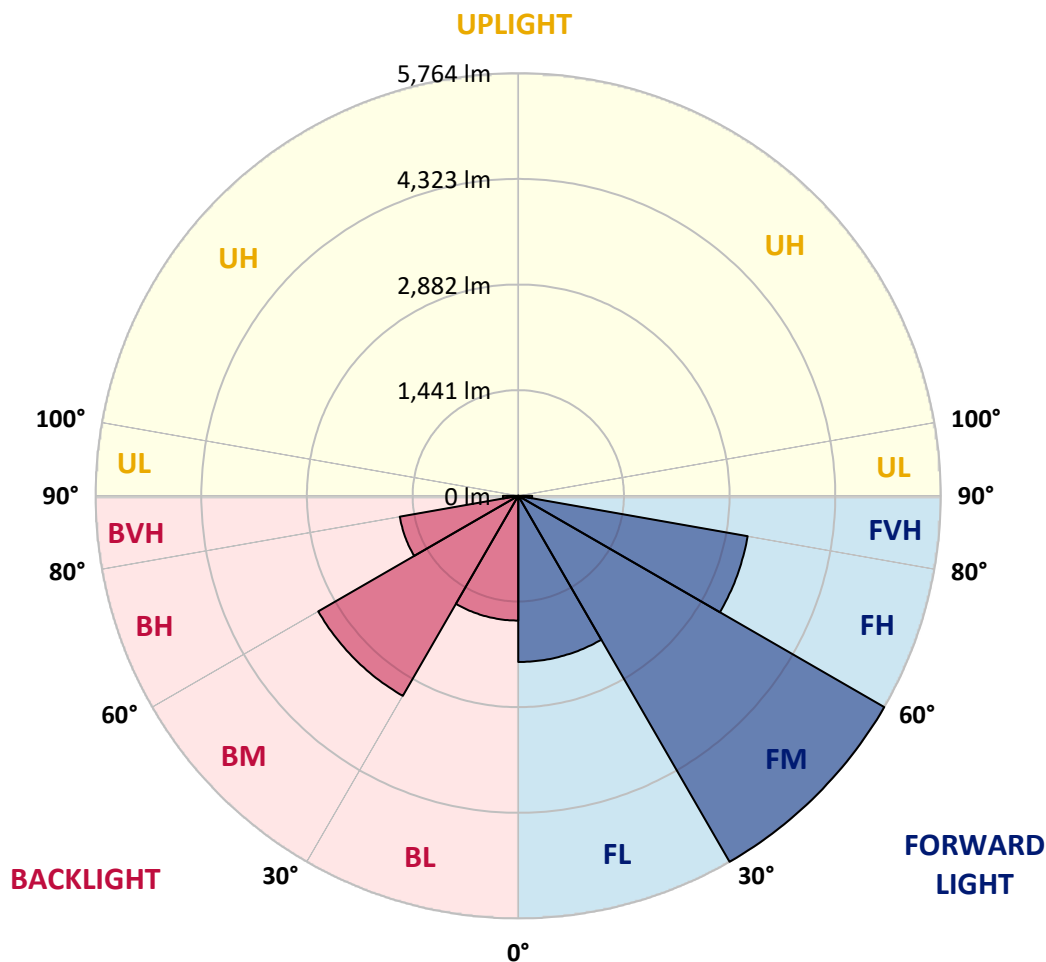
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2266.5	12.5			
FM (30°-60°)	5763.9	31.8			
FH (60°-80°)	3177.4	17.6			G2/5000
FVH (80°-90°)	191.1	1.1			G2/225
BL (0°-30°)	1701.4	9.4	B3/2500		
BM (30°-60°)	3150.4	17.4	B3/5000		
BH (60°-80°)	1640.5	9.1	B3/2500		G3/2500
BVH (80°-90°)	209.8	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°	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5
2.5°	5232.0	5191.8	5204.6	5226.5	5126.9	5148.9	5105.9	5123.3	5070.3	5050.2	5059.3
5°	5601.9	5559.0	5574.5	5581.8	5437.5	5379.0	5244.8	5216.5	5133.3	5096.8	5093.1
7.5°	5784.6	5738.0	5741.7	5746.2	5631.1	5639.4	5517.9	5372.6	5218.3	5162.6	5137.9
10°	6085.1	6020.2	5998.3	5989.2	5833.9	5769.1	5663.1	5583.6	5342.5	5258.5	5195.4
12.5°	6270.5	6223.0	6223.0	6213.9	6049.5	5999.2	5810.2	5726.1	5488.6	5389.1	5280.4
15°	6304.3	6272.3	6313.4	6305.2	6197.4	6139.0	6055.0	5879.6	5636.6	5533.4	5405.5
17.5°	5922.5	5837.6	5675.0	5699.6	5700.6	5819.3	5761.8	5882.3	5811.1	5727.0	5589.1
20°	4863.9	4893.1	5153.4	5090.4	5066.7	5318.8	5576.3	5583.6	5442.1	5428.4	5614.7
22.5°	4237.3	4133.2	4422.7	4843.8	4870.3	5207.3	5507.8	5869.5	5643.0	5521.5	5379.0
25°	3608.9	3647.2	4083.8	4629.1	5014.6	5089.5	5434.8	6012.0	6108.8	5996.5	5698.7
27.5°	3500.2	3498.3	3688.3	4293.0	5084.0	5365.3	5479.5	5931.6	6606.7	6543.6	6167.3
30°	3476.4	3461.8	3561.4	4063.7	4761.6	5613.8	5831.2	5992.8	6567.4	6847.8	6691.6
32.5°	3372.3	3359.5	3465.5	3728.5	4503.1	5795.5	6166.4	6407.5	6434.0	6566.5	7245.1
35°	3208.8	3218.8	3365.9	3651.8	4129.5	5358.9	6509.8	6874.3	6970.2	6878.8	6972.9
37.5°	3041.6	3052.6	3196.9	3521.2	4064.6	5176.3	6731.8	7325.5	7524.6	7426.9	6992.1
40°	2834.3	2851.6	3018.8	3383.2	3989.7	4764.3	6276.0	7837.9	8108.3	7980.4	7496.3
42.5°	2598.6	2605.9	2795.9	3173.2	3894.8	4789.0	5805.6	8311.1	8674.6	8604.3	7993.2
45°	2394.0	2394.0	2566.7	2902.8	3678.3	4742.4	5606.5	7958.5	9369.7	9270.1	8491.0
47.5°	2115.4	2140.1	2342.9	2676.3	3423.4	4634.6	5720.7	7166.6	10017.3	9934.2	8990.6
49°	1772.0	1814.0	2081.6	2552.1	3259.9	4545.1	5766.3	7446.1	9570.6	10200.9	9314.9
50°	1631.3	1653.3	1656.0	2463.5	3138.5	4463.8	5787.3	7660.7	8817.1	9770.7	9542.3
52.5°	1412.1	1274.2	1132.6	2217.7	2894.6	4163.3	5800.1	8243.5	8636.2	8465.4	9365.1
55°	596.5	781.0	992.9	1814.0	2631.5	3791.5	5758.1	8883.8	9033.6	8845.4	8029.7
57.5°	451.2	480.5	533.4	1407.6	1885.3	3367.7	5616.5	9289.3	9368.8	9155.1	8355.8
60°	65.8	67.6	95.0	570.9	1079.6	2404.1	5106.8	9277.4	9618.1	9453.7	8637.1
62.5°	27.4	28.3	36.5	467.7	832.1	1850.6	4662.0	9122.2	9860.2	9683.9	8901.1
65°	4.6	5.5	15.5	413.8	687.8	1729.1	4174.3	9153.2	9774.3	9701.3	9003.4
67.5°	3.7	4.6	14.6	371.8	567.2	1582.9	3692.9	8659.1	9461.0	9429.1	8730.3
70°	3.7	4.6	15.5	336.1	490.5	1394.8	3098.3	7974.9	8886.5	8899.3	8271.8
72.5°	4.6	4.6	15.5	300.5	426.6	1192.0	2451.6	7061.5	8365.0	8435.3	7619.6
75°	4.6	4.6	14.6	261.2	366.3	993.8	1765.6	5192.7	7501.8	7480.8	6682.5
77.5°	4.6	4.6	14.6	207.3	304.2	817.5	1150.0	2924.7	6212.1	6300.7	5587.3
80°	4.6	4.6	14.6	151.6	238.4	612.9	696.9	1497.1	3316.6	4105.8	3843.6
82.5°	4.6	4.6	14.6	102.3	163.5	353.5	401.9	758.1	1191.1	1305.3	1527.2
85°	3.7	3.7	11.0	61.2	84.0	125.1	193.6	403.7	651.3	680.5	664.0
87.5°	1.8	1.8	5.5	21.9	36.5	45.7	86.8	162.6	239.3	244.8	212.8
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°	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5	5026.5
2.5°	5059.3	5030.1	5003.6	5008.2	4951.6	4935.1	4872.1	4905.0	4873.0	4844.7	4871.2
5°	5067.6	5031.9	4983.5	4936.9	4807.2	4747.0	4671.1	4690.3	4647.4	4613.6	4642.8
7.5°	5091.3	5047.5	4972.6	4840.1	4685.8	4589.9	4504.0	4588.0	4578.0	4552.4	4582.5
10°	5102.3	5064.8	4936.0	4780.8	4565.2	4504.9	4427.3	4426.4	4429.1	4433.7	4463.8
12.5°	5131.5	5074.9	4871.2	4690.3	4490.3	4367.9	4311.3	4356.9	4274.7	4226.3	4247.3
15°	5200.9	5097.7	4827.3	4563.4	4374.3	4272.9	4092.1	4107.6	4090.2	4042.7	4063.7
17.5°	5337.9	5161.6	4825.5	4483.0	4226.3	4061.0	3903.0	3828.1	3804.3	3808.0	3826.3
20°	5506.0	5274.9	4829.2	4379.8	4072.0	3880.1	3636.3	3584.2	3505.6	3507.5	3512.0
22.5°	5399.1	5405.5	4831.0	4261.9	3879.2	3639.0	3380.5	3278.2	3217.9	3202.4	3225.2
25°	5688.7	5659.5	4859.3	4198.9	3676.5	3354.0	3083.7	2953.0	2862.6	2855.3	2880.9
27.5°	6074.1	6021.2	5005.5	4062.8	3461.8	3012.4	2719.2	2620.6	2542.9	2515.5	2533.8
30°	6542.7	6480.6	5207.3	3956.9	3172.3	2645.2	2394.0	2326.4	2249.7	2199.5	2204.0
32.5°	7032.3	6899.9	5414.7	3867.4	2875.4	2323.7	2109.1	2048.8	1958.3	1893.5	1909.0
35°	7525.5	7337.4	5645.8	3709.3	2512.8	2040.5	1867.0	1785.7	1711.7	1653.3	1643.2
37.5°	7135.5	7848.9	5869.5	3562.3	2228.7	1825.0	1628.6	1571.1	1527.2	1481.5	1480.6
40°	7167.5	7331.0	6002.0	3302.0	1911.8	1603.9	1406.6	1426.7	1445.0	1410.3	1410.3
42.5°	7484.4	7251.5	5949.0	2956.7	1676.1	1382.9	1292.5	1373.8	1431.3	1406.6	1405.7
45°	7931.1	7628.8	6039.4	2567.6	1446.8	1246.8	1260.5	1360.1	1435.0	1430.4	1428.6
47.5°	8405.1	8058.1	5865.9	2105.4	1288.8	1204.8	1260.5	1340.0	1429.5	1450.5	1445.9
49°	8649.0	8227.9	5796.5	1835.9	1225.8	1199.3	1262.3	1323.5	1419.4	1451.4	1446.8
50°	8797.9	8319.3	5706.9	1682.5	1192.0	1200.2	1266.0	1313.5	1410.3	1445.9	1443.2
52.5°	9133.1	8458.1	5263.0	1415.8	1137.2	1203.0	1289.7	1303.4	1376.5	1414.9	1435.0
55°	8791.5	8775.1	4696.7	1293.4	1108.0	1196.6	1299.8	1312.6	1348.2	1369.2	1384.7
57.5°	8738.5	8913.0	3983.4	1227.6	1082.4	1187.4	1287.9	1311.6	1332.7	1329.0	1322.6
60°	8906.6	9033.6	3248.1	1162.8	1053.2	1172.8	1248.6	1283.3	1289.7	1280.6	1266.0
62.5°	8933.1	9066.4	2496.3	1097.0	1021.2	1137.2	1191.1	1225.8	1225.8	1203.0	1197.5
65°	8809.8	8860.9	1839.6	1021.2	982.8	1096.1	1123.5	1149.1	1160.9	1130.8	1132.6
67.5°	8456.3	8160.4	1396.6	930.8	936.2	1039.5	1058.6	1076.0	1078.7	1061.4	1059.5
70°	7745.7	7376.7	998.4	793.7	851.3	949.9	979.2	1005.7	996.5	966.4	961.8
72.5°	6674.2	6346.3	678.7	635.7	749.0	864.1	882.3	883.3	865.0	886.9	902.4
75°	5741.7	4957.0	506.0	506.9	600.1	745.3	802.0	806.5	814.8	935.3	960.0
77.5°	4562.5	3229.8	431.1	400.1	460.4	620.2	709.7	742.6	985.6	1068.7	1057.7
80°	2802.3	1939.2	334.3	317.0	374.5	476.8	610.2	759.0	1005.7	945.4	913.4
82.5°	1312.6	885.1	241.1	243.0	278.6	348.0	482.3	883.3	868.6	717.0	707.9
85°	507.9	306.0	146.1	165.3	187.2	235.7	369.9	871.4	675.0	607.4	562.7
87.5°	130.6	59.4	63.9	67.6	83.1	124.2	201.9	456.7	355.3	311.5	306.0
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)