

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: P591386

Luminaire Tested: **CTN-CA10-210-740-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591386
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-CA10-210-740-U-T2-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: 21376 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

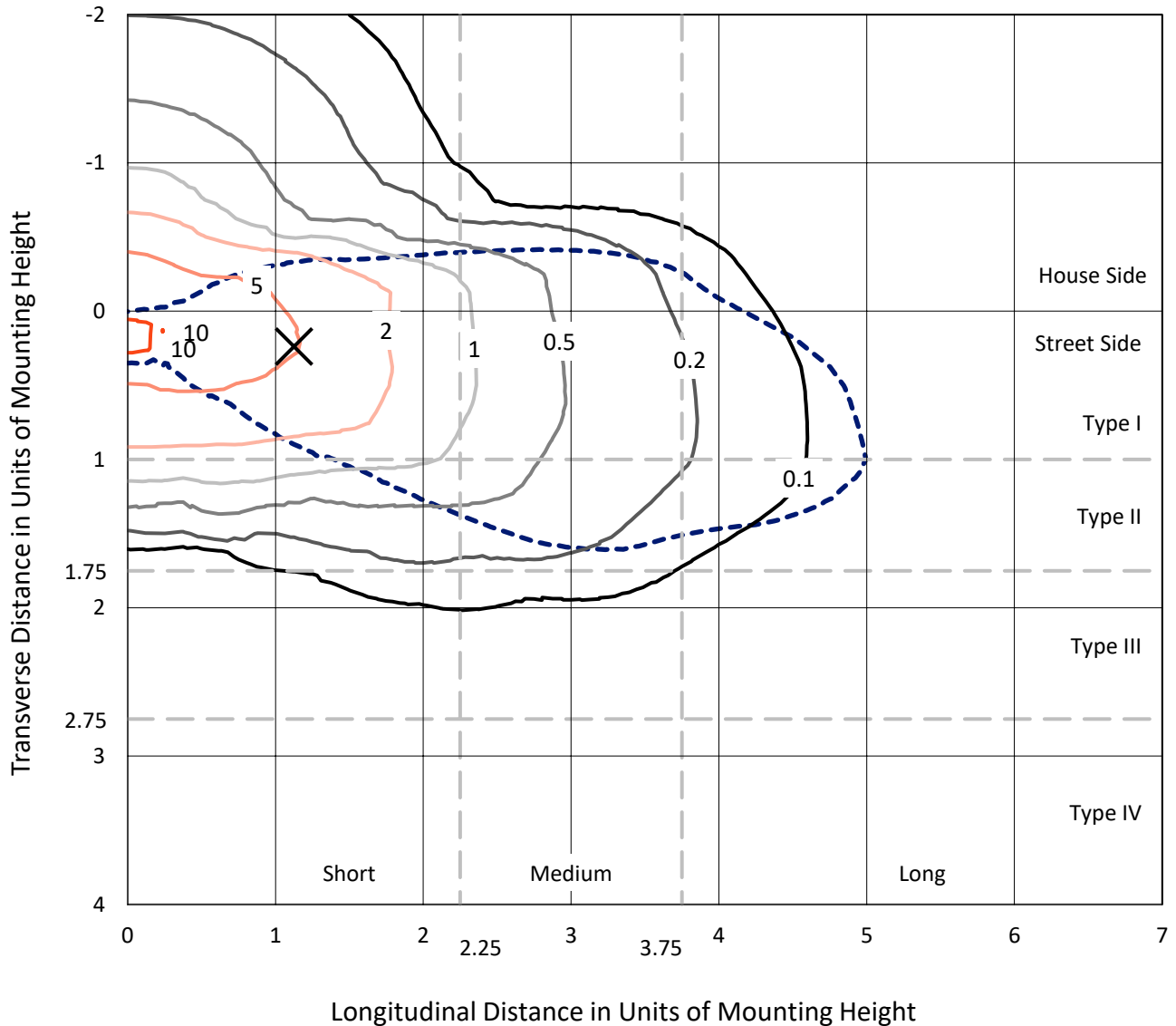
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

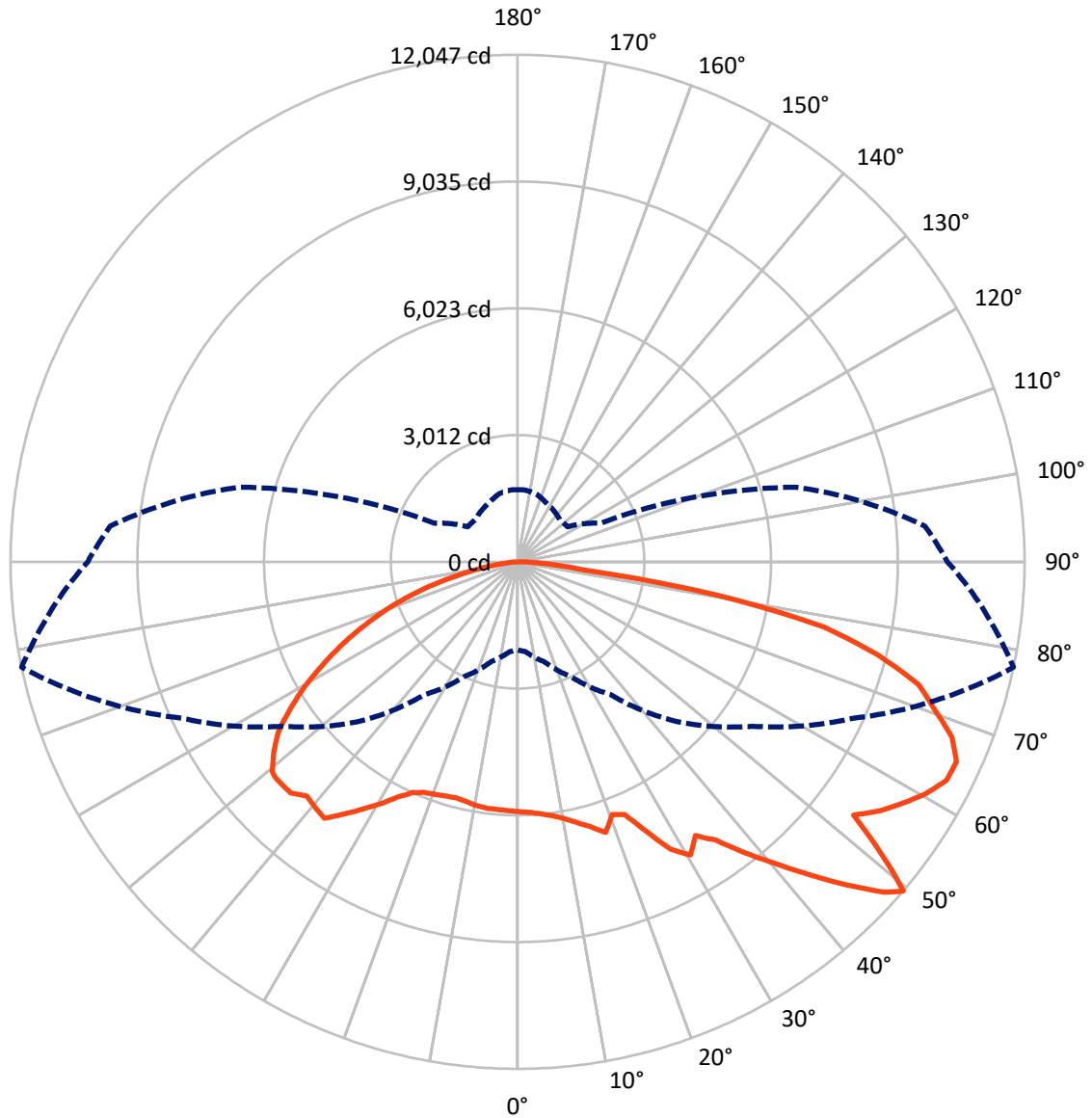
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.9 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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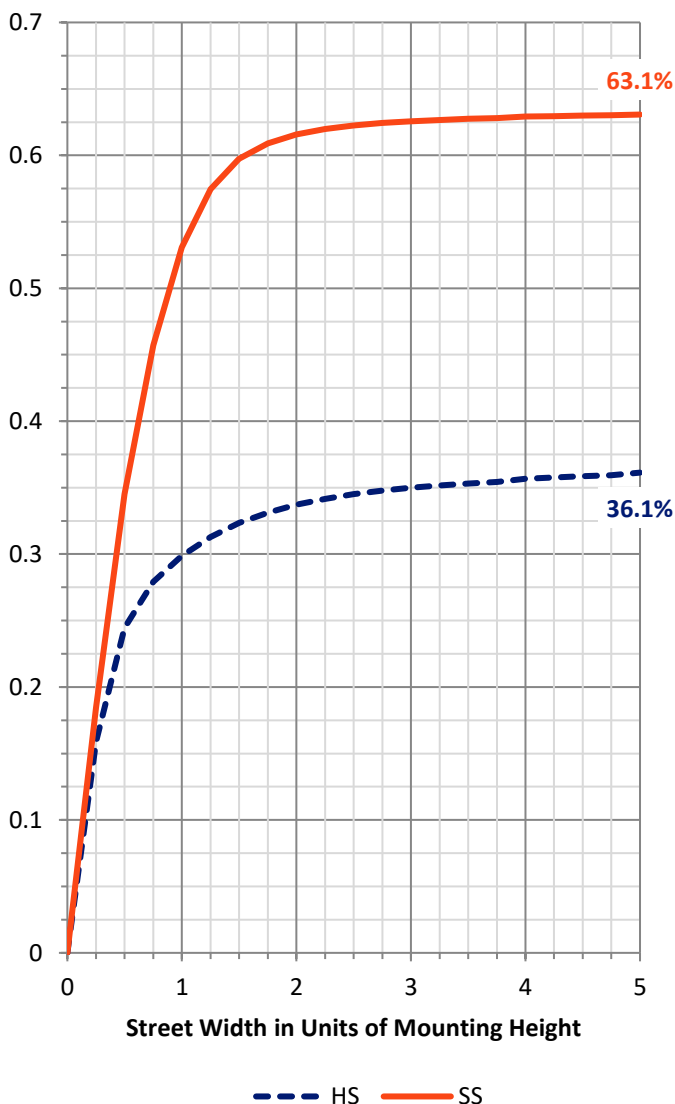
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7914.7	0.0	7914.7
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	13461.2	0.0	13461.2
	% Fixture	63.0	0.0	63.0
Total	Lumens	21376.0	0.0	21376.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	575.4	2.7
10°-20°	1693.3	7.9
20°-30°	2417.2	11.3
30°-40°	3111.7	14.6
40°-50°	3650.0	17.1
50°-60°	3765.5	17.6
60°-70°	3419.0	16.0
70°-80°	2270.6	10.6
80°-90°	473.4	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°	21376.0	100.0
0°-180°	21376.0	100.0

Coefficient of Utilization



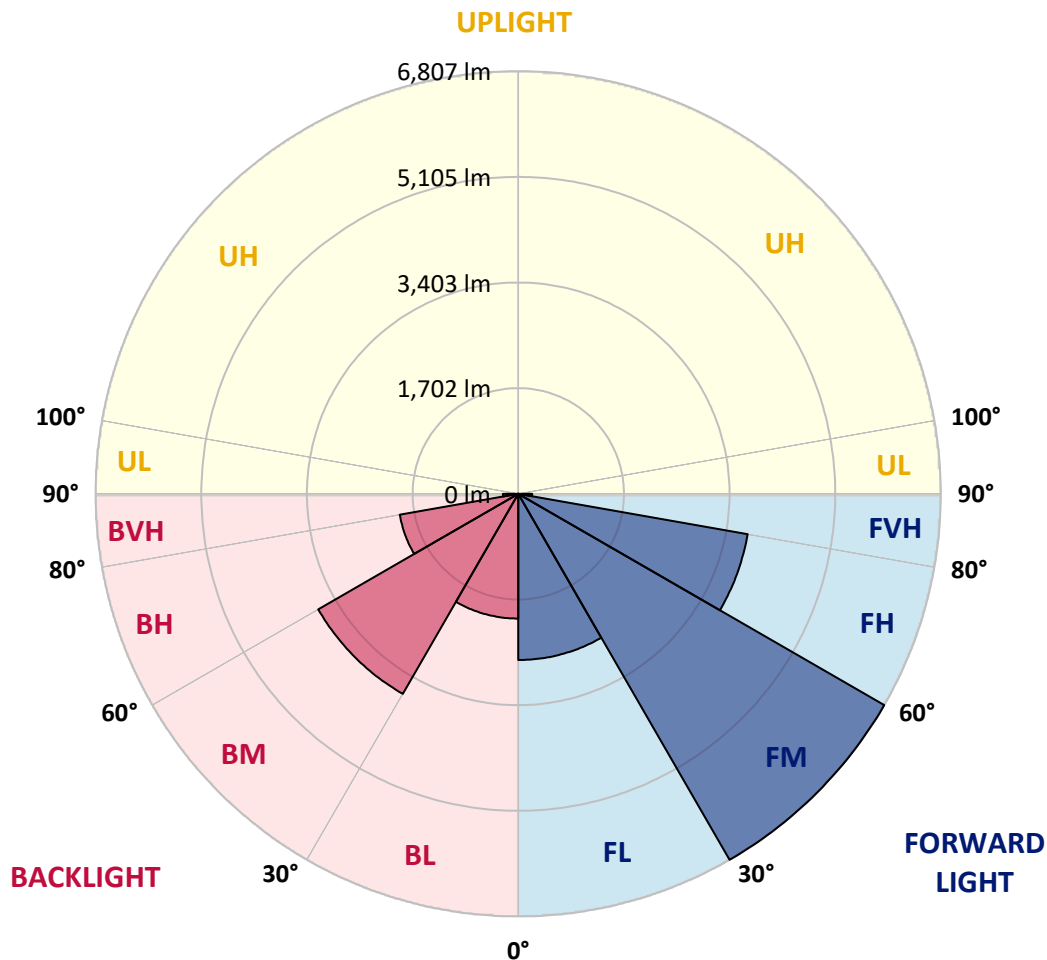
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2676.6	12.5			
FM (30°-60°)	6806.7	31.8			
FH (60°-80°)	3752.3	17.6			G2/5000
FVH (80°-90°)	225.6	1.1			G3/500
BL (0°-30°)	2009.2	9.4	B3/2500		
BM (30°-60°)	3720.4	17.4	B3/5000		
BH (60°-80°)	1937.3	9.1	B3/2500		G3/2500
BVH (80°-90°)	247.8	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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9
2.5°	6178.6	6131.1	6146.2	6172.1	6054.6	6080.4	6029.7	6050.2	5987.7	5963.9	5974.7
5°	6615.5	6564.8	6583.1	6591.7	6421.3	6352.3	6193.7	6160.3	6062.1	6019.0	6014.6
7.5°	6831.2	6776.2	6780.5	6785.9	6650.0	6659.7	6516.2	6344.7	6162.4	6096.6	6067.5
10°	7186.1	7109.5	7083.6	7072.8	6889.4	6812.9	6687.7	6593.9	6309.1	6209.9	6135.5
12.5°	7405.0	7348.9	7348.9	7338.2	7144.0	7084.7	6861.4	6762.2	6481.7	6364.1	6235.8
15°	7445.0	7407.2	7455.7	7446.0	7318.7	7249.7	7150.5	6943.4	6656.4	6534.6	6383.5
17.5°	6994.1	6893.8	6701.7	6730.9	6732.0	6872.2	6804.2	6946.6	6862.5	6763.2	6600.4
20°	5743.9	5778.4	6085.8	6011.4	5983.4	6281.1	6585.3	6593.9	6426.7	6410.5	6630.6
22.5°	5003.9	4881.0	5222.9	5720.2	5751.4	6149.5	6504.4	6931.5	6664.0	6520.5	6352.3
25°	4261.8	4307.1	4822.7	5466.7	5921.9	6010.3	6418.1	7099.8	7214.1	7081.4	6729.8
27.5°	4133.4	4131.3	4355.7	5069.7	6003.9	6336.1	6470.9	7004.9	7802.0	7727.6	7283.2
30°	4105.4	4088.1	4205.7	4799.0	5623.1	6629.5	6886.2	7077.1	7755.6	8086.8	7902.3
32.5°	3982.4	3967.3	4092.5	4403.1	5317.8	6844.1	7282.1	7566.8	7598.1	7754.5	8556.0
35°	3789.4	3801.2	3974.9	4312.5	4876.6	6328.5	7687.7	8118.0	8231.3	8123.4	8234.5
37.5°	3592.0	3604.9	3775.3	4158.3	4800.1	6112.8	7949.8	8650.9	8886.0	8770.6	8257.2
40°	3347.1	3367.6	3565.0	3995.4	4711.6	5626.3	7411.5	9256.0	9575.3	9424.3	8852.6
42.5°	3068.8	3077.4	3301.8	3747.3	4599.4	5655.4	6856.0	9814.8	10244.1	10161.0	9439.4
45°	2827.2	2827.2	3031.1	3428.0	4343.8	5600.4	6620.9	9398.4	11065.0	10947.4	10027.3
47.5°	2498.2	2527.3	2766.8	3160.5	4042.8	5473.1	6755.7	8463.2	11829.7	11731.6	10617.3
49°	2092.6	2142.2	2458.3	3013.8	3849.8	5367.4	6809.6	8793.3	11302.3	12046.5	11000.2
50°	1926.5	1952.4	1955.6	2909.2	3706.3	5271.4	6834.4	9046.8	10412.4	11538.5	11268.8
52.5°	1667.6	1504.7	1337.5	2619.0	3418.3	4916.6	6849.5	9735.0	10198.8	9997.1	11059.6
55°	704.4	922.3	1172.5	2142.2	3107.6	4477.5	6799.9	10491.1	10668.0	10445.8	9482.6
57.5°	532.9	567.4	629.9	1662.2	2226.4	3977.0	6632.7	10970.0	11063.9	10811.5	9867.6
60°	77.7	79.8	112.2	674.2	1275.0	2839.0	6030.8	10956.0	11358.3	11164.2	10199.9
62.5°	32.4	33.4	43.1	552.3	982.7	2185.4	5505.5	10772.6	11644.2	11436.0	10511.6
65°	5.4	6.5	18.3	488.6	812.2	2041.9	4929.5	10809.3	11542.8	11456.5	10632.4
67.5°	4.3	5.4	17.3	439.0	669.9	1869.3	4361.0	10225.8	11172.8	11135.1	10309.9
70°	4.3	5.4	18.3	396.9	579.2	1647.1	3658.8	9417.8	10494.3	10509.4	9768.4
72.5°	5.4	5.4	18.3	354.9	503.7	1407.7	2895.1	8339.2	9878.4	9961.5	8998.2
75°	5.4	5.4	17.3	308.5	432.5	1173.6	2085.1	6132.2	8859.1	8834.3	7891.5
77.5°	5.4	5.4	17.3	244.9	359.2	965.4	1358.0	3453.9	7336.0	7440.6	6598.2
80°	5.4	5.4	17.3	179.1	281.5	723.8	823.0	1767.9	3916.6	4848.6	4539.0
82.5°	5.4	5.4	17.3	120.8	193.1	417.4	474.6	895.3	1406.6	1541.4	1803.5
85°	4.3	4.3	12.9	72.3	99.2	147.8	228.7	476.8	769.1	803.6	784.2
87.5°	2.2	2.2	6.5	25.9	43.1	53.9	102.5	192.0	282.6	289.1	251.3
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9	5935.9
2.5°	5974.7	5940.2	5908.9	5914.3	5847.4	5828.0	5753.6	5792.4	5754.7	5721.2	5752.5
5°	5984.4	5942.4	5885.2	5830.2	5677.0	5605.8	5516.3	5538.9	5488.3	5448.3	5482.9
7.5°	6012.5	5960.7	5872.3	5715.8	5533.6	5420.3	5318.9	5418.1	5406.3	5376.1	5411.7
10°	6025.4	5981.2	5829.1	5645.7	5391.2	5320.0	5228.3	5227.2	5230.4	5235.8	5271.4
12.5°	6059.9	5993.1	5752.5	5538.9	5302.7	5158.2	5091.3	5145.2	5048.2	4991.0	5015.8
15°	6141.9	6020.0	5700.7	5389.0	5165.7	5046.0	4832.4	4850.8	4830.3	4774.2	4799.0
17.5°	6303.7	6095.5	5698.6	5294.1	4991.0	4795.7	4609.1	4520.7	4492.6	4497.0	4518.5
20°	6502.2	6229.3	5702.9	5172.2	4808.7	4582.2	4294.2	4232.7	4139.9	4142.1	4147.5
22.5°	6376.0	6383.5	5705.1	5033.1	4581.1	4297.4	3992.1	3871.3	3800.1	3781.8	3808.8
25°	6717.9	6683.4	5738.5	4958.6	4341.6	3960.9	3641.6	3487.3	3380.5	3371.9	3402.1
27.5°	7173.1	7110.6	5911.1	4797.9	4088.1	3557.4	3211.2	3094.7	3003.0	2970.6	2992.2
30°	7726.5	7653.1	6149.5	4672.8	3746.2	3123.8	2827.2	2747.4	2656.8	2597.4	2602.8
32.5°	8304.6	8148.2	6394.3	4567.1	3395.6	2744.1	2490.6	2419.4	2312.7	2236.1	2254.4
35°	8887.1	8664.9	6667.2	4380.5	2967.4	2409.7	2204.8	2108.8	2021.4	1952.4	1940.5
37.5°	8426.5	9269.0	6931.5	4206.8	2631.9	2155.2	1923.3	1855.3	1803.5	1749.6	1748.5
40°	8464.3	8657.4	7087.9	3899.4	2257.6	1894.1	1661.1	1684.9	1706.4	1665.5	1665.5
42.5°	8838.6	8563.5	7025.3	3491.6	1979.4	1633.1	1526.3	1622.3	1690.3	1661.1	1660.1
45°	9366.1	9009.0	7132.1	3032.1	1708.6	1472.4	1488.6	1606.1	1694.6	1689.2	1687.0
47.5°	9925.9	9516.0	6927.2	2486.3	1522.0	1422.8	1488.6	1582.4	1688.1	1712.9	1707.5
49°	10213.9	9716.6	6845.2	2168.1	1447.6	1416.3	1490.7	1563.0	1676.2	1714.0	1708.6
50°	10389.7	9824.5	6739.5	1986.9	1407.7	1417.4	1495.0	1551.1	1665.5	1707.5	1704.3
52.5°	10785.6	9988.4	6215.3	1671.9	1342.9	1420.6	1523.1	1539.3	1625.5	1670.9	1694.6
55°	10382.2	10362.7	5546.5	1527.4	1308.4	1413.1	1534.9	1550.0	1592.1	1616.9	1635.3
57.5°	10319.6	10525.6	4704.1	1449.7	1278.2	1402.3	1520.9	1549.0	1573.8	1569.5	1561.9
60°	10518.1	10668.0	3835.7	1373.1	1243.7	1385.0	1474.5	1515.5	1523.1	1512.3	1495.0
62.5°	10549.4	10706.8	2948.0	1295.5	1205.9	1342.9	1406.6	1447.6	1447.6	1420.6	1414.1
65°	10403.7	10464.1	2172.4	1205.9	1160.6	1294.4	1326.8	1357.0	1371.0	1335.4	1337.5
67.5°	9986.3	9636.8	1649.3	1099.2	1105.6	1227.5	1250.2	1270.7	1273.9	1253.4	1251.3
70°	9147.1	8711.3	1179.0	937.4	1005.3	1121.8	1156.3	1187.6	1176.8	1141.2	1135.8
72.5°	7881.8	7494.6	801.4	750.8	884.5	1020.4	1042.0	1043.1	1021.5	1047.4	1065.7
75°	6780.5	5853.9	597.6	598.7	708.7	880.2	947.1	952.5	962.2	1104.6	1133.7
77.5°	5387.9	3814.2	509.1	472.5	543.6	732.4	838.1	877.0	1163.9	1262.0	1249.1
80°	3309.3	2290.0	394.8	374.3	442.3	563.1	720.5	896.4	1187.6	1116.4	1078.7
82.5°	1550.0	1045.2	284.8	286.9	329.0	411.0	569.5	1043.1	1025.8	846.8	836.0
85°	599.7	361.4	172.6	195.2	221.1	278.3	436.9	1029.0	797.1	717.3	664.5
87.5°	154.2	70.1	75.5	79.8	98.2	146.7	238.4	539.3	419.6	367.8	361.4
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)