

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: P591434

Luminaire Tested: **CTN-CA6-230-740-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591434
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-CA6-230-740-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21103 lumens
Efficiency: N/A
Efficacy: 92.6 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

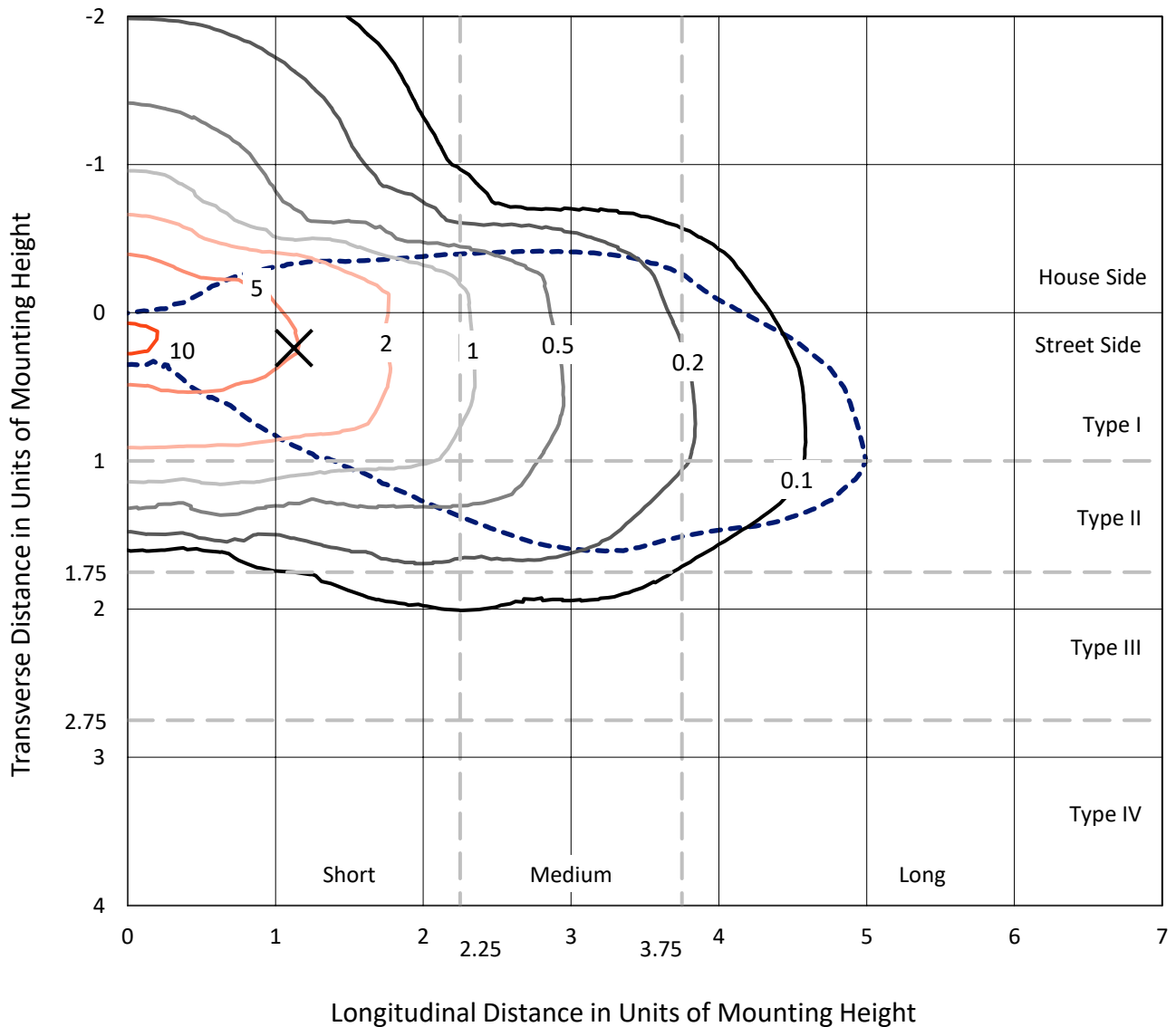
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

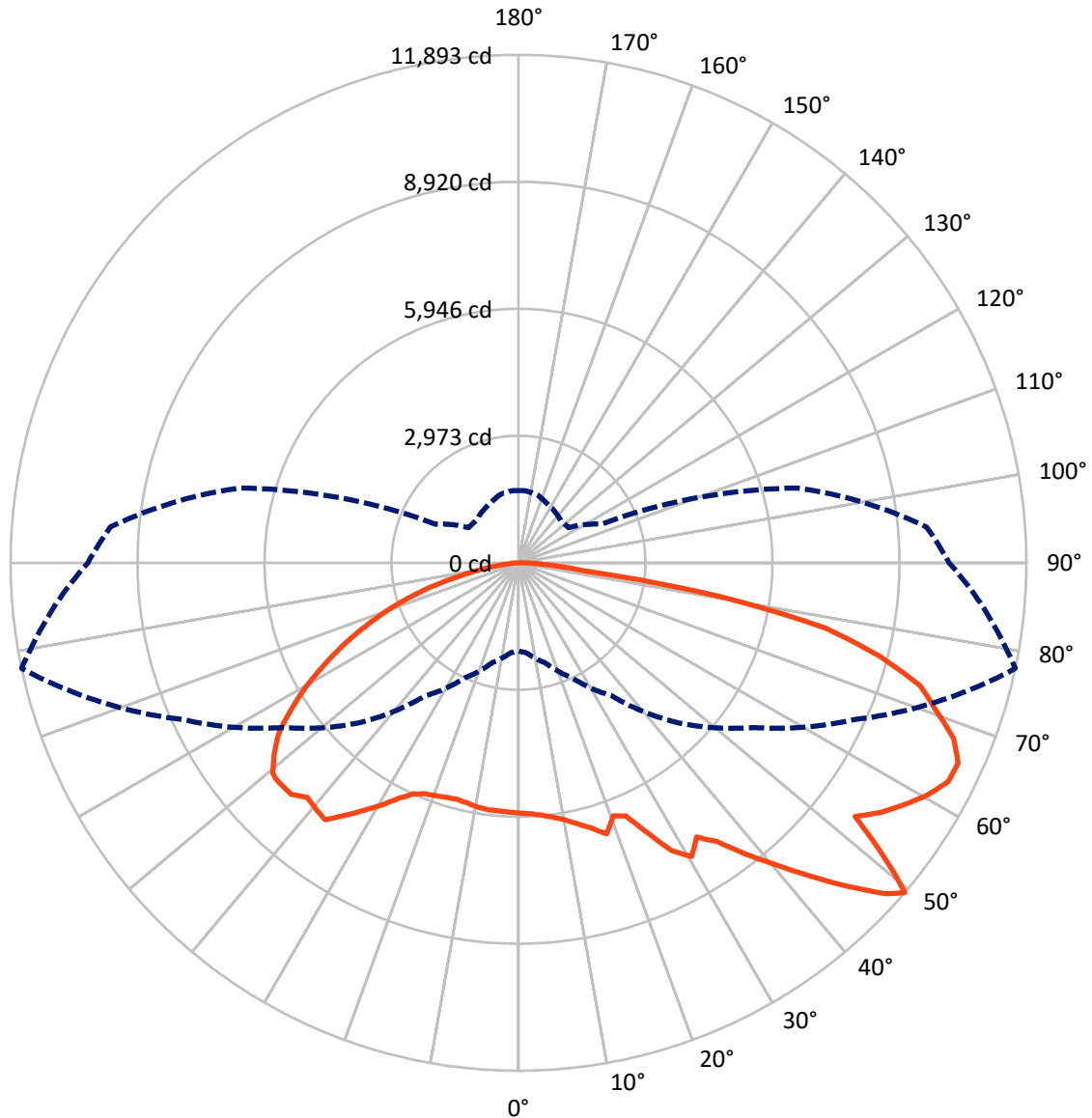
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.7 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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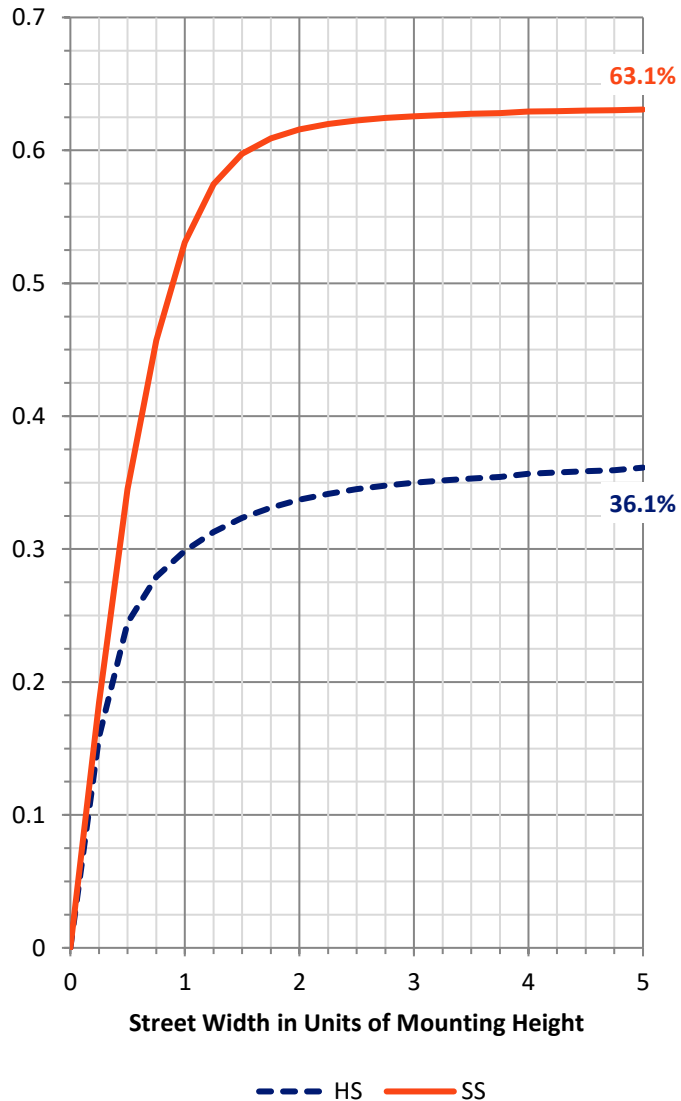
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7813.7	0.0	7813.7
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	13289.3	0.0	13289.3
	% Fixture	63.0	0.0	63.0
Total	Lumens	21103.0	0.0	21103.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	568.0	2.7
10°-20°	1671.6	7.9
20°-30°	2386.3	11.3
30°-40°	3071.9	14.6
40°-50°	3603.4	17.1
50°-60°	3717.4	17.6
60°-70°	3375.3	16.0
70°-80°	2241.6	10.6
80°-90°	467.4	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°	21103.0	100.0
0°-180°	21103.0	100.0

Coefficient of Utilization



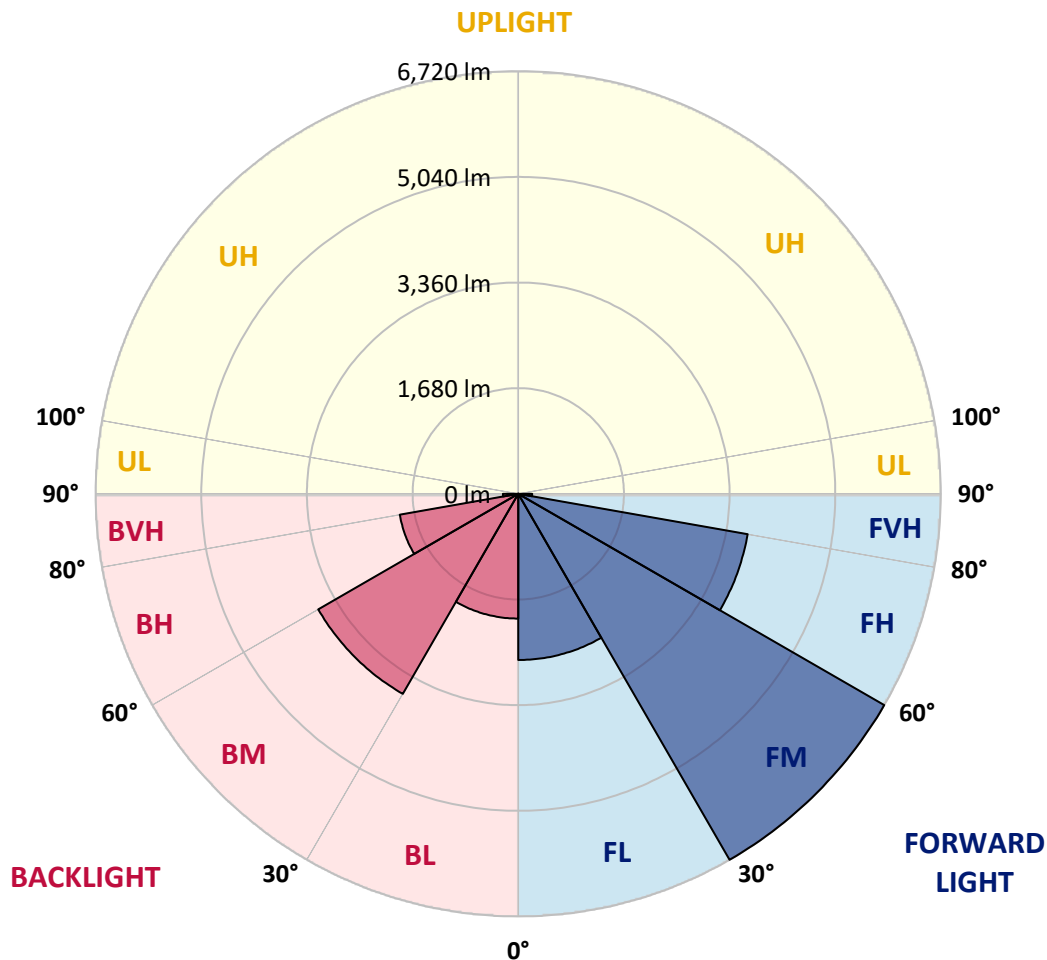
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2642.4	12.5			
FM (30°-60°)	6719.8	31.8			
FH (60°-80°)	3704.4	17.6			G2/5000
FVH (80°-90°)	222.8	1.1			G2/225
BL (0°-30°)	1983.6	9.4	B3/2500		
BM (30°-60°)	3672.9	17.4	B3/5000		
BH (60°-80°)	1912.6	9.1	B3/2500		G3/2500
BVH (80°-90°)	244.6	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°	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1
2.5°	6099.7	6052.8	6067.7	6093.3	5977.2	6002.8	5952.7	5973.0	5911.2	5887.8	5898.4
5°	6531.0	6480.9	6499.0	6507.5	6339.3	6271.1	6114.6	6081.6	5984.7	5942.1	5937.8
7.5°	6743.9	6689.6	6693.9	6699.2	6565.0	6574.6	6433.0	6263.7	6083.7	6018.8	5990.0
10°	7094.3	7018.7	6993.1	6982.5	6801.5	6725.8	6602.3	6509.7	6228.5	6130.6	6057.1
12.5°	7310.5	7255.1	7255.1	7244.4	7052.8	6994.2	6773.8	6675.8	6398.9	6282.8	6156.1
15°	7349.9	7312.6	7360.5	7350.9	7225.3	7157.1	7059.2	6854.7	6571.4	6451.1	6302.0
17.5°	6904.7	6805.7	6616.2	6644.9	6646.0	6784.4	6717.3	6857.9	6774.8	6676.9	6516.1
20°	5670.5	5704.6	6008.1	5934.6	5906.9	6200.9	6501.2	6509.7	6344.6	6328.6	6545.9
22.5°	4940.0	4818.6	5156.2	5647.1	5678.0	6070.9	6421.3	6843.0	6578.9	6437.3	6271.1
25°	4207.4	4252.1	4761.1	5396.9	5846.2	5933.6	6336.1	7009.1	7122.0	6991.0	6643.8
27.5°	4080.7	4078.5	4300.0	5005.0	5927.2	6255.2	6388.3	6915.4	7702.3	7628.9	7190.1
30°	4053.0	4035.9	4152.0	4737.7	5551.3	6544.8	6798.3	6986.7	7656.6	7983.5	7801.4
32.5°	3931.6	3916.7	4040.2	4346.9	5249.9	6756.7	7189.1	7470.2	7501.1	7655.5	8446.7
35°	3741.0	3752.7	3924.1	4257.4	4814.4	6247.7	7589.5	8014.4	8126.2	8019.7	8129.4
37.5°	3546.1	3558.9	3727.1	4105.1	4738.8	6034.7	7848.2	8540.4	8772.6	8658.6	8151.7
40°	3304.4	3324.6	3519.5	3944.4	4651.4	5554.5	7316.9	9137.8	9453.0	9303.9	8739.5
42.5°	3029.6	3038.1	3259.6	3699.4	4540.7	5583.2	6768.4	9689.4	10113.3	10031.3	9318.8
45°	2791.1	2791.1	2992.3	3384.2	4288.3	5528.9	6536.3	9278.4	10923.6	10807.6	9899.2
47.5°	2466.3	2495.0	2731.4	3120.1	3991.2	5403.3	6669.4	8355.1	11678.6	11581.7	10481.7
49°	2065.9	2114.9	2426.9	2975.3	3800.6	5298.9	6722.6	8681.0	11157.9	11892.7	10859.7
50°	1901.9	1927.5	1930.6	2872.0	3659.0	5204.1	6747.1	8931.2	10279.4	11391.1	11124.9
52.5°	1646.3	1485.5	1320.5	2585.6	3374.6	4853.8	6762.0	9610.6	10068.5	9869.4	10918.3
55°	695.4	910.5	1157.5	2114.9	3067.9	4420.4	6713.1	10357.1	10531.8	10312.4	9361.4
57.5°	526.1	560.1	621.9	1641.0	2197.9	3926.2	6548.0	10829.9	10922.6	10673.4	9741.6
60°	76.7	78.8	110.7	665.6	1258.7	2802.8	5953.8	10816.1	11213.3	11021.6	10069.6
62.5°	31.9	33.0	42.6	545.2	970.1	2157.5	5435.2	10635.1	11495.5	11290.0	10377.4
65°	5.3	6.4	18.1	482.4	801.9	2015.8	4866.5	10671.3	11395.4	11310.2	10496.6
67.5°	4.3	5.3	17.0	433.4	661.3	1845.5	4305.3	10095.2	11030.1	10992.9	10178.2
70°	4.3	5.3	18.1	391.9	571.8	1626.1	3612.1	9297.6	10360.3	10375.2	9643.6
72.5°	5.3	5.3	18.1	350.3	497.3	1389.7	2858.2	8232.7	9752.3	9834.3	8883.3
75°	5.3	5.3	17.0	304.6	427.0	1158.6	2058.4	6053.9	8745.9	8721.4	7790.7
77.5°	5.3	5.3	17.0	241.7	354.6	953.1	1340.7	3409.8	7242.3	7345.6	6513.9
80°	5.3	5.3	17.0	176.8	277.9	714.5	812.5	1745.4	3866.6	4786.7	4481.1
82.5°	5.3	5.3	17.0	119.3	190.6	412.1	468.6	883.9	1388.6	1521.7	1780.5
85°	4.3	4.3	12.8	71.3	98.0	145.9	225.8	470.7	759.3	793.3	774.2
87.5°	2.1	2.1	6.4	25.6	42.6	53.2	101.2	189.6	279.0	285.4	248.1
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°	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1	5860.1
2.5°	5898.4	5864.3	5833.5	5838.8	5772.8	5753.6	5680.1	5718.5	5681.2	5648.2	5679.1
5°	5908.0	5866.5	5810.0	5755.7	5604.5	5534.2	5445.8	5468.2	5418.2	5378.8	5412.8
7.5°	5935.7	5884.6	5797.3	5642.9	5462.9	5351.1	5251.0	5348.9	5337.2	5307.4	5342.6
10°	5948.5	5904.8	5754.7	5573.6	5322.3	5252.0	5161.5	5160.5	5163.7	5169.0	5204.1
12.5°	5982.6	5916.5	5679.1	5468.2	5235.0	5092.3	5026.3	5079.5	4983.7	4927.2	4951.7
15°	6063.5	5943.1	5627.9	5320.2	5099.8	4981.6	4770.7	4788.8	4768.6	4713.2	4737.7
17.5°	6223.2	6017.7	5625.8	5226.5	4927.2	4734.5	4550.3	4463.0	4435.3	4439.5	4460.8
20°	6419.2	6149.7	5630.1	5106.1	4747.3	4523.7	4239.3	4178.6	4087.0	4089.2	4094.5
22.5°	6294.6	6302.0	5632.2	4968.8	4522.6	4242.5	3941.2	3821.9	3751.6	3733.5	3760.1
25°	6632.1	6598.1	5665.2	4895.3	4286.2	3910.3	3595.1	3442.8	3337.4	3328.8	3358.7
27.5°	7081.5	7019.8	5835.6	4736.6	4035.9	3512.0	3170.2	3055.2	2964.7	2932.7	2954.0
30°	7627.8	7555.4	6070.9	4613.1	3698.4	3083.9	2791.1	2712.3	2622.8	2564.3	2569.6
32.5°	8198.6	8044.2	6312.7	4508.7	3352.3	2709.1	2458.8	2388.5	2283.1	2207.5	2225.6
35°	8773.6	8554.3	6582.1	4324.5	2929.5	2379.0	2176.6	2081.9	1995.6	1927.5	1915.7
37.5°	8318.9	9150.6	6843.0	4153.1	2598.3	2127.6	1898.7	1831.6	1780.5	1727.3	1726.2
40°	8356.2	8546.8	6997.4	3849.6	2228.8	1869.9	1639.9	1663.4	1684.7	1644.2	1644.2
42.5°	8725.7	8454.2	6935.6	3447.0	1954.1	1612.2	1506.8	1601.6	1668.7	1639.9	1638.9
45°	9246.4	8894.0	7041.1	2993.4	1686.8	1453.6	1469.5	1585.6	1672.9	1667.6	1665.5
47.5°	9799.1	9394.5	6838.7	2454.6	1502.6	1404.6	1469.5	1562.2	1666.6	1691.0	1685.7
49°	10083.4	9592.5	6757.8	2140.4	1429.1	1398.2	1471.7	1543.0	1654.8	1692.1	1686.8
50°	10257.0	9699.0	6653.4	1961.5	1389.7	1399.3	1475.9	1531.3	1644.2	1685.7	1682.5
52.5°	10647.8	9860.9	6135.9	1650.6	1325.8	1402.5	1503.6	1519.6	1604.8	1649.5	1672.9
55°	10249.6	10230.4	5475.7	1507.9	1291.7	1395.0	1515.3	1530.2	1571.8	1596.3	1614.4
57.5°	10187.8	10391.2	4644.0	1431.2	1261.9	1384.4	1501.5	1529.2	1553.7	1549.4	1542.0
60°	10383.7	10531.8	3786.7	1355.6	1227.8	1367.3	1455.7	1496.2	1503.6	1493.0	1475.9
62.5°	10414.6	10570.1	2910.3	1278.9	1190.5	1325.8	1388.6	1429.1	1429.1	1402.5	1396.1
65°	10270.9	10330.5	2144.7	1190.5	1145.8	1277.9	1309.8	1339.6	1353.5	1318.3	1320.5
67.5°	9858.7	9513.7	1628.2	1085.1	1091.5	1211.8	1234.2	1254.4	1257.6	1237.4	1235.3
70°	9030.3	8600.0	1163.9	925.4	992.5	1107.5	1141.6	1172.4	1161.8	1126.7	1121.3
72.5°	7781.1	7398.9	791.2	741.2	873.2	1007.4	1028.7	1029.7	1008.5	1034.0	1052.1
75°	6693.9	5779.2	589.9	591.0	699.6	868.9	935.0	940.3	949.9	1090.4	1119.2
77.5°	5319.1	3765.4	502.6	466.4	536.7	723.1	827.4	865.8	1149.0	1245.9	1233.1
80°	3267.1	2260.8	389.7	369.5	436.6	555.9	711.3	884.9	1172.4	1102.2	1064.9
82.5°	1530.2	1031.9	281.1	283.3	324.8	405.7	562.3	1029.7	1012.7	835.9	825.3
85°	592.1	356.7	170.4	192.7	218.3	274.7	431.3	1015.9	787.0	708.2	656.0
87.5°	152.3	69.2	74.5	78.8	96.9	144.8	235.3	532.4	414.2	363.1	356.7
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)