

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: P591188

Luminaire Tested: **CTN-CA8-480-722-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591188
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-722-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31431 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

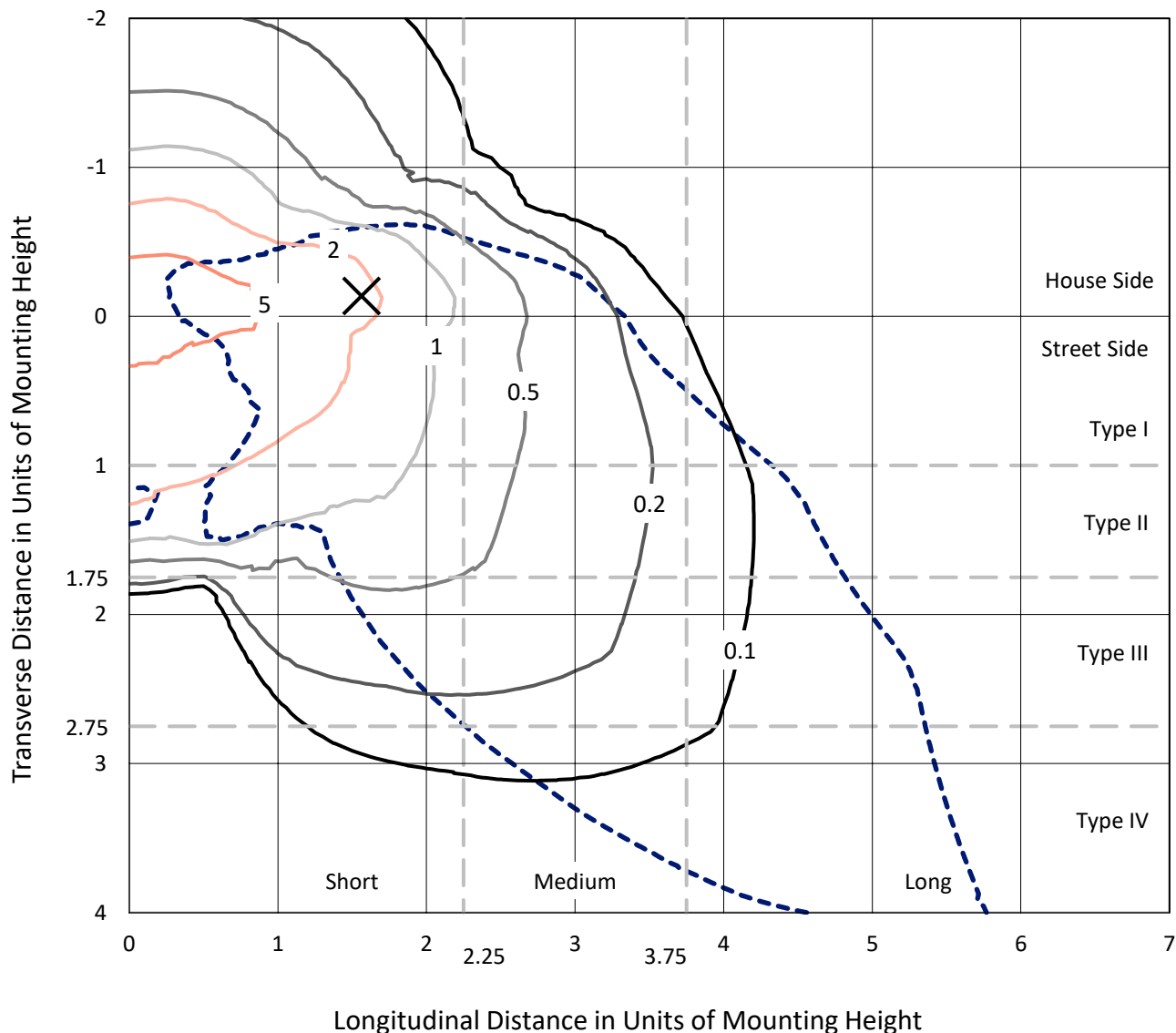
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

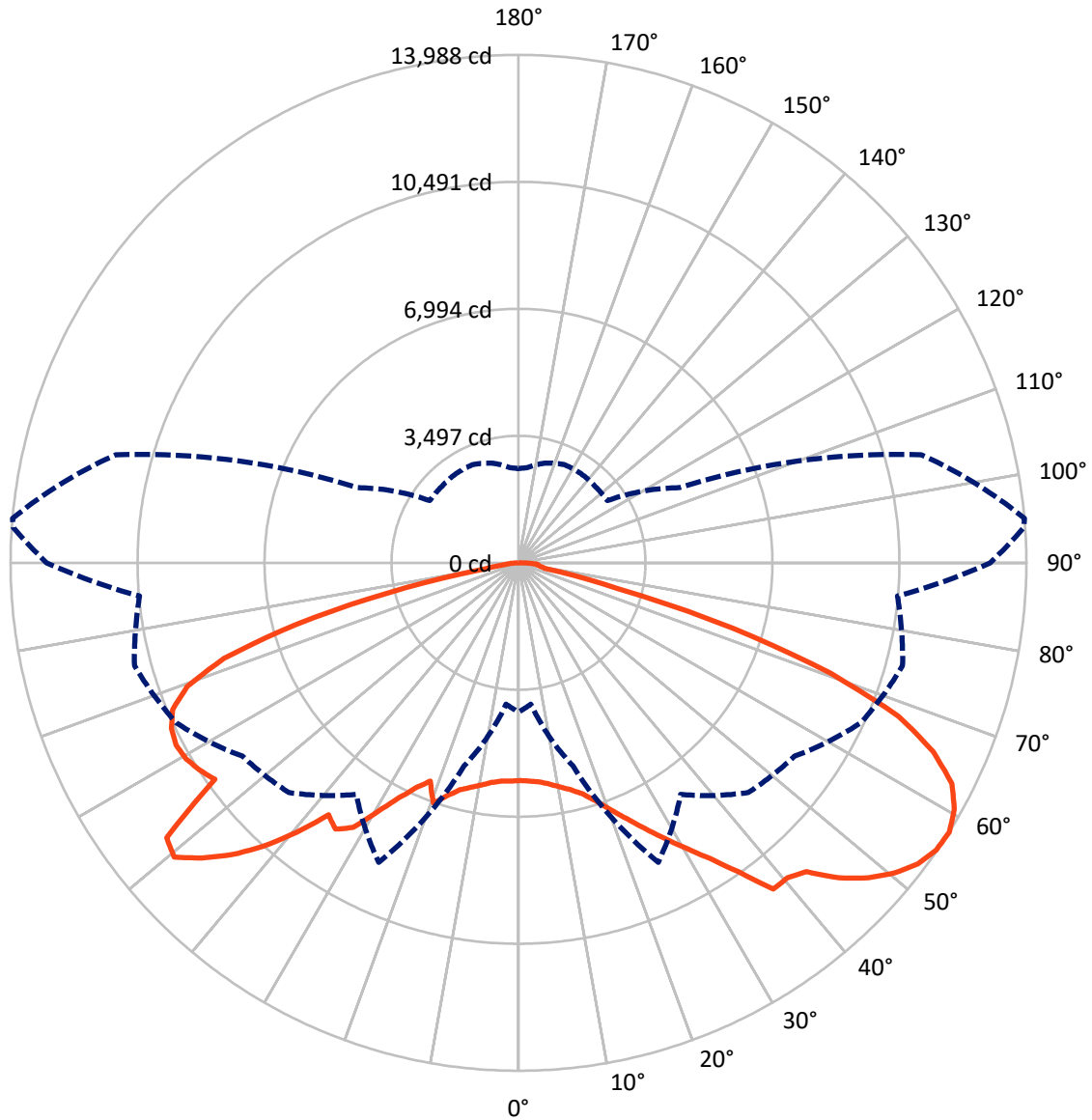
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 95-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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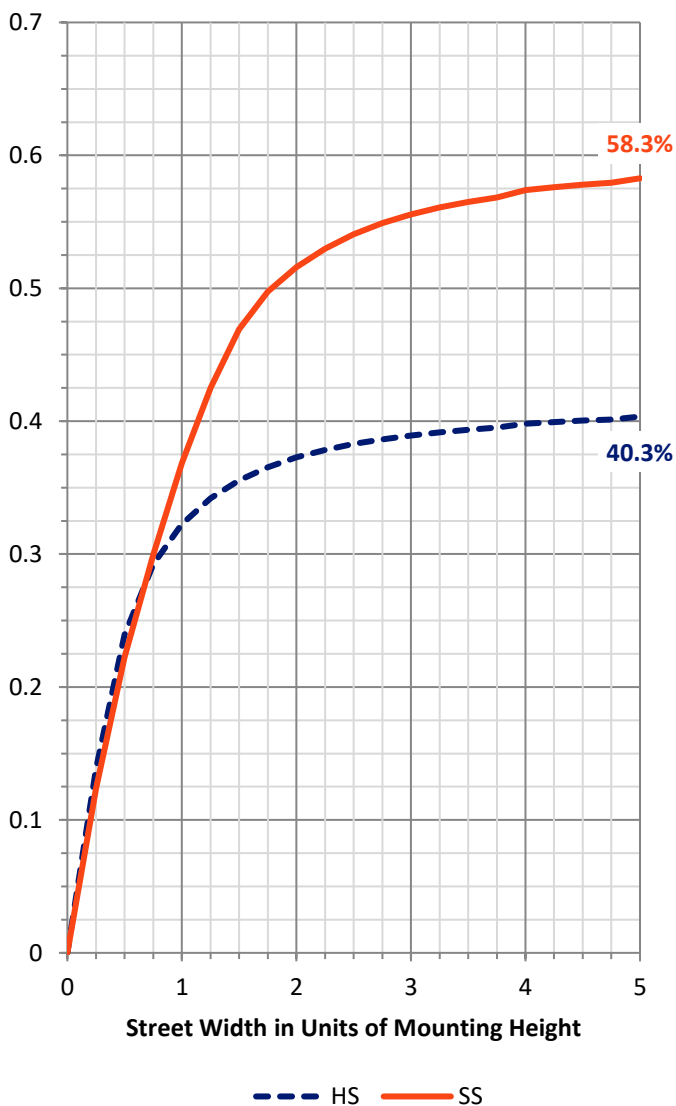
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	12945.4	0.0	12945.4
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	18485.6	0.0	18485.6
	% Fixture	58.8	0.0	58.8
Total	Lumens	31431.0	0.0	31431.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	585.6	1.9
10°-20°	1790.8	5.7
20°-30°	2829.8	9.0
30°-40°	3910.2	12.4
40°-50°	5272.3	16.8
50°-60°	6210.7	19.8
60°-70°	5548.4	17.7
70°-80°	4142.9	13.2
80°-90°	1140.3	3.6
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°	31431.0	100.0
0°-180°	31431.0	100.0

Coefficient of Utilization



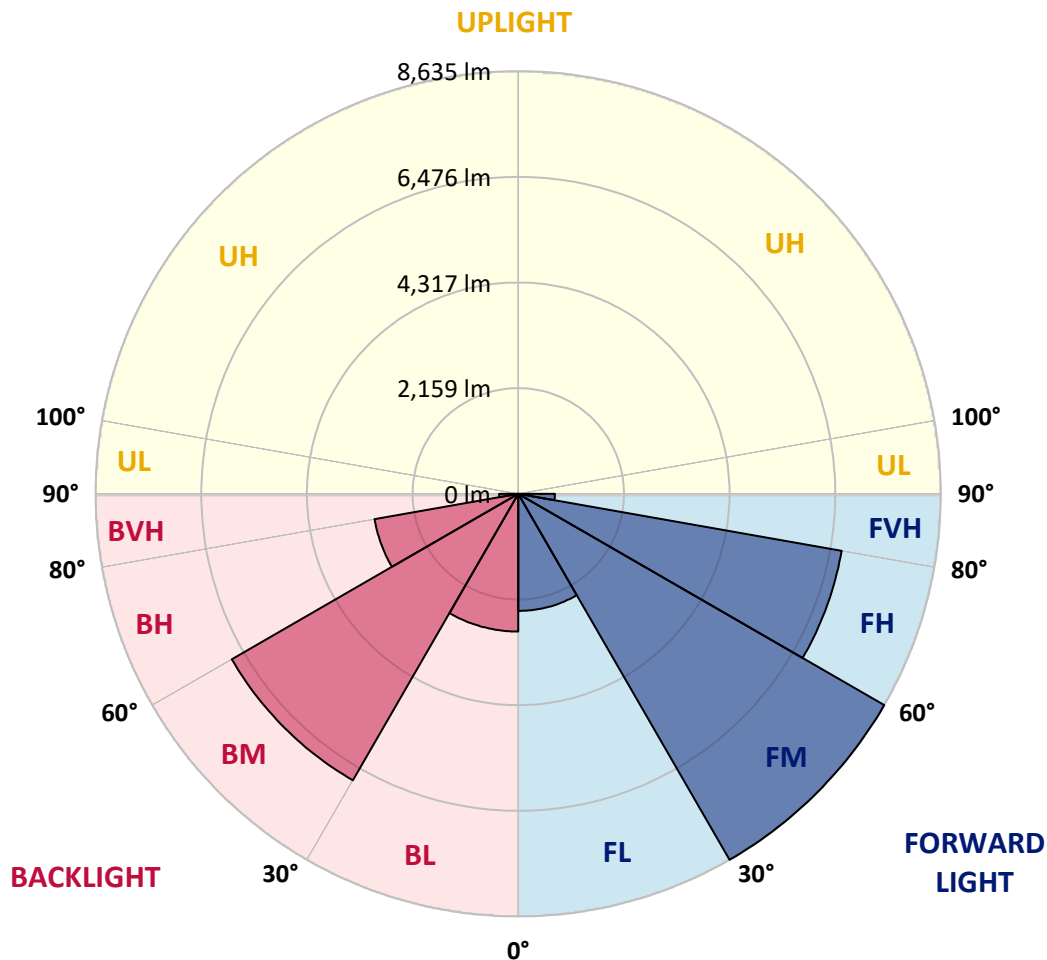
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2392.3	7.6			
FM	(30°-60°)	8634.7	27.5			
FH	(60°-80°)	6709.5	21.3			G3/7500
FVH	(80°-90°)	749.0	2.4			G4/750
BL	(0°-30°)	2813.8	9.0	B4/5000		
BM	(30°-60°)	6758.6	21.5	B4/8500		
BH	(60°-80°)	2981.7	9.5	B4/5000		G4/5000
BVH	(80°-90°)	391.3	1.2			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8
2.5°	5918.0	5880.4	5882.2	5934.1	5857.2	5912.7	5905.5	5991.4	5978.9	6012.9	6023.6
5°	5869.7	5837.5	5839.3	5905.5	5853.6	5903.7	5869.7	5948.5	5977.1	6029.0	6039.8
7.5°	5882.2	5853.6	5864.3	5927.0	5862.5	5912.7	5916.2	5989.6	6004.0	6093.5	6107.8
10°	5914.4	5884.0	5891.2	5941.3	5900.1	5989.6	5978.9	6075.6	6079.1	6204.4	6222.3
12.5°	5871.5	5850.0	5850.0	5912.7	5934.1	6023.6	6050.5	6150.7	6172.2	6317.2	6340.5
15°	5794.5	5758.7	5810.6	5903.7	5946.7	6082.7	6132.8	6283.2	6308.3	6458.6	6508.8
17.5°	5662.0	5642.4	5833.9	5862.5	5699.6	5803.5	6016.5	6437.2	6523.1	6700.3	6793.4
20°	5266.4	5044.5	4532.5	4625.6	5126.8	5500.9	5567.2	5769.5	6138.2	7020.7	7165.7
22.5°	3872.0	4063.5	4740.2	4795.6	4779.5	5089.2	5785.6	5980.7	6156.1	6480.1	7443.2
25°	4009.8	3999.1	4330.2	5033.7	5008.7	5067.7	5359.5	6308.3	6483.7	6805.9	7808.4
27.5°	4133.3	4142.3	4117.2	4779.5	5248.5	5309.4	5398.9	6046.9	6895.4	7264.2	8207.5
30°	4378.6	4341.0	4272.9	4271.1	5458.0	5547.5	5699.6	5916.2	7274.9	7860.3	8707.0
32.5°	4792.1	4749.1	4659.6	4518.2	4716.9	5794.5	6004.0	6279.6	6712.8	8592.4	9292.3
35°	5098.2	5067.7	5006.9	4908.4	4749.1	5918.0	6301.1	6666.3	7239.1	8896.7	10060.3
37.5°	5475.9	5432.9	5363.1	5241.4	5121.4	5073.1	6587.5	7104.9	7973.0	8690.9	10226.8
40°	5903.7	5878.6	5751.5	5594.0	5461.6	5327.3	6784.4	7677.7	8916.4	9614.6	10074.6
42.5°	6225.9	6206.2	6131.0	6004.0	5875.1	5789.1	6012.9	8381.2	9943.9	10507.8	10846.1
45°	6507.0	6485.5	6485.5	6451.5	6415.7	6422.8	6519.5	8886.0	10919.5	11270.4	11576.5
47.5°	6723.6	6686.0	6535.6	6566.0	6618.0	6773.7	7067.3	7726.0	11705.4	11918.4	12190.5
50°	7251.6	7194.4	6707.5	6820.2	6988.5	7239.1	7616.8	8445.6	10930.3	12471.5	12684.6
52.5°	7738.5	7473.6	5540.3	7194.4	7384.1	7754.7	8202.2	9224.3	10060.3	12292.5	13062.3
55°	6904.4	6634.1	5569.0	7881.8	7849.5	8316.7	8753.5	9863.4	10532.9	10267.9	12967.4
57.5°	4110.0	3906.0	5794.5	9102.6	7781.5	8945.1	9281.6	10409.4	10948.2	10473.8	12992.5
60°	2128.4	2237.6	2151.7	5386.4	6700.3	9220.7	9827.6	10935.6	11229.2	10627.7	13008.6
62.5°	286.4	205.9	85.9	3940.0	4761.6	7683.1	10513.2	11436.9	11435.1	10679.7	12895.8
65°	17.9	19.7	39.4	3920.3	5252.1	9115.1	11648.1	11841.4	11537.1	10588.4	12519.9
67.5°	7.2	9.0	35.8	3893.4	5667.4	9582.3	12983.5	11970.3	11547.9	10343.1	11694.6
70°	7.2	9.0	35.8	3626.7	5950.2	9664.7	13209.1	11922.0	11415.4	9739.9	10160.5
72.5°	9.0	10.7	32.2	3150.6	5778.4	9440.9	12840.3	11823.5	10941.0	8526.2	7888.9
75°	9.0	10.7	32.2	2545.5	5112.5	8952.2	12548.5	11000.1	9591.3	6370.9	5116.1
77.5°	7.2	9.0	32.2	1987.0	4262.2	7933.7	11383.2	9564.4	7584.6	3707.3	2021.0
80°	7.2	9.0	32.2	1383.7	3247.2	6503.4	9272.7	7448.6	4265.8	1059.7	569.2
82.5°	7.2	9.0	30.4	862.8	2296.7	4783.1	6336.9	3433.4	914.7	413.5	443.9
85°	7.2	7.2	23.3	422.5	1467.9	3177.4	3157.7	574.6	363.4	268.5	336.5
87.5°	3.6	5.4	12.5	193.3	819.9	1675.5	1258.4	220.2	155.7	109.2	188.0
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):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8	5996.8
2.5°	6027.2	6018.3	6043.3	6107.8	6104.2	6152.5	6114.9	6188.3	6200.9	6184.8	6209.8
5°	6059.4	6063.0	6131.0	6199.1	6174.0	6252.8	6268.9	6378.1	6381.7	6367.3	6399.6
7.5°	6140.0	6152.5	6220.6	6301.1	6336.9	6403.1	6394.2	6535.6	6523.1	6515.9	6553.5
10°	6252.8	6276.0	6349.4	6476.5	6460.4	6562.5	6515.9	6610.8	6607.2	6592.9	6634.1
12.5°	6390.6	6413.9	6507.0	6628.7	6630.5	6637.6	6600.1	6648.4	6632.3	6598.3	6630.5
15°	6576.8	6603.6	6730.7	6820.2	6743.3	6723.6	6652.0	6625.1	6564.2	6474.7	6501.6
17.5°	6870.4	6891.8	7035.0	7085.2	6952.7	6873.9	6669.9	6517.7	6345.9	6220.6	6243.8
20°	7240.9	7260.6	7376.9	7364.4	7187.2	6993.9	6677.0	6419.3	6098.8	5853.6	5846.4
22.5°	7649.0	7661.6	7772.6	7661.6	7346.5	7065.5	6662.7	6267.1	5728.3	5411.4	5377.4
25°	8098.4	8109.1	8107.3	7860.3	7437.8	7024.3	6530.2	6012.9	5321.9	4983.6	4947.8
27.5°	8601.4	8603.2	8406.2	8014.2	7398.4	6872.1	6274.3	5556.4	4949.6	4656.0	4629.2
30°	9136.6	9133.0	8680.1	8028.5	7246.3	6583.9	5878.6	5125.0	4614.8	4353.5	4315.9
32.5°	9747.0	9716.6	8923.6	7978.4	6968.8	6170.4	5368.5	4763.4	4351.7	4052.8	3997.3
35°	10529.3	10454.1	9131.2	7804.8	6557.1	5611.9	4895.9	4448.4	4097.5	3793.2	3737.7
37.5°	11497.7	11401.1	9457.0	7559.5	6082.7	5150.1	4548.6	4235.3	3914.9	3567.6	3496.0
40°	11218.5	11404.6	9845.5	7294.6	5624.5	4781.3	4344.5	4133.3	3803.9	3419.1	3351.0
42.5°	11649.9	11626.6	10377.1	6981.3	5184.1	4493.1	4262.2	4102.9	3744.9	3354.6	3275.9
45°	12383.8	12378.5	10950.0	6677.0	4754.5	4262.2	4199.5	4020.5	3660.7	3274.1	3188.1
47.5°	12979.9	12962.0	11497.7	6342.3	4357.1	4081.4	4072.4	3854.1	3510.4	3150.6	3071.8
50°	13395.2	13422.1	11802.0	6020.1	3981.2	3895.2	3861.2	3619.6	3299.1	3002.0	2941.1
52.5°	13722.8	13772.9	11934.5	5989.6	3651.8	3655.4	3596.3	3376.1	3125.5	2885.6	2821.2
55°	13883.9	13960.9	11798.5	5792.7	3329.6	3351.0	3293.8	3154.1	3005.6	2785.4	2738.8
57.5°	13950.1	13987.7	11483.4	4899.5	2984.1	2980.5	2998.4	2984.1	2844.4	2627.8	2593.8
60°	13837.4	13787.3	10797.8	3723.4	2633.2	2649.3	2763.9	2749.6	2626.1	2461.4	2414.8
62.5°	13490.1	13391.6	9543.0	2753.2	2352.2	2482.9	2604.6	2563.4	2413.0	2262.7	2226.9
65°	12827.8	12550.3	7604.3	2149.9	2217.9	2396.9	2509.7	2448.8	2277.0	2099.8	2078.3
67.5°	11639.1	11291.9	4990.8	1927.9	2160.6	2323.5	2441.7	2339.6	2173.2	1981.6	1951.2
70°	9498.2	9116.9	2362.9	1797.2	2031.7	2192.9	2278.8	2175.0	2004.9	1813.4	1791.9
72.5°	6623.3	6190.1	1272.8	1655.8	1883.2	2022.8	2080.1	1953.0	1804.4	1720.3	1714.9
75°	3300.9	2821.2	1154.6	1510.8	1691.6	1813.4	1910.0	1822.3	1691.6	1537.7	1498.3
77.5°	878.9	755.4	1086.6	1349.7	1539.5	1677.3	1732.8	1641.5	1491.1	1360.5	1337.2
80°	610.4	623.0	1015.0	1118.8	1342.6	1466.1	1518.0	1401.6	1326.5	1197.6	1161.8
82.5°	517.3	544.2	819.9	843.1	1066.9	1199.4	1290.7	1271.0	1163.6	1059.7	1045.4
85°	485.1	515.5	524.5	583.6	764.4	920.1	1077.6	1086.6	1015.0	882.5	839.6
87.5°	279.3	275.7	252.4	297.2	418.9	510.2	617.6	588.9	479.7	415.3	406.3
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)