

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: P591380

Luminaire Tested: **CTN-CA8-480-730-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591380
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-CA8-480-730-U-T4-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37867 lumens
Efficiency: N/A
Efficacy: 78.8 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

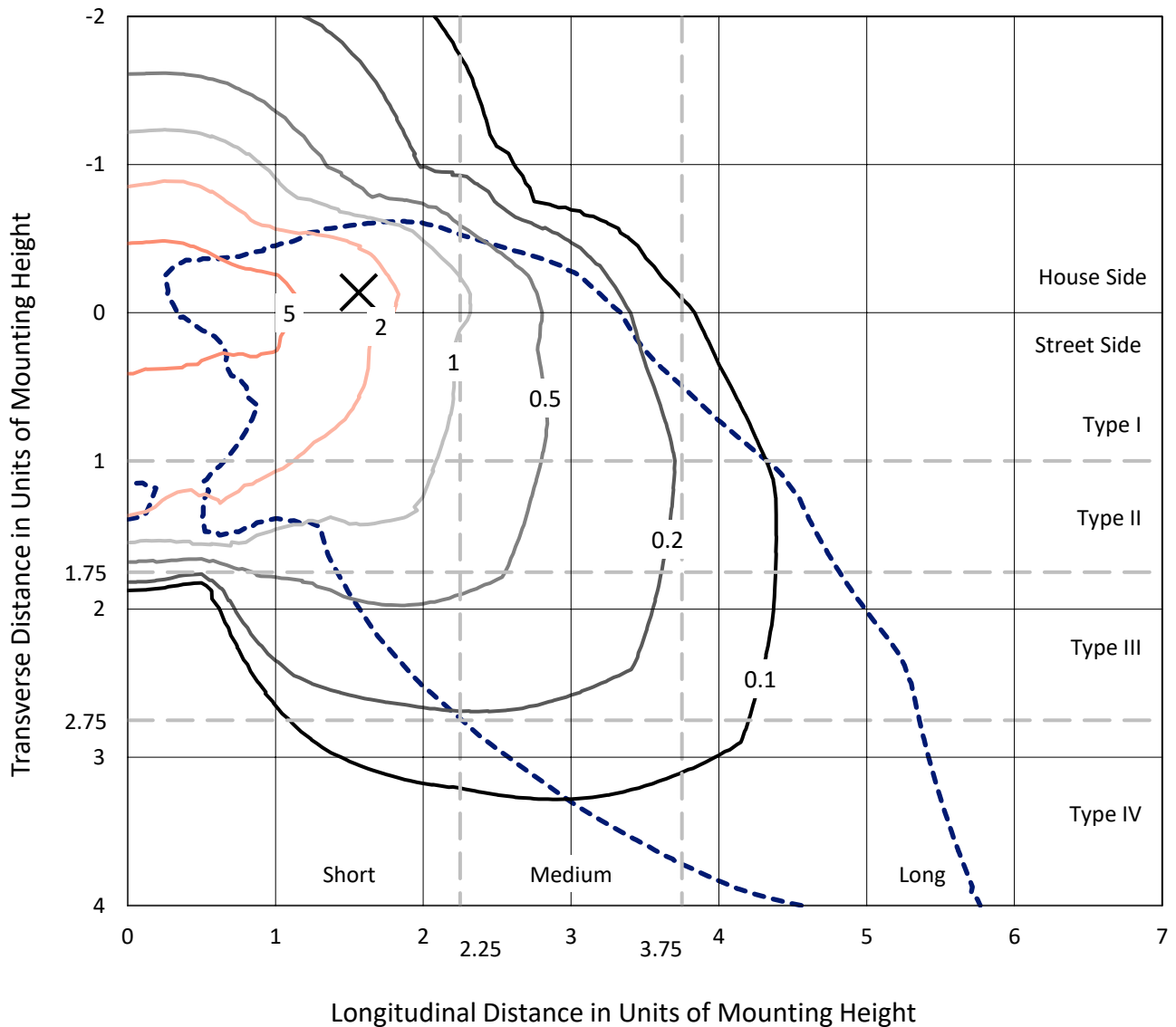
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

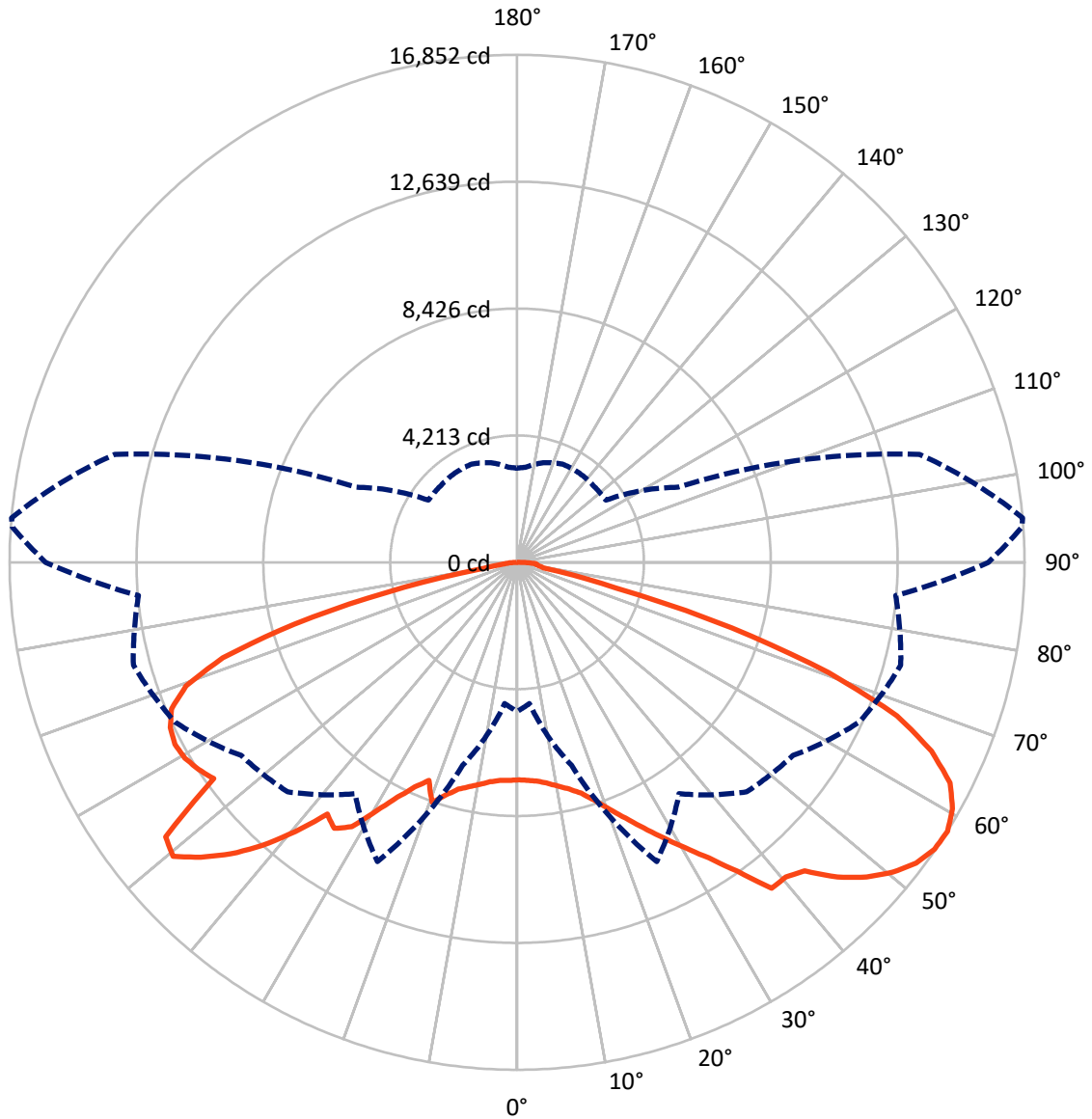
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.5 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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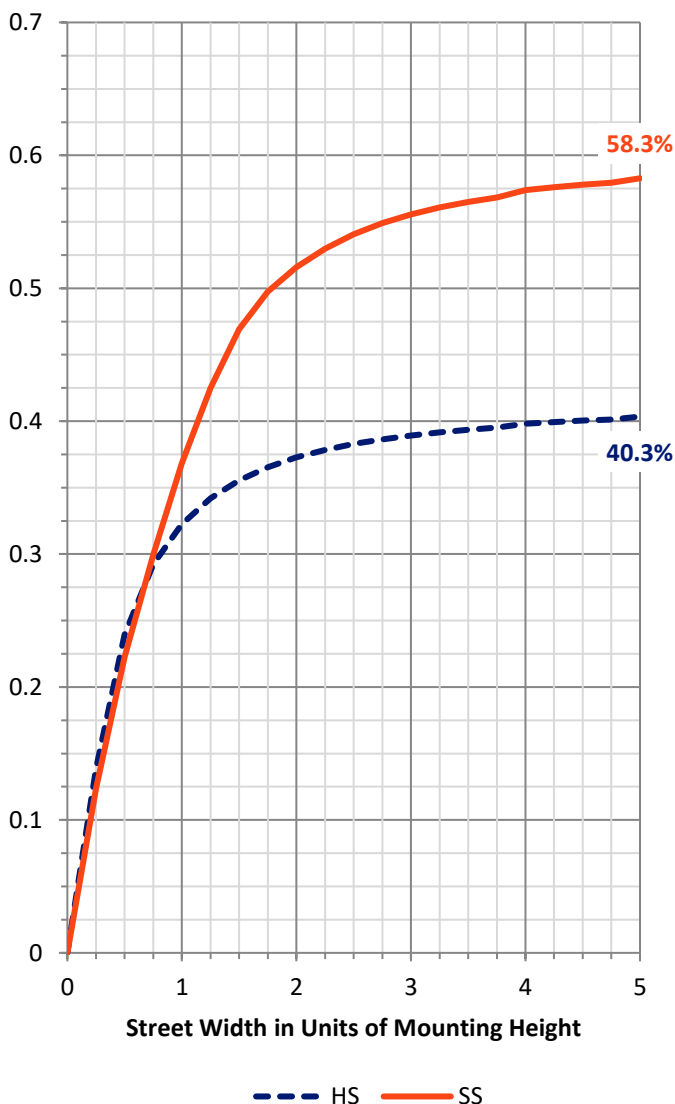
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15596.2	0.0	15596.2
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	22270.8	0.0	22270.8
	% Fixture	58.8	0.0	58.8
Total	Lumens	37867.0	0.0	37867.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	705.5	1.9
10°-20°	2157.5	5.7
20°-30°	3409.2	9.0
30°-40°	4710.9	12.4
40°-50°	6351.9	16.8
50°-60°	7482.4	19.8
60°-70°	6684.5	17.7
70°-80°	4991.2	13.2
80°-90°	1373.8	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°	37867.0	100.0
0°-180°	37867.0	100.0

Coefficient of Utilization

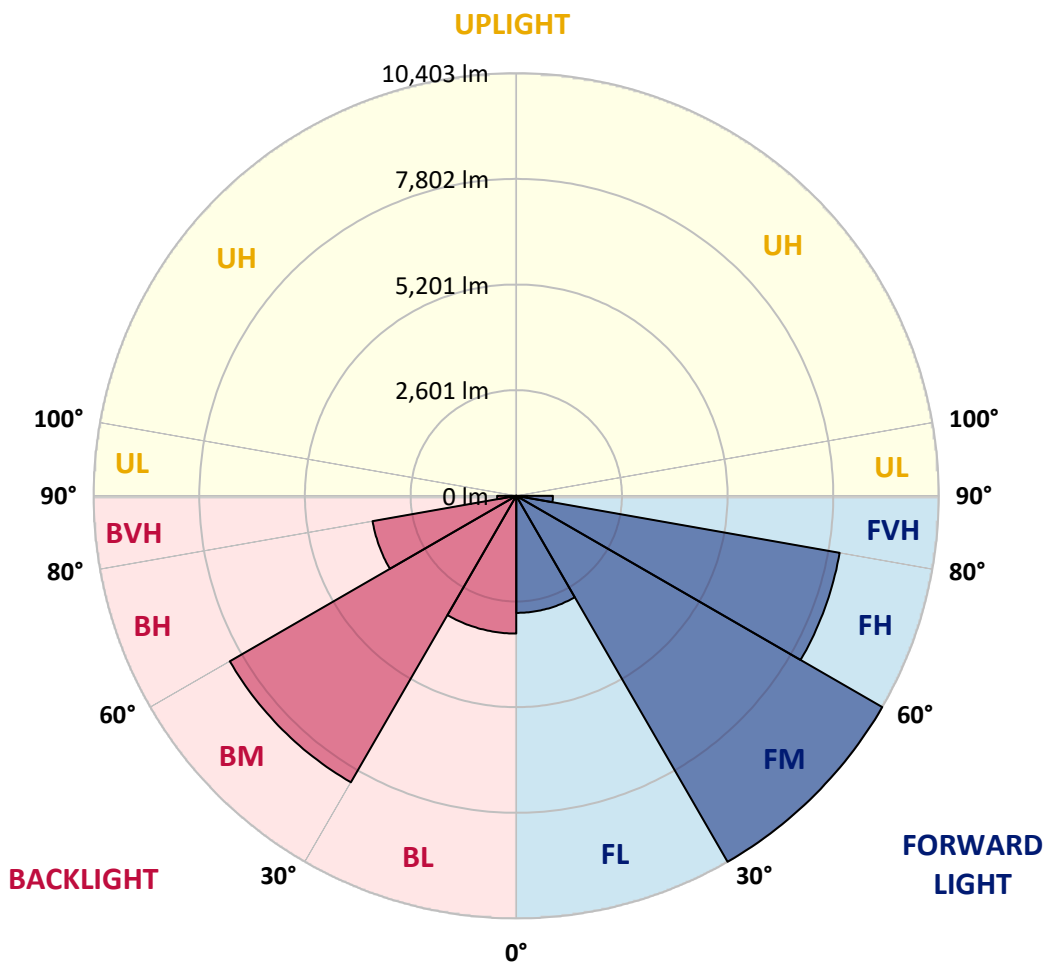


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2882.2	7.6			
FM	(30°-60°)	10402.8	27.5			
FH	(60°-80°)	8083.4	21.3			G4/12000
FVH	(80°-90°)	902.4	2.4			G5
BL	(0°-30°)	3390.0	9.0	B4/5000		
BM	(30°-60°)	8142.5	21.5	B4/8500		
BH	(60°-80°)	3592.3	9.5	B4/5000		G4/5000
BVH	(80°-90°)	471.4	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-G5
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7
2.5°	7129.8	7084.5	7086.7	7149.2	7056.5	7123.4	7114.7	7218.3	7203.2	7244.1	7257.1
5°	7071.6	7032.8	7034.9	7114.7	7052.2	7112.6	7071.6	7166.5	7201.0	7263.6	7276.5
7.5°	7086.7	7052.2	7065.1	7140.6	7063.0	7123.4	7127.7	7216.1	7233.4	7341.2	7358.4
10°	7125.5	7088.9	7097.5	7157.9	7108.3	7216.1	7203.2	7319.6	7323.9	7474.9	7496.5
12.5°	7073.8	7047.9	7047.9	7123.4	7149.2	7257.1	7289.4	7410.2	7436.1	7610.8	7638.8
15°	6981.0	6937.9	7000.4	7112.6	7164.3	7328.2	7388.6	7569.8	7600.0	7781.1	7841.5
17.5°	6821.4	6797.7	7028.5	7063.0	6866.7	6991.8	7248.5	7755.3	7858.8	8072.3	8184.4
20°	6344.8	6077.4	5460.6	5572.7	6176.6	6627.3	6707.1	6950.8	7395.1	8458.3	8633.0
22.5°	4664.8	4895.6	5710.8	5777.6	5758.2	6131.3	6970.2	7205.3	7416.7	7807.0	8967.3
25°	4830.9	4817.9	5216.9	6064.5	6034.3	6105.4	6457.0	7600.0	7811.3	8199.5	9407.2
27.5°	4979.7	4990.5	4960.3	5758.2	6323.3	6396.6	6504.4	7285.1	8307.4	8751.6	9888.2
30°	5275.1	5229.8	5147.9	5145.7	6575.6	6683.4	6866.7	7127.7	8764.6	9469.8	10489.9
32.5°	5773.3	5721.6	5613.7	5443.3	5682.7	6981.0	7233.4	7565.5	8087.4	10351.9	11195.1
35°	6142.1	6105.4	6032.1	5913.5	5721.6	7129.8	7591.4	8031.3	8721.4	10718.5	12120.3
37.5°	6597.1	6545.4	6461.3	6314.6	6170.1	6111.9	7936.4	8559.7	9605.7	10470.5	12320.9
40°	7112.6	7082.4	6929.3	6739.5	6579.9	6418.1	8173.7	9249.8	10742.2	11583.3	12137.5
42.5°	7500.8	7477.1	7386.5	7233.4	7078.1	6974.6	7244.1	10097.4	11980.1	12659.5	13067.1
45°	7839.4	7813.5	7813.5	7772.5	7729.4	7738.0	7854.5	10705.5	13155.5	13578.2	13947.0
47.5°	8100.3	8055.0	7873.9	7910.5	7973.1	8160.7	8514.4	9308.0	14102.2	14358.9	14686.7
50°	8736.5	8667.5	8080.9	8216.8	8419.5	8721.4	9176.5	10175.0	13168.4	15025.3	15281.9
52.5°	9323.1	9004.0	6674.8	8667.5	8896.1	9342.5	9881.7	11113.1	12120.3	14809.6	15737.0
55°	8318.1	7992.5	6709.3	9495.7	9456.8	10019.7	10546.0	11883.1	12689.6	12370.5	15622.7
57.5°	4951.6	4705.8	6981.0	10966.5	9374.9	10776.7	11182.2	12540.8	13190.0	12618.5	15652.9
60°	2564.2	2695.8	2592.3	6489.3	8072.3	11108.8	11839.9	13174.9	13528.6	12803.9	15672.3
62.5°	345.1	248.0	103.5	4746.8	5736.7	9256.3	12665.9	13778.7	13776.6	12866.5	15536.4
65°	21.6	23.7	47.4	4723.0	6327.6	10981.6	14033.2	14266.1	13899.5	12756.5	15083.5
67.5°	8.6	10.8	43.1	4690.7	6827.9	11544.5	15642.1	14421.4	13912.5	12461.0	14089.3
70°	8.6	10.8	43.1	4369.3	7168.7	11643.7	15913.8	14363.2	13752.9	11734.3	12241.1
72.5°	10.8	12.9	38.8	3795.7	6961.6	11374.1	15469.6	14244.6	13181.4	10272.1	9504.3
75°	10.8	12.9	38.8	3066.7	6159.4	10785.3	15118.0	13252.5	11555.3	7675.5	6163.7
77.5°	8.6	10.8	38.8	2393.9	5135.0	9558.2	13714.0	11522.9	9137.7	4466.4	2434.8
80°	8.6	10.8	38.8	1667.1	3912.1	7835.1	11171.4	8973.8	5139.3	1276.7	685.8
82.5°	8.6	10.8	36.7	1039.5	2767.0	5762.5	7634.5	4136.4	1102.0	498.2	534.8
85°	8.6	8.6	28.0	509.0	1768.4	3828.0	3804.3	692.3	437.8	323.5	405.4
87.5°	4.3	6.5	15.1	232.9	987.7	2018.6	1516.1	265.3	187.6	131.6	226.4
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°	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7	7224.7
2.5°	7261.4	7250.6	7280.8	7358.4	7354.1	7412.4	7367.1	7455.5	7470.6	7451.2	7481.4
5°	7300.2	7304.5	7386.5	7468.4	7438.2	7533.1	7552.5	7684.1	7688.4	7671.2	7710.0
7.5°	7397.3	7412.4	7494.3	7591.4	7634.5	7714.3	7703.5	7873.9	7858.8	7850.2	7895.4
10°	7533.1	7561.2	7649.6	7802.7	7783.3	7906.2	7850.2	7964.5	7960.1	7942.9	7992.5
12.5°	7699.2	7727.2	7839.4	7986.0	7988.2	7996.8	7951.5	8009.7	7990.3	7949.4	7988.2
15°	7923.5	7955.8	8109.0	8216.8	8124.0	8100.3	8014.1	7981.7	7908.4	7800.6	7832.9
17.5°	8277.2	8303.0	8475.6	8536.0	8376.4	8281.5	8035.6	7852.3	7645.3	7494.3	7522.3
20°	8723.6	8747.3	8887.5	8872.4	8658.9	8426.0	8044.3	7733.7	7347.7	7052.2	7043.6
22.5°	9215.3	9230.4	9364.1	9230.4	8850.8	8512.2	8027.0	7550.4	6901.2	6519.5	6478.5
25°	9756.6	9769.6	9767.4	9469.8	8960.8	8462.6	7867.4	7244.1	6411.7	6004.1	5960.9
27.5°	10362.6	10364.8	10127.6	9655.3	8913.4	8279.3	7559.0	6694.2	5963.1	5609.4	5577.1
30°	11007.5	11003.2	10457.5	9672.5	8730.1	7932.1	7082.4	6174.4	5559.8	5244.9	5199.6
32.5°	11742.9	11706.2	10750.8	9612.1	8395.8	7433.9	6467.8	5738.8	5242.8	4882.6	4815.8
35°	12685.3	12594.8	11001.0	9402.9	7899.8	6761.1	5898.4	5359.2	4936.5	4569.9	4503.1
37.5°	13852.1	13735.6	11393.5	9107.5	7328.2	6204.6	5480.0	5102.6	4716.6	4298.2	4211.9
40°	13515.6	13739.9	11861.5	8788.3	6776.2	5760.4	5234.2	4979.7	4582.9	4119.2	4037.2
42.5°	14035.4	14007.4	12502.0	8410.9	6245.6	5413.2	5135.0	4943.0	4511.7	4041.5	3946.6
45°	14919.6	14913.1	13192.1	8044.3	5728.0	5135.0	5059.5	4843.8	4410.3	3944.5	3841.0
47.5°	15637.8	15616.2	13852.1	7641.0	5249.3	4917.1	4906.3	4643.2	4229.2	3795.7	3700.8
50°	16138.1	16170.5	14218.7	7252.8	4796.4	4692.8	4651.9	4360.7	3974.7	3616.7	3543.4
52.5°	16532.8	16593.2	14378.3	7216.1	4399.5	4403.9	4332.7	4067.4	3765.5	3476.5	3398.9
55°	16726.9	16819.6	14214.4	6978.9	4011.3	4037.2	3968.2	3800.0	3621.0	3355.7	3299.7
57.5°	16806.7	16852.0	13834.8	5902.7	3595.1	3590.8	3612.4	3595.1	3426.9	3165.9	3125.0
60°	16670.8	16610.4	13008.8	4485.8	3172.4	3191.8	3329.8	3312.6	3163.8	2965.4	2909.3
62.5°	16252.4	16133.8	11497.0	3316.9	2833.8	2991.3	3137.9	3088.3	2907.1	2726.0	2682.9
65°	15454.5	15120.2	9161.4	2590.1	2672.1	2887.7	3023.6	2950.3	2743.2	2529.7	2503.9
67.5°	14022.4	13604.1	6012.7	2322.7	2603.1	2799.3	2941.7	2818.7	2618.2	2387.4	2350.7
70°	11443.1	10983.7	2846.8	2165.3	2447.8	2641.9	2745.4	2620.3	2415.4	2184.7	2158.8
72.5°	7979.6	7457.6	1533.4	1994.9	2268.8	2437.0	2506.0	2352.9	2173.9	2072.5	2066.1
75°	3976.8	3398.9	1391.0	1820.2	2038.0	2184.7	2301.1	2195.5	2038.0	1852.6	1805.1
77.5°	1058.9	910.1	1309.1	1626.1	1854.7	2020.8	2087.6	1977.6	1796.5	1639.0	1611.0
80°	735.4	750.5	1222.8	1347.9	1617.5	1766.3	1828.8	1688.6	1598.1	1442.8	1399.7
82.5°	623.3	655.6	987.7	1015.8	1285.4	1444.9	1554.9	1531.2	1401.8	1276.7	1259.5
85°	584.4	621.1	631.9	703.1	920.9	1108.5	1298.3	1309.1	1222.8	1063.2	1011.5
87.5°	336.4	332.1	304.1	358.0	504.7	614.6	744.0	709.5	578.0	500.3	489.6
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)