

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: P591416

Luminaire Tested: **CTN-CA10-630-740-U-T4-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591416
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-CA10-630-740-U-T4-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: 50071 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Short
BUG Rating: B5 - U0 - G5

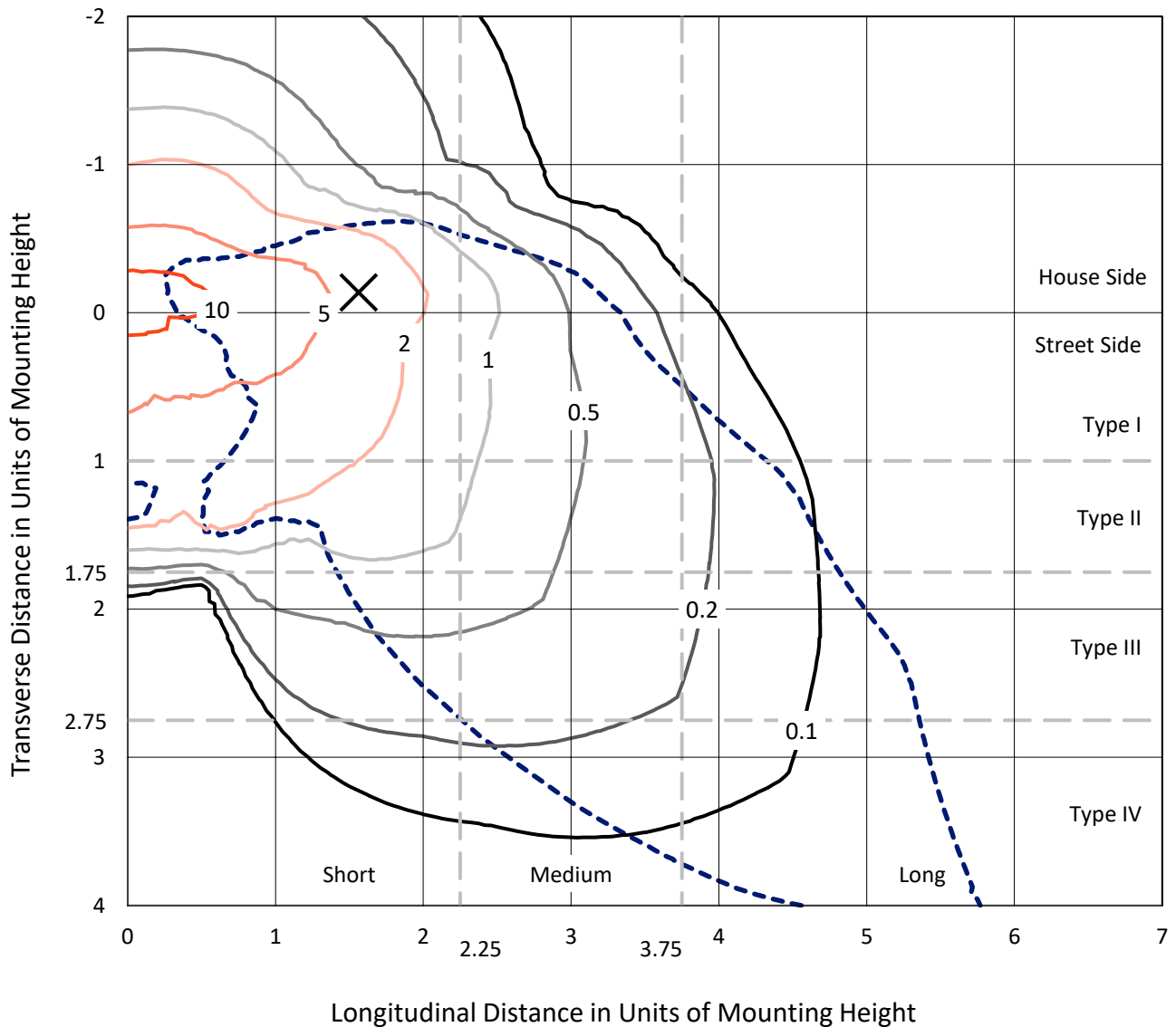
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

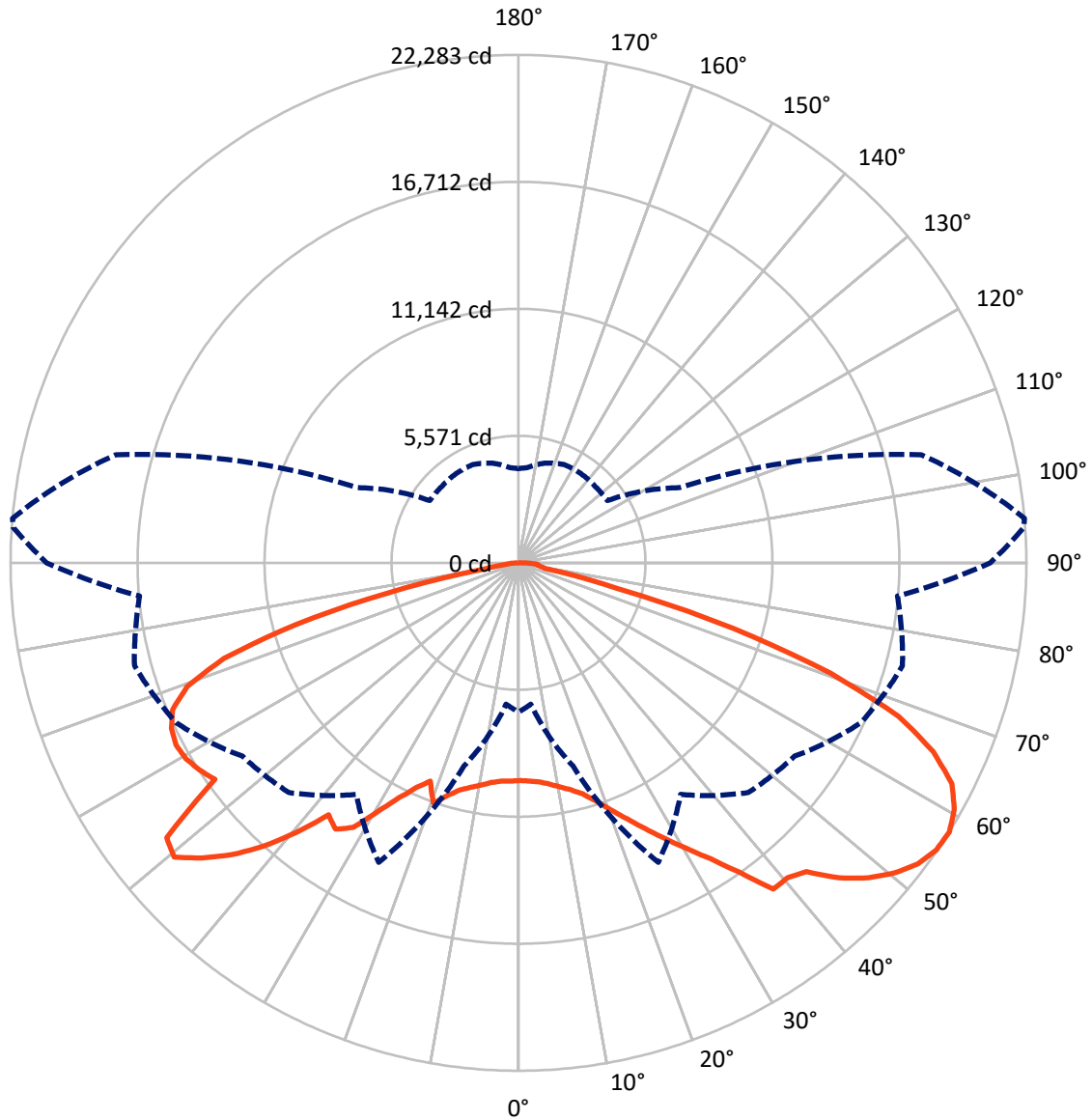
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11.3 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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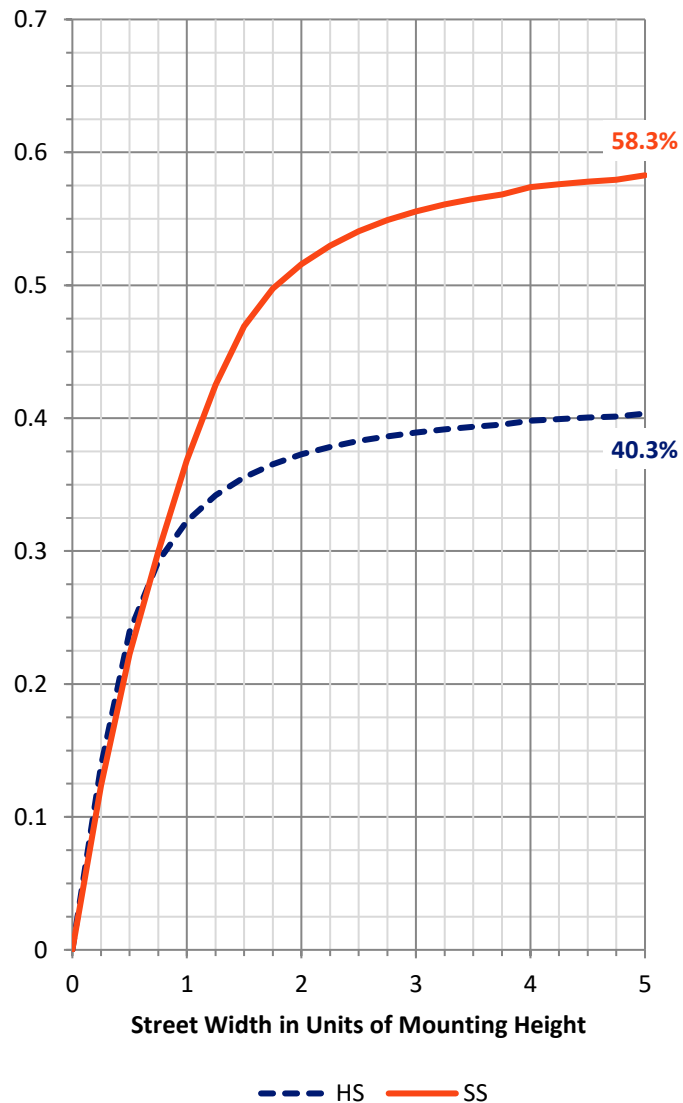
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	20622.7	0.0	20622.7
	% Fixture	41.2	0.0	41.2
Street Side	Lumens	29448.3	0.0	29448.3
	% Fixture	58.8	0.0	58.8
Total	Lumens	50071.0	0.0	50071.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	932.9	1.9
10°-20°	2852.8	5.7
20°-30°	4508.0	9.0
30°-40°	6229.2	12.4
40°-50°	8399.0	16.8
50°-60°	9893.9	19.8
60°-70°	8838.9	17.7
70°-80°	6599.8	13.2
80°-90°	1816.6	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°	50071.0	100.0
0°-180°	50071.0	100.0

Coefficient of Utilization

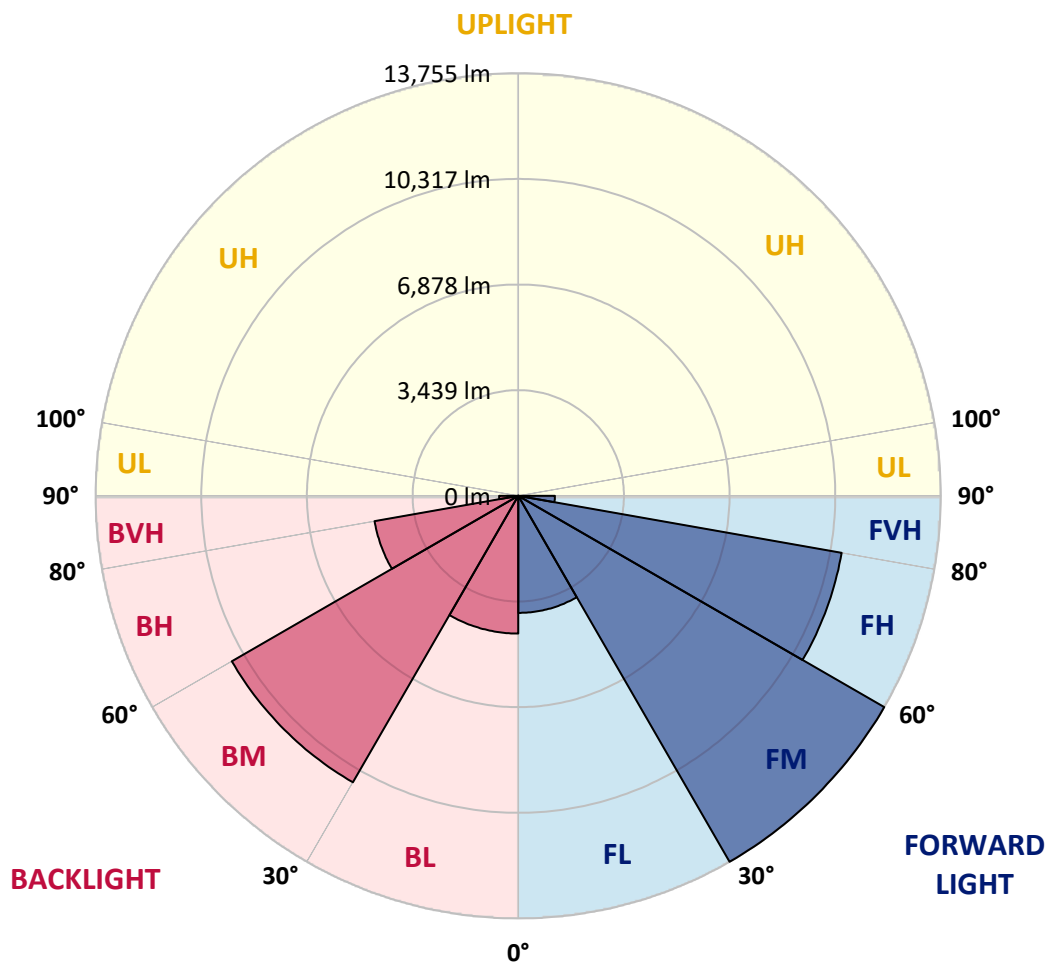


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3811.1	7.6			
FM	(30°-60°)	13755.4	27.5			
FH	(60°-80°)	10688.6	21.3			G4/12000
FVH	(80°-90°)	1193.2	2.4			G5
BL	(0°-30°)	4482.5	9.0	B4/5000		
BM	(30°-60°)	10766.7	21.5	B5		
BH	(60°-80°)	4750.1	9.5	B4/5000		G4/5000
BVH	(80°-90°)	623.4	1.2			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2
2.5°	9427.7	9367.8	9370.7	9453.4	9330.7	9419.1	9407.7	9544.6	9524.6	9578.8	9595.9
5°	9350.7	9299.4	9302.2	9407.7	9325.0	9404.9	9350.7	9476.2	9521.8	9604.5	9621.6
7.5°	9370.7	9325.0	9342.1	9441.9	9339.3	9419.1	9424.8	9541.8	9564.6	9707.2	9730.0
10°	9422.0	9373.5	9384.9	9464.8	9399.2	9541.8	9524.6	9678.6	9684.3	9884.0	9912.5
12.5°	9353.5	9319.3	9319.3	9419.1	9453.4	9595.9	9638.7	9798.4	9832.6	10063.6	10100.7
15°	9230.9	9173.9	9256.6	9404.9	9473.3	9690.0	9769.9	10009.4	10049.4	10288.9	10368.7
17.5°	9019.9	8988.5	9293.7	9339.3	9079.8	9245.2	9584.5	10254.7	10391.6	10673.9	10822.2
20°	8389.7	8036.1	7220.5	7368.8	8167.2	8763.2	8868.8	9191.0	9778.4	11184.3	11415.3
22.5°	6168.2	6473.3	7551.3	7639.7	7614.0	8107.4	9216.7	9527.5	9807.0	10323.1	11857.3
25°	6387.8	6370.7	6898.2	8019.0	7979.0	8073.1	8538.0	10049.4	10328.8	10842.1	12439.1
27.5°	6584.6	6598.8	6558.9	7614.0	8361.2	8458.1	8600.7	9633.0	10984.7	11572.2	13075.0
30°	6975.2	6915.3	6807.0	6804.1	8694.8	8837.4	9079.8	9424.8	11589.3	12521.8	13870.6
32.5°	7634.0	7565.5	7422.9	7197.7	7514.2	9230.9	9564.6	10003.7	10693.8	13688.1	14803.1
35°	8121.6	8073.1	7976.2	7819.3	7565.5	9427.7	10037.9	10619.7	11532.2	14172.9	16026.5
37.5°	8723.3	8654.9	8543.7	8349.7	8158.7	8081.7	10494.2	11318.4	12701.4	13845.0	16291.7
40°	9404.9	9364.9	9162.5	8911.5	8700.5	8486.6	10807.9	12230.9	14204.3	15316.4	16049.3
42.5°	9918.2	9886.8	9767.0	9564.6	9359.2	9222.4	9578.8	13351.6	15841.1	16739.4	17278.4
45°	10365.9	10331.7	10331.7	10277.5	10220.5	10231.9	10385.9	14155.8	17395.3	17954.2	18441.9
47.5°	10710.9	10651.1	10411.5	10460.0	10542.7	10790.8	11258.5	12307.9	18647.2	18986.5	19420.0
50°	11552.2	11460.9	10685.3	10864.9	11133.0	11532.2	12133.9	13454.3	17412.4	19867.7	20207.1
52.5°	12327.9	11905.8	8826.0	11460.9	11763.2	12353.5	13066.4	14694.8	16026.5	19582.6	20808.8
55°	10999.0	10568.4	8871.6	12556.0	12504.7	13248.9	13944.8	15712.8	16779.3	16357.3	20657.6
57.5°	6547.5	6222.4	9230.9	14500.8	12396.3	14249.9	14786.0	16582.6	17440.9	16685.2	20697.6
60°	3390.7	3564.6	3427.7	8580.7	10673.9	14689.1	15655.8	17421.0	17888.6	16930.5	20723.2
62.5°	456.3	327.9	136.9	6276.6	7585.5	12239.5	16748.0	18219.4	18216.6	17013.2	20543.6
65°	28.5	31.4	62.7	6245.2	8366.9	14520.8	18555.9	18863.9	18379.1	16867.7	19944.7
67.5°	11.4	14.3	57.0	6202.4	9028.4	15265.1	20683.3	19069.2	18396.2	16477.1	18630.1
70°	11.4	14.3	57.0	5777.5	9479.0	15396.3	21042.6	18992.3	18185.2	15516.0	16186.2
72.5°	14.3	17.1	51.3	5019.0	9205.3	15039.8	20455.2	18835.4	17429.5	13582.6	12567.4
75°	14.3	17.1	51.3	4055.1	8144.4	14261.3	19990.3	17523.6	15279.4	10149.2	8150.1
77.5°	11.4	14.3	51.3	3165.4	6789.9	12638.7	18133.9	15236.6	12082.6	5905.8	3219.6
80°	11.4	14.3	51.3	2204.4	5173.0	10360.2	14771.8	11865.9	6795.6	1688.2	906.8
82.5°	11.4	14.3	48.5	1374.5	3658.7	7619.7	10095.0	5469.5	1457.2	658.7	707.2
85°	11.4	11.4	37.1	673.0	2338.4	5061.7	5030.4	915.4	578.9	427.8	536.1
87.5°	5.7	8.6	20.0	308.0	1306.1	2669.2	2004.7	350.8	248.1	174.0	299.4
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°	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2	9553.2
2.5°	9601.6	9587.4	9627.3	9730.0	9724.3	9801.3	9741.4	9858.3	9878.3	9852.6	9892.5
5°	9653.0	9658.7	9767.0	9875.4	9835.5	9961.0	9986.6	10160.6	10166.3	10143.5	10194.8
7.5°	9781.3	9801.3	9909.6	10037.9	10095.0	10200.5	10186.2	10411.5	10391.6	10380.1	10440.0
10°	9961.0	9998.0	10114.9	10317.4	10291.7	10454.3	10380.1	10531.3	10525.6	10502.8	10568.4
12.5°	10180.5	10217.6	10365.9	10559.8	10562.7	10574.1	10514.2	10591.2	10565.5	10511.3	10562.7
15°	10477.1	10519.9	10722.4	10864.9	10742.3	10710.9	10596.9	10554.1	10457.1	10314.6	10357.3
17.5°	10944.8	10979.0	11207.1	11287.0	11076.0	10950.5	10625.4	10383.0	10109.2	9909.6	9946.7
20°	11535.1	11566.5	11751.8	11731.9	11449.5	11141.6	10636.8	10226.2	9715.7	9325.0	9313.6
22.5°	12185.3	12205.2	12382.0	12205.2	11703.3	11255.6	10614.0	9983.8	9125.4	8620.7	8566.5
25°	12901.0	12918.2	12915.3	12521.8	11848.8	11190.0	10403.0	9578.8	8478.1	7939.1	7882.1
27.5°	13702.4	13705.2	13391.5	12767.0	11786.0	10947.6	9995.2	8851.6	7884.9	7417.2	7374.5
30°	14555.0	14549.3	13827.8	12789.8	11543.6	10488.5	9364.9	8164.4	7351.7	6935.3	6875.4
32.5°	15527.4	15479.0	14215.7	12710.0	11101.6	9829.8	8552.2	7588.3	6932.5	6456.2	6367.8
35°	16773.6	16653.9	14546.5	12433.4	10445.7	8940.0	7799.4	7086.4	6527.5	6042.7	5954.3
37.5°	18316.4	18162.4	15065.5	12042.7	9690.0	8204.3	7246.1	6747.1	6236.6	5683.4	5569.3
40°	17871.5	18168.1	15684.3	11620.6	8960.0	7616.9	6921.1	6584.6	6059.8	5446.7	5338.4
42.5°	18558.8	18521.7	16531.2	11121.6	8258.5	7157.7	6789.9	6536.1	5965.7	5344.1	5218.6
45°	19728.0	19719.4	17443.8	10636.8	7574.1	6789.9	6690.1	6404.9	5831.7	5215.7	5078.9
47.5°	20677.6	20649.1	18316.4	10103.5	6941.0	6501.9	6487.6	6139.7	5592.2	5019.0	4893.5
50°	21339.2	21382.0	18801.2	9590.2	6342.2	6205.3	6151.1	5766.1	5255.7	4782.3	4685.3
52.5°	21861.1	21940.9	19012.2	9541.8	5817.4	5823.1	5729.0	5378.3	4979.0	4596.9	4494.3
55°	22117.7	22240.3	18795.5	9228.1	5304.1	5338.4	5247.1	5024.7	4788.0	4437.2	4363.1
57.5°	22223.2	22283.1	18293.6	7805.1	4753.8	4748.1	4776.6	4753.8	4531.3	4186.3	4132.1
60°	22043.6	21963.7	17201.4	5931.5	4194.8	4220.5	4403.0	4380.2	4183.4	3921.1	3846.9
62.5°	21490.3	21333.5	15202.4	4385.9	3747.1	3955.3	4149.2	4083.6	3844.1	3604.5	3547.5
65°	20435.2	19993.2	12114.0	3424.9	3533.2	3818.4	3998.1	3901.1	3627.3	3345.0	3310.8
67.5°	18541.7	17988.5	7950.5	3071.3	3442.0	3701.5	3889.7	3727.2	3462.0	3156.8	3108.3
70°	15131.1	14523.7	3764.2	2863.1	3236.7	3493.3	3630.2	3464.8	3193.9	2888.8	2854.5
72.5°	10551.3	9861.1	2027.6	2637.8	3000.0	3222.4	3313.7	3111.2	2874.5	2740.5	2731.9
75°	5258.5	4494.3	1839.3	2406.8	2694.8	2888.8	3042.8	2903.0	2694.8	2449.6	2386.9
77.5°	1400.2	1203.4	1731.0	2150.2	2452.5	2672.0	2760.4	2615.0	2375.5	2167.3	2130.2
80°	972.4	992.4	1616.9	1782.3	2138.8	2335.5	2418.2	2232.9	2113.1	1907.8	1850.7
82.5°	824.1	866.9	1306.1	1343.1	1699.6	1910.6	2056.1	2024.7	1853.6	1688.2	1665.4
85°	772.8	821.3	835.5	929.7	1217.7	1465.8	1716.7	1731.0	1616.9	1405.9	1337.4
87.5°	444.9	439.2	402.1	473.4	667.3	812.7	983.8	938.2	764.3	661.6	647.3
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)