

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: P591371

Luminaire Tested: **CTN-CA8-480-730-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591371
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
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-T1-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: 40597 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

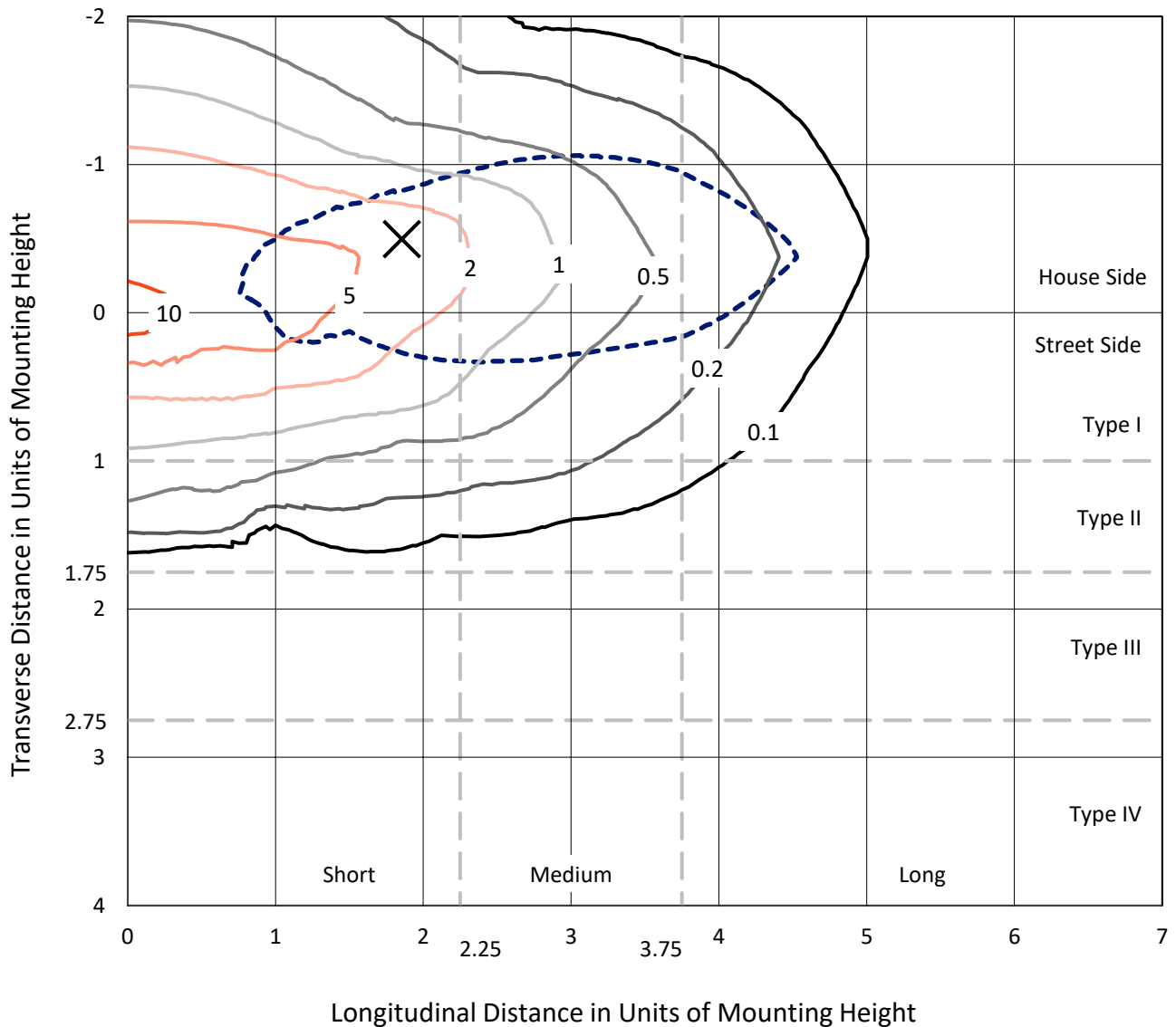
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

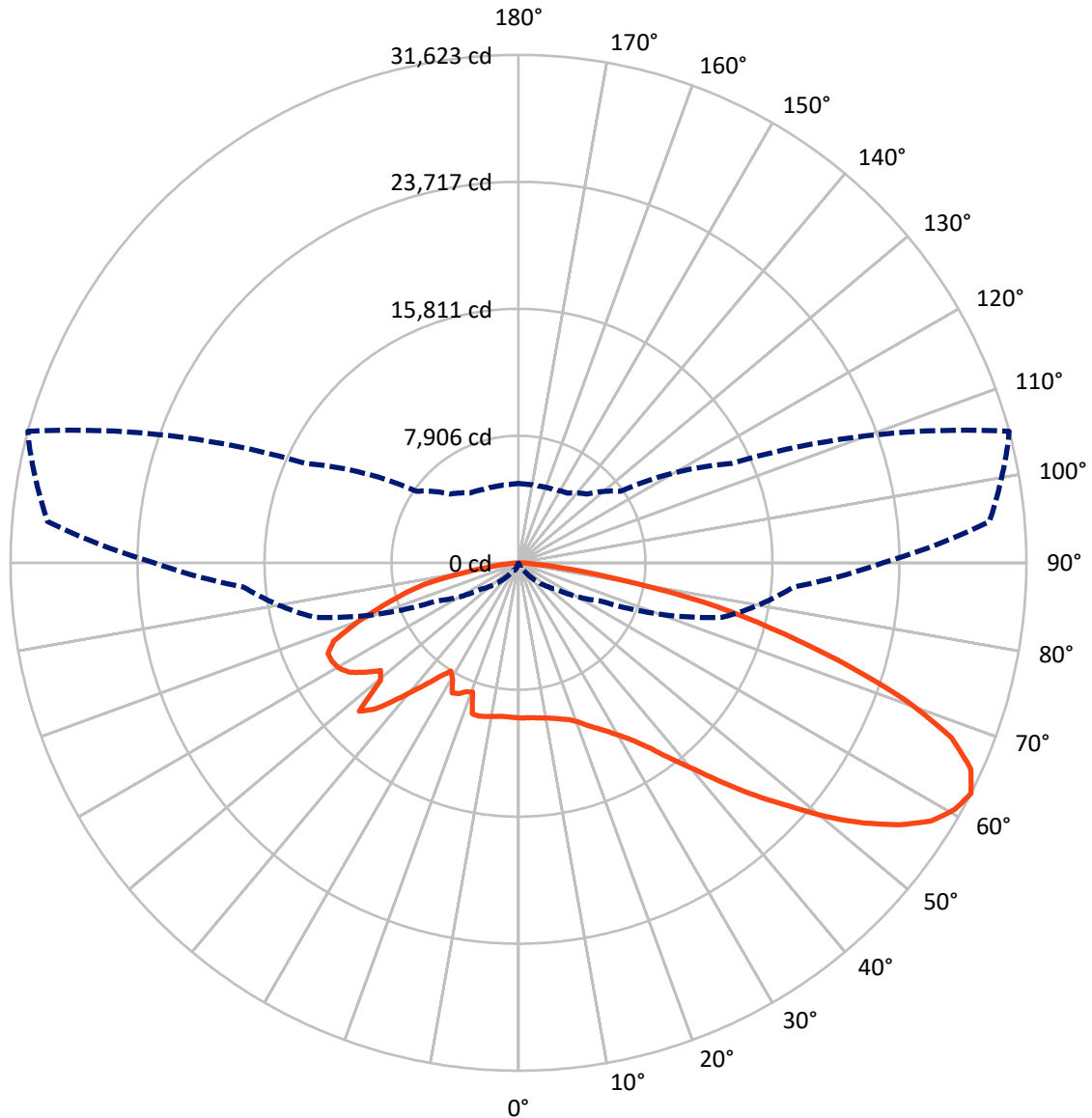
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.7 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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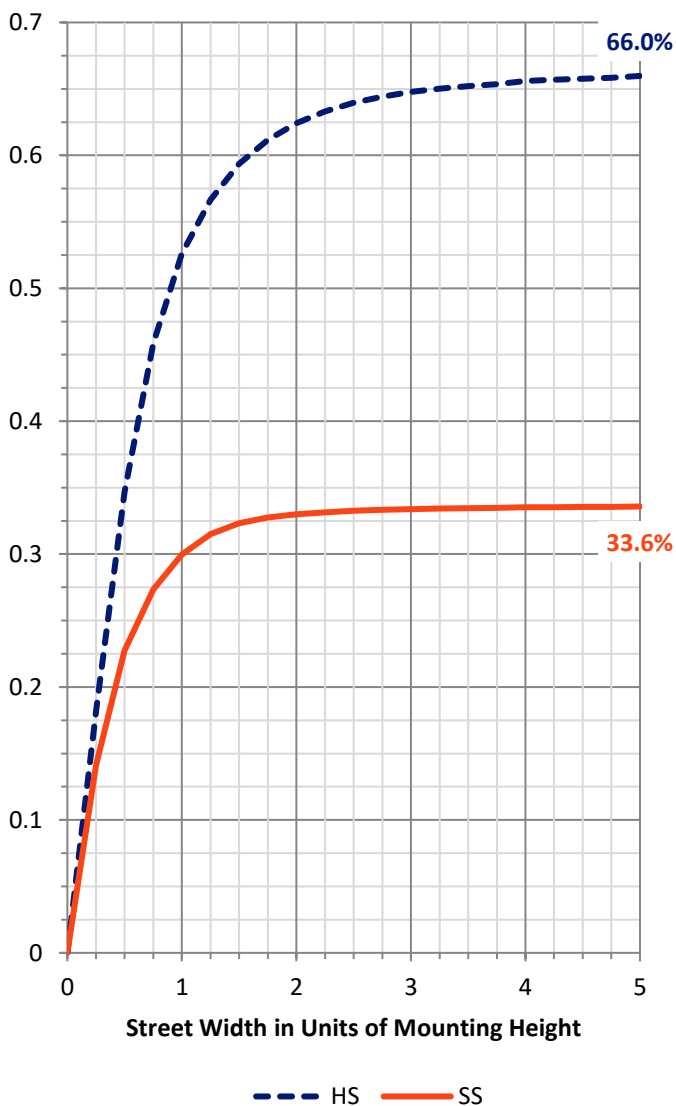
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	27012.8	0.0	27012.8
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	13584.2	0.0	13584.2
	% Fixture	33.5	0.0	33.5
Total	Lumens	40597.0	0.0	40597.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	921.5	2.3
10°-20°	2602.7	6.4
20°-30°	3668.0	9.0
30°-40°	4983.6	12.3
40°-50°	6779.6	16.7
50°-60°	8031.7	19.8
60°-70°	7876.0	19.4
70°-80°	4967.5	12.2
80°-90°	766.3	1.9
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°	40597.0	100.0
0°-180°	40597.0	100.0

Coefficient of Utilization

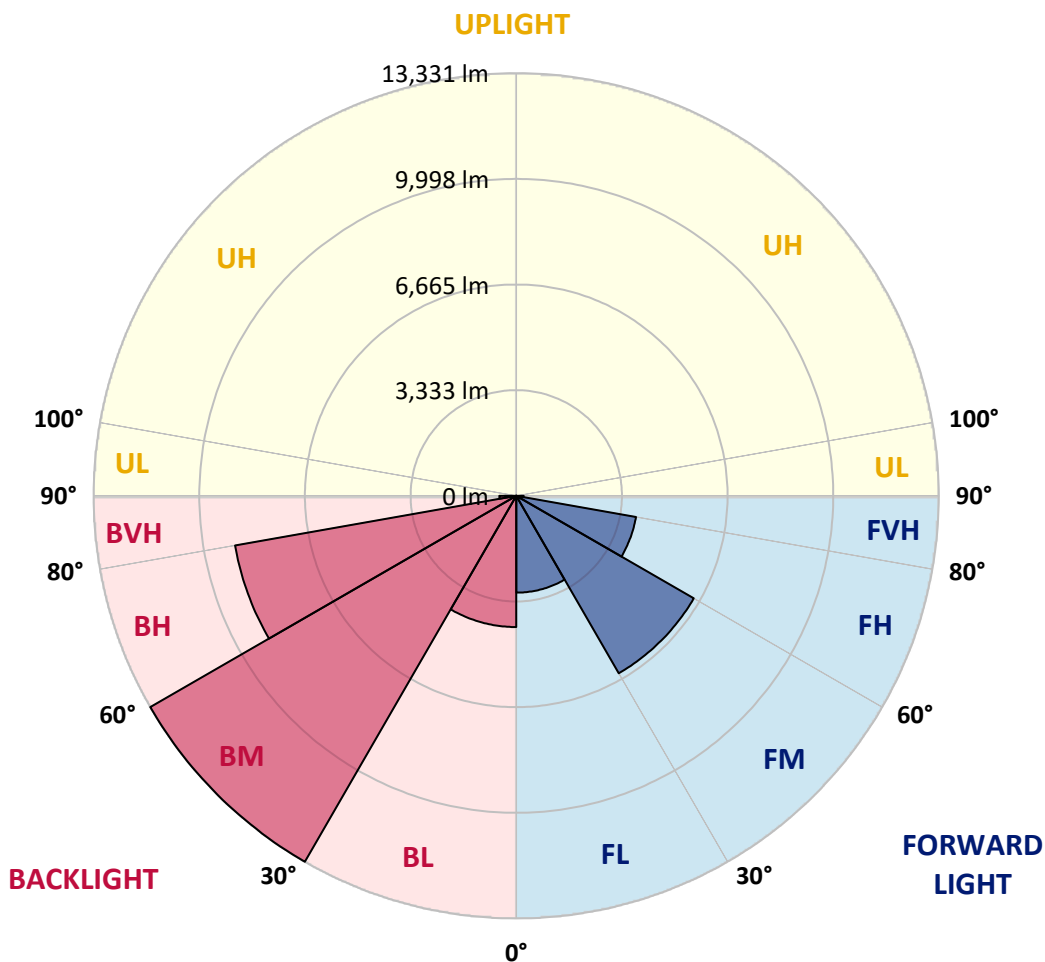


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3053.6	7.5			
FM (30°-60°)	6464.0	15.9			
FH (60°-80°)	3835.5	9.4			G2/5000
FVH (80°-90°)	231.1	0.6			G3/500
BL (0°-30°)	4138.7	10.2	B4/5000		
BM (30°-60°)	13330.9	32.8	B5		
BH (60°-80°)	9008.0	22.2	B5		G5
BVH (80°-90°)	535.1	1.3			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 I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4
2.5°	9663.8	9588.4	9642.3	9724.2	9601.3	9672.5	9553.9	9650.9	9627.2	9633.7	9678.9
5°	9588.4	9508.6	9573.3	9681.1	9560.3	9640.1	9543.1	9625.0	9616.4	9646.6	9683.3
7.5°	9517.2	9441.7	9508.6	9579.7	9517.2	9594.8	9521.5	9622.9	9629.3	9696.2	9726.4
10°	9441.7	9366.2	9430.9	9512.9	9461.1	9558.2	9528.0	9650.9	9698.4	9786.8	9812.7
12.5°	9275.7	9208.8	9262.7	9357.6	9366.2	9508.6	9528.0	9717.8	9776.0	9892.4	9931.3
15°	8277.1	8350.5	8637.3	8913.3	9032.0	9295.1	9439.6	9778.1	9860.1	10026.2	10086.5
17.5°	6696.3	6558.3	6111.9	6228.3	6884.0	7768.2	8102.4	8943.5	9832.1	10194.4	10272.0
20°	3957.4	4239.9	5113.4	5380.8	5622.3	6573.4	7697.0	8197.3	8538.1	9825.6	10526.5
22.5°	3263.0	3282.4	3907.8	5141.4	5413.1	5786.2	6655.4	8303.0	8654.5	8911.2	9691.9
25°	3025.7	3045.2	3153.0	4106.2	5264.3	5695.7	6077.4	7589.2	8954.3	9271.3	9881.7
27.5°	2836.0	2861.8	2961.0	3228.5	4908.5	5669.8	6152.9	6730.8	9088.0	9698.4	10269.9
30°	2693.6	2704.4	2805.8	3064.6	3711.6	5676.2	6262.8	6879.6	8324.6	10239.7	10813.3
32.5°	2564.2	2570.7	2676.4	2928.7	3319.0	5257.9	6428.9	7190.2	7949.3	10683.9	11559.5
35°	2465.0	2460.7	2555.6	2803.6	3191.8	4026.4	6614.4	7563.3	8548.9	10263.4	12672.3
37.5°	2370.1	2363.7	2445.6	2674.2	3079.7	3769.8	6398.7	8011.9	9409.4	10582.6	12581.8
40°	2296.8	2283.9	2352.9	2557.8	2963.2	3705.1	5040.0	8486.3	10354.0	12228.1	13343.1
42.5°	2232.1	2223.5	2281.7	2445.6	2844.6	3627.4	4697.1	8743.0	11529.3	14130.2	15312.1
45°	2135.1	2148.0	2212.7	2370.1	2717.3	3517.5	4731.6	7022.0	12773.7	15780.0	17274.6
47.5°	2094.1	2091.9	2132.9	2281.7	2607.4	3364.3	4707.9	6439.7	13556.6	17507.5	19196.1
50°	2029.4	2018.6	1759.8	2178.2	2495.2	3174.6	4608.7	6607.9	11281.3	19202.6	20960.3
52.5°	1908.6	1697.3	1539.8	2104.9	2380.9	2967.5	4386.6	6681.2	10893.1	18900.7	22476.4
55°	1013.6	1130.1	1457.9	2001.3	2247.2	2782.0	4060.9	6629.5	11732.1	15113.6	20865.4
57.5°	899.3	895.0	927.3	1580.8	1171.0	2579.3	3668.4	6392.2	12525.7	15803.8	21255.7
60°	71.2	73.3	86.3	526.2	621.1	1815.9	3245.7	6098.9	12946.2	16619.0	22202.5
62.5°	34.5	38.8	51.8	470.1	567.2	1652.0	2864.0	5598.6	13123.1	17207.7	22670.5
65°	8.6	10.8	23.7	414.1	493.9	1470.8	2480.1	5012.0	13138.2	17231.4	23047.9
67.5°	6.5	10.8	23.7	375.3	450.7	1311.2	2143.7	4602.2	12495.5	17143.0	22858.1
70°	6.5	10.8	23.7	336.4	407.6	1136.5	1846.1	4201.1	10854.3	16813.1	22213.3
72.5°	6.5	12.9	23.7	295.5	358.0	964.0	1567.9	3759.0	9109.6	15435.0	20776.9
75°	6.5	12.9	25.9	239.4	306.2	767.8	1287.5	3219.8	7576.2	13384.0	18396.0
77.5°	6.5	12.9	25.9	185.5	248.0	573.7	974.8	2551.3	6045.0	9870.9	12924.7
80°	6.5	12.9	25.9	131.6	202.7	403.3	709.5	1740.4	3605.9	5188.8	6582.0
82.5°	6.5	12.9	25.9	94.9	146.7	291.1	437.8	858.3	1721.0	2490.9	3125.0
85°	4.3	10.8	23.7	62.5	77.6	176.8	261.0	381.7	515.4	681.5	920.9
87.5°	4.3	6.5	15.1	23.7	32.3	62.5	97.0	86.3	97.0	202.7	291.1
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):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4	9657.4
2.5°	9672.5	9663.8	9666.0	9713.4	9672.5	9681.1	9609.9	9752.3	9739.3	9719.9	9776.0
5°	9683.3	9678.9	9696.2	9737.2	9674.6	9685.4	9618.6	9784.6	9743.6	9737.2	9804.0
7.5°	9737.2	9730.7	9748.0	9767.4	9698.4	9698.4	9640.1	9771.7	9748.0	9704.8	9780.3
10°	9834.2	9810.5	9827.7	9838.5	9732.9	9728.5	9620.7	9776.0	9715.6	9694.0	9791.1
12.5°	9970.1	9916.2	9942.1	9924.8	9784.6	9758.7	9614.2	9715.6	9640.1	9627.2	9715.6
15°	10153.4	10082.2	10101.6	10069.3	9892.4	9817.0	9584.1	9627.2	9506.4	9495.6	9560.3
17.5°	10323.8	10280.6	10269.9	10269.9	10062.8	9875.2	9556.0	9495.6	9336.0	9325.3	9357.6
20°	10632.2	10573.9	10567.5	10515.7	10209.5	9922.6	9510.7	9325.3	9088.0	9034.1	9094.5
22.5°	10731.4	11013.9	10994.5	10765.9	10332.4	9961.5	9418.0	9111.7	8786.1	8682.6	8712.8
25°	11026.8	11451.7	11417.2	11085.1	10457.5	9983.0	9305.8	8876.7	8428.1	8246.9	8253.4
27.5°	11494.8	11928.3	11904.6	11425.8	10612.8	9989.5	9180.8	8628.7	8072.3	7835.0	7854.4
30°	12090.1	12527.8	12493.3	11805.4	10847.8	10002.4	9085.9	8331.1	7746.6	7490.0	7485.7
32.5°	12918.2	13315.0	13213.7	12312.2	11130.4	10056.4	8960.8	8048.5	7449.0	7179.4	7157.8
35°	14169.0	14315.7	14190.6	12916.0	11430.1	10090.9	8760.2	7772.5	7172.9	6907.7	6888.3
37.5°	15859.8	15678.7	15510.5	13595.4	11740.7	10082.2	8505.7	7505.1	6935.7	6683.4	6683.4
40°	16025.9	17244.4	16933.8	14311.4	12021.0	10034.8	8264.2	7244.1	6743.8	6538.9	6571.2
42.5°	16804.4	19161.6	18726.0	15003.7	12223.8	9896.8	8005.4	7006.9	6564.8	6398.7	6411.7
45°	18717.4	20906.3	20651.9	15672.2	12333.7	9653.1	7705.6	6774.0	6364.2	6232.7	6258.5
47.5°	20774.8	22981.0	22607.9	16289.0	12273.4	9292.9	7386.4	6560.5	6155.0	6070.9	6118.4
50°	22720.1	25163.5	24853.0	16722.5	12005.9	8788.3	7045.7	6334.0	5991.1	5924.3	5948.0
52.5°	24628.7	27145.5	26912.5	16957.6	11471.1	8259.9	6730.8	6118.4	5838.0	5753.9	5786.2
55°	26203.0	29023.9	28797.4	16933.8	10666.7	7707.8	6418.1	5885.4	5682.7	5607.2	5633.1
57.5°	27432.3	30486.1	30324.3	16573.7	9730.7	7201.0	6064.4	5656.8	5477.8	5411.0	5432.5
60°	28532.2	31413.4	31204.2	15777.9	8738.7	6642.4	5700.0	5385.1	5236.3	5182.4	5216.9
62.5°	29433.6	31432.8	31622.6	14626.2	7766.0	6051.5	5294.5	5050.8	4943.0	4910.6	4932.2
65°	29664.4	30854.9	30947.6	13202.9	6780.4	5464.9	4807.1	4647.5	4602.2	4582.8	4626.0
67.5°	29345.2	29636.4	29084.3	11999.5	5881.1	4800.7	4280.9	4181.7	4209.7	4214.0	4270.1
70°	28521.4	26375.5	25523.7	10992.3	5042.2	4065.2	3702.9	3670.6	3746.1	3808.6	3849.6
72.5°	26420.8	21654.7	20843.8	9569.0	3974.7	3112.0	2915.8	3019.3	2993.4	3021.4	3094.8
75°	22745.9	16713.9	16211.4	7787.6	3027.9	2262.3	1999.2	2010.0	2042.3	2184.7	2262.3
77.5°	16202.7	12021.0	11796.7	5973.9	2005.7	1330.6	1375.9	1529.0	1574.3	1578.7	1632.6
80°	8585.5	6700.6	6396.6	3519.6	1326.3	951.1	1035.2	1102.0	1162.4	1225.0	1240.1
82.5°	3869.0	3030.1	2946.0	1749.0	841.1	733.3	752.7	867.0	916.6	927.3	938.1
85°	1503.2	1046.0	996.4	726.8	552.1	496.0	549.9	666.4	713.8	692.3	685.8
87.5°	401.1	245.9	224.3	243.7	258.8	273.9	312.7	355.8	407.6	392.5	379.6
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)