

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: P591167

Luminaire Tested: **CTN-CA8-330-722-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591167
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-CA8-330-722-U-T1-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: 23209 lumens
Efficiency: N/A
Efficacy: 70.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

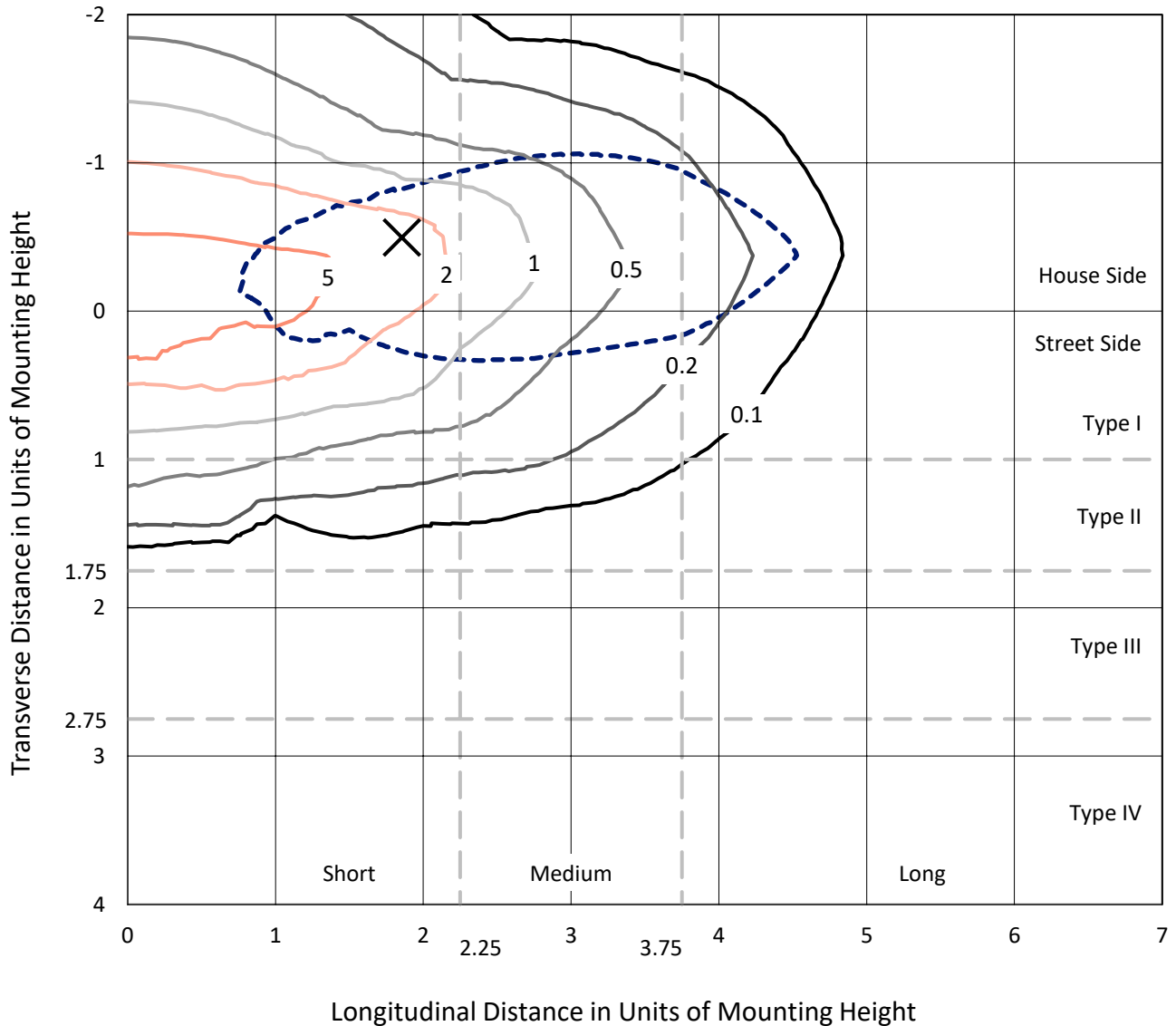
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

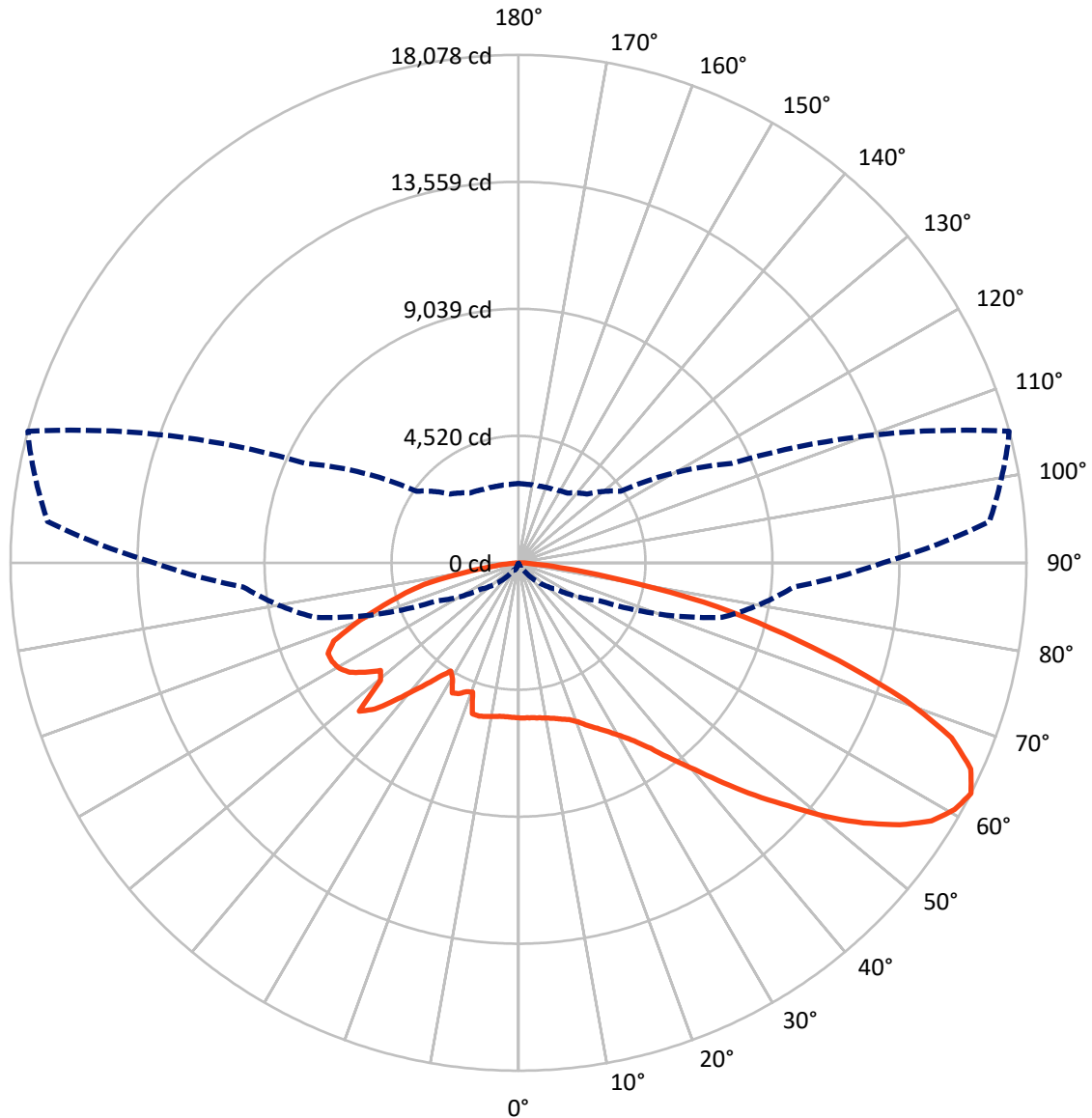
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.8 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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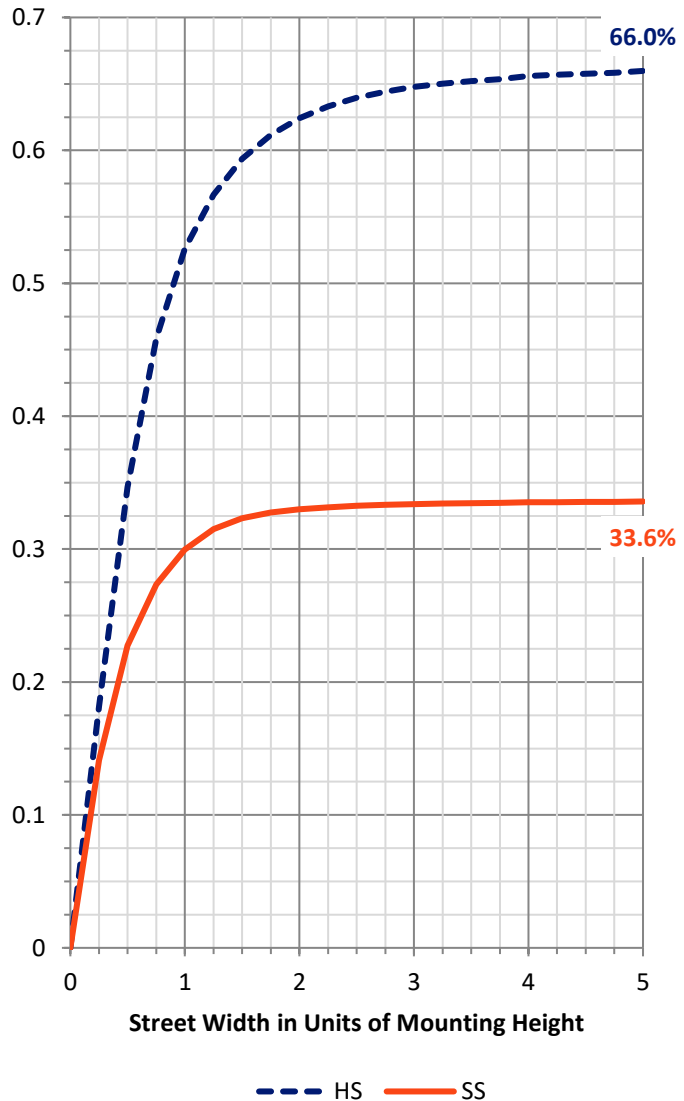
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15443.0	0.0	15443.0
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	7766.0	0.0	7766.0
	% Fixture	33.5	0.0	33.5
Total	Lumens	23209.0	0.0	23209.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	526.8	2.3
10°-20°	1487.9	6.4
20°-30°	2097.0	9.0
30°-40°	2849.1	12.3
40°-50°	3875.9	16.7
50°-60°	4591.7	19.8
60°-70°	4502.7	19.4
70°-80°	2839.9	12.2
80°-90°	438.1	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°	23209.0	100.0
0°-180°	23209.0	100.0

Coefficient of Utilization



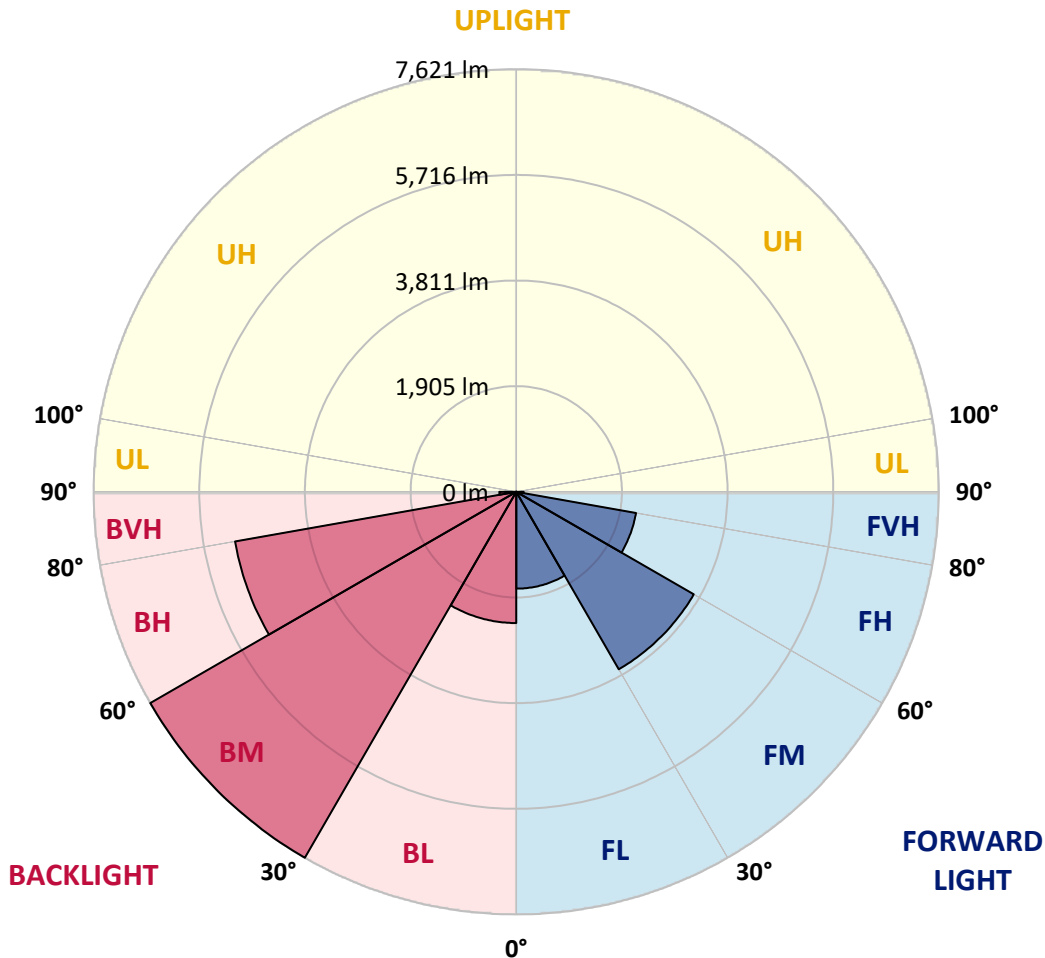
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1745.7	7.5			
FM (30°-60°)	3695.5	15.9			
FH (60°-80°)	2192.7	9.4			G2/5000
FVH (80°-90°)	132.2	0.6			G2/225
BL (0°-30°)	2366.0	10.2	B3/2500		
BM (30°-60°)	7621.2	32.8	B4/8500		
BH (60°-80°)	5149.8	22.2	B5		G5
BVH (80°-90°)	305.9	1.3			G3/500
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°	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0
2.5°	5524.7	5481.6	5512.4	5559.3	5489.0	5529.7	5461.9	5517.4	5503.8	5507.5	5533.4
5°	5481.6	5436.0	5473.0	5534.6	5465.6	5511.2	5455.7	5502.6	5497.6	5514.9	5535.8
7.5°	5440.9	5397.8	5436.0	5476.7	5440.9	5485.3	5443.4	5501.3	5505.0	5543.2	5560.5
10°	5397.8	5354.6	5391.6	5438.4	5408.9	5464.3	5447.1	5517.4	5544.5	5595.0	5609.8
12.5°	5302.8	5264.6	5295.4	5349.7	5354.6	5436.0	5447.1	5555.6	5588.9	5655.4	5677.6
15°	4732.0	4773.9	4937.9	5095.7	5163.5	5313.9	5396.5	5590.1	5636.9	5731.9	5766.4
17.5°	3828.2	3749.3	3494.1	3560.7	3935.5	4441.0	4632.1	5113.0	5620.9	5828.0	5872.4
20°	2262.4	2423.9	2923.3	3076.2	3214.2	3758.0	4400.3	4686.4	4881.2	5617.2	6017.9
22.5°	1865.4	1876.5	2234.1	2939.3	3094.6	3307.9	3804.8	4746.8	4947.7	5094.5	5540.8
25°	1729.8	1740.9	1802.5	2347.5	3009.6	3256.2	3474.4	4338.7	5119.1	5300.4	5649.3
27.5°	1621.3	1636.1	1692.8	1845.7	2806.1	3241.4	3517.5	3848.0	5195.6	5544.5	5871.2
30°	1539.9	1546.1	1604.0	1752.0	2121.9	3245.1	3580.4	3933.0	4759.1	5853.9	6181.9
32.5°	1466.0	1469.6	1530.1	1674.3	1897.5	3005.9	3675.4	4110.6	4544.6	6107.9	6608.5
35°	1409.2	1406.8	1461.0	1602.8	1824.7	2301.9	3781.4	4323.9	4887.3	5867.5	7244.7
37.5°	1355.0	1351.3	1398.1	1528.8	1760.6	2155.2	3658.1	4580.3	5379.3	6050.0	7192.9
40°	1313.1	1305.7	1345.1	1462.3	1694.0	2118.2	2881.4	4851.6	5919.3	6990.7	7628.1
42.5°	1276.1	1271.1	1304.4	1398.1	1626.2	2073.8	2685.3	4998.3	6591.2	8078.1	8753.8
45°	1220.6	1228.0	1265.0	1355.0	1553.5	2010.9	2705.0	4014.4	7302.6	9021.3	9875.7
47.5°	1197.2	1195.9	1219.4	1304.4	1490.6	1923.4	2691.5	3681.5	7750.2	10008.9	10974.3
50°	1160.2	1154.0	1006.1	1245.3	1426.5	1814.9	2634.8	3777.7	6449.4	10978.0	11982.8
52.5°	1091.1	970.3	880.3	1203.3	1361.2	1696.5	2507.8	3819.6	6227.5	10805.4	12849.6
55°	579.5	646.1	833.5	1144.2	1284.7	1590.5	2321.6	3790.0	6707.1	8640.4	11928.6
57.5°	514.1	511.7	530.2	903.7	669.5	1474.6	2097.2	3654.4	7160.8	9034.9	12151.7
60°	40.7	41.9	49.3	300.8	355.1	1038.1	1855.6	3486.7	7401.3	9500.9	12693.0
62.5°	19.7	22.2	29.6	268.8	324.3	944.4	1637.3	3200.7	7502.4	9837.5	12960.5
65°	4.9	6.2	13.6	236.7	282.3	840.9	1417.9	2865.3	7511.0	9851.1	13176.3
67.5°	3.7	6.2	13.6	214.5	257.7	749.6	1225.5	2631.1	7143.6	9800.5	13067.8
70°	3.7	6.2	13.6	192.3	233.0	649.8	1055.4	2401.7	6205.3	9611.9	12699.2
72.5°	3.7	7.4	13.6	168.9	204.7	551.1	896.3	2149.0	5207.9	8824.1	11878.0
75°	3.7	7.4	14.8	136.9	175.1	438.9	736.1	1840.8	4331.3	7651.5	10516.9
77.5°	3.7	7.4	14.8	106.0	141.8	328.0	557.3	1458.6	3455.9	5643.1	7388.9
80°	3.7	7.4	14.8	75.2	115.9	230.6	405.6	995.0	2061.5	2966.4	3762.9
82.5°	3.7	7.4	14.8	54.2	83.8	166.4	250.3	490.7	983.9	1424.0	1786.5
85°	2.5	6.2	13.6	35.8	44.4	101.1	149.2	218.2	294.7	389.6	526.5
87.5°	2.5	3.7	8.6	13.6	18.5	35.8	55.5	49.3	55.5	115.9	166.4
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):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0	5521.0
2.5°	5529.7	5524.7	5526.0	5553.1	5529.7	5534.6	5493.9	5575.3	5567.9	5556.8	5588.9
5°	5535.8	5533.4	5543.2	5566.7	5530.9	5537.1	5498.9	5593.8	5570.4	5566.7	5604.9
7.5°	5566.7	5563.0	5572.8	5583.9	5544.5	5544.5	5511.2	5586.4	5572.8	5548.2	5591.3
10°	5622.1	5608.6	5618.5	5624.6	5564.2	5561.7	5500.1	5588.9	5554.3	5542.0	5597.5
12.5°	5699.8	5669.0	5683.8	5673.9	5593.8	5579.0	5496.4	5554.3	5511.2	5503.8	5554.3
15°	5804.6	5763.9	5775.0	5756.5	5655.4	5612.3	5479.1	5503.8	5434.7	5428.6	5465.6
17.5°	5902.0	5877.4	5871.2	5871.2	5752.8	5645.6	5463.1	5428.6	5337.3	5331.2	5349.7
20°	6078.3	6045.0	6041.3	6011.8	5836.7	5672.7	5437.2	5331.2	5195.6	5164.7	5199.3
22.5°	6135.0	6296.6	6285.5	6154.8	5907.0	5694.9	5384.2	5209.1	5022.9	4963.8	4981.0
25°	6304.0	6546.8	6527.1	6337.2	5978.5	5707.2	5320.1	5074.7	4818.3	4714.7	4718.4
27.5°	6571.5	6819.3	6805.8	6532.0	6067.2	5710.9	5248.6	4932.9	4614.8	4479.2	4490.3
30°	6911.8	7162.1	7142.3	6749.0	6201.6	5718.3	5194.3	4762.8	4428.7	4282.0	4279.5
32.5°	7385.2	7612.1	7554.1	7038.8	6363.1	5749.1	5122.8	4601.3	4258.5	4104.4	4092.1
35°	8100.3	8184.2	8112.7	7384.0	6534.5	5768.9	5008.2	4443.5	4100.7	3949.1	3938.0
37.5°	9066.9	8963.4	8867.2	7772.4	6712.1	5763.9	4862.7	4290.6	3965.1	3820.8	3820.8
40°	9161.9	9858.5	9680.9	8181.7	6872.3	5736.8	4724.6	4141.4	3855.4	3738.2	3756.7
42.5°	9607.0	10954.6	10705.5	8577.5	6988.2	5657.9	4576.6	4005.8	3753.0	3658.1	3665.5
45°	10700.6	11952.0	11806.5	8959.7	7051.1	5518.6	4405.2	3872.6	3638.4	3563.2	3578.0
47.5°	11876.8	13138.1	12924.8	9312.3	7016.6	5312.7	4222.8	3750.6	3518.8	3470.7	3497.8
50°	12988.9	14385.8	14208.3	9560.1	6863.7	5024.2	4028.0	3621.1	3425.1	3386.9	3400.4
52.5°	14080.0	15518.9	15385.7	9694.5	6557.9	4722.1	3848.0	3497.8	3337.5	3289.5	3307.9
55°	14980.1	16592.7	16463.3	9680.9	6098.1	4406.5	3669.2	3364.7	3248.8	3205.6	3220.4
57.5°	15682.8	17428.7	17336.2	9475.0	5563.0	4116.7	3467.0	3234.0	3131.6	3093.4	3105.7
60°	16311.6	17958.8	17839.2	9020.1	4995.8	3797.4	3258.6	3078.6	2993.5	2962.7	2982.5
62.5°	16827.0	17969.9	18078.4	8361.7	4439.8	3459.6	3026.8	2887.5	2825.9	2807.4	2819.7
65°	16958.9	17639.5	17692.5	7548.0	3876.3	3124.2	2748.2	2657.0	2631.1	2620.0	2644.6
67.5°	16776.4	16942.9	16627.3	6860.0	3362.2	2744.5	2447.4	2390.6	2406.7	2409.1	2441.2
70°	16305.5	15078.7	14591.7	6284.2	2882.6	2324.1	2116.9	2098.4	2141.6	2177.3	2200.8
72.5°	15104.6	12379.8	11916.2	5470.5	2272.3	1779.1	1666.9	1726.1	1711.3	1727.3	1769.3
75°	13003.7	9555.2	9267.9	4452.1	1731.0	1293.3	1142.9	1149.1	1167.6	1249.0	1293.3
77.5°	9263.0	6872.3	6744.1	3415.2	1146.6	760.7	786.6	874.1	900.0	902.5	933.3
80°	4908.3	3830.7	3656.9	2012.1	758.3	543.7	591.8	630.0	664.5	700.3	708.9
82.5°	2211.9	1732.3	1684.2	999.9	480.8	419.2	430.3	495.6	524.0	530.2	536.3
85°	859.4	598.0	569.6	415.5	315.6	283.6	314.4	381.0	408.1	395.8	392.1
87.5°	229.3	140.6	128.2	139.3	148.0	156.6	178.8	203.4	233.0	224.4	217.0
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)