

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: P591343

Luminaire Tested: **CTN-CA6-230-730-U-T3-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591343
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-730-U-T3-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23432 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

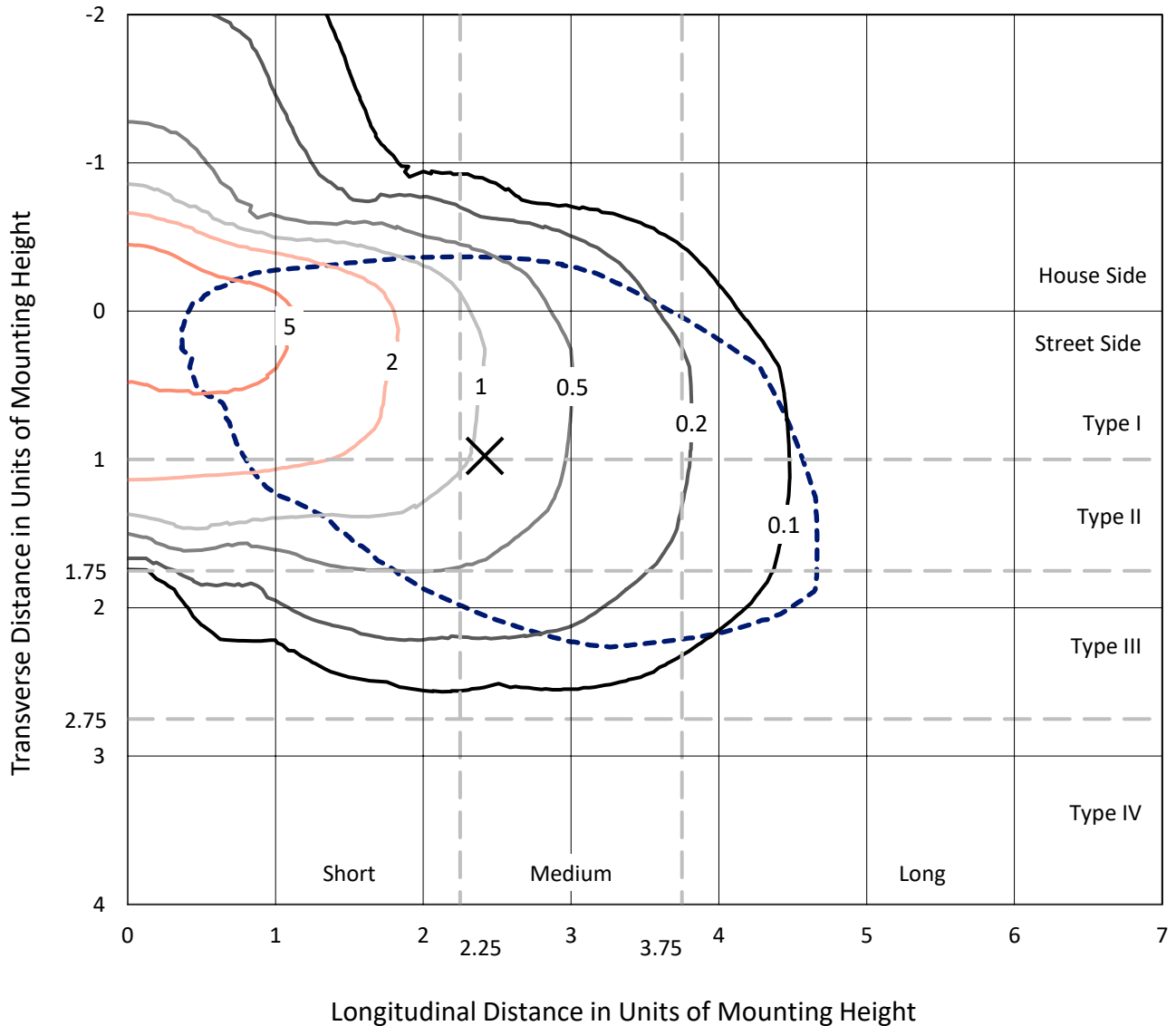
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

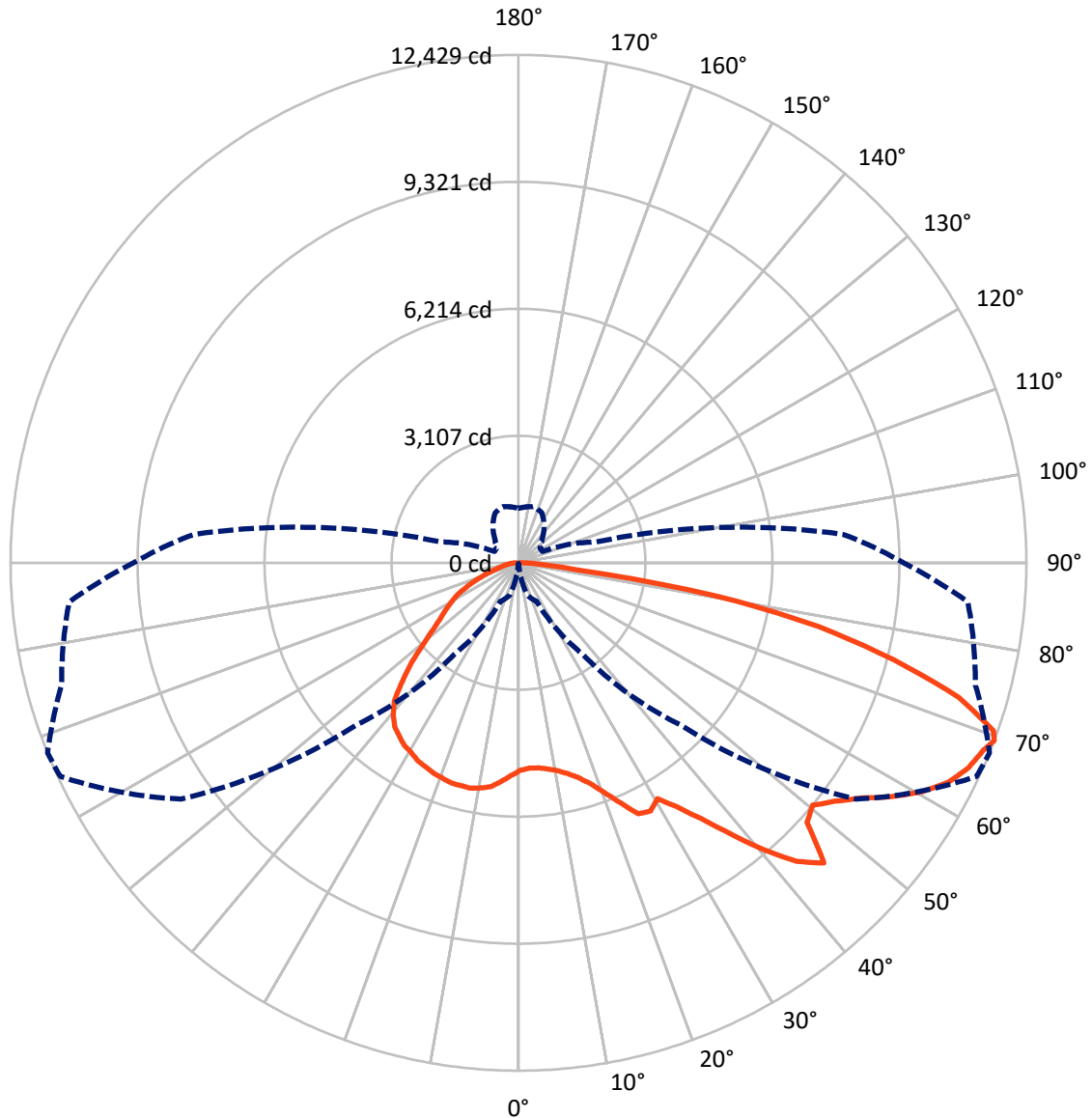
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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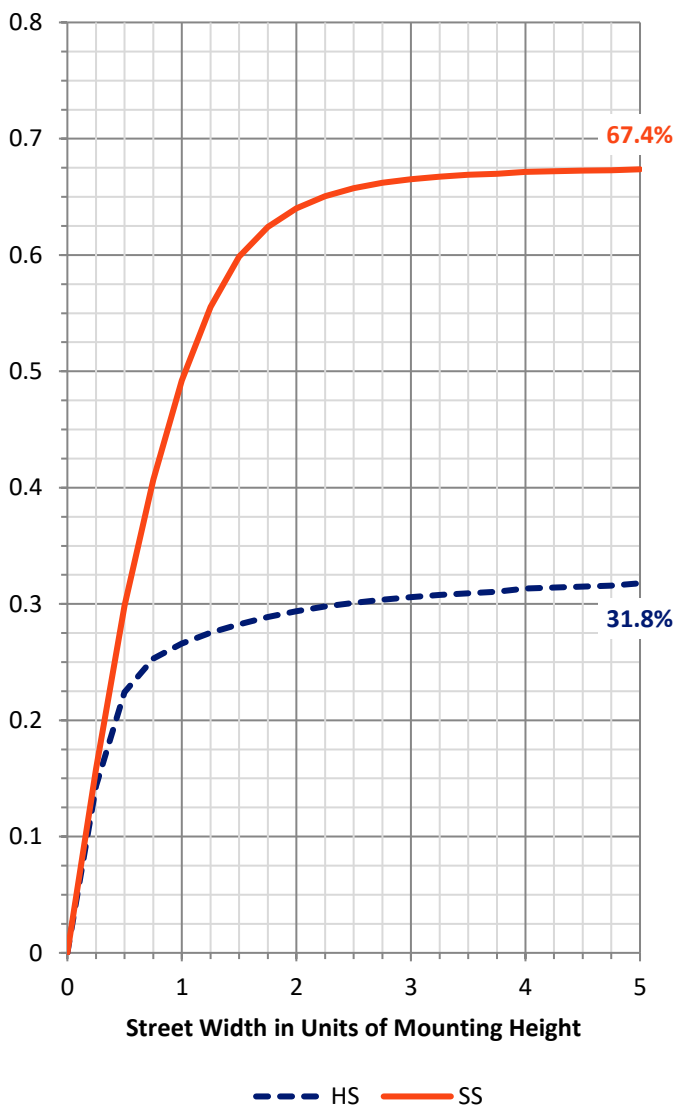
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7643.2	0.0	7643.2
	% Fixture	32.6	0.0	32.6
Street Side	Lumens	15788.8	0.0	15788.8
	% Fixture	67.4	0.0	67.4
Total	Lumens	23432.0	0.0	23432.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	507.3	2.2
10°-20°	1569.7	6.7
20°-30°	2413.3	10.3
30°-40°	3134.4	13.4
40°-50°	3869.0	16.5
50°-60°	4345.3	18.5
60°-70°	4246.6	18.1
70°-80°	2851.7	12.2
80°-90°	494.6	2.1
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°	23432.0	100.0
0°-180°	23432.0	100.0

Coefficient of Utilization

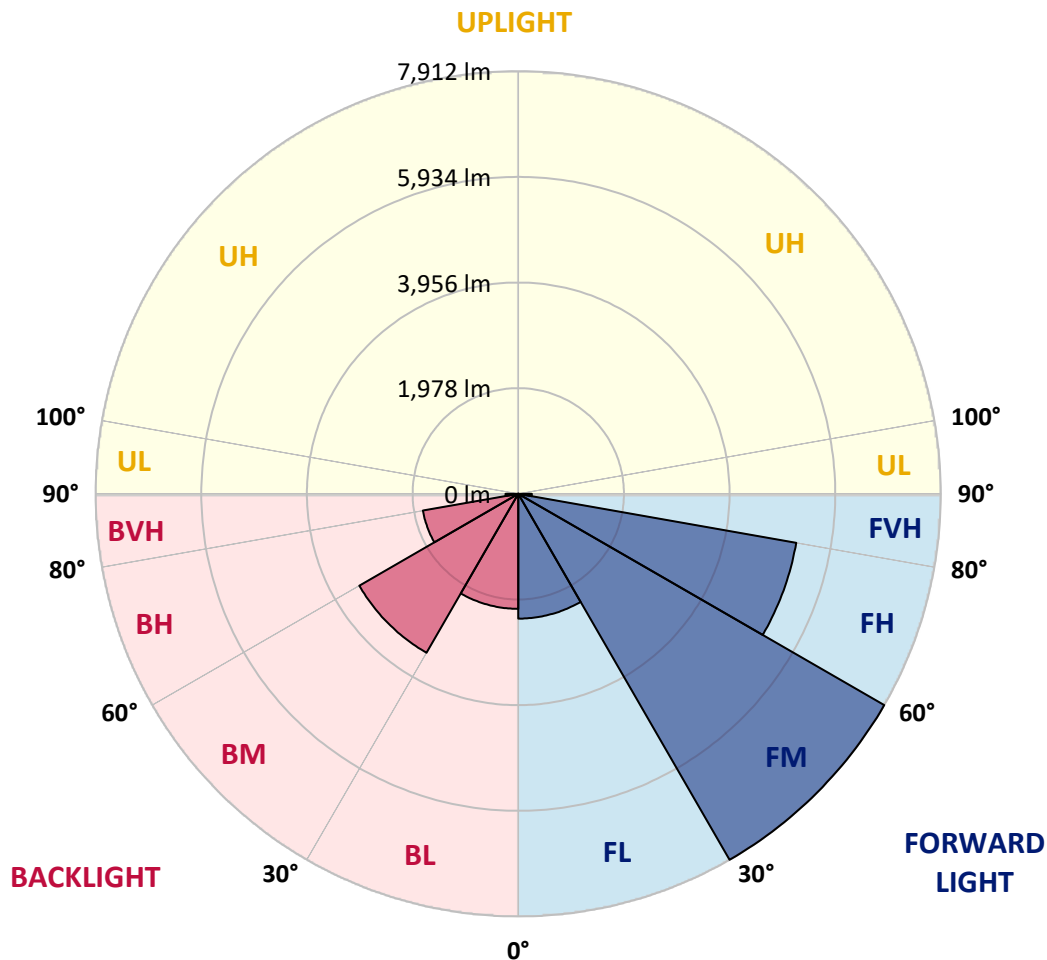


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2336.4	10.0			
FM (30°-60°)	7912.4	33.8			
FH (60°-80°)	5285.1	22.6			G3/7500
FVH (80°-90°)	254.9	1.1			G3/500
BL (0°-30°)	2153.9	9.2	B3/2500		
BM (30°-60°)	3436.3	14.7	B3/5000		
BH (60°-80°)	1813.3	7.7	B3/2500		G3/2500
BVH (80°-90°)	239.7	1.0			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	68°	75°	85°
0°	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4
2.5°	4976.9	4946.6	4958.1	4999.9	4915.2	4970.6	4944.5	5000.9	5030.2	5017.7	5097.1
5°	5023.9	4990.5	4992.6	5021.9	4930.9	4977.9	4948.7	5009.3	5041.7	5023.9	5130.6
7.5°	5167.2	5130.6	5120.1	5118.0	5032.3	5067.9	5009.3	5058.4	5091.9	5082.5	5202.7
10°	5386.8	5342.8	5323.0	5311.5	5209.0	5198.6	5125.4	5147.3	5172.4	5182.9	5312.5
12.5°	5628.3	5568.7	5556.1	5521.6	5389.9	5366.9	5278.0	5288.5	5288.5	5312.5	5441.1
15°	5833.2	5784.1	5784.1	5748.5	5619.9	5587.5	5465.2	5452.6	5450.5	5469.4	5584.4
17.5°	5701.5	5674.3	5650.2	5632.5	5433.8	5381.5	5713.0	5691.0	5680.6	5699.4	5766.3
20°	5259.2	5332.4	5177.6	4959.1	4990.5	5619.9	6031.9	5992.1	5998.4	6017.2	5998.4
22.5°	4628.7	4447.8	4732.2	4810.6	4941.3	5406.6	6322.5	6364.4	6376.9	6378.0	6279.7
25°	3966.9	4067.3	4453.1	5051.1	5034.4	5422.3	6145.8	6740.8	6803.5	6797.2	6626.8
27.5°	4157.2	4138.3	4436.3	4829.5	5326.1	5754.8	6254.6	6519.1	6878.8	7277.1	7046.1
30°	4323.4	4307.7	4339.1	4889.1	5518.5	6087.3	6661.3	6618.4	6694.8	7416.2	7540.6
32.5°	4471.9	4460.4	4497.0	4557.6	5198.6	6445.9	7097.3	7088.9	7115.1	7171.5	8124.0
35°	4612.0	4613.0	4658.0	4757.3	5239.3	6520.1	7528.1	7616.9	7686.0	7810.4	8023.7
37.5°	4708.2	4710.3	4745.8	4866.1	5067.9	6153.2	7964.1	8280.9	8404.3	8628.0	8325.8
40°	4707.1	4722.8	4808.6	4965.4	5235.1	5910.6	8099.0	9033.7	9232.3	9395.5	8887.3
42.5°	4608.9	4617.2	4777.2	5060.5	5383.6	6094.6	7679.7	9767.7	9988.3	9943.3	9351.5
45°	4518.9	4516.8	4698.8	5048.0	5516.4	6347.6	7736.1	9746.8	10479.7	10425.3	9778.1
47.5°	4398.7	4401.8	4594.2	4993.6	5637.7	6618.4	8154.4	8863.3	9497.9	10839.4	10125.3
50°	4248.1	4267.0	4462.5	4911.0	5698.3	6871.5	8516.1	9251.2	9326.4	9735.3	10465.1
52.5°	3998.2	3964.8	4321.3	4815.9	5741.2	7055.5	8861.2	9623.4	9694.5	9546.0	10811.1
55°	2269.9	2816.8	4144.6	4705.0	5753.7	7166.3	9128.8	10046.8	10157.7	10017.6	11092.4
57.5°	1426.2	1470.1	3590.5	4411.2	5648.1	7235.3	9457.1	10628.2	10792.3	10458.8	11305.7
60°	505.0	544.7	1746.1	2025.3	4629.8	7045.0	9956.9	11313.0	11367.4	10873.9	11462.5
62.5°	53.3	70.1	1183.6	1486.8	3594.7	6501.3	10302.0	11864.0	11814.9	11181.3	11547.2
65°	18.8	26.1	1040.3	1330.0	3345.8	6331.9	10415.9	12099.3	12098.2	11377.8	11486.6
67.5°	14.6	19.9	904.4	1155.3	2986.1	5969.1	10226.7	12276.0	12259.3	11572.3	11326.6
69°	14.6	20.9	814.5	1041.4	2725.8	5622.0	10080.3	12369.0	12428.6	11575.5	11037.0
70°	14.6	20.9	757.0	961.9	2513.5	5304.2	9870.1	12297.9	12328.3	11475.1	10736.9
72.5°	14.6	20.9	586.6	744.4	1911.3	4082.9	8646.8	11206.4	11263.9	10593.7	9649.5
75°	14.6	20.9	413.0	541.6	1254.7	2739.4	6885.0	9333.8	9489.6	8953.2	7906.6
77.5°	14.6	20.9	246.8	370.1	787.3	1503.5	4737.5	7153.8	7506.1	7006.3	5651.3
80°	14.6	19.9	116.1	201.8	448.5	796.7	2170.6	4403.9	4862.9	4383.0	2955.8
82.5°	14.6	19.9	95.1	145.3	226.9	396.3	848.0	1442.9	1416.7	1272.5	952.5
85°	13.6	17.8	78.4	106.6	163.1	250.9	472.6	587.6	560.4	495.6	498.7
87.5°	9.4	10.5	27.2	48.1	65.9	124.4	229.0	248.8	254.1	212.2	222.7
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4	5079.4
2.5°	5134.8	5141.0	5171.4	5225.7	5224.7	5283.2	5267.6	5403.5	5408.7	5406.6	5417.1
5°	5181.8	5217.4	5284.3	5400.3	5467.3	5555.1	5538.4	5675.3	5683.7	5672.2	5701.5
7.5°	5263.4	5307.3	5417.1	5560.3	5578.1	5688.9	5665.9	5776.7	5771.5	5750.6	5800.8
10°	5378.4	5430.7	5530.0	5611.6	5662.8	5727.6	5702.5	5796.6	5778.8	5755.8	5803.9
12.5°	5495.5	5520.6	5576.0	5668.0	5672.2	5686.8	5657.6	5733.9	5714.0	5679.5	5729.7
15°	5607.4	5610.5	5601.1	5642.9	5599.0	5608.4	5544.6	5592.7	5558.2	5542.5	5575.0
17.5°	5752.7	5715.1	5648.1	5630.4	5526.9	5482.9	5388.8	5386.8	5326.1	5304.2	5326.1
20°	5927.3	5845.8	5691.0	5543.6	5364.8	5274.9	5114.9	5072.0	5022.9	4975.8	5002.0
22.5°	6168.8	6011.0	5744.3	5469.4	5173.5	4996.8	4800.2	4678.9	4586.9	4495.9	4523.1
25°	6443.8	6223.2	5819.6	5342.8	4944.5	4631.9	4376.7	4169.7	4038.0	3905.2	3964.8
27.5°	6816.0	6511.8	5865.6	5248.7	4646.5	4227.2	3820.5	3550.7	3413.8	3318.6	3288.3
30°	7250.0	6885.0	5948.2	5063.7	4296.2	3729.5	3213.0	2911.9	2766.6	2721.6	2740.4
32.5°	7779.0	7338.8	6116.6	4908.9	3940.7	3201.5	2599.3	2364.0	2259.5	2252.1	2250.1
35°	8486.9	7918.1	6260.8	4668.5	3470.2	2585.7	2068.1	1873.7	1869.5	1866.3	1873.7
37.5°	9030.5	8507.8	6414.5	4433.2	2911.9	2019.0	1654.1	1535.9	1523.4	1560.0	1569.4
40°	9459.2	8930.2	6644.6	4035.9	2257.4	1507.7	1270.4	1226.4	1315.3	1395.8	1412.6
42.5°	9846.1	9285.7	6694.8	3612.4	1644.7	1157.4	1052.9	1126.1	1263.0	1355.1	1372.8
45°	10208.9	9658.9	6503.4	2983.0	1176.3	980.7	1001.7	1111.4	1265.1	1363.4	1373.9
47.5°	10605.2	9908.8	6296.4	2398.5	967.1	940.0	991.2	1116.7	1277.7	1377.0	1382.2
50°	10866.6	10087.6	5778.8	1875.7	906.5	914.9	987.0	1128.2	1279.8	1350.9	1355.1
52.5°	10973.2	10230.9	5310.4	1501.4	876.2	896.0	992.2	1148.0	1274.5	1314.3	1312.2
55°	11040.1	10296.7	4907.9	1249.5	849.0	881.4	1001.7	1162.7	1286.0	1326.8	1326.8
57.5°	10997.3	10149.3	4608.9	1064.4	821.8	871.0	1013.2	1184.6	1394.8	1466.9	1459.6
60°	10965.9	9873.3	4184.4	940.0	789.4	859.5	1027.8	1261.0	1626.9	1700.1	1676.0
62.5°	10803.8	9640.1	3724.3	860.5	752.8	853.2	1040.3	1363.4	1659.3	1655.1	1608.1
65°	10390.8	9165.4	2998.7	780.0	715.2	844.8	1044.5	1408.4	1526.5	1460.7	1447.1
67.5°	9805.3	8480.6	2366.1	699.5	673.3	827.0	1079.0	1355.1	1452.3	1395.8	1374.9
69°	9422.6	7973.5	1965.7	649.3	646.2	812.4	1092.6	1349.8	1425.1	1361.3	1334.1
70°	9114.2	7534.3	1697.0	616.9	625.2	800.9	1079.0	1348.8	1413.6	1334.1	1303.8
72.5°	7790.5	6104.0	1095.8	539.5	563.6	770.6	1027.8	1314.3	1389.6	1337.3	1295.5
75°	6037.1	4443.7	708.9	466.3	498.7	719.3	976.6	1292.3	1411.5	1316.4	1226.4
77.5°	3873.8	2377.6	548.9	392.1	428.7	647.2	884.5	1203.4	1370.7	1285.0	1168.9
80°	1687.5	882.5	423.5	317.9	347.1	525.9	759.1	1069.6	1299.6	1290.2	1211.8
82.5°	716.2	568.8	326.2	243.6	276.0	389.0	594.9	917.0	1148.0	1193.0	1278.7
85°	405.7	340.9	217.5	167.3	204.9	286.5	423.5	703.7	934.7	1036.2	1108.3
87.5°	174.6	142.2	100.4	89.9	116.1	148.5	181.9	330.4	498.7	608.5	654.5
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)