

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: P591197

Luminaire Tested: **CTN-CA10-210-727-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591197
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-8)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-210-727-U-T3-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17673 lumens
Efficiency: N/A
Efficacy: 83.0 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): 212.9
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

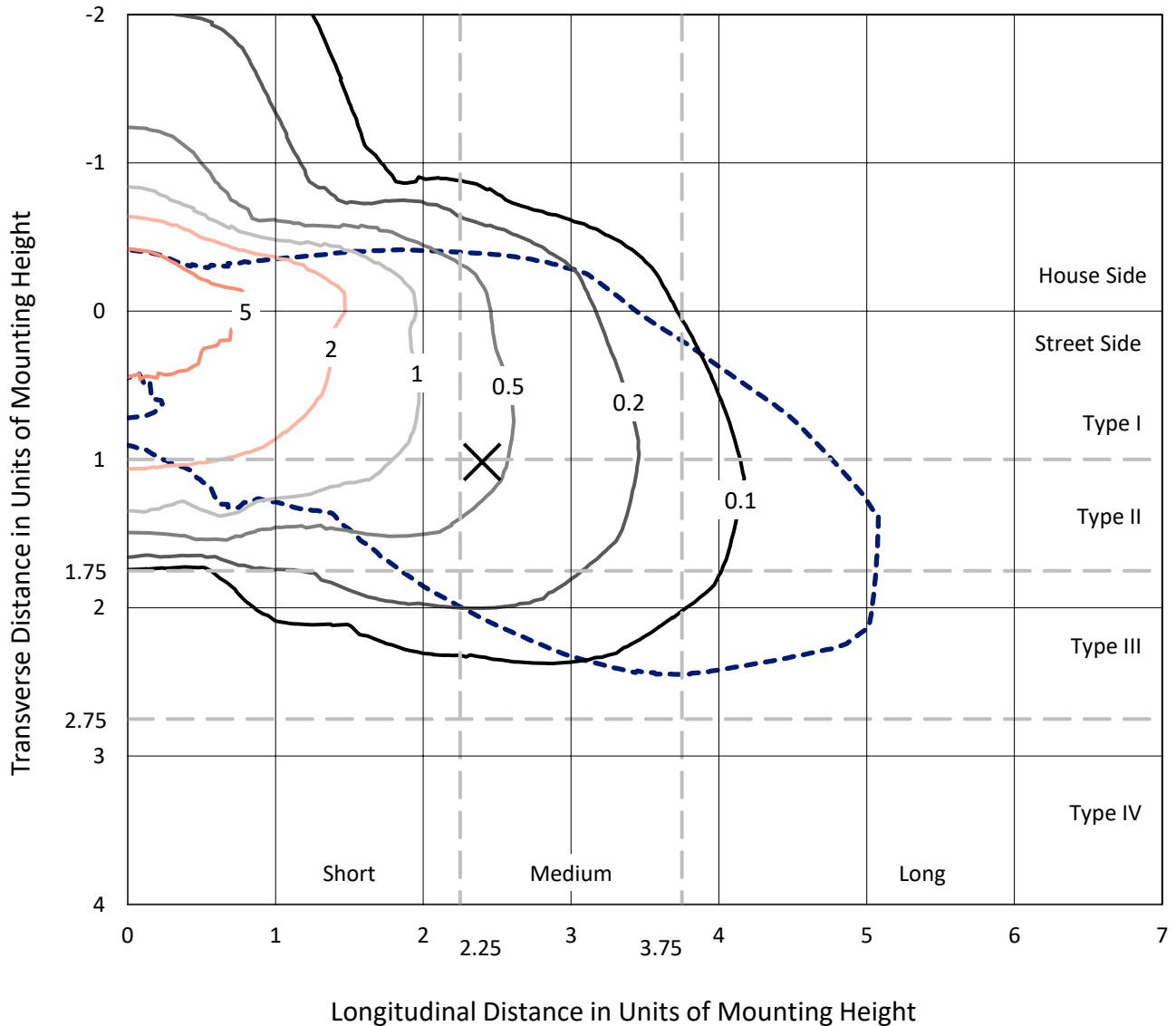




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Iso-Footcandle Lines of Horizontal Illumination

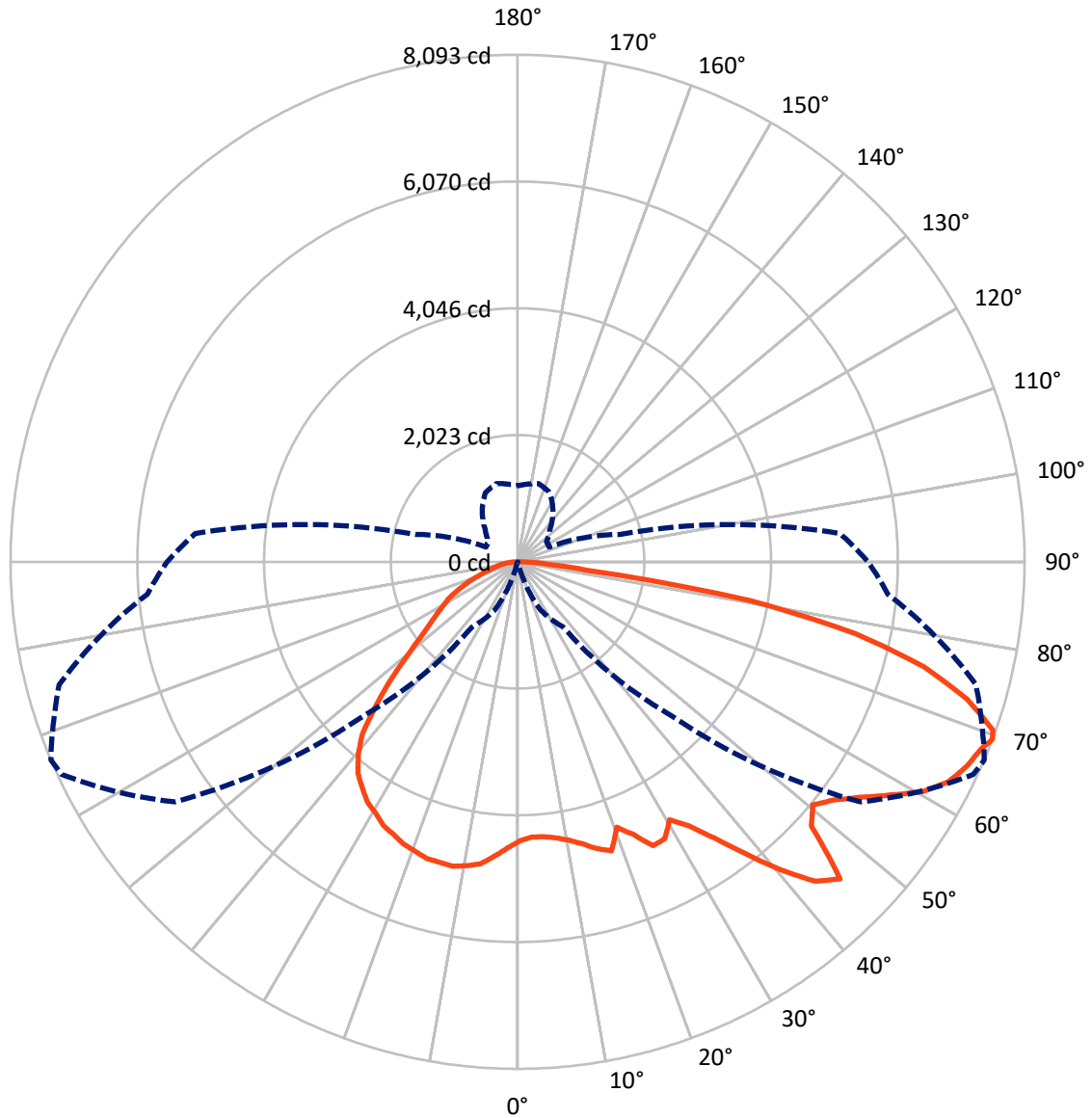
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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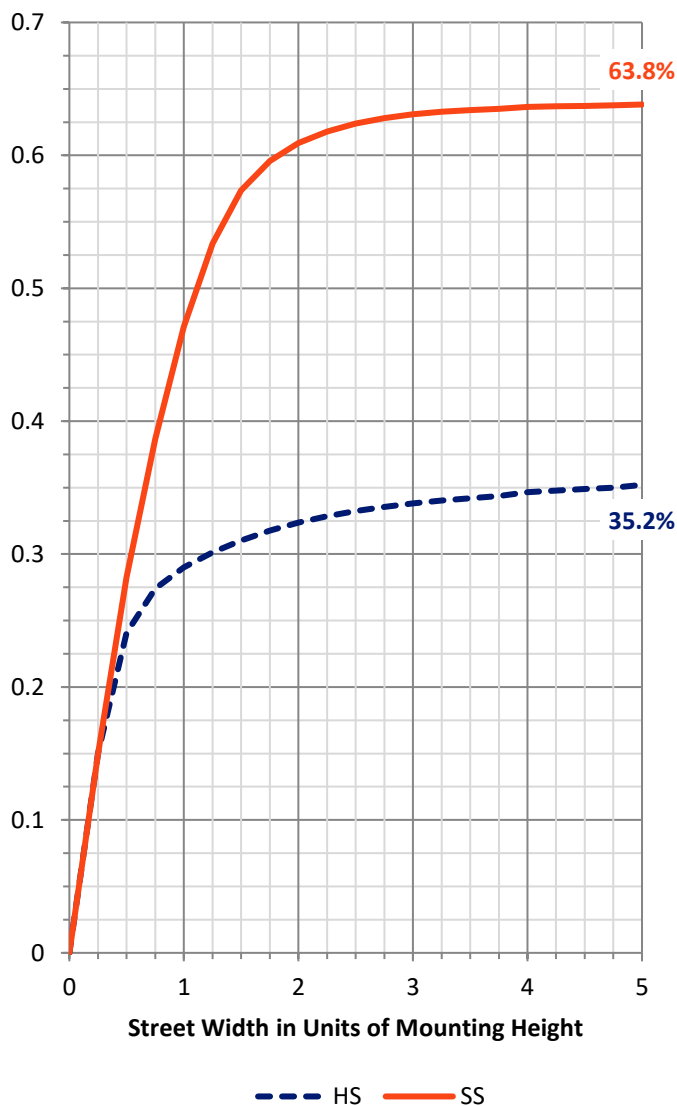
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6393.6	0.0	6393.6
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	11279.4	0.0	11279.4
	% Fixture	63.8	0.0	63.8
Total	Lumens	17673.0	0.0	17673.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	445.2	2.5
10°-20°	1374.5	7.8
20°-30°	2028.7	11.5
30°-40°	2548.9	14.4
40°-50°	2989.8	16.9
50°-60°	3128.6	17.7
60°-70°	2795.0	15.8
70°-80°	1967.2	11.1
80°-90°	395.1	2.2
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°	17673.0	100.0
0°-180°	17673.0	100.0

Coefficient of Utilization

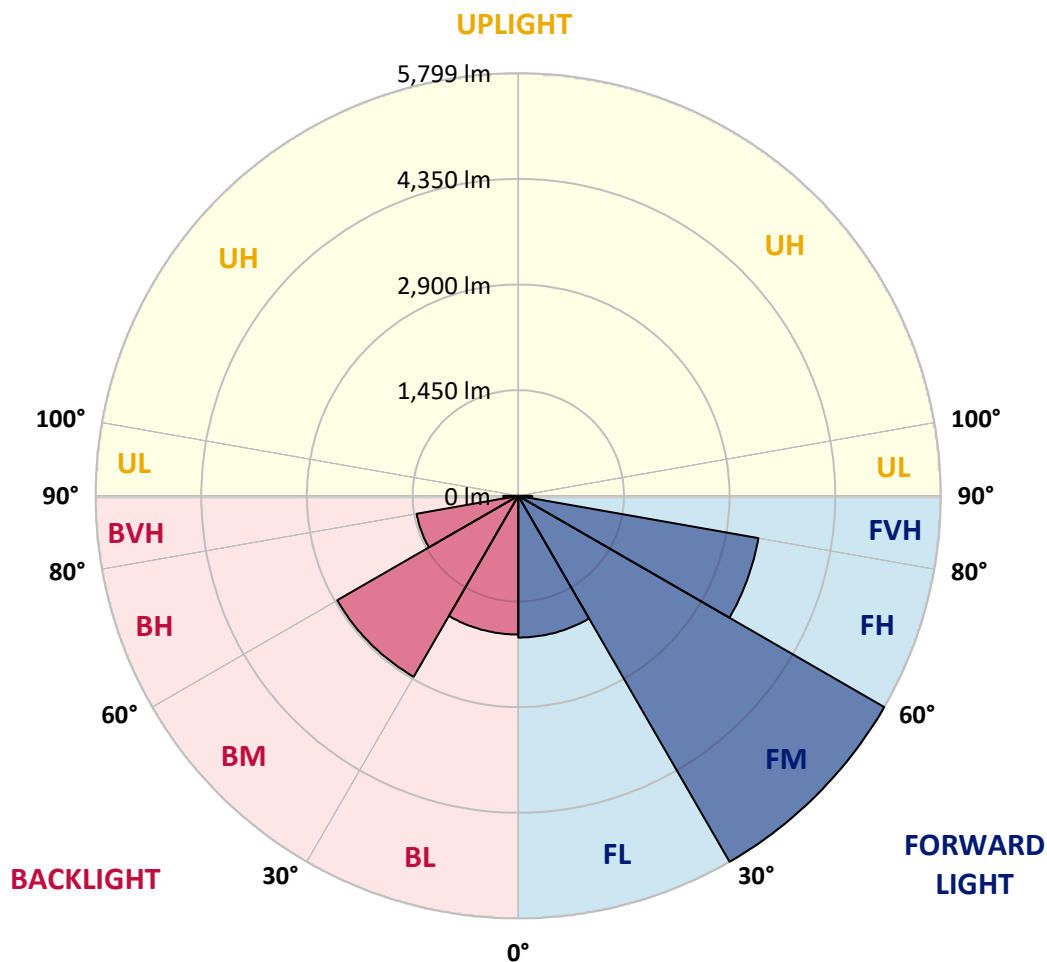


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1944.8	11.0			
FM (30°-60°)	5799.5	32.8			
FH (60°-80°)	3346.3	18.9			G2/5000
FVH (80°-90°)	188.8	1.1			G2/225
BL (0°-30°)	1903.6	10.8	B3/2500		
BM (30°-60°)	2867.8	16.2	B3/5000		
BH (60°-80°)	1415.9	8.0	B3/2500		G3/2500
BVH (80°-90°)	206.3	1.2			G2/225
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°	67°	75°	85°
0°	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0
2.5°	4346.0	4320.4	4332.3	4366.1	4295.8	4346.0	4327.8	4378.9	4398.1	4395.3	4468.4
5°	4380.7	4352.4	4357.0	4382.6	4305.8	4345.1	4327.8	4384.4	4406.3	4399.9	4499.5
7.5°	4504.0	4473.0	4462.9	4471.2	4388.0	4418.2	4380.7	4426.4	4450.1	4450.1	4563.4
10°	4698.6	4661.1	4639.2	4638.3	4540.6	4526.9	4481.2	4502.2	4519.6	4534.2	4660.2
12.5°	4902.3	4871.2	4842.9	4827.4	4698.6	4666.6	4599.9	4615.5	4621.0	4641.1	4766.2
15°	5087.7	5056.7	5048.4	5023.8	4895.9	4842.9	4749.7	4742.4	4749.7	4761.6	4885.8
17.5°	5016.5	5018.3	5064.0	5068.5	4902.3	4779.9	4715.0	4838.3	4850.2	4944.3	5024.7
20°	4881.3	4814.6	4575.3	4444.7	4463.9	4622.8	4505.0	4499.5	4524.1	4691.3	5098.7
22.5°	4065.6	4029.1	4160.6	4202.6	4354.2	4414.5	4694.9	4702.3	4726.9	4726.9	4845.7
25°	3510.2	3699.3	3955.1	4411.8	4364.3	4376.2	4490.3	4975.4	5021.9	5021.0	5003.7
27.5°	3629.0	3605.2	3988.0	4274.8	4613.6	4592.6	4468.4	4798.2	5004.6	5359.0	5276.8
30°	3771.5	3754.1	3782.4	4267.5	4829.2	4857.5	4742.4	4708.6	4779.0	5523.4	5589.2
32.5°	3903.9	3882.9	3914.9	3988.9	4526.9	5130.6	5042.0	5000.9	5026.5	5176.3	5991.1
35°	4020.8	4019.0	4055.6	4143.2	4601.8	5225.6	5348.9	5346.2	5414.7	5543.5	6049.5
37.5°	4104.0	4103.1	4132.3	4234.6	4337.8	4826.5	5636.7	5800.2	5909.8	6100.7	5909.8
40°	4103.1	4117.7	4194.4	4325.9	4462.9	4610.0	5763.6	6333.6	6465.1	6601.2	6283.4
42.5°	4017.2	4025.4	4160.6	4404.5	4574.4	4701.3	5259.4	6824.1	6971.2	6961.1	6577.5
45°	3937.7	3941.4	4092.1	4391.7	4667.5	4896.8	5156.2	6822.3	7219.6	7281.7	6854.3
47.5°	3834.5	3834.5	3983.4	4317.7	4751.6	5116.9	5432.1	5893.3	6308.0	7559.4	7083.5
50°	3702.1	3718.5	3535.8	4241.0	4791.8	5326.1	5665.9	6045.9	6103.4	6760.2	7296.3
52.5°	3491.1	3481.9	2763.1	4156.0	4808.2	5477.7	5908.9	6284.3	6315.3	6249.6	7088.1
55°	2200.4	2453.4	2443.4	4056.5	4798.2	5575.5	6095.2	6546.4	6634.1	6553.7	5962.8
57.5°	1329.0	1268.7	2088.1	3771.5	3853.7	5651.3	6348.2	6944.7	7021.4	6835.1	6063.2
60°	518.8	489.6	528.9	1716.3	2764.9	5257.6	6692.6	7367.6	7440.7	7102.7	6148.2
62.5°	64.9	55.7	47.5	1188.4	1757.4	3905.8	6875.3	7708.3	7722.0	7296.3	6164.6
65°	9.1	10.0	18.3	1059.6	1596.6	3839.1	6939.2	7847.1	7875.4	7436.1	6108.9
67.5°	3.7	4.6	14.6	921.6	1401.2	3661.9	6781.2	7943.0	7975.9	7571.3	6055.0
69°	3.7	4.6	14.6	828.5	1267.8	3466.4	6679.8	8028.0	8092.8	7574.0	5931.7
70°	3.7	4.6	13.7	761.8	1163.7	3301.1	6582.1	7995.1	8047.2	7500.9	5794.7
72.5°	3.7	4.6	13.7	586.4	885.1	2650.7	5963.7	7529.3	7502.8	7040.6	5261.3
75°	4.6	4.6	13.7	411.9	613.8	1885.3	5032.9	6686.2	6698.1	6267.8	4425.5
77.5°	4.6	4.6	13.7	262.1	387.3	1090.6	3644.5	5483.2	5517.0	5222.0	3313.9
80°	4.6	4.6	13.7	119.7	240.2	570.0	1792.1	3573.3	3755.0	3505.7	1818.6
82.5°	4.6	4.6	12.8	74.9	131.5	256.7	707.0	1120.8	1109.8	1092.4	578.2
85°	3.7	3.7	10.0	53.0	87.7	148.9	392.8	502.4	496.0	439.4	298.7
87.5°	1.8	1.8	5.5	21.9	36.5	67.6	196.4	228.4	217.4	186.3	127.9
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°	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0	4452.0
2.5°	4502.2	4508.6	4538.8	4578.0	4589.9	4641.1	4649.3	4733.3	4746.1	4767.1	4776.2
5°	4547.9	4572.5	4638.3	4730.6	4809.1	4889.5	4892.2	4994.5	5021.0	5015.6	5042.0
7.5°	4612.7	4653.8	4754.3	4882.2	4910.5	5014.6	5007.3	5108.7	5110.5	5095.9	5136.1
10°	4712.3	4763.4	4854.8	4933.3	4987.2	5054.8	5045.7	5141.6	5127.9	5112.4	5157.1
12.5°	4814.6	4841.1	4896.8	4984.5	4996.4	5020.1	5008.2	5096.8	5082.2	5063.0	5106.9
15°	4904.1	4916.9	4916.9	4964.4	4934.3	4953.4	4913.2	4984.5	4950.7	4941.6	4983.6
17.5°	5020.1	4999.1	4956.2	4952.5	4874.0	4844.7	4784.5	4803.6	4739.7	4746.1	4768.0
20°	5150.7	5104.2	4990.9	4877.6	4732.4	4663.0	4543.3	4534.2	4474.8	4463.9	4484.9
22.5°	5199.1	5240.3	5032.9	4813.7	4563.4	4408.1	4266.6	4199.0	4112.2	4056.5	4063.8
25°	5346.2	5420.2	5096.8	4699.5	4364.3	4108.5	3895.7	3741.3	3610.7	3544.0	3557.7
27.5°	5545.3	5665.9	5133.4	4620.0	4103.1	3768.7	3412.5	3209.7	3074.5	3005.1	3003.3
30°	5830.3	5981.9	5203.7	4453.8	3812.6	3322.1	2882.7	2643.4	2532.9	2487.2	2490.9
32.5°	6186.5	6369.2	5349.9	4315.0	3496.5	2844.4	2343.8	2134.6	2084.4	2076.2	2071.6
35°	6658.8	6839.6	5465.9	4101.2	3086.4	2302.7	1881.6	1733.7	1741.9	1740.1	1745.5
37.5°	6582.1	7268.0	5598.3	3892.1	2595.9	1804.9	1520.8	1437.7	1440.5	1472.4	1478.8
40°	6293.4	6893.5	5795.6	3545.9	2022.3	1386.6	1199.3	1180.1	1258.7	1329.0	1341.8
42.5°	6519.9	6667.9	5822.1	3172.3	1479.7	1063.2	1002.9	1082.4	1209.4	1290.7	1305.3
45°	6746.5	6866.1	5668.6	2613.3	1061.4	909.8	954.5	1068.7	1209.4	1296.1	1306.2
47.5°	6976.6	6975.7	5489.6	2095.4	867.7	869.6	942.6	1069.6	1216.7	1304.4	1309.8
50°	7122.8	7064.3	5021.9	1641.4	807.5	845.8	936.2	1075.1	1214.8	1278.8	1281.5
52.5°	7195.9	7109.1	4609.1	1311.7	779.1	826.6	937.2	1087.9	1204.8	1240.4	1238.6
55°	7072.6	7084.4	4267.5	1090.6	752.7	811.1	941.7	1097.0	1209.4	1245.9	1245.9
57.5°	6919.1	6921.8	3995.3	923.5	726.2	798.3	947.2	1110.7	1293.4	1361.9	1351.9
60°	6811.3	6688.0	3609.8	818.4	696.0	786.4	954.5	1170.1	1490.7	1560.1	1536.4
62.5°	6634.1	6467.0	3213.4	745.3	662.2	777.3	959.1	1253.2	1517.2	1520.8	1462.4
65°	6323.6	6084.2	2594.1	673.2	627.5	764.5	956.3	1284.3	1397.5	1342.7	1326.3
67.5°	5874.2	5561.8	2033.3	601.0	589.2	745.3	974.6	1227.6	1319.9	1275.1	1253.2
69°	5593.7	5165.4	1688.0	558.1	564.5	730.7	983.7	1216.7	1292.5	1237.7	1212.1
70°	5380.9	4821.9	1429.5	529.8	543.5	717.9	965.5	1210.3	1279.7	1212.1	1182.0
72.5°	4568.9	3876.5	915.2	464.0	488.7	686.0	916.2	1170.1	1251.4	1205.7	1168.3
75°	3532.2	2847.1	583.7	403.7	433.0	638.5	865.0	1141.8	1264.2	1182.0	1099.7
77.5°	2377.6	1590.3	445.7	338.9	367.2	576.4	783.7	1062.3	1220.3	1148.2	1046.8
80°	1083.3	606.5	344.4	274.9	296.9	464.0	675.9	939.9	1153.6	1152.7	1079.7
82.5°	433.9	405.6	255.8	210.1	233.8	346.2	535.3	804.7	1017.5	1061.4	1133.5
85°	253.0	255.8	169.9	146.1	174.5	254.8	381.8	622.0	827.6	915.2	976.4
87.5°	103.2	115.1	79.5	76.7	95.9	136.1	175.4	301.4	445.7	547.1	584.6
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)