

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: P591101

Luminaire Tested: **CTN-CA10-210-722-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591101
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-CA10-210-722-U-T3-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17009 lumens
Efficiency: N/A
Efficacy: 79.9 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

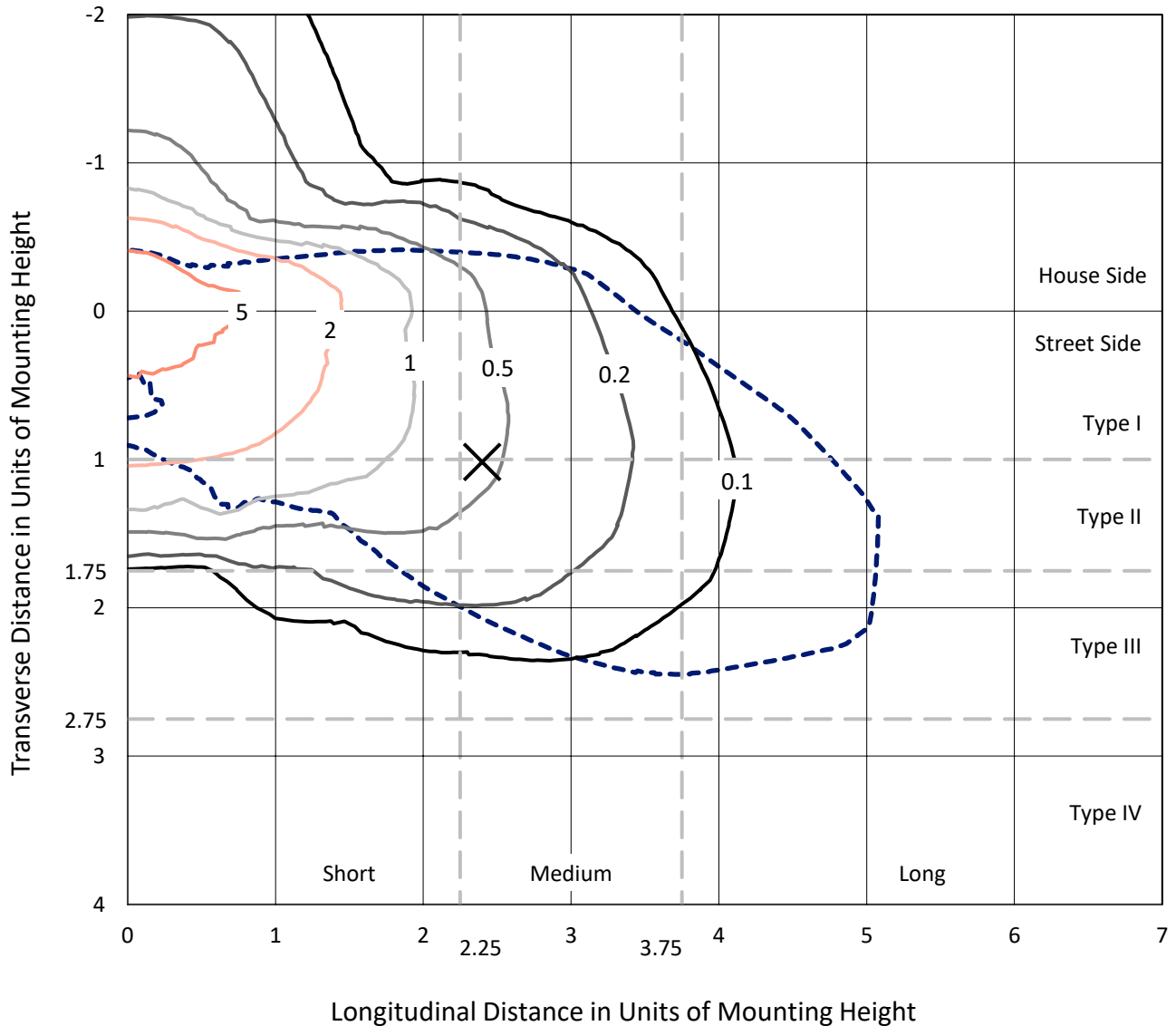
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

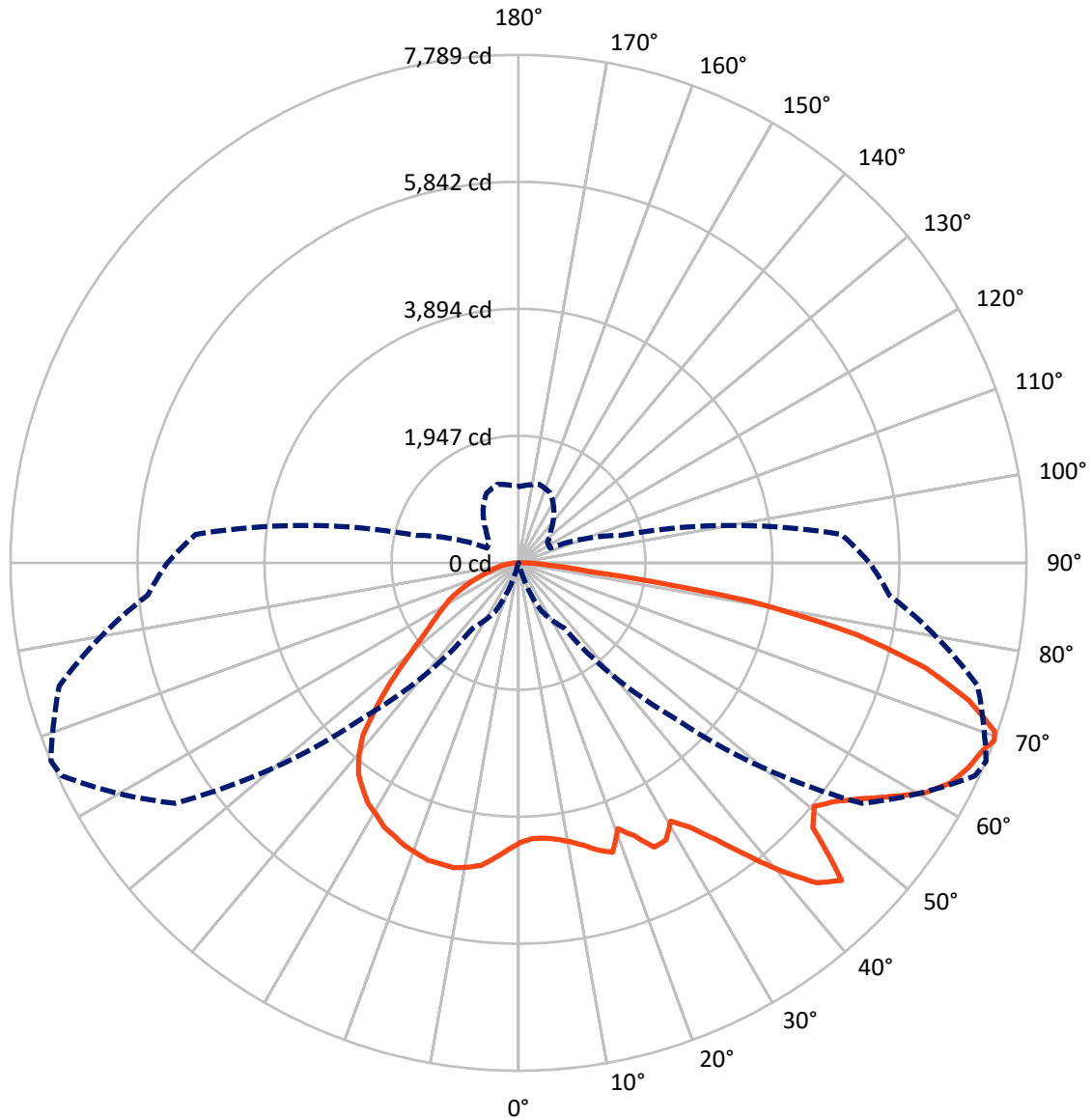
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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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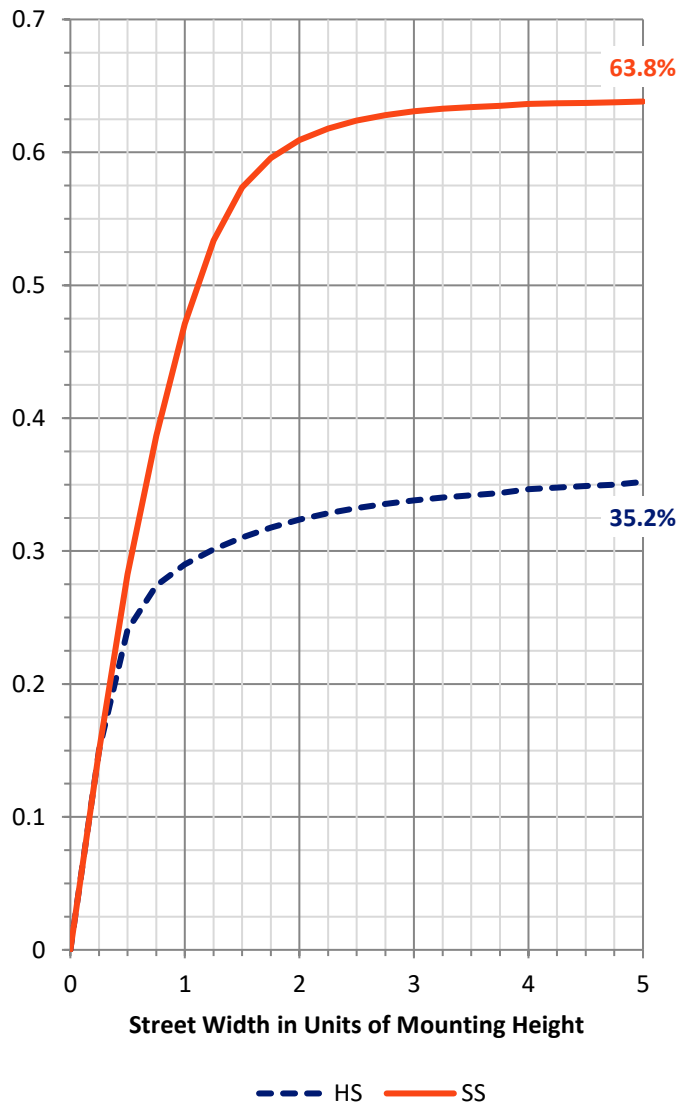
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6153.4	0.0	6153.4
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	10855.6	0.0	10855.6
	% Fixture	63.8	0.0	63.8
Total	Lumens	17009.0	0.0	17009.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	428.5	2.5
10°-20°	1322.9	7.8
20°-30°	1952.5	11.5
30°-40°	2453.2	14.4
40°-50°	2877.4	16.9
50°-60°	3011.0	17.7
60°-70°	2690.0	15.8
70°-80°	1893.3	11.1
80°-90°	380.3	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°	17009.0	100.0
0°-180°	17009.0	100.0

Coefficient of Utilization

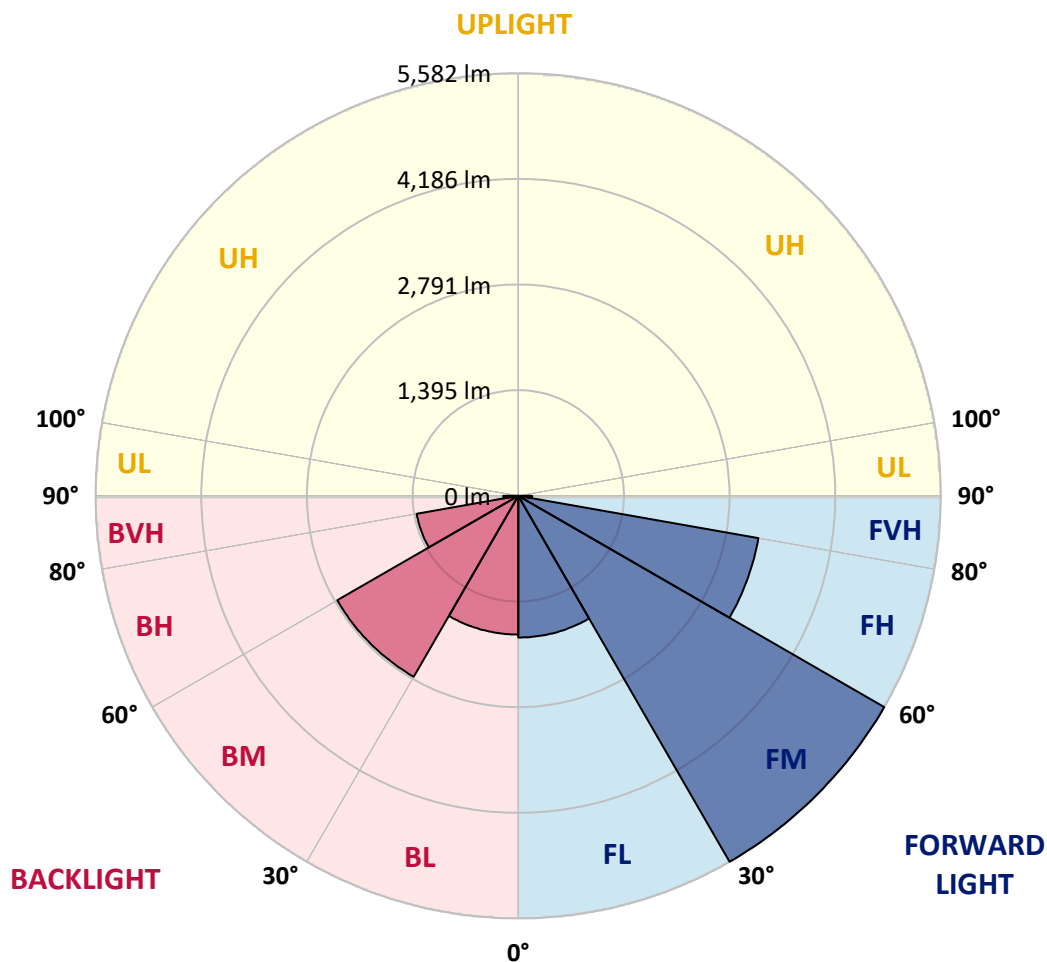


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1871.8	11.0			
FM	(30°-60°)	5581.6	32.8			
FH	(60°-80°)	3220.5	18.9			G2/5000
FVH	(80°-90°)	181.7	1.1			G2/225
BL	(0°-30°)	1832.1	10.8	B3/2500		
BM	(30°-60°)	2760.0	16.2	B3/5000		
BH	(60°-80°)	1362.7	8.0	B3/2500		G3/2500
BVH	(80°-90°)	198.6	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°	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7
2.5°	4182.7	4158.1	4169.5	4202.1	4134.4	4182.7	4165.2	4214.4	4232.8	4230.2	4300.5
5°	4216.1	4188.9	4193.3	4217.9	4144.1	4181.9	4165.2	4219.7	4240.8	4234.6	4330.4
7.5°	4334.8	4304.9	4295.3	4303.2	4223.2	4252.2	4216.1	4260.1	4283.0	4283.0	4392.0
10°	4522.1	4486.0	4464.9	4464.0	4370.0	4356.8	4312.8	4333.1	4349.8	4363.8	4485.1
12.5°	4718.1	4688.2	4661.0	4646.0	4522.1	4491.3	4427.1	4442.1	4447.3	4466.7	4587.1
15°	4896.6	4866.7	4858.8	4835.0	4711.9	4661.0	4571.3	4564.3	4571.3	4582.7	4702.3
17.5°	4828.0	4829.7	4873.7	4878.1	4718.1	4600.3	4537.9	4656.6	4668.0	4758.5	4835.9
20°	4697.9	4633.7	4403.4	4277.7	4296.1	4449.1	4335.7	4330.4	4354.2	4515.0	4907.1
22.5°	3912.9	3877.7	4004.3	4044.7	4190.6	4248.7	4518.5	4525.6	4549.3	4549.3	4663.6
25°	3378.4	3560.3	3806.5	4246.0	4200.3	4211.7	4321.6	4788.4	4833.3	4832.4	4815.7
27.5°	3492.6	3469.8	3838.1	4114.2	4440.3	4420.1	4300.5	4617.9	4816.6	5157.6	5078.5
30°	3629.8	3613.1	3640.3	4107.1	4647.8	4675.0	4564.3	4531.7	4599.4	5315.9	5379.2
32.5°	3757.3	3737.0	3767.8	3839.0	4356.8	4937.9	4852.6	4813.0	4837.7	4981.8	5766.0
35°	3869.8	3868.0	3903.2	3987.6	4428.9	5029.3	5148.0	5145.3	5211.3	5335.2	5822.2
37.5°	3949.8	3948.9	3977.0	4075.5	4174.8	4645.1	5424.9	5582.3	5687.7	5871.5	5687.7
40°	3948.9	3963.0	4036.8	4163.4	4295.3	4436.8	5547.1	6095.6	6222.2	6353.2	6047.3
42.5°	3866.3	3874.2	4004.3	4239.0	4402.5	4524.7	5061.8	6567.7	6709.3	6699.6	6330.4
45°	3789.8	3793.3	3938.3	4226.7	4492.2	4712.8	4962.5	6566.0	6948.4	7008.1	6596.7
47.5°	3690.4	3690.4	3833.7	4155.5	4573.1	4924.7	5228.0	5671.9	6071.0	7275.4	6817.4
50°	3563.0	3578.8	3403.0	4081.6	4611.7	5126.0	5453.0	5818.7	5874.1	6506.2	7022.2
52.5°	3359.9	3351.1	2659.3	3999.9	4627.6	5271.9	5686.9	6048.2	6078.1	6014.8	6821.8
55°	2117.7	2361.2	2351.6	3904.1	4617.9	5366.0	5866.2	6300.5	6384.9	6307.5	5738.7
57.5°	1279.1	1221.1	2009.6	3629.8	3708.9	5439.0	6109.7	6683.8	6757.6	6578.3	5835.4
60°	499.3	471.2	509.0	1651.8	2661.0	5060.1	6441.1	7090.8	7161.1	6835.8	5917.2
62.5°	62.4	53.6	45.7	1143.7	1691.4	3759.0	6616.9	7418.7	7431.9	7022.2	5933.0
65°	8.8	9.7	17.6	1019.8	1536.7	3694.8	6678.5	7552.3	7579.6	7156.7	5879.4
67.5°	3.5	4.4	14.1	887.0	1348.5	3524.3	6526.4	7644.6	7676.3	7286.8	5827.5
69°	3.5	4.4	14.1	797.3	1220.2	3336.2	6428.8	7726.4	7788.8	7289.5	5708.8
70°	3.5	4.4	13.2	733.2	1120.0	3177.0	6334.8	7694.7	7744.8	7219.1	5577.0
72.5°	3.5	4.4	13.2	564.4	851.8	2551.1	5739.6	7246.4	7220.9	6776.1	5063.6
75°	4.4	4.4	13.2	396.5	590.8	1814.5	4843.8	6435.0	6446.4	6032.3	4259.2
77.5°	4.4	4.4	13.2	252.3	372.7	1049.6	3507.6	5277.2	5309.7	5025.8	3189.4
80°	4.4	4.4	13.2	115.2	231.2	548.6	1724.8	3439.0	3614.0	3374.0	1750.3
82.5°	4.4	4.4	12.3	72.1	126.6	247.0	680.4	1078.6	1068.1	1051.4	556.5
85°	3.5	3.5	9.7	51.0	84.4	143.3	378.0	483.5	477.3	422.8	287.5
87.5°	1.8	1.8	5.3	21.1	35.2	65.1	189.0	219.8	209.2	179.3	123.1
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7	4284.7
2.5°	4333.1	4339.2	4368.2	4406.0	4417.5	4466.7	4474.6	4555.5	4567.8	4588.0	4596.8
5°	4377.0	4400.7	4464.0	4552.8	4628.4	4705.8	4708.4	4806.9	4832.4	4827.1	4852.6
7.5°	4439.4	4479.0	4575.7	4698.8	4726.0	4826.2	4819.2	4916.8	4918.5	4904.5	4943.2
10°	4535.3	4584.5	4672.4	4748.0	4799.9	4864.9	4856.1	4948.4	4935.2	4920.3	4963.4
12.5°	4633.7	4659.2	4712.8	4797.2	4808.6	4831.5	4820.1	4905.3	4891.3	4872.8	4915.0
15°	4719.9	4732.2	4732.2	4777.9	4748.9	4767.3	4728.7	4797.2	4764.7	4755.9	4796.3
17.5°	4831.5	4811.3	4770.0	4766.5	4690.9	4662.7	4604.7	4623.2	4561.6	4567.8	4588.9
20°	4957.2	4912.4	4803.4	4694.4	4554.6	4487.8	4372.6	4363.8	4306.7	4296.1	4316.4
22.5°	5003.8	5043.4	4843.8	4632.8	4392.0	4242.5	4106.3	4041.2	3957.7	3904.1	3911.1
25°	5145.3	5216.5	4905.3	4522.9	4200.3	3954.2	3749.3	3600.8	3475.1	3410.9	3424.1
27.5°	5337.0	5453.0	4940.5	4446.5	3948.9	3627.1	3284.3	3089.1	2959.0	2892.2	2890.5
30°	5611.3	5757.2	5008.2	4286.5	3669.3	3197.3	2774.4	2544.1	2437.7	2393.8	2397.3
32.5°	5954.1	6129.9	5148.9	4152.8	3365.2	2737.5	2255.8	2054.4	2006.1	1998.2	1993.8
35°	6408.6	6582.7	5260.5	3947.1	2970.5	2216.2	1810.9	1668.5	1676.4	1674.7	1680.0
37.5°	6334.8	6995.0	5388.0	3745.8	2498.4	1737.1	1463.7	1383.7	1386.3	1417.1	1423.3
40°	6057.0	6634.5	5577.9	3412.6	1946.3	1334.5	1154.3	1135.8	1211.4	1279.1	1291.4
42.5°	6275.0	6417.4	5603.4	3053.1	1424.1	1023.3	965.2	1041.7	1163.9	1242.2	1256.2
45°	6493.0	6608.2	5455.7	2515.1	1021.5	875.6	918.7	1028.5	1163.9	1247.4	1257.1
47.5°	6714.5	6713.6	5283.4	2016.6	835.1	836.9	907.2	1029.4	1171.0	1255.3	1260.6
50°	6855.2	6798.9	4833.3	1579.7	777.1	814.0	901.1	1034.7	1169.2	1230.7	1233.4
52.5°	6925.5	6842.0	4435.9	1262.4	749.9	795.6	902.0	1047.0	1159.5	1193.8	1192.1
55°	6806.8	6818.3	4107.1	1049.6	724.4	780.6	906.3	1055.8	1163.9	1199.1	1199.1
57.5°	6659.1	6661.8	3845.2	888.8	698.9	768.3	911.6	1069.0	1244.8	1310.7	1301.1
60°	6555.4	6436.7	3474.2	787.7	669.9	756.9	918.7	1126.1	1434.7	1501.5	1478.6
62.5°	6384.9	6224.0	3092.7	717.3	637.3	748.1	923.0	1206.1	1460.2	1463.7	1407.4
65°	6086.0	5855.7	2496.6	647.9	603.9	735.8	920.4	1236.0	1345.0	1292.3	1276.4
67.5°	5653.5	5352.8	1956.9	578.4	567.0	717.3	938.0	1181.5	1270.3	1227.2	1206.1
69°	5383.6	4971.3	1624.6	537.1	543.3	703.3	946.8	1171.0	1243.9	1191.2	1166.6
70°	5178.7	4640.7	1375.8	509.9	523.1	691.0	929.2	1164.8	1231.6	1166.6	1137.5
72.5°	4397.2	3730.9	880.9	446.6	470.3	660.2	881.7	1126.1	1204.4	1160.4	1124.4
75°	3399.5	2740.1	561.7	388.6	416.7	614.5	832.5	1098.9	1216.7	1137.5	1058.4
77.5°	2288.3	1530.5	429.0	326.1	353.4	554.7	754.3	1022.4	1174.5	1105.0	1007.4
80°	1042.6	583.7	331.4	264.6	285.7	446.6	650.5	904.6	1110.3	1109.4	1039.1
82.5°	417.6	390.3	246.1	202.2	225.0	333.2	515.1	774.5	979.3	1021.5	1091.0
85°	243.5	246.1	163.5	140.7	167.9	245.3	367.5	598.7	796.5	880.9	939.8
87.5°	99.3	110.8	76.5	73.8	92.3	131.0	168.8	290.1	429.0	526.6	562.6
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)