

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: P591149

Luminaire Tested: **CTN-CA6-230-722-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591149
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-CA6-230-722-U-T3-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16792 lumens
Efficiency: N/A
Efficacy: 73.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

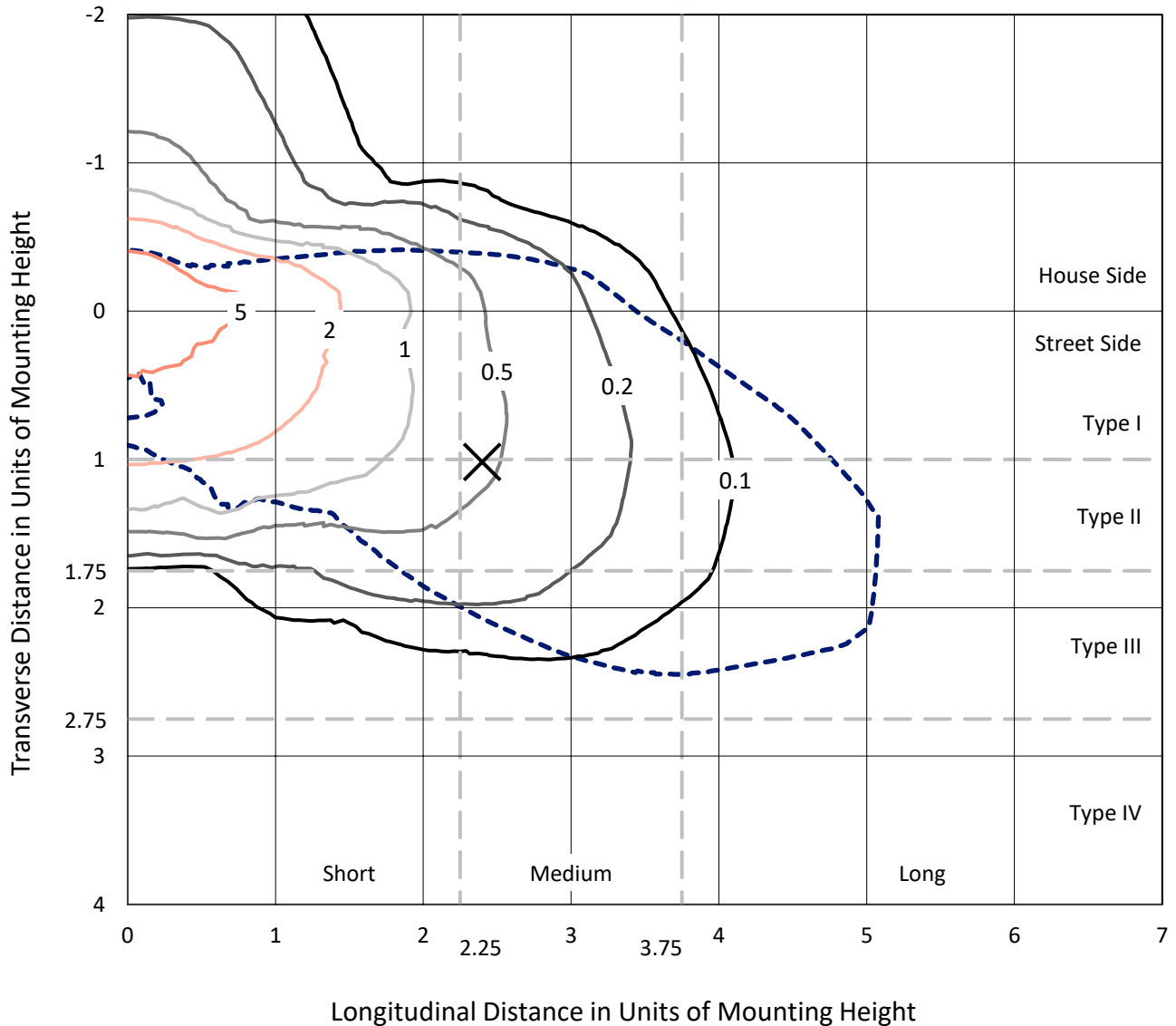
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

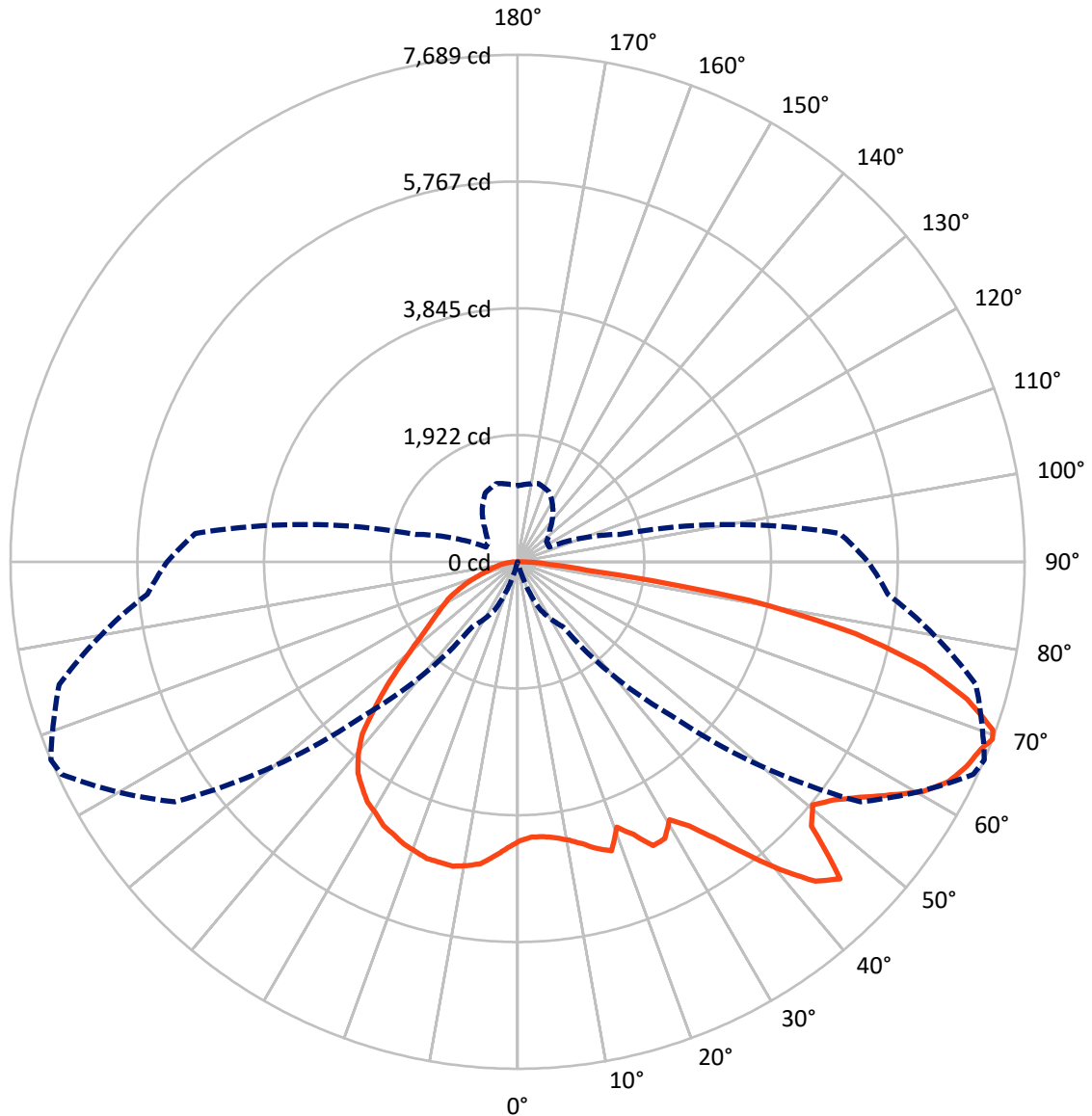
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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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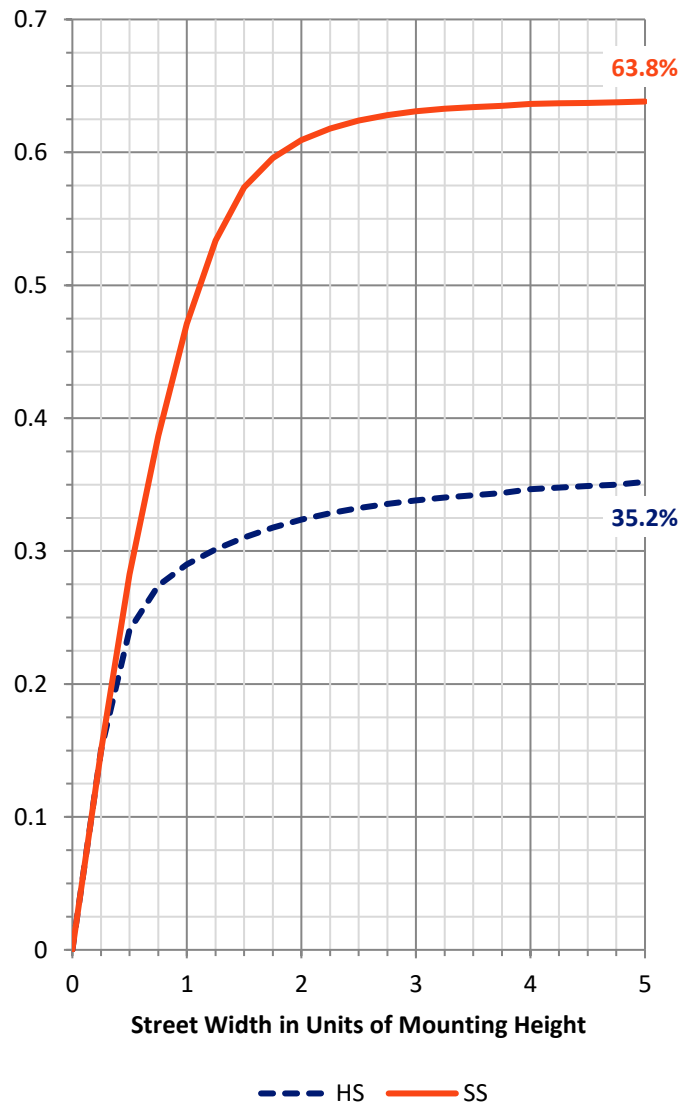
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6074.9	0.0	6074.9
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	10717.1	0.0	10717.1
	% Fixture	63.8	0.0	63.8
Total	Lumens	16792.0	0.0	16792.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	423.0	2.5
10°-20°	1306.0	7.8
20°-30°	1927.6	11.5
30°-40°	2421.9	14.4
40°-50°	2840.7	16.9
50°-60°	2972.6	17.7
60°-70°	2655.7	15.8
70°-80°	1869.1	11.1
80°-90°	375.4	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°	16792.0	100.0
0°-180°	16792.0	100.0

Coefficient of Utilization

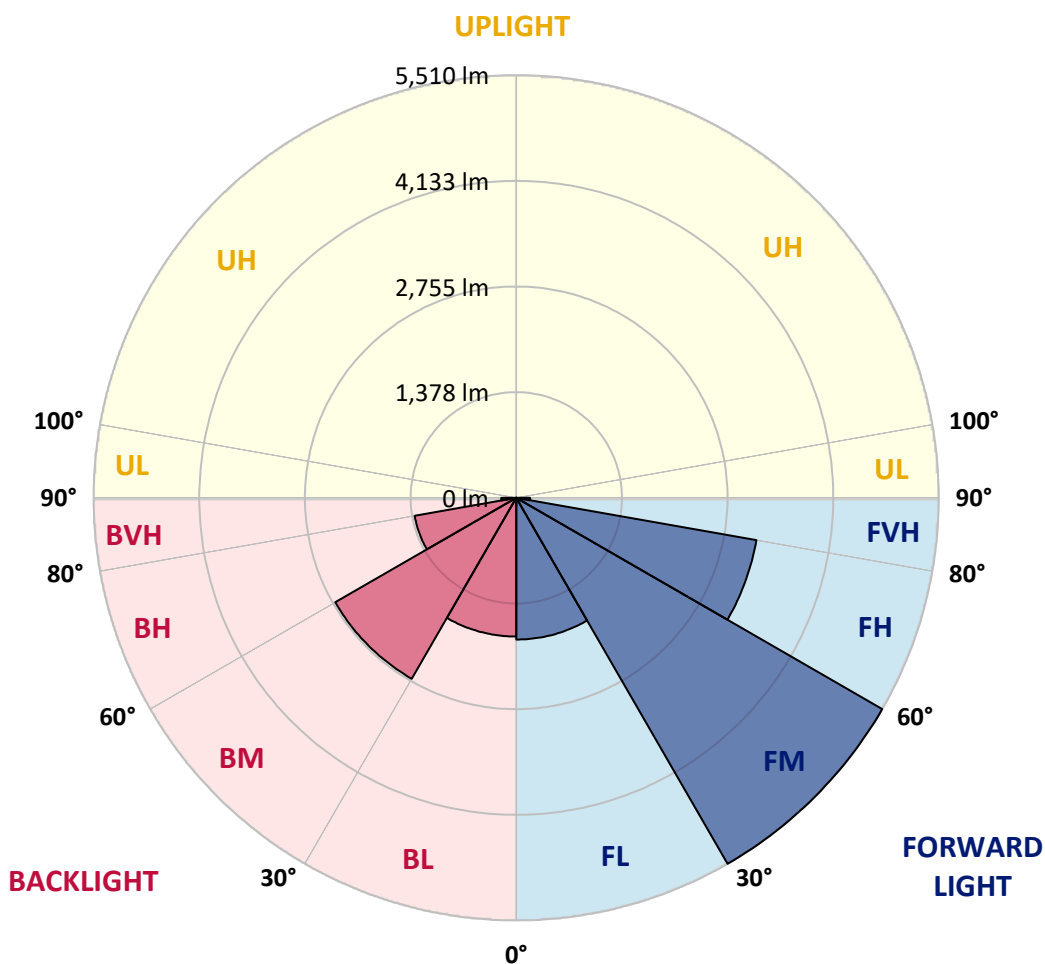


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1847.9	11.0			
FM (30°-60°)	5510.4	32.8			
FH (60°-80°)	3179.5	18.9			G2/5000
FVH (80°-90°)	179.4	1.1			G2/225
BL (0°-30°)	1808.7	10.8	B3/2500		
BM (30°-60°)	2724.8	16.2	B3/5000		
BH (60°-80°)	1345.3	8.0	B3/2500		G3/2500
BVH (80°-90°)	196.0	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°	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0
2.5°	4129.4	4105.1	4116.4	4148.5	4081.6	4129.4	4112.0	4160.6	4178.8	4176.2	4245.7
5°	4162.3	4135.4	4139.8	4164.1	4091.2	4128.5	4112.0	4165.8	4186.7	4180.6	4275.2
7.5°	4279.5	4250.0	4240.5	4248.3	4169.3	4197.9	4162.3	4205.7	4228.3	4228.3	4335.9
10°	4464.4	4428.8	4408.0	4407.1	4314.2	4301.2	4257.8	4277.8	4294.3	4308.2	4427.9
12.5°	4657.9	4628.4	4601.5	4586.7	4464.4	4434.0	4370.6	4385.4	4390.6	4409.7	4528.6
15°	4834.1	4804.6	4796.8	4773.3	4651.8	4601.5	4513.0	4506.0	4513.0	4524.3	4642.3
17.5°	4766.4	4768.1	4811.5	4815.9	4657.9	4541.6	4480.0	4597.2	4608.4	4697.8	4774.2
20°	4637.9	4574.6	4347.2	4223.1	4241.3	4392.3	4280.4	4275.2	4298.6	4457.4	4844.5
22.5°	3862.9	3828.2	3953.2	3993.1	4137.2	4194.5	4460.9	4467.8	4491.3	4491.3	4604.1
25°	3335.3	3514.9	3757.9	4191.9	4146.7	4158.0	4266.5	4727.3	4771.6	4770.7	4754.2
27.5°	3448.1	3425.5	3789.2	4061.7	4383.7	4363.7	4245.7	4559.0	4755.1	5091.8	5013.7
30°	3583.5	3567.0	3593.9	4054.7	4588.5	4615.4	4506.0	4473.9	4540.7	5248.1	5310.6
32.5°	3709.3	3689.4	3719.7	3790.0	4301.2	4874.9	4790.7	4751.6	4775.9	4918.3	5692.4
35°	3820.4	3818.7	3853.4	3936.7	4372.4	4965.1	5082.3	5079.7	5144.8	5267.2	5748.0
37.5°	3899.4	3898.5	3926.3	4023.5	4121.6	4585.9	5355.7	5511.0	5615.2	5796.6	5615.2
40°	3898.5	3912.4	3985.3	4110.3	4240.5	4380.2	5476.3	6017.9	6142.9	6272.2	5970.1
42.5°	3816.9	3824.7	3953.2	4184.9	4346.3	4467.0	4997.2	6483.9	6623.7	6614.1	6249.6
45°	3741.4	3744.9	3888.1	4172.8	4434.9	4652.7	4899.2	6482.2	6859.7	6918.7	6512.6
47.5°	3643.4	3643.4	3784.8	4102.5	4514.7	4861.9	5161.3	5599.6	5993.6	7182.6	6730.4
50°	3517.5	3533.1	3359.6	4029.6	4552.9	5060.6	5383.5	5744.5	5799.2	6423.2	6932.6
52.5°	3317.0	3308.4	2625.3	3948.9	4568.5	5204.7	5614.3	5971.0	6000.5	5938.0	6734.7
55°	2090.7	2331.1	2321.6	3854.3	4559.0	5297.5	5791.4	6220.1	6303.4	6227.0	5665.5
57.5°	1262.8	1205.5	1984.0	3583.5	3661.6	5369.6	6031.8	6598.5	6671.4	6494.3	5761.0
60°	493.0	465.2	502.5	1630.7	2627.1	4995.5	6359.0	7000.3	7069.7	6748.6	5841.7
62.5°	61.6	52.9	45.1	1129.1	1669.8	3711.1	6532.5	7324.0	7337.1	6932.6	5857.3
65°	8.7	9.5	17.4	1006.7	1517.1	3647.7	6593.3	7456.0	7482.9	7065.4	5804.4
67.5°	3.5	4.3	13.9	875.7	1331.3	3479.3	6443.1	7547.1	7578.3	7193.9	5753.2
69°	3.5	4.3	13.9	787.2	1204.6	3293.6	6346.8	7627.8	7689.4	7196.5	5636.0
70°	3.5	4.3	13.0	723.8	1105.7	3136.5	6253.9	7596.5	7646.0	7127.0	5505.8
72.5°	3.5	4.3	13.0	557.2	841.0	2518.6	5666.4	7153.9	7128.8	6689.6	4999.0
75°	4.3	4.3	13.0	391.4	583.2	1791.3	4782.0	6352.9	6364.2	5955.4	4204.9
77.5°	4.3	4.3	13.0	249.1	368.0	1036.2	3462.8	5209.9	5242.0	4961.7	3148.7
80°	4.3	4.3	13.0	113.7	228.3	541.6	1702.8	3395.1	3567.9	3330.9	1727.9
82.5°	4.3	4.3	12.2	71.2	125.0	243.9	671.7	1064.9	1054.5	1038.0	549.4
85°	3.5	3.5	9.5	50.3	83.3	141.5	373.2	477.3	471.3	417.5	283.8
87.5°	1.7	1.7	5.2	20.8	34.7	64.2	186.6	217.0	206.6	177.0	121.5
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°	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0	4230.0
2.5°	4277.8	4283.9	4312.5	4349.8	4361.1	4409.7	4417.5	4497.4	4509.5	4529.5	4538.1
5°	4321.2	4344.6	4407.1	4494.7	4569.4	4645.8	4648.4	4745.6	4770.7	4765.5	4790.7
7.5°	4382.8	4421.8	4517.3	4638.8	4665.7	4764.7	4757.7	4854.0	4855.8	4841.9	4880.1
10°	4477.4	4526.0	4612.8	4687.4	4738.6	4802.8	4794.2	4885.3	4872.3	4857.5	4900.0
12.5°	4574.6	4599.8	4652.7	4736.0	4747.3	4769.9	4758.6	4842.8	4828.9	4810.7	4852.3
15°	4659.6	4671.8	4671.8	4716.9	4688.3	4706.5	4668.3	4736.0	4703.9	4695.2	4735.2
17.5°	4769.9	4749.9	4709.1	4705.6	4631.0	4603.2	4546.0	4564.2	4503.4	4509.5	4530.3
20°	4894.0	4849.7	4742.1	4634.5	4496.5	4430.5	4316.8	4308.2	4251.7	4241.3	4261.3
22.5°	4940.0	4979.0	4782.0	4573.7	4335.9	4188.4	4053.9	3989.6	3907.2	3854.3	3861.2
25°	5079.7	5150.0	4842.8	4465.2	4146.7	3903.7	3701.5	3554.8	3430.7	3367.4	3380.4
27.5°	5268.9	5383.5	4877.5	4389.7	3898.5	3580.9	3242.4	3049.7	2921.3	2855.3	2853.6
30°	5539.7	5683.7	4944.3	4231.8	3622.5	3156.5	2739.0	2511.6	2406.6	2363.2	2366.7
32.5°	5878.1	6051.7	5083.2	4099.9	3322.2	2702.6	2227.0	2028.2	1980.5	1972.7	1968.4
35°	6326.8	6498.7	5193.4	3896.8	2932.6	2187.9	1787.8	1647.2	1655.0	1653.3	1658.5
37.5°	6253.9	6905.7	5319.2	3698.0	2466.5	1714.9	1445.0	1366.0	1368.6	1399.0	1405.1
40°	5979.7	6549.9	5506.7	3369.1	1921.5	1317.4	1139.5	1121.3	1195.9	1262.8	1274.9
42.5°	6194.9	6335.5	5531.9	3014.1	1406.0	1010.2	952.9	1028.4	1149.1	1226.3	1240.2
45°	6410.2	6523.8	5386.1	2483.0	1008.5	864.4	906.9	1015.4	1149.1	1231.5	1241.1
47.5°	6628.9	6628.0	5216.0	1990.9	824.5	826.2	895.7	1016.3	1156.0	1239.3	1244.5
50°	6767.7	6712.2	4771.6	1559.6	767.2	803.7	889.6	1021.5	1154.3	1215.0	1217.6
52.5°	6837.2	6754.7	4379.3	1246.3	740.3	785.4	890.4	1033.6	1144.7	1178.6	1176.8
55°	6720.0	6731.3	4054.7	1036.2	715.1	770.7	894.8	1042.3	1149.1	1183.8	1183.8
57.5°	6574.2	6576.8	3796.1	877.4	690.0	758.5	900.0	1055.3	1228.9	1294.0	1284.5
60°	6471.8	6354.6	3429.9	777.6	661.3	747.2	906.9	1111.8	1416.4	1482.3	1459.8
62.5°	6303.4	6144.6	3053.2	708.2	629.2	738.6	911.3	1190.7	1441.5	1445.0	1389.5
65°	6008.3	5780.9	2464.8	639.6	596.2	726.4	908.7	1220.2	1327.9	1275.8	1260.2
67.5°	5581.3	5284.5	1931.9	571.1	559.8	708.2	926.0	1166.4	1254.1	1211.6	1190.7
69°	5314.9	4907.9	1603.8	530.3	536.3	694.3	934.7	1156.0	1228.0	1176.0	1151.7
70°	5112.7	4581.5	1358.2	503.4	516.4	682.2	917.3	1149.9	1215.9	1151.7	1123.0
72.5°	4341.1	3683.3	869.6	440.9	464.3	651.8	870.5	1111.8	1189.0	1145.6	1110.0
75°	3356.1	2705.2	554.6	383.6	411.4	606.6	821.9	1084.8	1201.1	1123.0	1044.9
77.5°	2259.1	1511.0	423.5	322.0	348.9	547.6	744.6	1009.3	1159.5	1090.9	994.6
80°	1029.3	576.3	327.2	261.2	282.1	440.9	642.2	893.0	1096.1	1095.3	1025.8
82.5°	412.2	385.3	243.0	199.6	222.2	328.9	508.6	764.6	966.8	1008.5	1077.0
85°	240.4	243.0	161.4	138.9	165.8	242.1	362.8	591.0	786.3	869.6	927.8
87.5°	98.1	109.4	75.5	72.9	91.1	129.3	166.6	286.4	423.5	519.9	555.4
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)