

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: P510510

Luminaire Tested: **CTN-CA10-310-760-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510510
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-760-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42736 lumens
Efficiency: N/A
Efficacy: 136.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

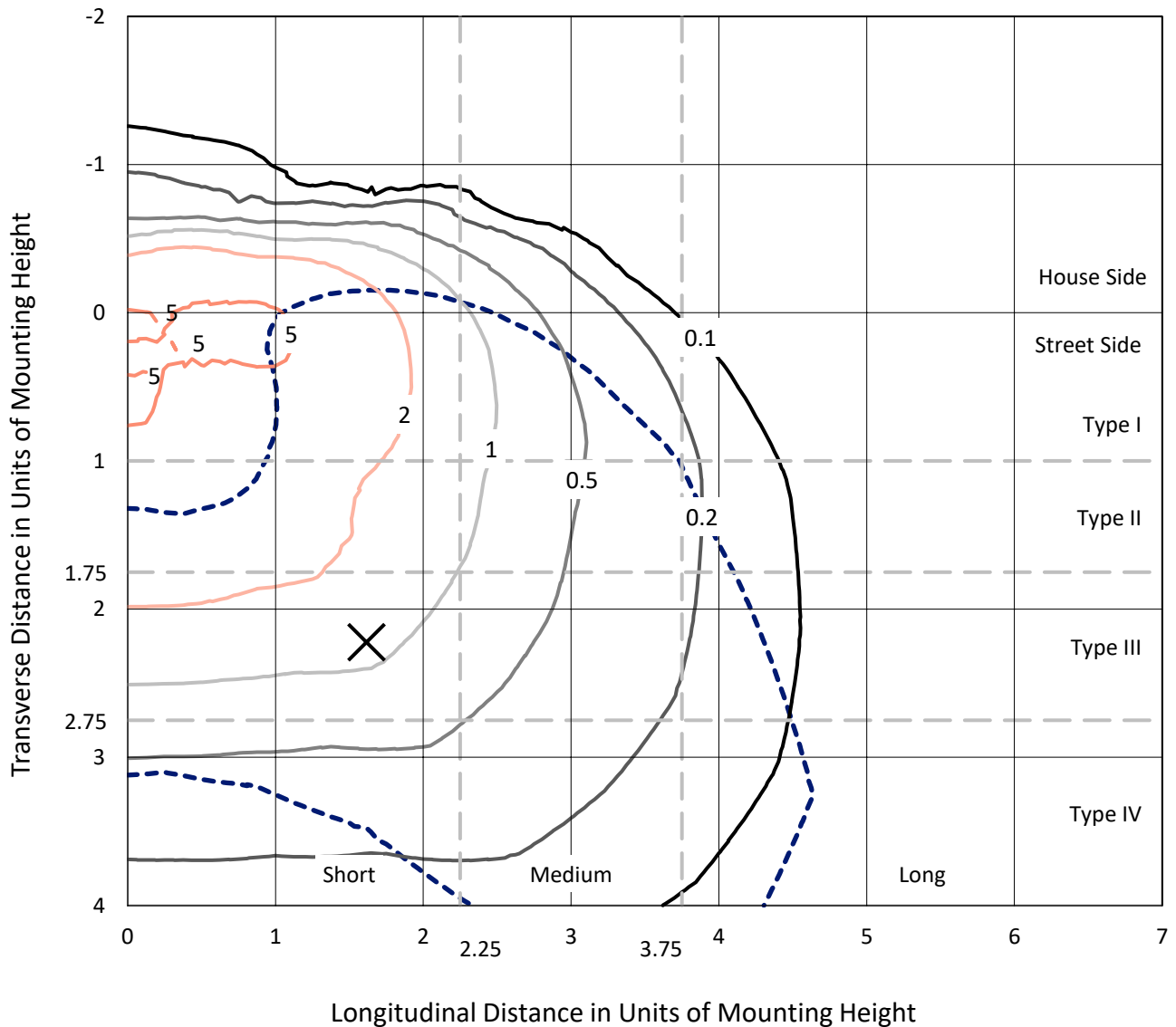
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

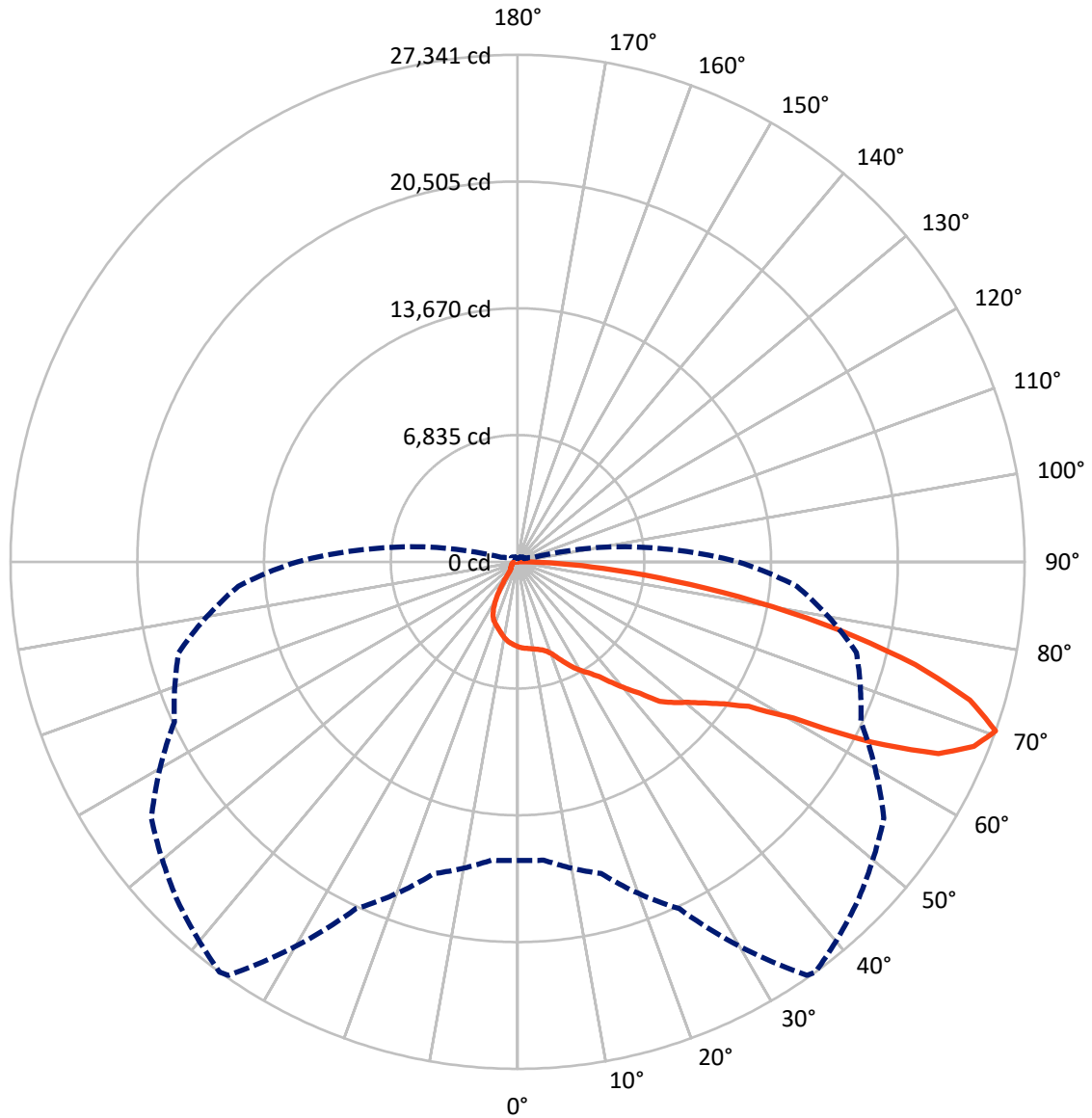
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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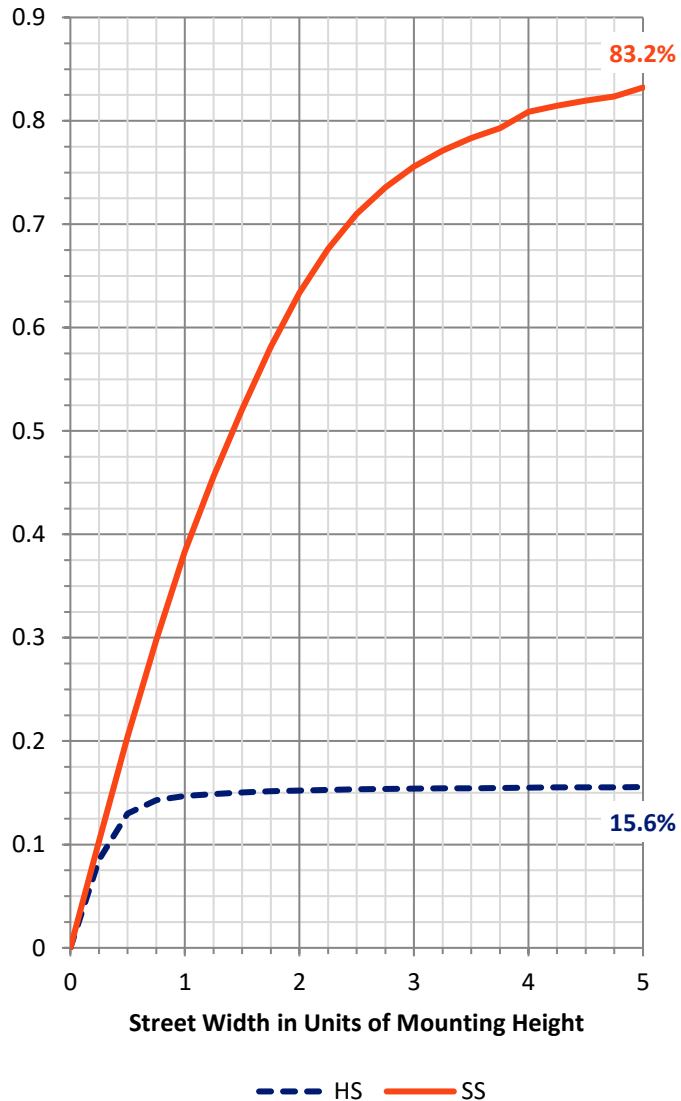
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6744.1	0.0	6744.1
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	35991.9	0.0	35991.9
	% Fixture	84.2	0.0	84.2
Total	Lumens	42736.0	0.0	42736.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.3	1.0
10°-20°	1291.4	3.0
20°-30°	2322.4	5.4
30°-40°	3675.1	8.6
40°-50°	5743.6	13.4
50°-60°	8247.6	19.3
60°-70°	11187.2	26.2
70°-80°	8279.7	19.4
80°-90°	1554.7	3.6
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°	42736.0	100.0
0°-180°	42736.0	100.0

Coefficient of Utilization

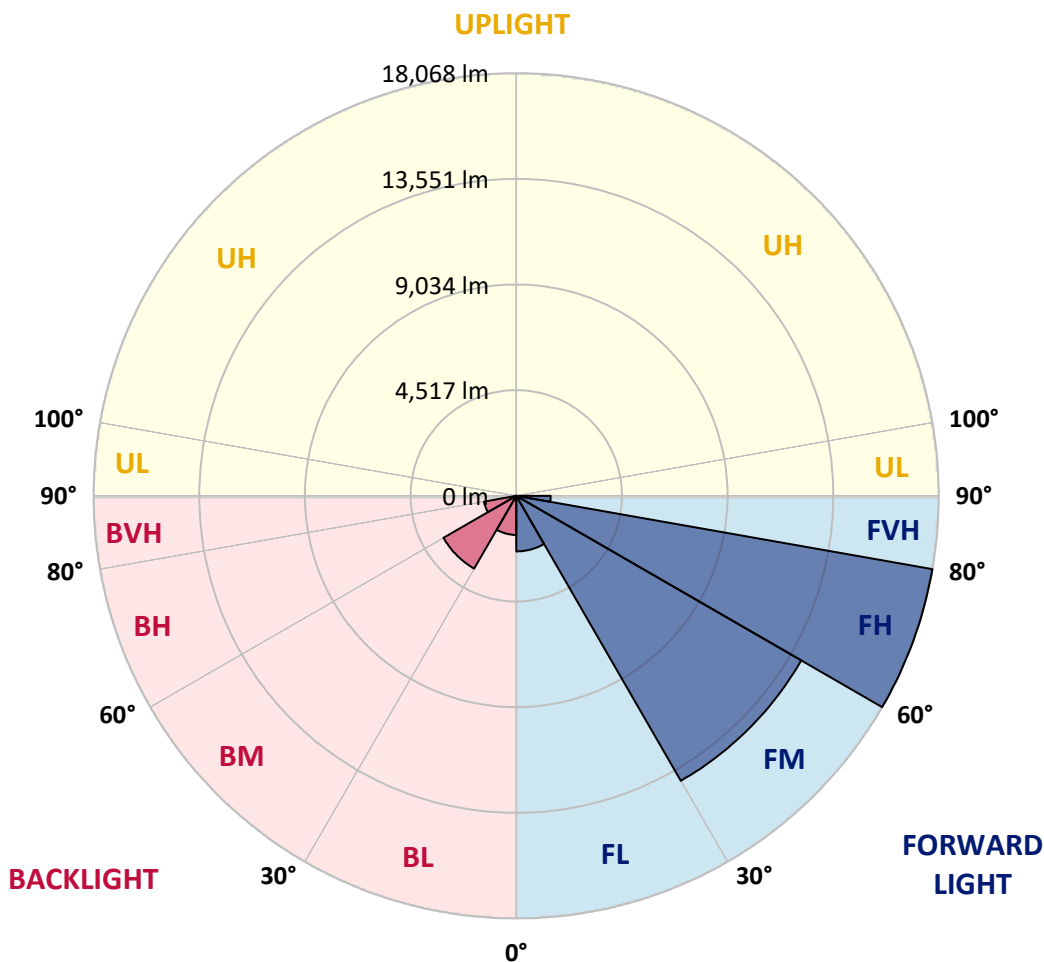


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2377.0	5.6			
FM (30°-60°)	14072.6	32.9			
FH (60°-80°)	18068.4	42.3			G5
FVH (80°-90°)	1474.0	3.4			G5
BL (0°-30°)	1671.1	3.9	B3/2500		
BM (30°-60°)	3593.8	8.4	B3/5000		
BH (60°-80°)	1398.5	3.3	B3/2500		G3/2500
BVH (80°-90°)	80.6	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9
2.5°	4671.7	4661.8	4653.9	4656.9	4651.0	4654.9	4646.0	4635.2	4609.5	4598.7	4593.7
5°	4713.1	4710.2	4702.3	4696.4	4685.5	4681.6	4671.7	4680.6	4666.8	4631.2	4610.5
7.5°	4737.8	4736.8	4727.9	4715.1	4721.0	4726.0	4735.8	4722.0	4704.3	4687.5	4645.1
10°	4748.6	4748.6	4737.8	4744.7	4775.3	4778.2	4783.2	4792.1	4775.3	4750.6	4708.2
12.5°	4776.3	4774.3	4778.2	4800.9	4832.5	4839.4	4864.1	4864.1	4866.1	4851.3	4801.9
15°	4845.3	4845.3	4854.2	4874.9	4929.2	4933.1	4969.7	5002.2	5006.2	4984.5	4947.0
17.5°	5005.2	5001.2	4996.3	5009.1	5067.3	5069.3	5132.4	5173.9	5184.7	5208.4	5202.5
20°	5309.1	5305.1	5304.1	5305.1	5301.2	5295.2	5357.4	5401.8	5457.1	5498.5	5519.2
22.5°	5744.2	5735.3	5735.3	5686.9	5649.4	5655.4	5665.2	5689.9	5762.9	5835.9	5913.9
25°	6212.8	6206.9	6211.8	6088.5	6038.2	6057.9	6045.1	6083.6	6179.3	6242.4	6325.3
27.5°	6595.6	6604.5	6576.9	6481.2	6448.6	6463.4	6433.8	6544.3	6649.9	6760.4	6885.7
30°	7072.2	7024.8	6956.7	6840.3	6828.5	6830.4	6828.5	7006.1	7225.1	7383.0	7556.6
32.5°	7694.7	7702.6	7549.7	7275.4	7174.8	7161.0	7200.4	7460.9	7756.9	8107.1	8336.0
35°	8324.2	8337.0	8225.5	7939.4	7652.3	7608.9	7550.7	7889.1	8316.3	9018.8	9364.1
37.5°	8992.1	9037.5	8905.3	8649.8	8309.4	8268.9	7993.7	8326.2	8957.6	10098.2	10551.0
40°	9886.0	9837.7	9677.9	9353.3	9036.5	8971.4	8651.8	8826.4	9782.4	11449.8	11778.4
42.5°	10545.1	10531.3	10396.1	10075.5	9756.8	9704.5	9447.0	9636.4	10821.4	12820.3	12967.3
45°	11068.0	11152.9	11149.9	10948.6	10769.1	10739.5	10587.5	10866.7	12077.3	14113.7	14041.7
47.5°	11532.7	11585.0	11501.1	11413.3	11329.5	11339.3	11451.8	12026.0	13360.9	15243.4	14924.8
50°	12293.4	12226.3	11850.4	11783.3	11901.7	11906.6	12249.0	13133.0	14774.8	16220.2	15672.6
52.5°	13307.7	13234.7	12462.1	12347.7	12627.9	12648.6	13217.9	14236.1	16233.0	17153.5	16416.5
55°	14817.2	14647.5	13819.7	13306.7	13434.9	13518.8	14208.5	15296.7	17374.6	17976.4	16979.9
57.5°	16671.1	16794.4	16370.2	15210.9	14677.1	14708.7	15342.1	16312.0	18381.9	18696.6	17309.4
60°	18630.5	18600.9	18778.5	18290.1	17268.0	17098.3	16775.7	17347.9	19162.3	19303.4	17648.8
62.5°	19704.0	19876.6	20468.6	20566.3	21488.8	21399.0	19199.8	18632.5	20064.1	19684.3	17741.6
65°	19698.1	19773.1	20875.1	22086.7	24968.6	24943.0	23920.8	20490.3	20736.0	19887.5	17556.1
67.5°	18425.3	18541.7	19830.3	22197.2	26576.9	26546.3	25839.8	23101.9	20947.1	19642.8	16690.8
70°	16104.8	16144.2	17401.2	20641.3	27223.1	27340.5	25905.9	24104.4	20422.3	18915.7	15113.2
72.5°	13286.0	13204.1	14433.4	17627.1	25577.4	25507.3	24810.8	22907.6	19538.2	17503.8	12326.0
75°	9782.4	10010.3	11113.4	14153.2	21899.2	22155.8	22464.6	21076.4	17352.8	14425.5	8523.5
77.5°	6459.5	6749.5	7864.4	10612.2	17337.1	17735.7	18535.8	17926.1	14116.7	10347.8	4059.0
80°	3337.8	3556.8	4560.2	7041.6	12428.6	13003.8	14470.9	13577.0	10008.4	4678.6	908.7
82.5°	1262.9	1234.3	2043.3	4030.4	7969.0	8491.9	9558.5	8141.7	3561.7	821.9	422.3
85°	554.5	587.0	846.5	1838.1	4556.3	4624.3	5414.6	3174.0	521.9	392.7	287.1
87.5°	239.8	275.3	355.2	528.8	1537.2	1774.9	2196.2	1008.3	157.9	136.2	144.0
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°	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9	4578.9
2.5°	4584.9	4578.9	4569.1	4544.4	4504.0	4499.0	4495.1	4491.1	4483.2	4487.2	4509.9
5°	4594.7	4583.9	4548.4	4512.8	4477.3	4445.8	4407.3	4392.5	4372.7	4359.9	4383.6
7.5°	4628.3	4605.6	4553.3	4505.0	4408.3	4361.9	4312.6	4254.3	4212.9	4186.3	4209.9
10°	4684.5	4655.9	4590.8	4491.1	4377.7	4250.4	4163.6	4066.9	3988.0	3966.3	3988.0
12.5°	4776.3	4733.9	4657.9	4522.7	4321.4	4154.7	3989.9	3862.7	3735.4	3698.9	3709.7
15°	4925.3	4891.7	4775.3	4588.8	4322.4	4067.9	3823.2	3618.0	3451.2	3393.0	3389.1
17.5°	5164.0	5128.5	4994.3	4720.0	4357.9	3999.8	3659.4	3346.6	3094.1	2965.8	2945.1
20°	5506.4	5457.1	5253.8	4913.4	4434.9	3970.2	3507.5	3087.2	2694.5	2453.7	2417.2
22.5°	5887.2	5834.9	5535.0	5062.4	4490.2	3912.0	3362.4	2800.1	2283.1	1989.0	1947.6
25°	6360.8	6246.4	5804.3	5203.5	4477.3	3789.6	3126.6	2410.3	1849.9	1595.4	1567.8
27.5°	6828.5	6683.4	6078.6	5277.5	4421.1	3595.3	2781.3	1954.5	1448.4	1267.8	1245.1
30°	7408.6	7128.4	6322.3	5312.0	4279.0	3304.2	2318.6	1485.9	1084.3	960.0	938.3
32.5°	8098.3	7674.0	6551.2	5273.5	4042.2	2860.2	1802.6	1088.3	806.1	728.1	727.1
35°	9007.9	8342.9	6802.8	5147.2	3679.1	2381.7	1263.9	743.9	628.5	601.8	606.8
37.5°	10071.5	9248.7	7058.4	4940.1	3268.7	1822.3	842.6	573.2	552.5	553.5	554.5
40°	11193.3	10249.1	7402.7	4649.0	2770.5	1319.1	606.8	515.0	514.0	523.9	526.9
42.5°	12264.8	11220.9	7826.9	4261.3	2248.5	872.2	525.9	491.3	478.5	482.5	485.4
45°	13260.3	12054.6	8188.0	3883.4	1689.1	622.6	516.0	463.7	444.0	442.0	444.0
47.5°	14062.4	12722.6	8408.1	3439.4	1203.7	517.0	495.3	438.1	410.4	404.5	401.6
50°	14673.2	13218.9	8488.0	2936.2	814.0	493.3	467.7	408.5	374.9	375.9	375.9
52.5°	15269.1	13669.8	8395.2	2429.1	598.9	472.6	448.9	384.8	349.3	368.0	372.9
55°	15698.3	13859.2	8124.9	1880.5	499.2	446.9	428.2	357.2	332.5	363.1	372.9
57.5°	15948.9	14008.2	7628.6	1357.6	457.8	422.3	401.6	331.5	308.8	316.7	321.6
60°	16104.8	13800.0	6972.5	928.4	436.1	402.5	374.9	314.7	284.1	265.4	262.4
62.5°	16018.9	13279.1	6108.2	638.3	413.4	380.8	352.2	298.9	258.5	233.8	231.9
65°	15319.4	12315.1	4689.5	517.0	399.6	371.0	338.4	284.1	240.7	217.1	214.1
67.5°	14022.0	10582.6	2738.9	459.8	393.7	361.1	327.6	270.3	230.9	205.2	201.3
70°	11889.9	7960.1	917.6	410.4	392.7	360.1	318.7	260.5	220.0	193.4	189.4
72.5°	8577.8	4802.9	446.9	361.1	367.0	345.3	311.8	252.6	213.1	179.6	172.7
75°	4874.9	1563.8	403.5	311.8	341.4	329.5	307.8	253.6	216.1	162.8	154.9
77.5°	1387.2	456.8	389.7	265.4	322.6	340.4	288.1	228.9	221.0	151.0	141.1
80°	468.6	406.5	375.9	206.2	260.5	281.2	249.6	201.3	223.0	137.1	127.3
82.5°	375.9	408.5	315.7	164.8	198.3	213.1	198.3	180.6	180.6	122.3	114.4
85°	300.9	378.9	200.3	131.2	148.0	163.8	140.1	135.2	126.3	102.6	99.6
87.5°	174.6	118.4	82.9	67.1	62.2	63.1	54.3	65.1	79.9	70.1	69.1
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)