

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: P591029

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

Issue Date: 12/14/2021

Test Information

Test Method: LM-79-08
Report Number: P591029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2112-474-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 12/14/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-210-727-U-T3-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26903 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

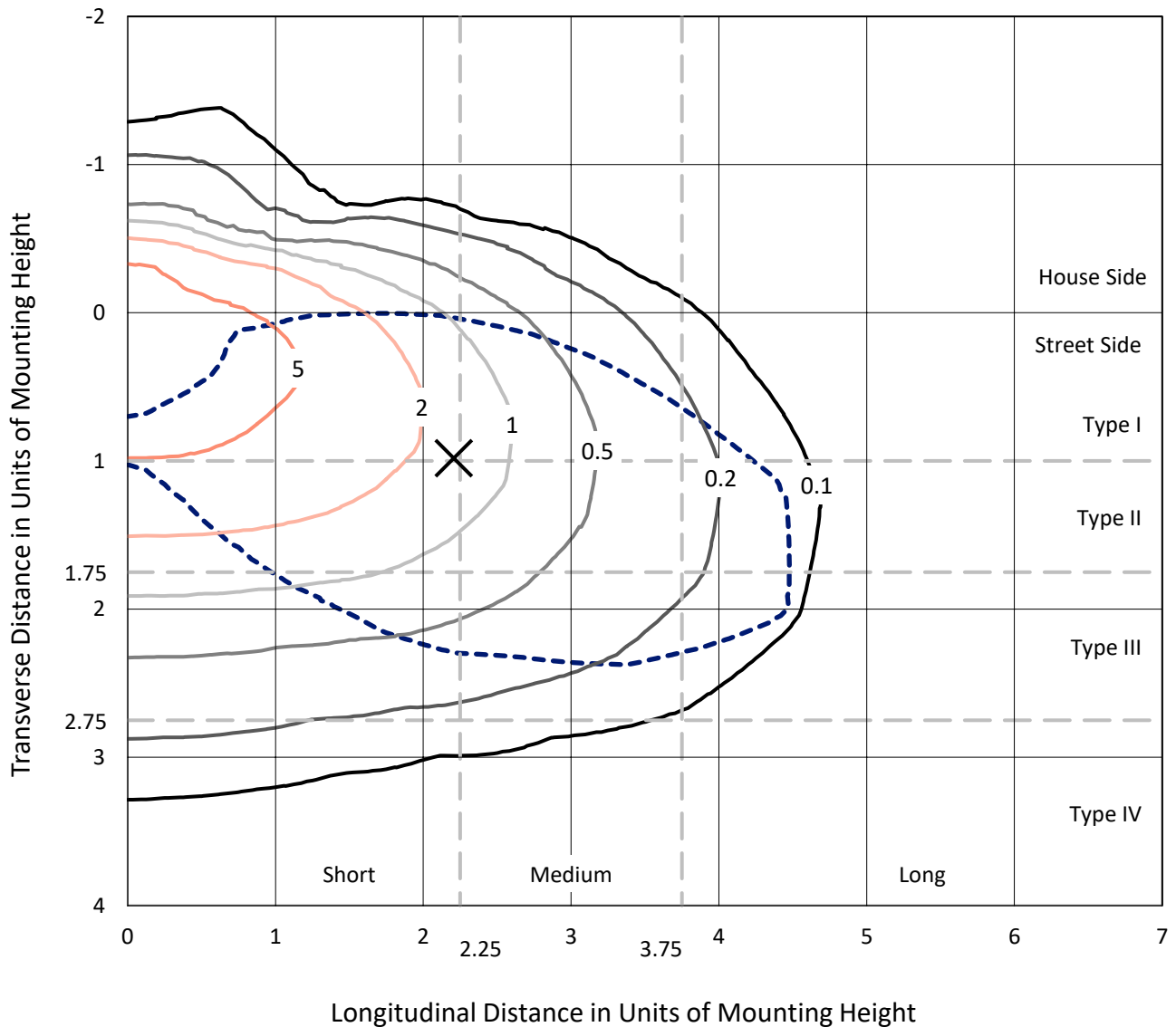
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

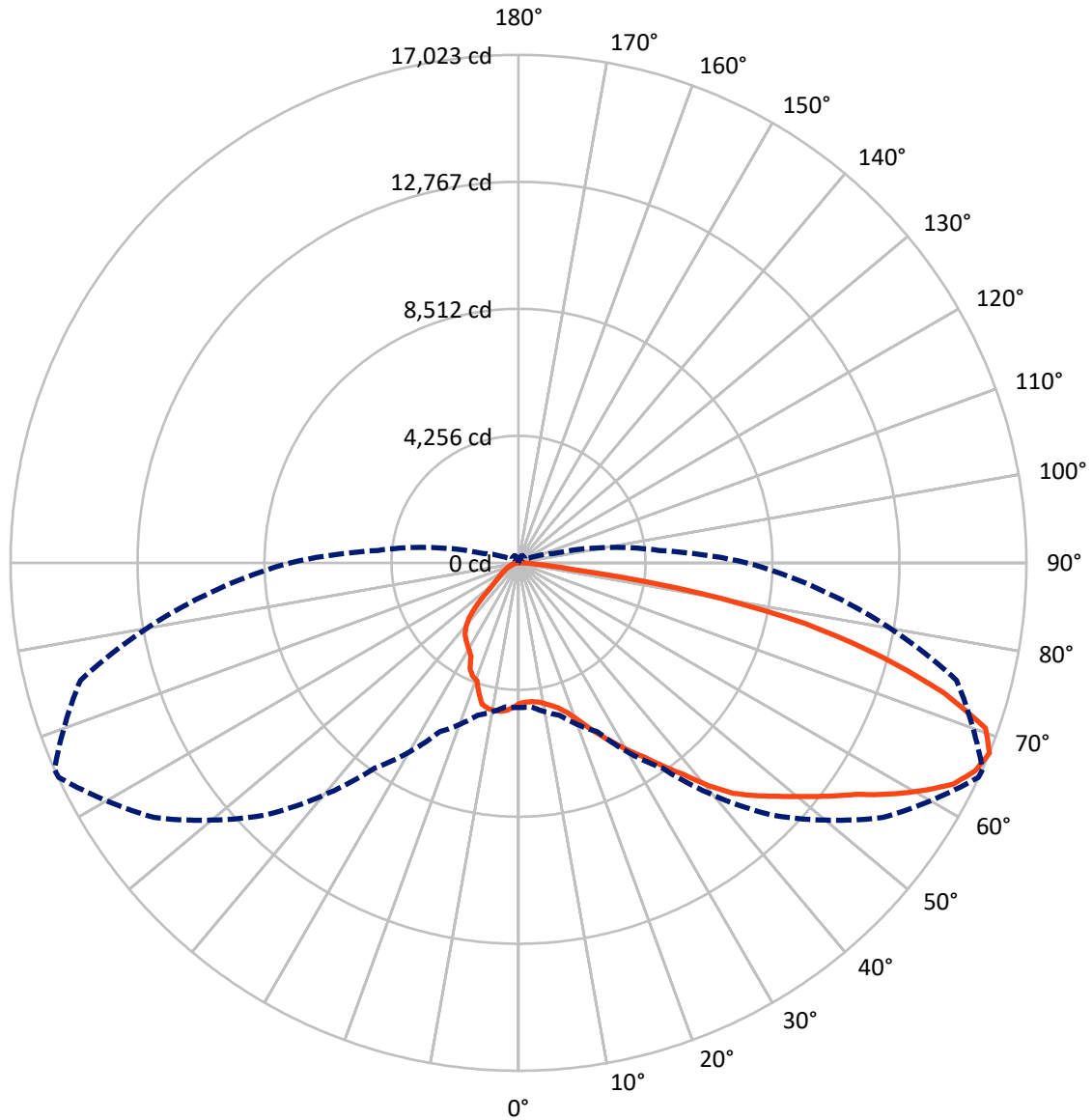
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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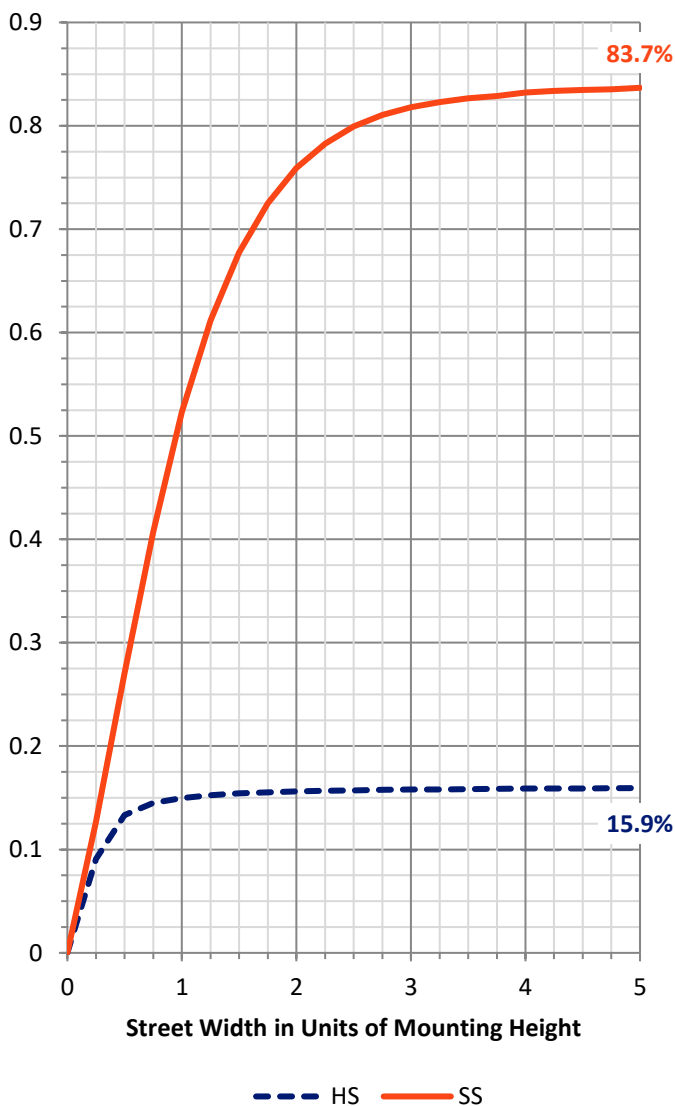
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4342.7	0.0	4342.7
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	22560.3	0.0	22560.3
	% Fixture	83.9	0.0	83.9
Total	Lumens	26903.0	0.0	26903.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	466.8	1.7
10°-20°	1407.4	5.2
20°-30°	2287.8	8.5
30°-40°	3341.9	12.4
40°-50°	4451.1	16.5
50°-60°	5384.4	20.0
60°-70°	5764.6	21.4
70°-80°	3421.1	12.7
80°-90°	377.7	1.4
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°	26903.0	100.0
0°-180°	26903.0	100.0

Coefficient of Utilization



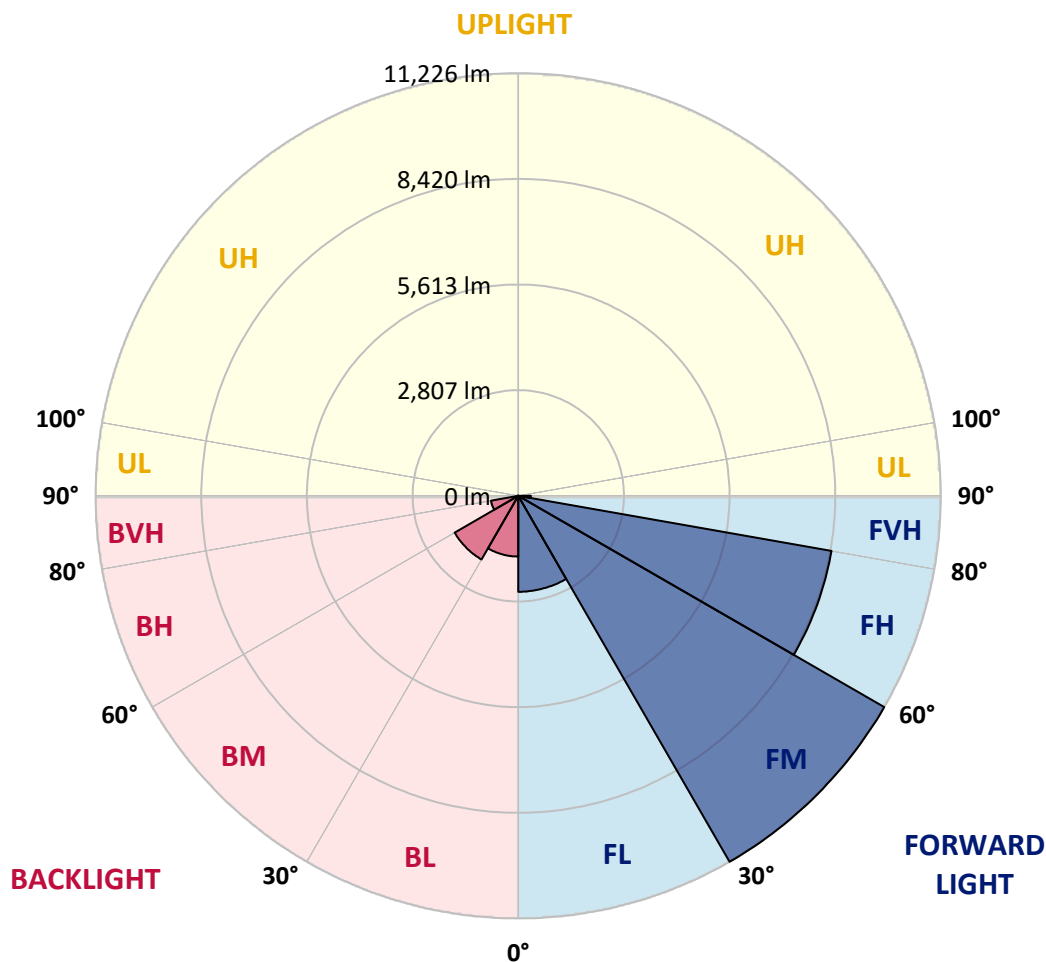
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2549.2	9.5			
FM (30°-60°)	11226.1	41.7			
FH (60°-80°)	8450.1	31.4			G4/12000
FVH (80°-90°)	334.9	1.2			G3/500
BL (0°-30°)	1612.8	6.0	B3/2500		
BM (30°-60°)	1951.4	7.3	B2/2500		
BH (60°-80°)	735.6	2.7	B2/1000		G2/1000
BVH (80°-90°)	42.9	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-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9
2.5°	4650.3	4624.1	4635.9	4666.9	4607.6	4645.3	4618.6	4665.2	4677.9	4683.0	4701.6
5°	4741.4	4706.7	4707.5	4727.0	4659.7	4676.2	4630.9	4663.5	4673.6	4687.2	4732.5
7.5°	4901.1	4862.6	4859.2	4864.3	4780.4	4761.8	4697.8	4704.6	4712.2	4720.2	4779.1
10°	5120.6	5081.2	5074.4	5061.3	4950.7	4902.0	4807.1	4792.3	4799.5	4786.3	4856.2
12.5°	5384.1	5336.7	5311.7	5274.0	5146.0	5069.8	4944.4	4903.7	4910.0	4882.5	4931.2
15°	5661.2	5610.7	5597.2	5539.2	5381.6	5277.3	5115.1	5053.2	5054.9	5023.2	5021.0
17.5°	5956.9	5912.0	5900.9	5864.1	5689.5	5565.4	5365.0	5281.2	5274.8	5243.4	5150.2
20°	6292.4	6264.0	6258.1	6236.9	6078.9	5933.6	5705.6	5593.0	5586.6	5537.0	5337.9
22.5°	6705.0	6671.6	6653.8	6635.5	6517.3	6366.1	6121.2	5962.4	5987.4	5903.9	5581.5
25°	7115.5	7088.8	7073.6	7061.7	6964.3	6821.1	6573.3	6386.9	6411.9	6322.5	5877.6
27.5°	7523.1	7464.2	7488.8	7516.7	7419.3	7305.3	7035.9	6833.0	6840.6	6744.0	6232.2
30°	7901.8	7870.9	7913.3	7939.5	7868.4	7779.4	7496.4	7300.2	7311.7	7196.9	6638.9
32.5°	8238.2	8193.7	8288.2	8339.4	8297.1	8223.8	7950.5	7764.6	7767.9	7698.5	7124.4
35°	8485.2	8488.1	8618.6	8756.3	8755.9	8652.5	8420.4	8333.9	8373.3	8342.4	7720.1
37.5°	8736.8	8714.4	8865.2	9069.8	9136.7	9044.8	8907.1	8958.4	9011.3	9106.2	8282.7
40°	8855.9	8856.7	9039.3	9275.7	9430.3	9413.0	9364.7	9707.4	9817.1	9845.5	8057.3
42.5°	8712.3	8722.4	9048.2	9466.3	9706.5	9798.5	9904.4	10488.2	10562.3	10401.7	8322.9
45°	8524.2	8538.1	8920.7	9532.0	9951.4	10210.3	10502.1	11071.5	11129.1	10915.6	8709.3
47.5°	8347.5	8373.3	8771.6	9492.6	10145.4	10674.1	11036.8	11621.0	11691.3	11409.6	9069.4
50°	8115.3	8173.0	8579.2	9388.0	10291.6	11077.9	11530.8	12282.3	12309.4	11891.7	9393.9
52.5°	7890.8	7907.8	8361.5	9254.1	10401.7	11443.9	12120.0	12961.8	12993.2	12419.6	9693.4
55°	7583.2	7608.7	8115.8	9086.3	10469.5	11750.6	12716.5	13670.2	13698.1	13053.8	10015.4
57.5°	7244.7	7263.4	7797.2	8828.8	10418.7	12023.0	13352.4	14562.4	14631.0	13706.2	10304.7
60°	6819.8	6844.4	7386.2	8471.6	10243.3	12340.8	14137.9	15516.0	15516.0	14305.2	10533.9
62.5°	6221.2	6255.5	6804.2	7957.3	9879.0	12524.6	14764.9	16346.3	16340.8	14777.1	10611.4
65°	5525.6	5531.1	6028.5	7233.7	9274.0	12426.8	15003.8	16831.4	16819.1	15118.6	10504.7
67.5°	4850.7	4844.8	5286.2	6244.1	8401.7	11945.1	14889.8	17008.5	17023.3	15200.8	10106.9
70°	3893.3	3885.7	4291.5	5074.4	7082.5	10907.6	14242.1	16559.0	16603.9	14731.4	9446.4
72.5°	2785.9	2774.4	2968.9	3486.6	5201.1	8972.8	12627.2	14831.4	14913.6	13227.9	8240.3
75°	1631.5	1643.7	1846.7	2144.5	3088.8	5902.6	10241.6	12455.6	12572.9	11252.8	6481.3
77.5°	907.4	904.9	1054.0	1278.1	1519.2	2956.2	7149.8	9809.1	9848.9	8817.7	4358.5
80°	438.0	435.9	476.2	600.7	866.4	1328.1	3511.6	6094.6	6215.3	5359.1	2130.9
82.5°	315.2	316.9	339.3	329.6	323.2	585.9	1171.8	1919.5	1752.6	1352.7	658.8
85°	236.8	236.8	257.2	237.2	231.7	298.2	569.8	685.9	658.3	602.0	391.4
87.5°	111.4	105.9	112.7	106.8	99.1	132.2	250.0	289.8	268.2	233.9	171.2
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°	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9	4710.9
2.5°	4733.4	4742.7	4791.4	4855.0	4860.9	4915.5	4932.5	5000.3	4997.7	4979.1	4998.6
5°	4765.2	4793.5	4877.0	4966.4	4989.3	5057.9	5072.7	5139.2	5143.5	5120.6	5139.7
7.5°	4816.0	4857.5	4936.3	5024.8	5035.0	5096.0	5093.5	5156.6	5145.6	5125.7	5151.1
10°	4878.3	4910.5	4963.0	5021.5	5016.8	5065.5	5050.3	5095.6	5072.7	5056.6	5085.9
12.5°	4941.0	4942.2	4946.5	4983.3	4954.5	4965.5	4935.5	4968.9	4933.8	4906.7	4924.4
15°	5003.7	4968.1	4908.3	4885.5	4805.4	4764.3	4721.1	4761.3	4679.2	4635.9	4647.0
17.5°	5092.2	5006.6	4805.8	4515.2	4268.6	4132.7	4030.6	3951.8	3953.5	3992.4	4015.7
20°	5163.0	4837.6	4347.0	4167.4	3983.1	3734.4	3348.5	3242.6	3172.7	3171.4	3182.8
22.5°	5138.0	4658.8	4347.4	4066.6	3665.8	3168.9	3001.9	2904.9	2741.8	2393.2	2364.8
25°	5368.0	4817.3	4372.4	3858.1	3160.4	2908.3	2679.1	2490.6	2078.8	2014.0	2011.5
27.5°	5643.8	5031.2	4406.3	3408.2	2958.3	2618.1	2326.7	1871.2	1673.8	1645.9	1636.1
30°	5962.8	5283.3	4199.6	3264.2	2743.1	2280.5	1894.1	1437.0	1276.4	1266.7	1269.2
32.5°	6362.7	5570.9	3984.0	3145.6	2482.6	1889.5	1291.7	1096.0	1004.0	903.6	935.8
35°	6788.9	5405.3	4112.7	2999.0	2156.4	1420.9	981.2	870.6	796.0	666.0	613.0
37.5°	6621.1	5519.2	4262.3	2838.0	1748.8	963.4	759.2	663.4	593.5	485.1	483.0
40°	6827.9	5845.4	4369.0	2578.7	1264.6	683.3	553.3	513.5	481.3	421.1	412.6
42.5°	7193.1	6130.1	4441.5	2246.2	755.8	508.4	472.4	478.3	450.3	404.2	398.6
45°	7552.7	6379.2	4373.3	1739.1	537.6	458.4	460.5	458.0	424.1	407.1	401.2
47.5°	7880.2	6589.8	4181.4	1147.2	466.4	446.9	451.6	440.2	402.0	392.3	391.4
50°	8161.5	6812.2	3310.8	879.1	448.6	431.7	441.9	423.2	357.6	347.0	336.0
52.5°	8334.8	6442.4	2941.4	675.3	430.0	408.0	410.9	426.2	336.8	268.2	251.2
55°	8308.5	5803.5	2734.6	562.2	400.3	374.9	380.9	405.4	304.6	209.7	189.8
57.5°	8433.5	5751.0	2520.3	478.3	345.3	339.8	327.9	369.4	277.1	139.0	131.8
60°	8413.2	5744.6	2249.1	376.2	305.0	285.5	270.7	300.8	198.7	51.7	47.0
62.5°	8380.1	5581.5	1941.1	337.2	280.9	273.3	260.5	294.4	169.0	36.0	26.7
65°	8214.5	5316.7	1592.1	295.3	262.2	246.6	245.7	278.8	139.4	19.9	8.9
67.5°	7648.9	4740.2	1184.5	272.0	251.2	243.2	258.0	268.6	133.9	20.3	8.0
70°	6945.7	3979.7	764.3	245.3	235.5	239.8	252.1	271.6	130.1	18.6	7.2
72.5°	5807.7	3078.6	463.5	219.0	213.1	225.8	248.7	271.6	120.3	15.7	5.9
75°	4418.2	2053.4	344.8	193.6	186.8	202.9	226.6	261.0	118.2	13.6	3.8
77.5°	2743.1	969.7	272.0	162.7	155.5	172.0	190.2	215.2	119.9	13.1	2.1
80°	1109.5	405.0	213.5	130.9	122.0	130.9	154.2	183.4	95.3	18.6	0.0
82.5°	466.9	285.1	174.5	104.2	97.4	86.0	105.1	136.0	75.0	14.8	0.0
85°	308.8	197.8	125.0	70.7	62.3	41.9	51.3	61.4	42.8	0.0	0.0
87.5°	139.8	87.7	54.7	24.1	20.3	11.4	6.8	5.9	0.0	0.0	0.0
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)