

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: STREETWORKS

Report Number: P721892

Luminaire Tested: **CST-CA8-430-722-U-T4-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721892
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-430-722-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47031 lumens
Efficiency: N/A
Efficacy: 108.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

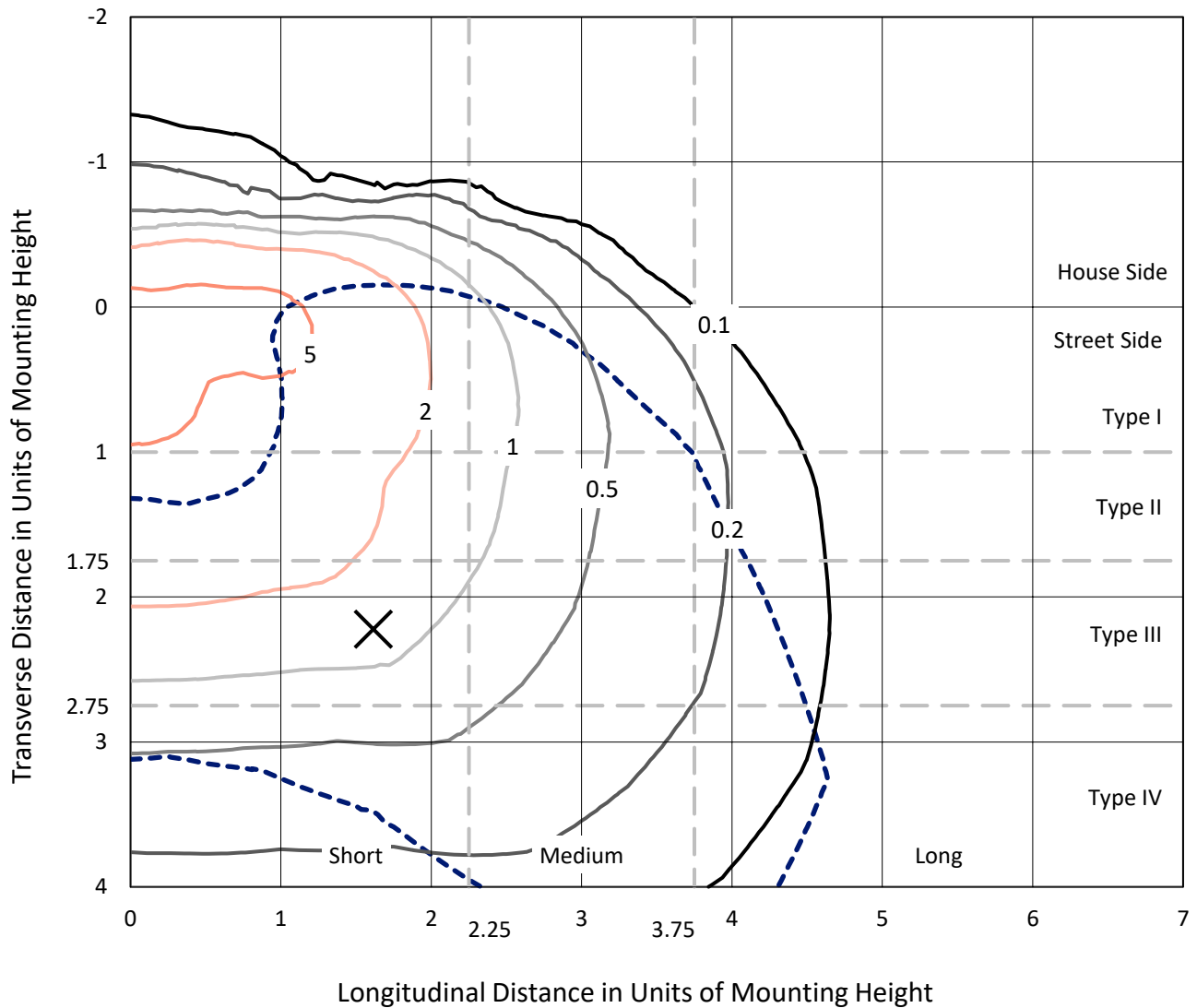
Input Watts (W): 434.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P721892
 CATALOG NUMBER: CST-CA8-430-722-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

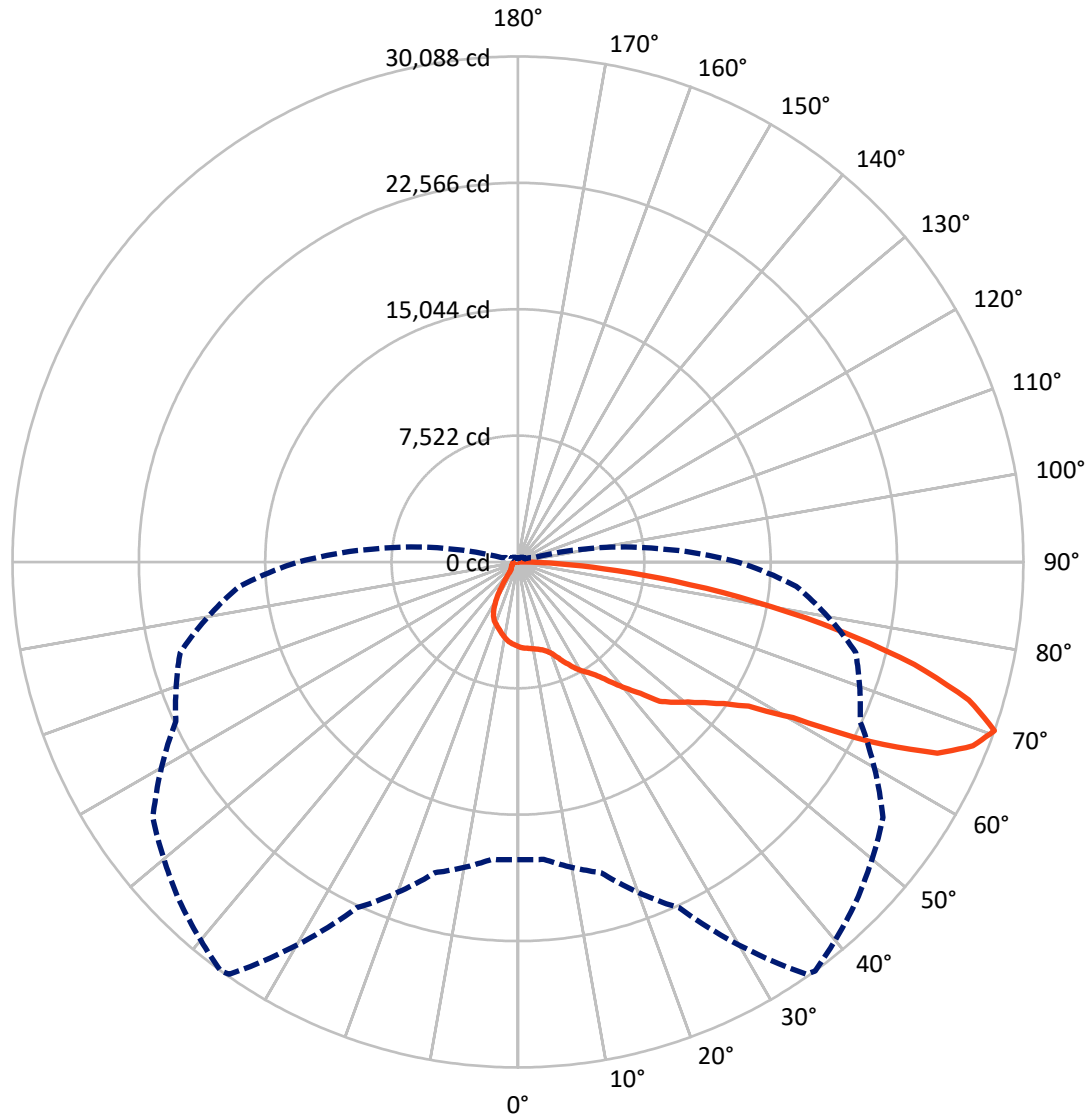
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.4 fc
 Type IV - Short - N/A

REPORT NUMBER: P721892
CATALOG NUMBER: CST-CA8-430-722-U-T4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P721892
 CATALOG NUMBER: CST-CA8-430-722-U-T4-HSS

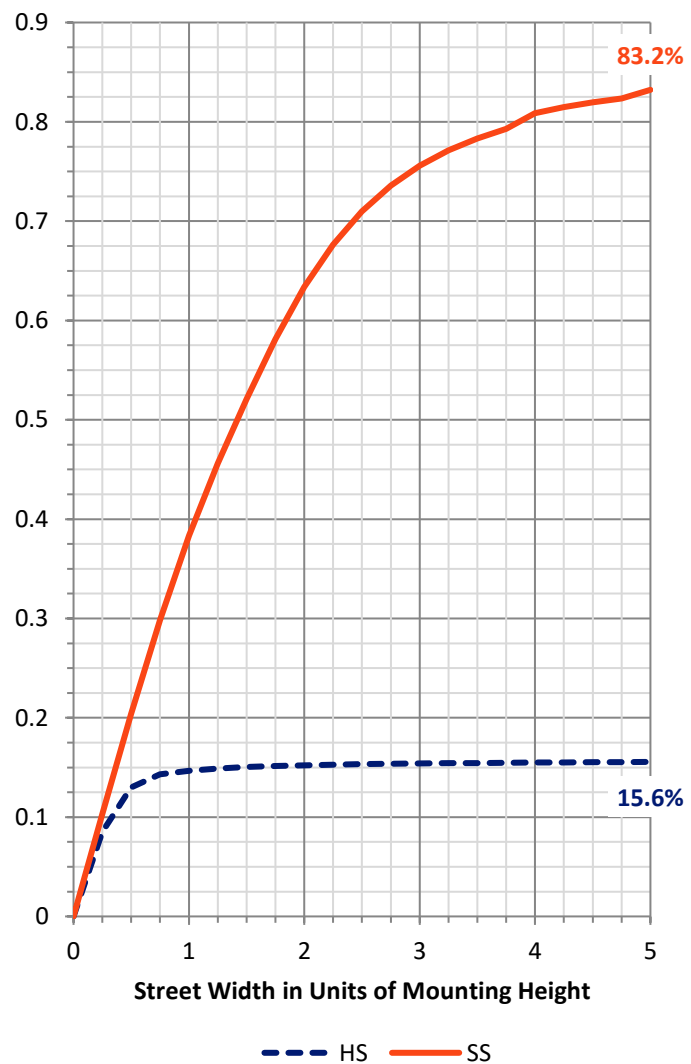
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7421.8	0.0	7421.8
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	39609.2	0.0	39609.2
	% Fixture	84.2	0.0	84.2
Total	Lumens	47031.0	0.0	47031.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	477.9	1.0
10°-20°	1421.2	3.0
20°-30°	2555.8	5.4
30°-40°	4044.5	8.6
40°-50°	6320.8	13.4
50°-60°	9076.5	19.3
60°-70°	12311.5	26.2
70°-80°	9111.8	19.4
80°-90°	1710.9	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°	47031.0	100.0
0°-180°	47031.0	100.0



REPORT NUMBER: P721892

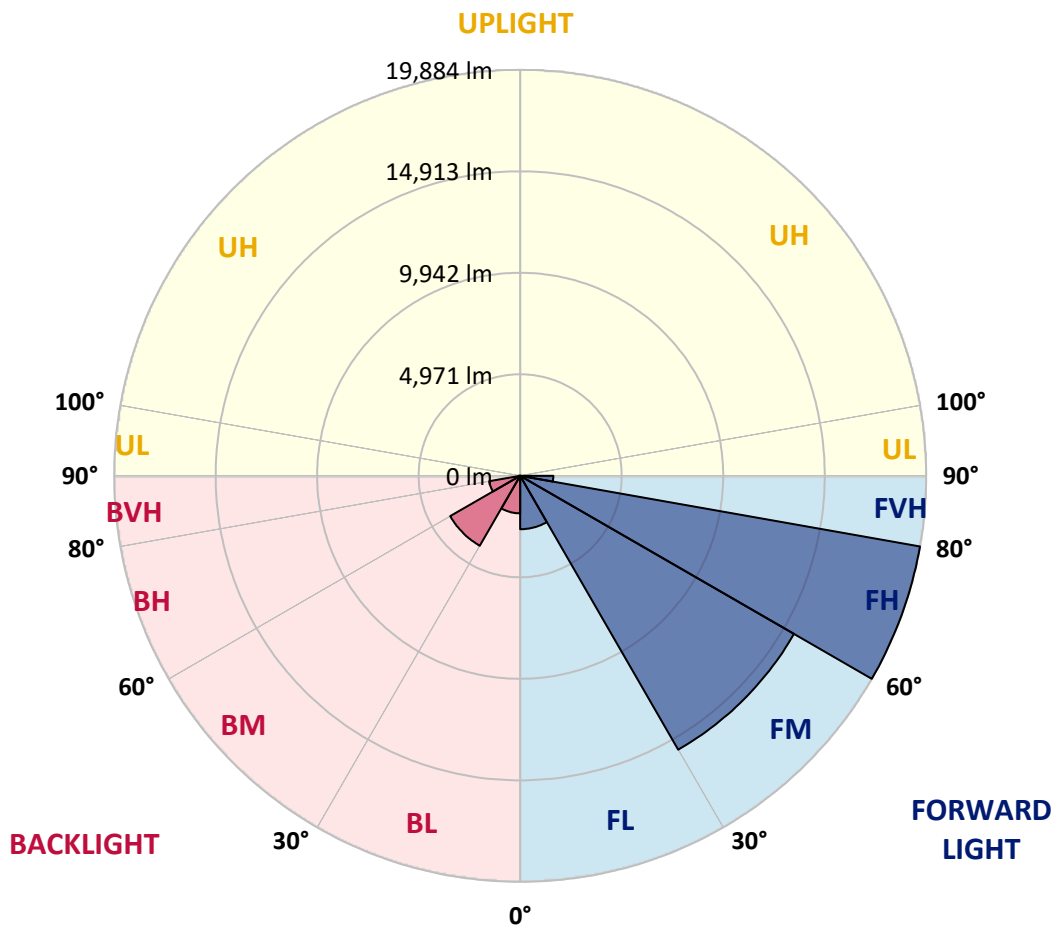
CATALOG NUMBER: CST-CA8-430-722-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2615.8	5.6			
FM (30°-60°)	15486.9	32.9			
FH (60°-80°)	19884.2	42.3			G5
FVH (80°-90°)	1622.2	3.4			G5
BL (0°-30°)	1839.1	3.9	B3/2500		
BM (30°-60°)	3954.9	8.4	B3/5000		
BH (60°-80°)	1539.1	3.3	B3/2500		G3/2500
BVH (80°-90°)	88.7	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





REPORT NUMBER: P721892

CATALOG NUMBER: CST-CA8-430-722-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1
2.5°	5141.2	5130.3	5121.7	5124.9	5118.4	5122.7	5113.0	5101.0	5072.8	5060.9	5055.4
5°	5186.8	5183.5	5174.9	5168.3	5156.4	5152.1	5141.2	5151.0	5135.8	5096.7	5073.9
7.5°	5213.9	5212.9	5203.1	5189.0	5195.5	5200.9	5211.8	5196.6	5177.0	5158.6	5111.9
10°	5225.9	5225.9	5213.9	5221.5	5255.2	5258.5	5263.9	5273.7	5255.2	5228.1	5181.4
12.5°	5256.3	5254.1	5258.5	5283.4	5318.2	5325.8	5352.9	5352.9	5355.1	5338.8	5284.5
15°	5332.3	5332.3	5342.1	5364.9	5424.6	5428.9	5469.1	5504.9	5509.3	5485.4	5444.1
17.5°	5508.2	5503.9	5498.4	5512.5	5576.6	5578.8	5648.3	5693.9	5705.8	5731.9	5725.4
20°	5842.6	5838.3	5837.2	5838.3	5833.9	5827.4	5895.8	5944.7	6005.5	6051.1	6073.9
22.5°	6321.5	6311.7	6311.7	6258.5	6217.2	6223.7	6234.6	6261.7	6342.1	6422.4	6508.2
25°	6837.2	6830.7	6836.1	6700.4	6645.0	6666.7	6652.6	6695.0	6800.3	6869.8	6961.0
27.5°	7258.5	7268.3	7237.9	7132.5	7096.7	7113.0	7080.4	7202.0	7318.2	7439.8	7577.7
30°	7782.9	7730.8	7655.9	7527.8	7514.7	7516.9	7514.7	7710.2	7951.2	8124.9	8316.0
32.5°	8468.1	8476.7	8308.4	8006.6	7895.8	7880.6	7924.1	8210.7	8536.5	8921.9	9173.8
35°	9160.8	9174.9	9052.2	8737.3	8421.4	8373.6	8309.5	8682.0	9152.1	9925.2	10305.2
37.5°	9895.9	9945.8	9800.3	9519.1	9144.5	9100.0	8797.0	9163.0	9857.9	11113.0	11611.4
40°	10879.6	10826.4	10650.5	10293.3	9944.7	9873.1	9521.3	9713.5	10765.6	12600.6	12962.1
42.5°	11604.9	11589.7	11440.9	11088.1	10737.3	10679.8	10396.4	10604.9	11908.9	14108.7	14270.5
45°	12180.4	12273.7	12270.5	12049.0	11851.4	11818.8	11651.6	11958.9	13291.1	15532.2	15452.9
47.5°	12691.8	12749.3	12657.0	12560.4	12468.1	12478.9	12602.7	13234.7	14703.7	16775.4	16424.7
50°	13528.9	13455.1	13041.4	12967.6	13097.8	13103.3	13480.0	14452.9	16259.7	17850.3	17247.7
52.5°	14645.1	14564.7	13714.6	13588.6	13897.0	13919.8	14546.3	15666.8	17864.5	18877.5	18066.4
55°	16306.3	16119.6	15208.6	14644.0	14785.2	14877.5	15636.4	16834.0	19120.7	19783.0	18686.4
57.5°	18346.5	18482.3	18015.4	16739.6	16152.2	16186.9	16884.0	17951.3	20229.3	20575.7	19049.0
60°	20502.9	20470.3	20665.8	20128.3	19003.4	18816.7	18461.6	19091.4	21088.2	21243.4	19422.6
62.5°	21684.3	21874.3	22525.7	22633.2	23648.4	23549.6	21129.4	20505.1	22080.6	21662.5	19524.6
65°	21677.7	21760.3	22973.1	24306.4	27478.0	27449.8	26324.9	22549.6	22820.0	21886.2	19320.5
67.5°	20277.1	20405.2	21823.2	24428.0	29247.8	29214.2	28436.8	25423.7	23052.3	21616.9	18368.3
70°	17723.3	17766.7	19150.0	22715.7	29959.0	30088.2	28509.5	26526.9	22474.7	20816.7	16632.1
72.5°	14621.2	14531.1	15884.0	19398.7	28147.9	28070.9	27304.3	25209.8	21501.8	19262.9	13564.7
75°	10765.6	11016.4	12230.3	15575.6	24100.1	24382.4	24722.3	23194.6	19096.8	15875.3	9380.1
77.5°	7108.6	7427.9	8654.8	11678.7	19079.4	19518.1	20398.7	19727.7	15535.4	11387.7	4466.9
80°	3673.2	3914.3	5018.5	7749.3	13677.7	14310.7	15925.2	14941.5	11014.2	5148.8	1000.0
82.5°	1389.8	1358.3	2248.7	4435.4	8769.9	9345.4	10519.1	8959.9	3919.7	904.5	464.7
85°	610.2	646.0	931.6	2022.8	5014.2	5089.1	5958.8	3493.0	574.4	432.1	316.0
87.5°	263.8	302.9	390.9	582.0	1691.7	1953.3	2417.0	1109.7	173.7	149.8	158.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P721892
 CATALOG NUMBER: CST-CA8-430-722-U-T4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1	5039.1
2.5°	5045.7	5039.1	5028.3	5001.1	4956.6	4951.2	4946.8	4942.5	4933.8	4938.2	4963.1
5°	5056.5	5044.6	5005.5	4966.4	4927.3	4892.6	4850.2	4833.9	4812.2	4798.1	4824.2
7.5°	5093.4	5068.5	5010.9	4957.7	4851.3	4800.3	4746.0	4681.9	4636.3	4607.0	4633.1
10°	5155.3	5123.8	5052.2	4942.5	4817.6	4677.6	4582.0	4475.6	4388.8	4364.9	4388.8
12.5°	5256.3	5209.6	5126.0	4977.2	4755.7	4572.2	4390.9	4250.9	4110.8	4070.6	4082.6
15°	5420.2	5383.3	5255.2	5050.0	4756.8	4476.7	4207.4	3981.6	3798.1	3734.0	3729.7
17.5°	5683.0	5643.9	5496.3	5194.4	4795.9	4401.8	4027.2	3683.0	3405.0	3263.9	3241.1
20°	6059.8	6005.5	5781.8	5407.2	4880.6	4369.2	3860.0	3397.4	2965.3	2700.4	2660.2
22.5°	6478.9	6421.3	6091.3	5571.2	4941.4	4305.1	3700.4	3081.5	2512.5	2188.9	2143.3
25°	7000.1	6874.1	6387.7	5726.4	4927.3	4170.5	3440.9	2652.6	2035.9	1755.7	1725.3
27.5°	7514.7	7355.1	6689.5	5807.9	4865.4	3956.6	3060.8	2150.9	1593.9	1395.2	1370.3
30°	8153.2	7844.8	6957.7	5845.9	4709.1	3636.3	2551.6	1635.2	1193.3	1056.5	1032.6
32.5°	8912.1	8445.3	7209.6	5803.5	4448.5	3147.7	1983.7	1197.6	887.1	801.3	800.2
35°	9913.2	9181.4	7486.5	5664.6	4048.9	2621.1	1390.9	818.7	691.6	662.3	667.8
37.5°	11083.7	10178.2	7767.7	5436.5	3597.2	2005.4	927.3	630.8	608.0	609.1	610.2
40°	12318.3	11279.2	8146.7	5116.2	3048.9	1451.7	667.8	566.8	565.7	576.6	579.8
42.5°	13497.4	12348.7	8613.5	4689.5	2474.5	959.8	578.7	540.7	526.6	530.9	534.2
45°	14593.0	13266.1	9010.9	4273.7	1858.9	685.1	567.9	510.3	488.6	486.4	488.6
47.5°	15475.7	14001.2	9253.1	3785.1	1324.7	569.0	545.1	482.1	451.7	445.2	441.9
50°	16147.8	14547.4	9341.0	3231.3	895.8	542.9	514.7	449.5	412.6	413.7	413.7
52.5°	16803.6	15043.6	9239.0	2673.2	659.1	520.1	494.0	423.5	384.4	405.0	410.4
55°	17276.0	15252.0	8941.5	2069.5	549.4	491.9	471.2	393.1	365.9	399.6	410.4
57.5°	17551.7	15416.0	8395.3	1494.0	503.8	464.7	441.9	364.8	339.9	348.5	354.0
60°	17723.3	15186.9	7673.3	1021.7	479.9	443.0	412.6	346.4	312.7	292.1	288.8
62.5°	17628.8	14613.6	6722.1	702.5	454.9	419.1	387.6	329.0	284.5	257.3	255.2
65°	16859.0	13552.8	5160.7	569.0	439.7	408.3	372.4	312.7	264.9	238.9	235.6
67.5°	15431.2	11646.2	3014.1	506.0	433.2	397.4	360.5	297.5	254.1	225.8	221.5
70°	13084.8	8760.1	1009.8	451.7	432.1	396.3	350.7	286.6	242.1	212.8	208.5
72.5°	9439.8	5285.6	491.9	397.4	403.9	380.0	343.1	278.0	234.5	197.6	190.0
75°	5364.9	1721.0	444.1	343.1	375.7	362.7	338.8	279.0	237.8	179.2	170.5
77.5°	1526.6	502.7	428.9	292.1	355.1	374.6	317.0	251.9	243.2	166.1	155.3
80°	515.7	447.3	413.7	226.9	286.6	309.4	274.7	221.5	245.4	150.9	140.1
82.5°	413.7	449.5	347.5	181.3	218.2	234.5	218.2	198.7	198.7	134.6	126.0
85°	331.2	416.9	220.4	144.4	162.9	180.2	154.2	148.8	139.0	112.9	109.7
87.5°	192.2	130.3	91.2	73.8	68.4	69.5	59.7	71.7	87.9	77.1	76.0
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)