

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: P721872

Luminaire Tested: **CST-CA8-400-750-U-T4-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721872
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-CA8-400-750-U-T4-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54735 lumens
Efficiency: N/A
Efficacy: 136.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

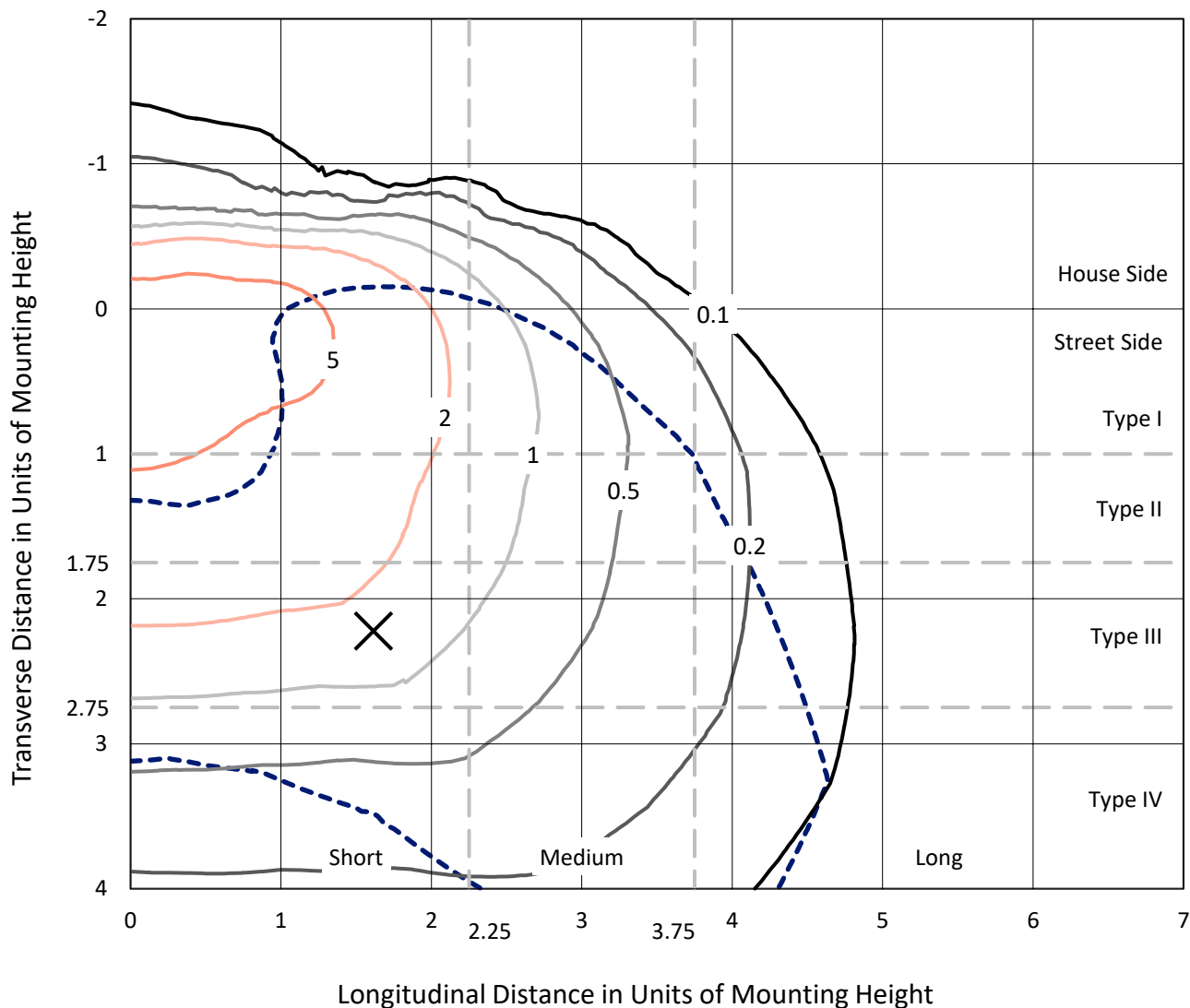
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

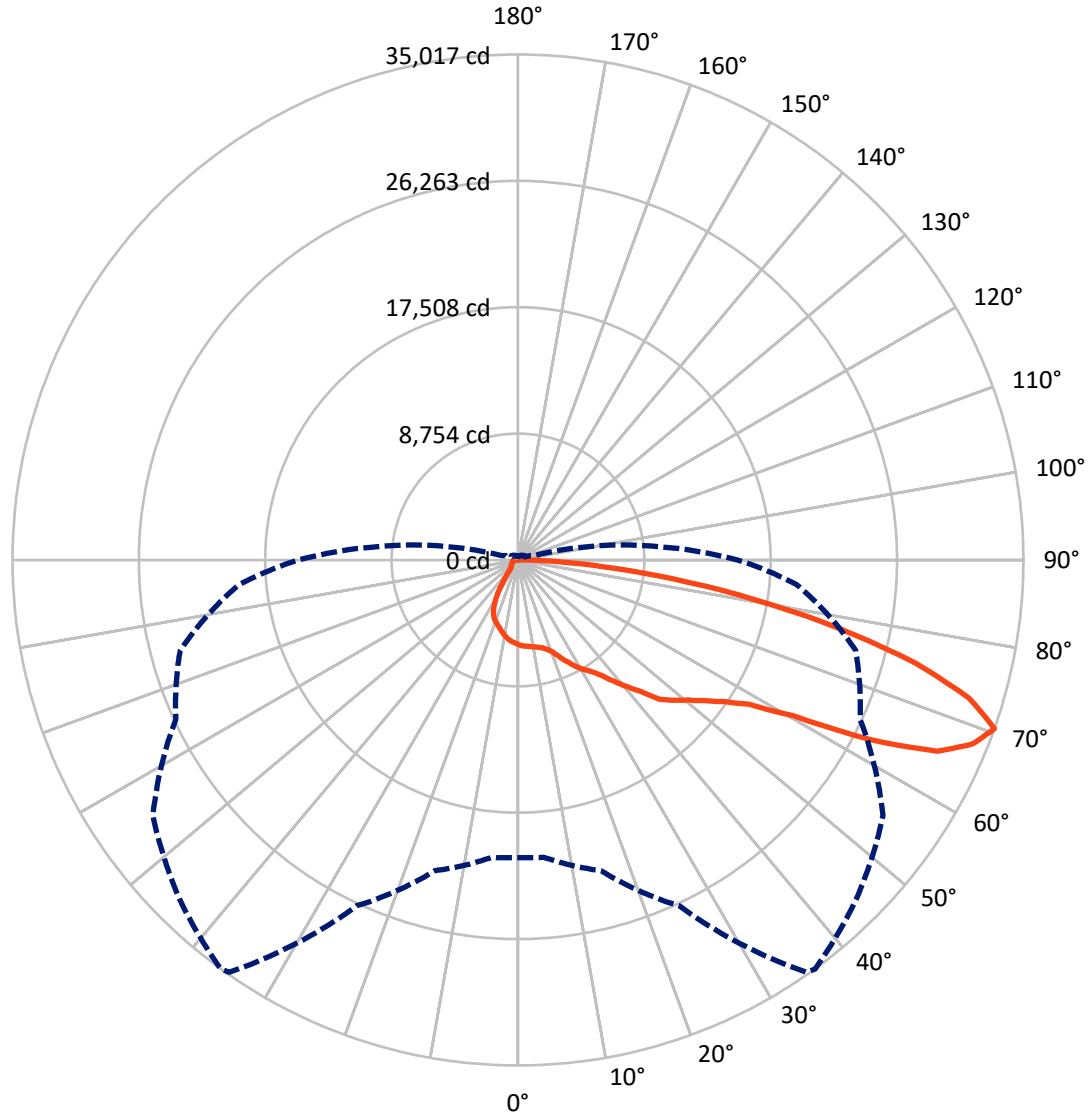
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.4 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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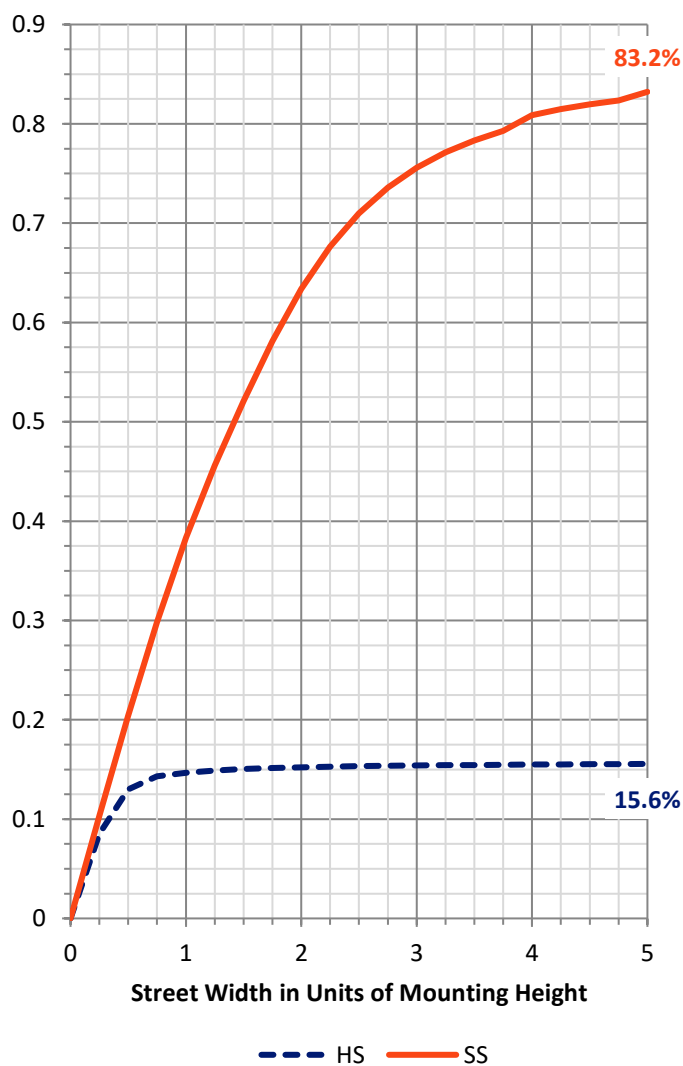
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8637.6	0.0	8637.6
	% Fixture	15.8	0.0	15.8
Street Side	Lumens	46097.4	0.0	46097.4
	% Fixture	84.2	0.0	84.2
Total	Lumens	54735.0	0.0	54735.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	556.2	1.0
10°-20°	1654.0	3.0
20°-30°	2974.4	5.4
30°-40°	4707.0	8.6
40°-50°	7356.2	13.4
50°-60°	10563.3	19.3
60°-70°	14328.2	26.2
70°-80°	10604.4	19.4
80°-90°	1991.2	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°	54735.0	100.0
0°-180°	54735.0	100.0

Coefficient of Utilization

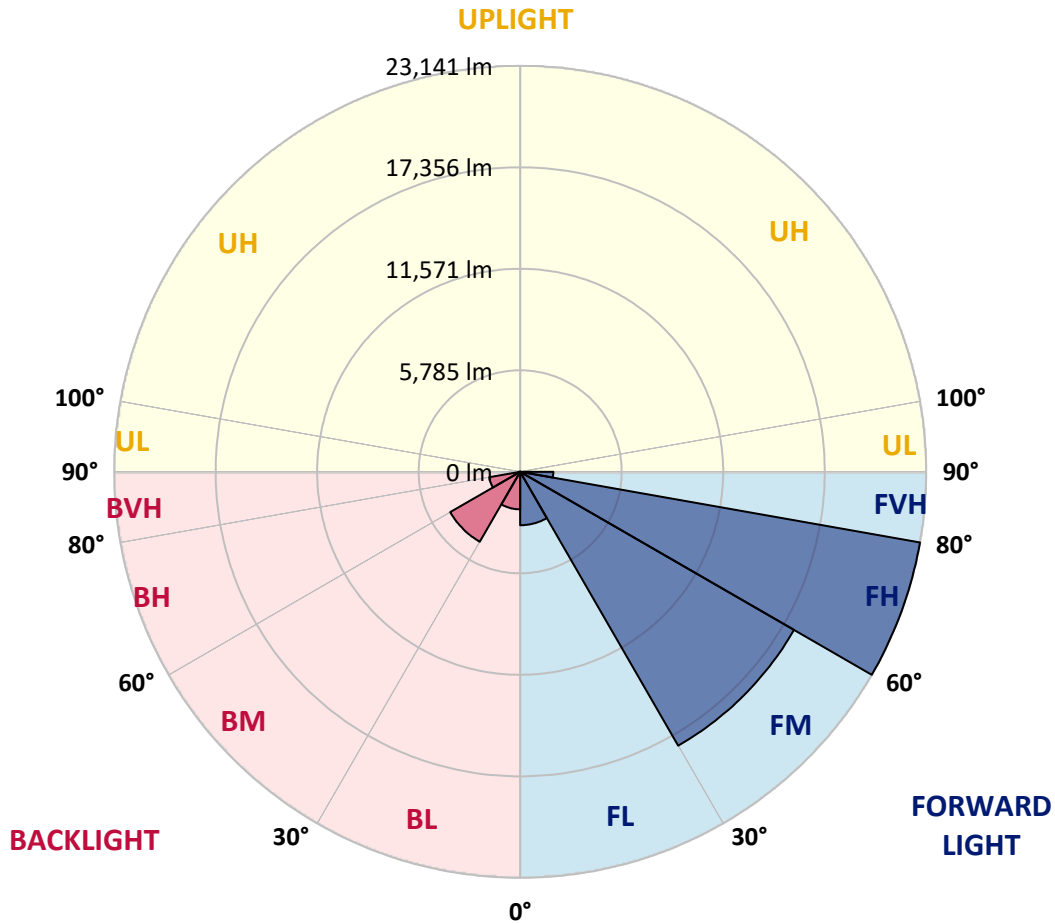


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3044.3	5.6			
FM (30°-60°)	18023.7	32.9			
FH (60°-80°)	23141.4	42.3			G5
FVH (80°-90°)	1887.9	3.4			G5
BL (0°-30°)	2140.4	3.9	B3/2500		
BM (30°-60°)	4602.8	8.4	B3/5000		
BH (60°-80°)	1791.2	3.3	B3/2500		G3/2500
BVH (80°-90°)	103.3	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6
2.5°	5983.4	5970.7	5960.6	5964.4	5956.8	5961.9	5950.5	5936.6	5903.8	5889.9	5883.5
5°	6036.4	6032.6	6022.5	6015.0	6001.1	5996.0	5983.4	5994.7	5977.0	5931.6	5905.0
7.5°	6068.0	6066.8	6055.4	6039.0	6046.5	6052.9	6065.5	6047.8	6025.1	6003.6	5949.2
10°	6081.9	6081.9	6068.0	6076.9	6116.0	6119.8	6126.2	6137.5	6116.0	6084.5	6030.1
12.5°	6117.3	6114.8	6119.8	6148.9	6189.3	6198.2	6229.8	6229.8	6232.3	6213.3	6150.2
15°	6205.8	6205.8	6217.1	6243.7	6313.2	6318.2	6365.0	6406.7	6411.7	6383.9	6335.9
17.5°	6410.5	6405.4	6399.1	6415.5	6490.1	6492.6	6573.5	6626.6	6640.5	6670.8	6663.2
20°	6799.7	6794.6	6793.4	6794.6	6789.6	6782.0	6861.6	6918.5	6989.2	7042.3	7068.8
22.5°	7356.9	7345.6	7345.6	7283.7	7235.6	7243.2	7255.9	7287.4	7381.0	7474.5	7574.3
25°	7957.2	7949.6	7955.9	7798.0	7733.5	7758.8	7742.4	7791.6	7914.2	7995.1	8101.2
27.5°	8447.5	8458.8	8423.5	8300.9	8259.2	8278.1	8240.2	8381.8	8517.0	8658.5	8819.0
30°	9057.8	8997.2	8910.0	8760.9	8745.7	8748.2	8745.7	8973.2	9253.7	9455.9	9678.3
32.5°	9855.2	9865.3	9669.4	9318.1	9189.2	9171.5	9222.1	9555.7	9934.8	10383.4	10676.5
35°	10661.4	10677.8	10535.0	10168.6	9800.8	9745.2	9670.7	10104.1	10651.3	11551.0	11993.3
37.5°	11516.9	11575.0	11405.7	11078.4	10642.4	10590.6	10238.1	10663.9	11472.6	12933.4	13513.4
40°	12661.7	12599.8	12395.1	11979.4	11573.7	11490.3	11080.9	11304.6	12529.1	14664.6	15085.4
42.5°	13505.9	13488.2	13315.0	12904.4	12496.2	12429.2	12099.4	12342.0	13859.7	16419.8	16608.1
45°	14175.6	14284.3	14280.5	14022.7	13792.7	13754.8	13560.2	13917.8	15468.3	18076.5	17984.2
47.5°	14770.8	14837.7	14730.3	14617.9	14510.5	14523.1	14667.1	15402.6	17112.3	19523.3	19115.2
50°	15745.0	15659.1	15177.7	15091.7	15243.4	15249.7	15688.2	16820.4	18923.1	20774.3	20073.0
52.5°	17044.1	16950.6	15961.1	15814.5	16173.4	16199.9	16929.1	18233.2	20790.8	21969.8	21025.8
55°	18977.4	18760.1	17699.9	17042.8	17207.1	17314.5	18197.8	19591.6	22252.8	23023.6	21747.4
57.5°	21351.8	21509.8	20966.4	19481.6	18798.0	18838.4	19649.7	20891.9	23543.0	23946.1	22169.4
60°	23861.4	23823.5	24051.0	23425.5	22116.3	21899.0	21485.8	22218.7	24542.5	24723.2	22604.1
62.5°	25236.3	25457.4	26215.6	26340.7	27522.2	27407.2	24590.6	23864.0	25697.5	25211.0	22722.9
65°	25228.7	25324.7	26736.2	28288.0	31979.1	31946.2	30637.1	26243.4	26558.1	25471.3	22485.3
67.5°	23598.6	23747.7	25398.0	28429.5	34038.8	33999.7	33094.9	29588.3	26828.5	25157.9	21377.1
70°	20626.5	20677.0	22286.9	26436.7	34866.5	35016.9	33179.6	30872.1	26156.2	24226.6	19356.5
72.5°	17016.3	16911.4	18485.9	22576.3	32758.8	32669.0	31776.9	29339.3	25024.0	22418.3	15786.7
75°	12529.1	12821.0	14233.7	18127.0	28047.9	28376.4	28772.0	26994.0	22225.0	18475.8	10916.6
77.5°	8273.1	8644.6	10072.5	13591.8	22204.8	22715.3	23740.1	22959.2	18080.3	13253.1	5198.6
80°	4274.9	4555.4	5840.6	9018.6	15918.2	16654.9	18533.9	17389.0	12818.4	5992.2	1163.8
82.5°	1617.5	1580.8	2617.0	5162.0	10206.5	10876.2	12242.2	10427.6	4561.8	1052.6	540.8
85°	710.2	751.9	1084.2	2354.2	5835.5	5922.7	6934.9	4065.2	668.5	502.9	367.7
87.5°	307.1	352.6	454.9	677.3	1968.8	2273.3	2812.9	1291.4	202.2	174.4	184.5
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°	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6	5864.6
2.5°	5872.2	5864.6	5851.9	5820.4	5768.5	5762.2	5757.2	5752.1	5742.0	5747.1	5776.1
5°	5884.8	5870.9	5825.4	5779.9	5734.4	5694.0	5644.7	5625.8	5600.5	5584.1	5614.4
7.5°	5927.8	5898.7	5831.7	5769.8	5646.0	5586.6	5523.4	5448.8	5395.8	5361.7	5392.0
10°	5999.8	5963.1	5879.7	5752.1	5606.8	5443.8	5332.6	5208.8	5107.7	5079.9	5107.7
12.5°	6117.3	6063.0	5965.7	5792.6	5534.8	5321.2	5110.2	4947.2	4784.2	4737.4	4751.3
15°	6308.1	6265.2	6116.0	5877.2	5536.0	5210.0	4896.6	4633.8	4420.2	4345.7	4340.6
17.5°	6613.9	6568.4	6396.6	6045.3	5581.5	5122.8	4686.9	4286.3	3962.8	3798.5	3772.0
20°	7052.4	6989.2	6728.9	6293.0	5680.1	5084.9	4492.3	3953.9	3451.0	3142.7	3095.9
22.5°	7540.2	7473.2	7089.1	6483.8	5750.9	5010.4	4306.5	3586.2	2924.1	2547.5	2494.4
25°	8146.7	8000.1	7434.0	6664.5	5734.4	4853.7	4004.5	3087.1	2369.3	2043.3	2007.9
27.5°	8745.7	8559.9	7785.3	6759.2	5662.4	4604.7	3562.2	2503.3	1855.0	1623.8	1594.7
30°	9488.7	9129.8	8097.4	6803.5	5480.4	4232.0	2969.6	1903.1	1388.7	1229.5	1201.7
32.5°	10372.0	9828.6	8390.6	6754.2	5177.2	3663.3	2308.7	1393.8	1032.4	932.6	931.3
35°	11537.1	10685.4	8712.8	6592.4	4712.1	3050.4	1618.7	952.8	804.9	770.8	777.1
37.5°	12899.3	11845.4	9040.1	6327.1	4186.5	2334.0	1079.2	734.2	707.6	708.9	710.2
40°	14336.1	13126.8	9481.1	5954.3	3548.3	1689.5	777.1	659.6	658.4	671.0	674.8
42.5°	15708.4	14371.4	10024.5	5457.7	2879.8	1117.1	673.5	629.3	612.9	617.9	621.7
45°	16983.4	15439.2	10487.0	4973.7	2163.4	797.4	660.9	593.9	568.6	566.1	568.6
47.5°	18010.8	16294.7	10768.8	4405.1	1541.6	662.2	634.4	561.1	525.7	518.1	514.3
50°	18792.9	16930.3	10871.1	3760.6	1042.5	631.8	599.0	523.1	480.2	481.4	481.4
52.5°	19556.2	17507.8	10752.4	3111.1	767.0	605.3	575.0	492.8	447.3	471.3	477.7
55°	20105.9	17750.4	10406.1	2408.5	639.4	572.4	548.4	457.4	425.8	465.0	477.7
57.5°	20426.8	17941.3	9770.5	1738.8	586.3	540.8	514.3	424.6	395.5	405.6	411.9
60°	20626.5	17674.6	8930.2	1189.1	558.5	515.6	480.2	403.1	363.9	339.9	336.1
62.5°	20516.6	17007.4	7823.2	817.6	529.5	487.8	451.1	382.9	331.1	299.5	297.0
65°	19620.6	15772.8	6006.1	662.2	511.8	475.1	433.4	363.9	308.3	278.0	274.2
67.5°	17958.9	13553.9	3507.9	588.9	504.2	462.5	419.5	346.2	295.7	262.8	257.8
70°	15228.2	10195.1	1175.2	525.7	502.9	461.2	408.2	333.6	281.8	247.7	242.6
72.5°	10986.1	6151.4	572.4	462.5	470.1	442.3	399.3	323.5	272.9	230.0	221.1
75°	6243.7	2002.9	516.8	399.3	437.2	422.1	394.3	324.8	276.7	208.5	198.4
77.5°	1776.7	585.1	499.1	339.9	413.2	436.0	369.0	293.2	283.1	193.3	180.7
80°	600.2	520.6	481.4	264.1	333.6	360.1	319.7	257.8	285.6	175.6	163.0
82.5°	481.4	523.1	404.4	211.0	254.0	272.9	254.0	231.2	231.2	156.7	146.6
85°	385.4	485.2	256.5	168.1	189.5	209.8	179.4	173.1	161.7	131.4	127.6
87.5°	223.7	151.6	106.1	85.9	79.6	80.9	69.5	83.4	102.4	89.7	88.5
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)