

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: P510396

Luminaire Tested: **CST-CA10-210-722-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510396
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-210-722-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25889 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

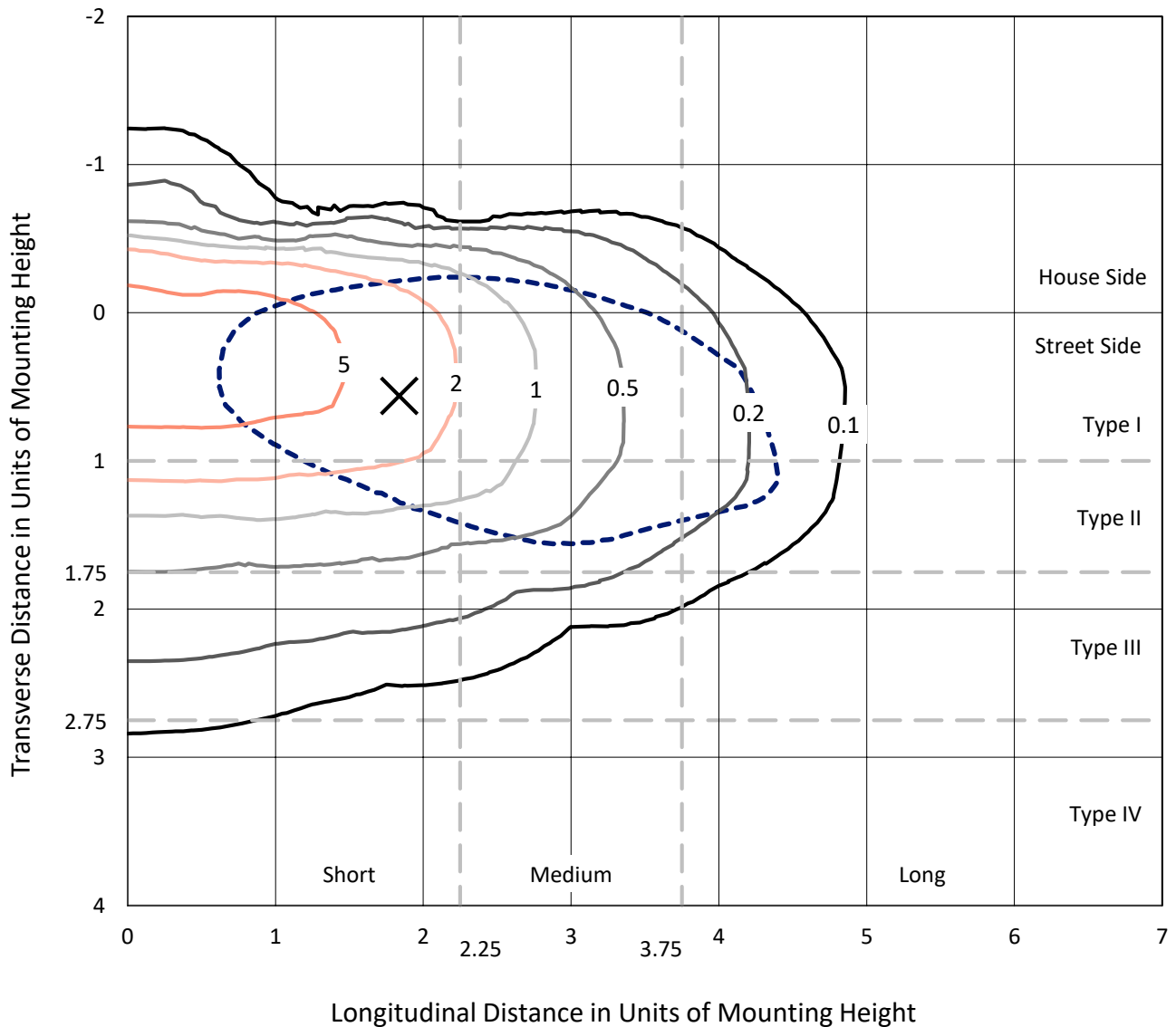
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

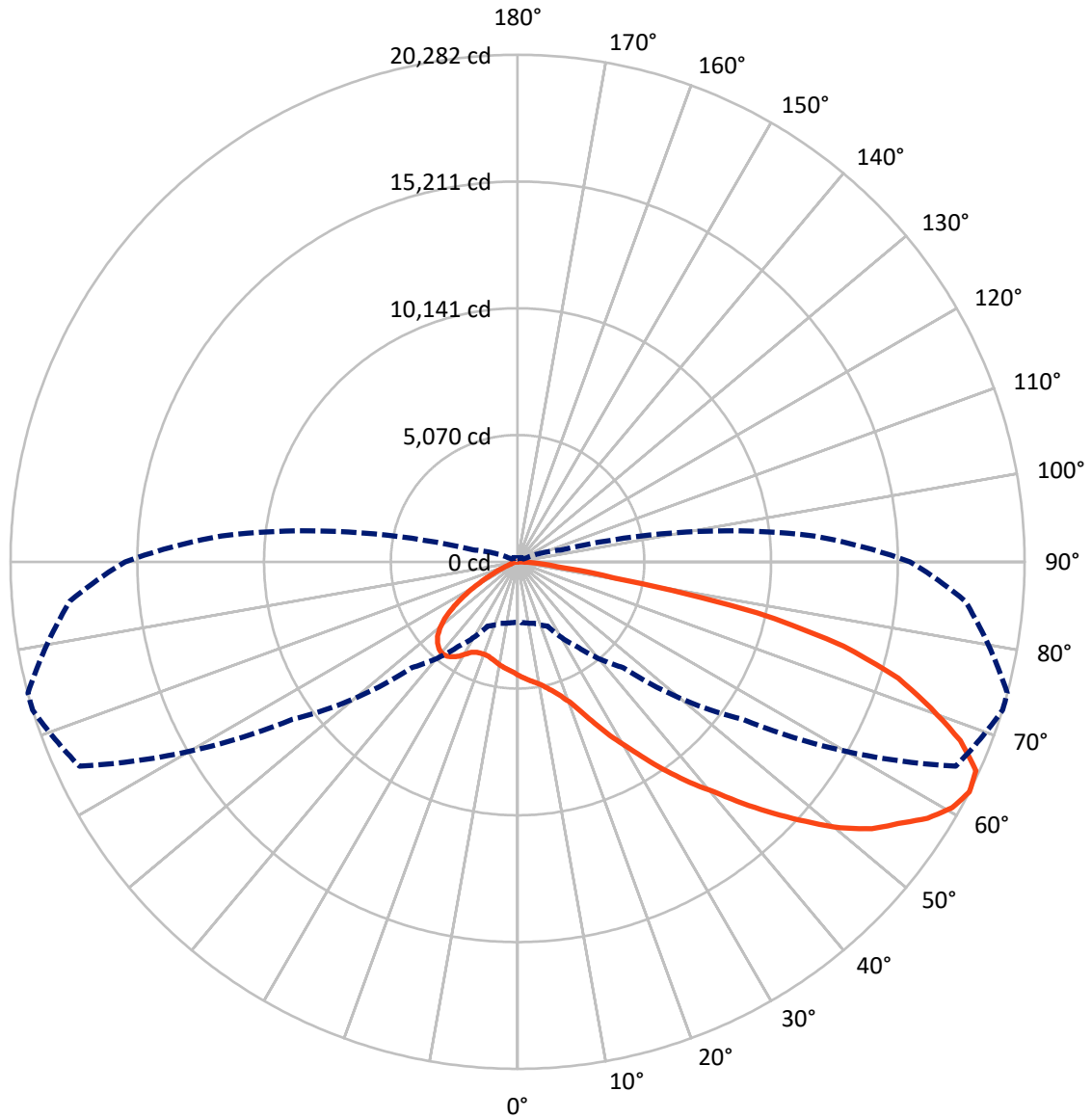
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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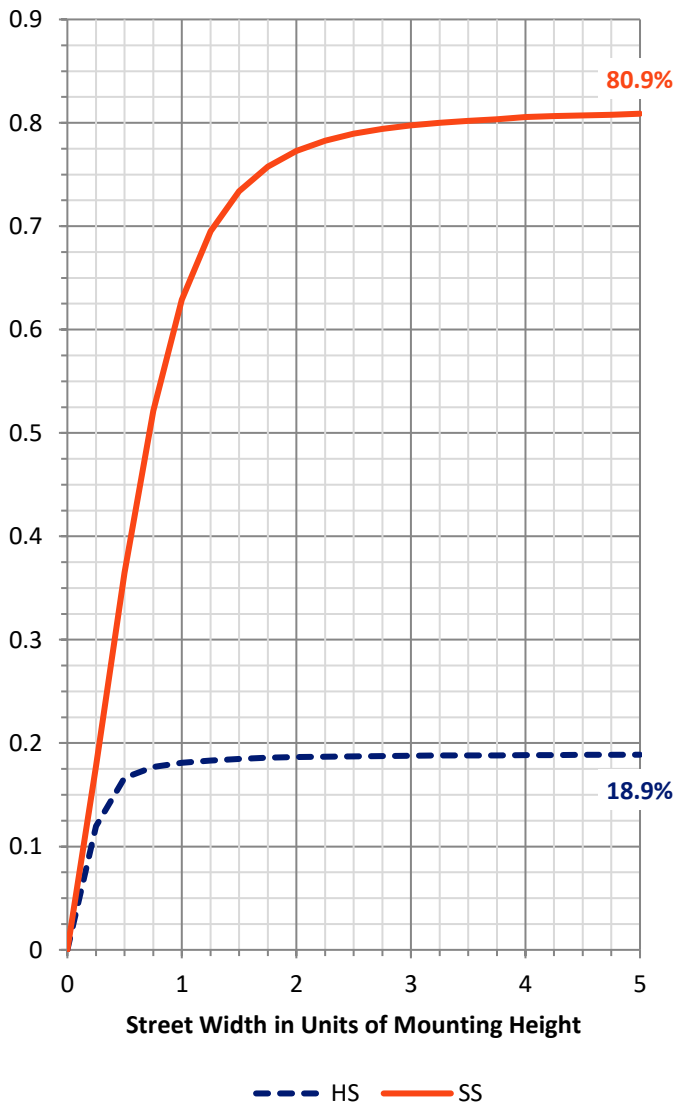
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4952.4	0.0	4952.4
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	20936.6	0.0	20936.6
	% Fixture	80.9	0.0	80.9
Total	Lumens	25889.0	0.0	25889.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	433.7	1.7
10°-20°	1304.4	5.0
20°-30°	2253.7	8.7
30°-40°	3388.9	13.1
40°-50°	4518.8	17.5
50°-60°	5321.8	20.6
60°-70°	5290.8	20.4
70°-80°	3037.6	11.7
80°-90°	339.3	1.3
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°	25889.0	100.0
0°-180°	25889.0	100.0



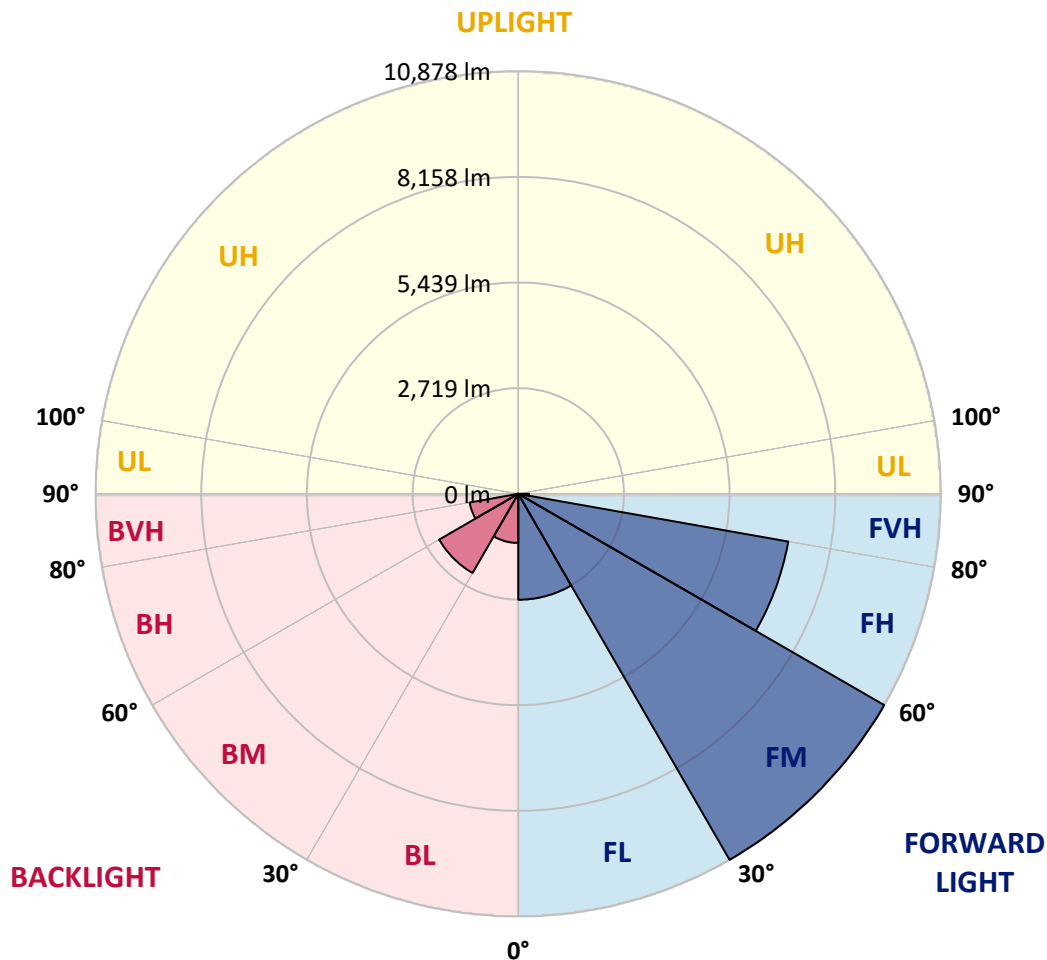
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2726.1	10.5			
FM (30°-60°)	10877.9	42.0			
FH (60°-80°)	7056.9	27.3			G3/7500
FVH (80°-90°)	275.6	1.1			G3/500
BL (0°-30°)	1265.6	4.9	B3/2500		
BM (30°-60°)	2351.6	9.1	B2/2500		
BH (60°-80°)	1271.5	4.9	B3/2500		G3/2500
BVH (80°-90°)	63.7	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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3
2.5°	4857.6	4869.8	4855.3	4848.9	4841.9	4796.6	4743.7	4689.7	4646.1	4639.1	4582.2
5°	5198.8	5205.1	5181.3	5154.0	5106.9	5032.0	4937.3	4843.7	4756.5	4733.3	4629.3
7.5°	5460.8	5448.6	5442.8	5419.6	5378.3	5295.8	5152.3	4998.8	4864.0	4831.5	4673.4
10°	5706.7	5701.4	5657.3	5628.2	5562.5	5486.4	5368.4	5173.8	4983.7	4931.4	4711.8
12.5°	5972.8	5961.2	5943.2	5880.4	5827.0	5698.5	5556.2	5378.9	5167.4	5097.6	4777.4
15°	6212.2	6180.9	6171.0	6105.3	6051.3	5953.1	5810.1	5604.4	5378.3	5318.5	4902.4
17.5°	6440.0	6425.5	6403.4	6358.7	6298.2	6222.7	6108.2	5888.0	5654.4	5567.2	5114.5
20°	6633.6	6615.5	6596.4	6608.6	6595.2	6547.0	6474.9	6287.2	6001.9	5917.6	5372.5
22.5°	6768.4	6767.8	6844.5	6889.3	6914.8	6913.1	6895.6	6789.3	6502.2	6416.8	5758.4
25°	6880.5	6889.3	6986.3	7156.6	7308.8	7322.8	7446.0	7395.4	7151.3	7062.4	6338.9
27.5°	6913.7	6931.1	7107.2	7375.1	7606.4	7828.4	8009.1	8101.5	7875.4	7769.1	6963.1
30°	6937.5	6944.5	7117.1	7437.8	7925.4	8277.0	8600.1	8756.4	8561.7	8483.9	7658.7
32.5°	6769.5	6771.9	7036.3	7522.1	8159.6	8769.2	9151.6	9446.2	9395.1	9292.2	8419.4
35°	6538.3	6581.3	6884.6	7440.7	8352.5	9221.3	9742.0	10181.3	10283.6	10209.8	9179.5
37.5°	6252.3	6286.0	6610.9	7319.9	8395.0	9532.2	10201.1	10928.7	11196.0	11183.8	10097.1
40°	5900.8	5942.0	6330.8	7059.5	8374.0	9758.3	10739.8	11756.2	12095.6	12057.2	11007.1
42.5°	5485.3	5545.7	5922.8	6724.8	8221.2	9896.6	11180.9	12598.8	13209.6	13184.6	11812.6
45°	5074.4	5106.9	5451.0	6258.7	7939.9	9941.3	11595.8	13759.9	14352.1	14324.2	12783.0
47.5°	4650.8	4679.2	5038.4	5767.7	7451.8	9851.3	11924.1	14757.1	15516.1	15488.2	13747.1
50°	3665.2	3772.7	4509.0	5335.9	6895.6	9596.1	12233.9	15999.6	16734.1	16615.6	14591.5
52.5°	3135.8	3174.7	3556.5	4900.6	6340.7	9160.9	12440.8	17150.8	17736.0	17565.1	15455.1
55°	2931.2	2957.4	3144.5	4098.1	5819.4	8502.5	12684.2	18304.9	18487.4	18443.8	16159.4
57.5°	2776.0	2805.1	2938.8	3422.8	5270.2	7579.6	12608.1	19116.7	19345.1	19205.6	16907.3
60°	2556.4	2591.8	2769.1	3073.0	4646.1	6642.9	11938.1	19449.1	19968.7	19811.8	17476.2
62.5°	2418.1	2441.3	2543.0	2837.6	4128.9	5983.9	10984.5	19342.2	20281.9	20276.1	17969.6
65°	2230.4	2264.6	2373.3	2612.2	3668.7	5473.0	10084.9	18814.0	20147.1	20152.3	18071.3
67.5°	2033.9	2047.9	2161.8	2353.6	3126.5	5005.2	8920.9	17910.3	19097.0	19216.7	17367.5
70°	1788.7	1781.7	1904.9	2045.0	2555.2	4249.8	7180.4	16302.9	17545.4	17594.8	15944.4
72.5°	1407.5	1413.9	1448.2	1545.2	1939.8	3344.4	5210.4	13773.9	15923.4	16011.2	14125.4
75°	946.1	956.5	1116.3	1211.1	1395.3	2403.5	3276.4	9297.4	13461.2	13708.8	11560.9
77.5°	721.8	728.2	774.6	878.1	1009.4	1713.2	1775.9	5066.3	9800.1	10387.6	9044.1
80°	511.4	513.7	467.8	416.1	537.5	1162.3	1048.9	2157.7	3905.2	4614.7	5312.1
82.5°	229.0	225.5	265.6	220.8	309.7	449.8	495.1	1047.2	1621.9	1743.4	1898.0
85°	106.3	119.1	136.6	114.5	184.2	173.8	192.9	446.3	760.1	839.1	834.5
87.5°	26.2	28.5	36.0	45.9	66.8	59.3	58.1	131.3	169.7	169.1	259.8
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°	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3	4540.3
2.5°	4543.2	4513.0	4441.5	4372.4	4306.7	4263.1	4214.3	4163.2	4132.4	4117.9	4149.2
5°	4565.9	4508.4	4371.8	4234.7	4118.4	4019.1	3949.3	3890.1	3858.1	3861.0	3862.7
7.5°	4585.1	4504.3	4313.1	4119.6	3938.3	3815.1	3723.9	3659.9	3623.3	3595.4	3616.4
10°	4601.9	4487.5	4244.5	3986.5	3789.5	3607.1	3483.3	3406.0	3338.6	3300.8	3330.4
12.5°	4620.0	4481.1	4167.8	3867.4	3612.3	3408.3	3238.6	3161.9	3095.7	3067.2	3085.2
15°	4698.4	4505.5	4096.4	3727.3	3437.4	3173.5	2990.5	2896.3	2844.0	2809.7	2817.3
17.5°	4833.2	4570.0	4050.5	3580.9	3242.1	2963.2	2726.1	2616.2	2529.6	2505.2	2498.8
20°	5025.0	4692.6	4050.5	3457.1	3020.7	2729.6	2456.4	2271.0	2136.2	2085.7	2124.6
22.5°	5346.9	4901.2	4090.5	3345.0	2830.1	2487.2	2161.8	1878.8	1696.9	1623.1	1666.1
25°	5797.3	5223.7	4155.6	3246.8	2656.3	2208.3	1788.1	1462.7	1262.2	1174.5	1173.3
27.5°	6385.4	5717.1	4287.0	3166.6	2448.3	1847.4	1398.2	1085.0	896.7	843.8	851.4
30°	7037.4	6251.8	4535.1	3050.3	2195.5	1443.5	1018.1	797.3	664.8	595.1	596.2
32.5°	7666.2	6805.6	4829.7	2974.8	1867.2	1088.4	725.8	568.9	486.4	445.1	451.5
35°	8340.3	7283.3	5048.8	2848.1	1481.9	786.8	513.1	426.5	392.3	370.8	371.9
37.5°	9068.5	7808.6	5229.0	2678.4	1120.4	540.4	378.9	365.5	351.0	323.7	321.4
40°	9829.2	8417.0	5336.5	2404.1	778.7	374.2	321.9	337.1	328.9	293.5	290.6
42.5°	10474.2	8886.6	5363.2	2040.9	503.8	303.3	291.7	315.0	316.7	280.7	276.0
45°	11093.7	9305.0	5310.9	1562.6	349.3	285.3	273.1	305.1	307.4	274.9	267.3
47.5°	11787.0	9877.4	5216.2	1042.5	288.8	269.6	266.7	288.8	297.0	270.2	260.9
50°	12629.0	10342.9	4935.5	640.4	272.5	259.8	259.8	273.1	284.2	260.9	256.3
52.5°	13492.6	10748.5	4520.0	439.3	262.7	249.3	256.9	262.7	266.7	245.8	249.9
55°	14111.5	11108.2	3900.5	353.3	256.9	242.3	260.3	248.7	242.9	224.9	220.8
57.5°	14798.4	11535.9	3267.1	313.2	249.3	246.4	248.7	226.6	210.4	191.8	187.7
60°	15277.8	11766.1	2491.9	294.6	240.6	242.3	229.5	199.9	170.3	156.9	154.0
62.5°	15696.2	11897.4	1826.5	270.8	232.5	231.9	208.0	170.9	140.1	125.5	123.2
65°	15632.9	11692.3	1183.8	251.6	226.1	218.5	186.5	146.4	116.8	105.8	104.6
67.5°	14936.1	10784.5	745.6	231.9	215.0	201.7	167.4	130.8	107.5	94.7	93.6
70°	13473.4	9531.1	456.2	206.3	191.2	178.4	148.2	122.6	101.7	86.6	83.7
72.5°	11451.7	8163.1	322.5	181.9	166.8	151.7	125.5	116.8	97.0	77.9	75.5
75°	9408.4	6012.9	270.2	158.6	142.4	122.0	106.9	108.7	91.2	70.9	69.2
77.5°	6625.4	3748.8	251.6	129.6	112.2	97.0	92.4	99.4	83.7	65.1	63.3
80°	3866.8	2105.4	208.0	102.3	84.3	75.0	77.3	84.3	73.2	58.7	56.4
82.5°	1560.9	833.3	146.4	79.6	61.6	59.9	63.3	68.6	60.4	49.4	48.2
85°	557.3	260.3	83.1	52.3	39.5	41.3	40.7	48.8	43.6	36.0	35.4
87.5°	146.4	51.7	37.2	20.9	16.9	16.9	15.7	22.7	20.9	16.3	18.0
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)