

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: P510636

Luminaire Tested: **CST-CA6-230-722-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510636
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-CA6-230-722-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (6) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25557 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

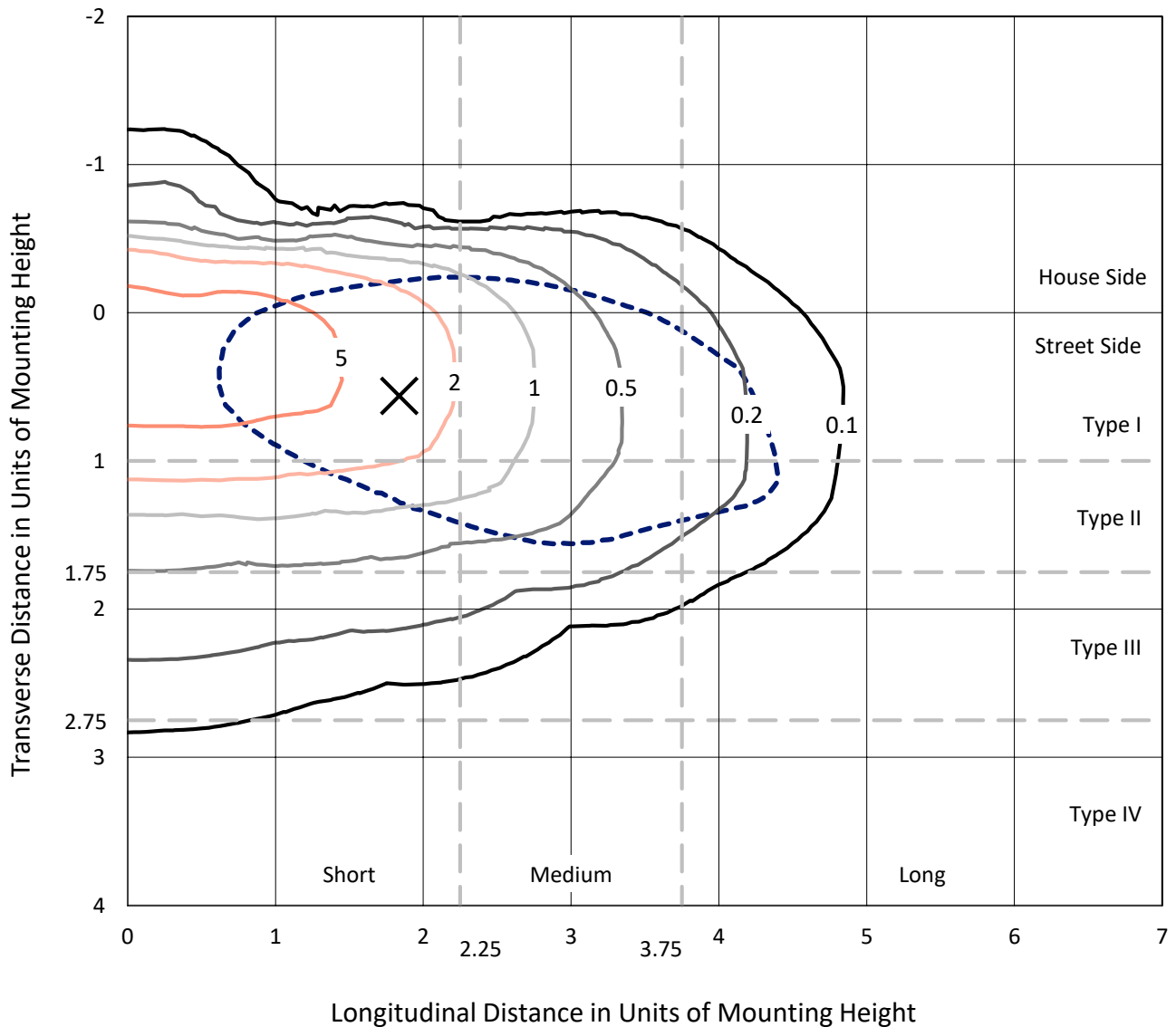
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

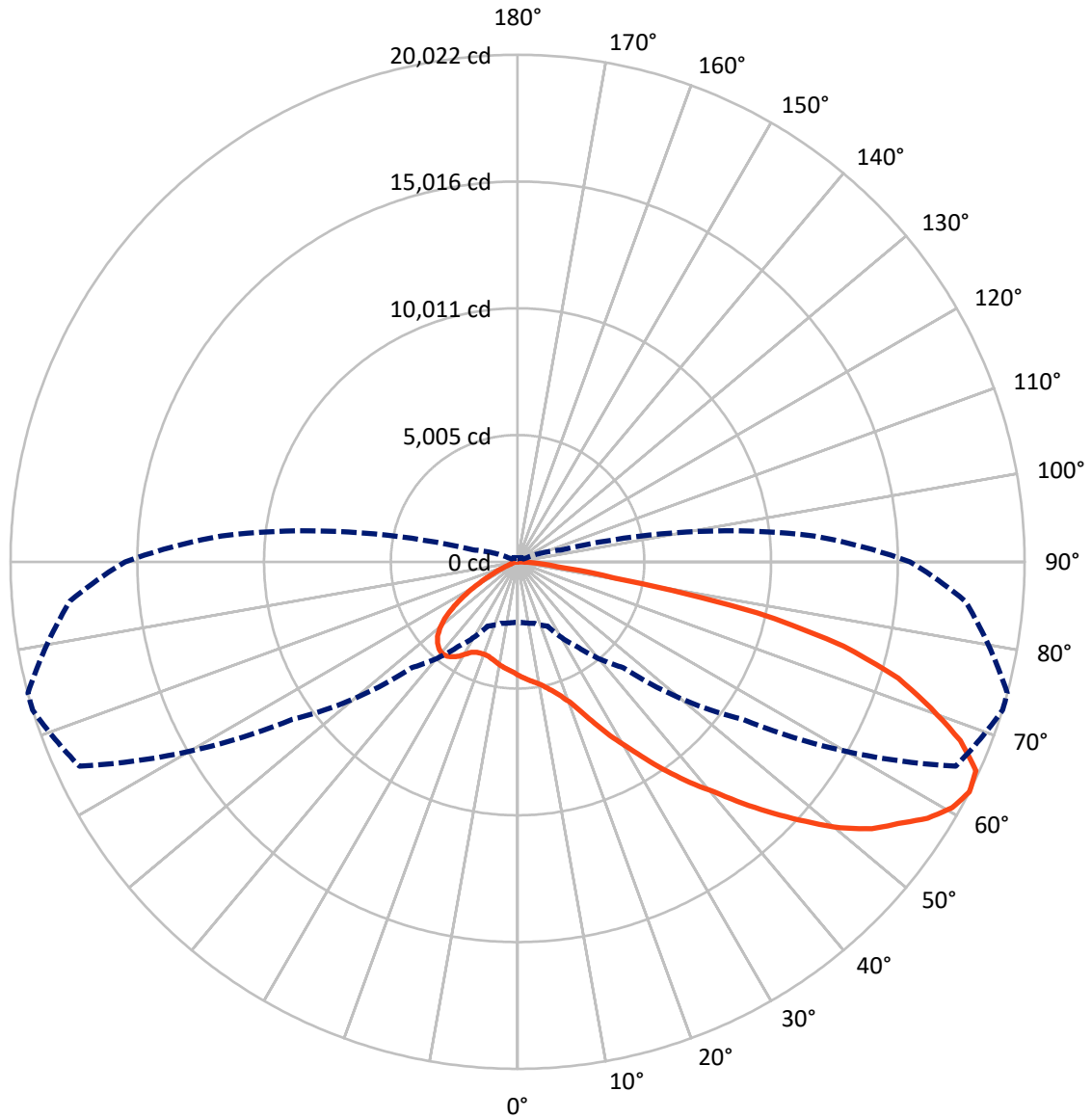
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 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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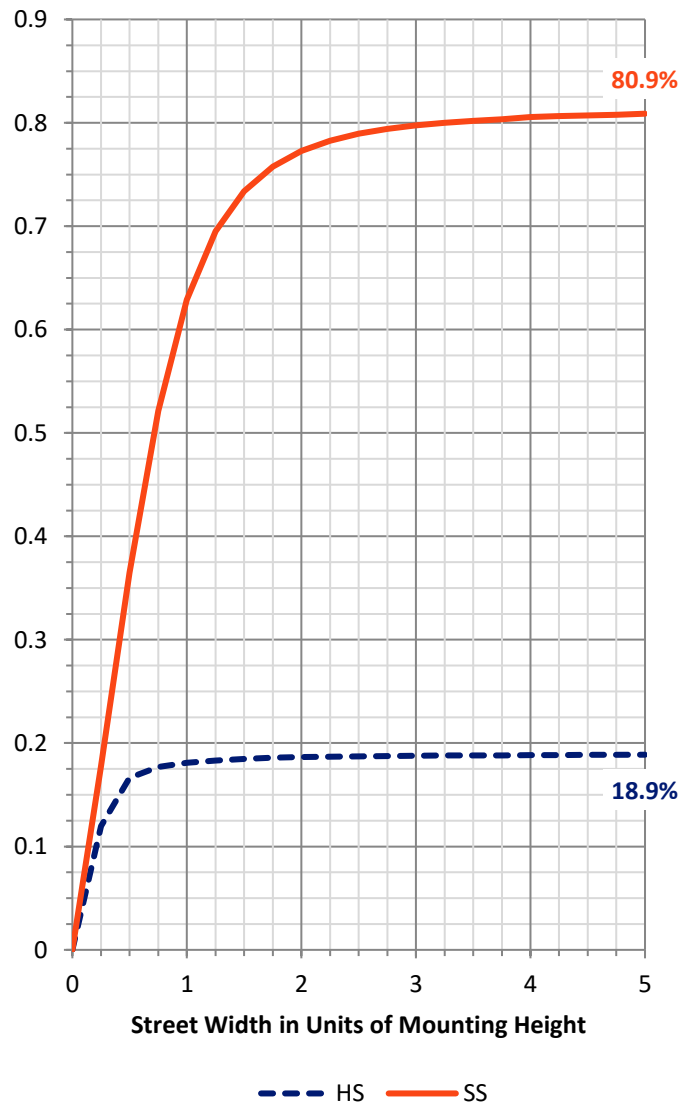
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4888.9	0.0	4888.9
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	20668.1	0.0	20668.1
	% Fixture	80.9	0.0	80.9
Total	Lumens	25557.0	0.0	25557.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	428.1	1.7
10°-20°	1287.6	5.0
20°-30°	2224.8	8.7
30°-40°	3345.5	13.1
40°-50°	4460.9	17.5
50°-60°	5253.6	20.6
60°-70°	5223.0	20.4
70°-80°	2998.6	11.7
80°-90°	335.0	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°	25557.0	100.0
0°-180°	25557.0	100.0

Coefficient of Utilization



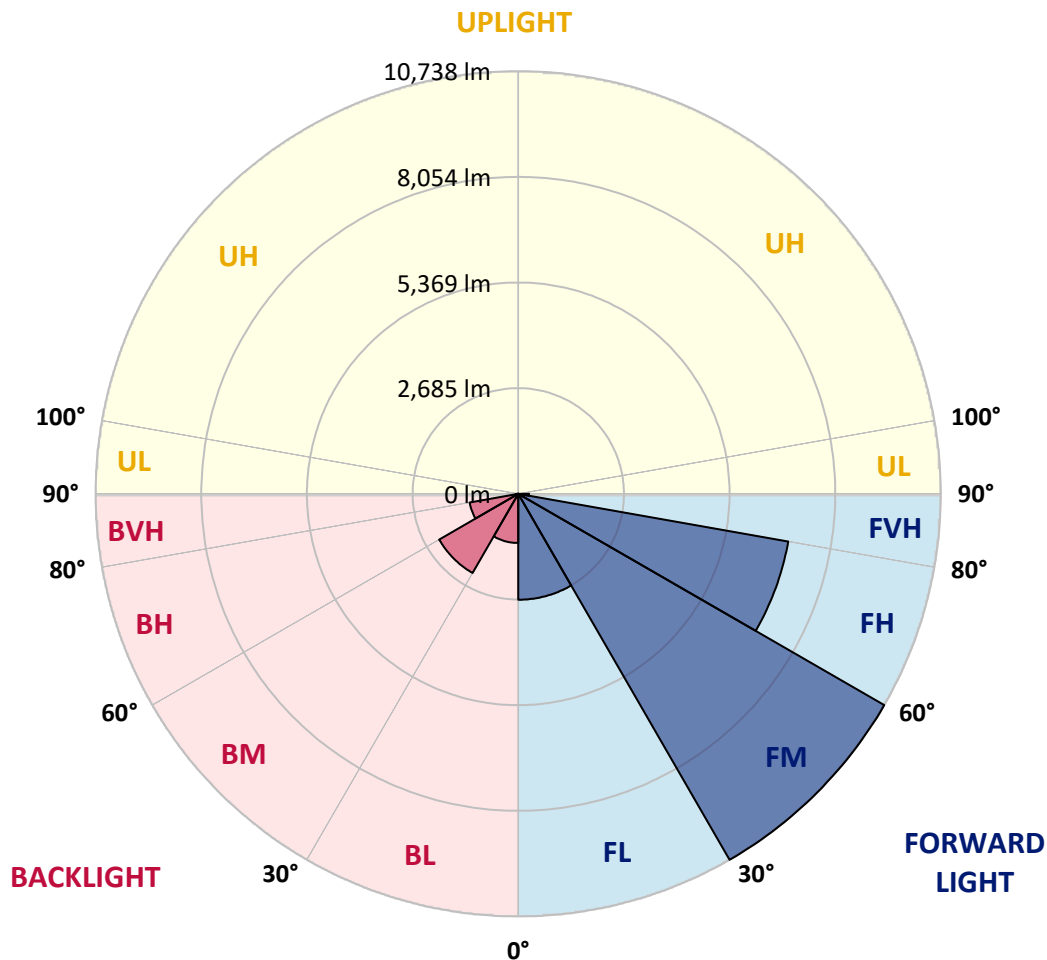
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2691.1	10.5			
FM (30°-60°)	10738.4	42.0			
FH (60°-80°)	6966.4	27.3			G3/7500
FVH (80°-90°)	272.1	1.1			G3/500
BL (0°-30°)	1249.4	4.9	B3/2500		
BM (30°-60°)	2321.5	9.1	B2/2500		
BH (60°-80°)	1255.2	4.9	B3/2500		G3/2500
BVH (80°-90°)	62.9	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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1
2.5°	4795.3	4807.4	4793.0	4786.7	4779.9	4735.1	4682.9	4629.6	4586.5	4579.6	4523.4
5°	5132.1	5138.4	5114.9	5087.9	5041.4	4967.4	4873.9	4781.6	4695.5	4672.6	4569.9
7.5°	5390.8	5378.8	5373.0	5350.1	5309.4	5227.9	5086.2	4934.7	4801.7	4769.5	4613.5
10°	5633.5	5628.3	5584.7	5556.0	5491.2	5416.1	5299.6	5107.4	4919.8	4868.2	4651.3
12.5°	5896.2	5884.7	5867.0	5805.0	5752.2	5625.4	5484.9	5309.9	5101.1	5032.3	4716.2
15°	6132.6	6101.6	6091.8	6027.0	5973.7	5876.7	5735.6	5532.5	5309.4	5250.3	4839.5
17.5°	6357.5	6343.1	6321.3	6277.1	6217.5	6142.9	6029.9	5812.5	5581.8	5495.8	5048.9
20°	6548.5	6530.7	6511.8	6523.8	6510.6	6463.0	6391.9	6206.6	5924.9	5841.7	5303.6
22.5°	6681.6	6681.0	6756.7	6800.9	6826.1	6824.4	6807.2	6702.2	6418.8	6334.5	5684.5
25°	6792.3	6800.9	6896.7	7064.8	7215.1	7228.9	7350.5	7300.6	7059.6	6971.9	6257.6
27.5°	6825.0	6842.2	7016.0	7280.5	7508.8	7728.0	7906.4	7997.6	7774.4	7669.4	6873.8
30°	6848.5	6855.4	7025.8	7342.5	7823.8	8170.8	8489.8	8644.1	8451.9	8375.1	7560.5
32.5°	6682.7	6685.0	6946.0	7425.6	8055.0	8656.7	9034.2	9325.1	9274.6	9173.0	8311.4
35°	6454.4	6496.9	6796.3	7345.3	8245.4	9103.1	9617.1	10050.8	10151.7	10078.9	9061.8
37.5°	6172.2	6205.4	6526.1	7226.0	8287.3	9410.0	10070.3	10788.5	11052.4	11040.4	9967.6
40°	5825.1	5865.8	6249.6	6969.0	8266.6	9633.1	10602.1	11605.4	11940.5	11902.6	10866.0
42.5°	5414.9	5474.6	5846.9	6638.6	8115.8	9769.7	11037.5	12437.3	13040.2	13015.5	11661.1
45°	5009.3	5041.4	5381.1	6178.5	7838.1	9813.8	11447.1	13583.5	14168.0	14140.5	12619.1
47.5°	4591.1	4619.2	4973.8	5693.7	7356.2	9724.9	11771.2	14567.9	15317.1	15289.6	13570.8
50°	3618.2	3724.3	4451.1	5267.5	6807.2	9473.1	12077.0	15794.4	16519.5	16402.5	14404.4
52.5°	3095.5	3134.0	3510.9	4837.8	6259.4	9043.4	12281.2	16930.8	17508.5	17339.9	15256.9
55°	2893.6	2919.4	3104.2	4045.5	5744.8	8393.4	12521.6	18070.2	18250.3	18207.3	15952.2
57.5°	2740.4	2769.1	2901.1	3378.9	5202.7	7482.4	12446.4	18871.6	19097.0	18959.4	16690.5
60°	2523.6	2558.6	2733.6	3033.6	4586.5	6557.7	11785.0	19199.7	19712.6	19557.7	17252.1
62.5°	2387.1	2410.0	2510.4	2801.3	4076.0	5907.1	10843.6	19094.2	20021.8	20016.1	17739.2
65°	2201.8	2235.6	2342.9	2578.7	3621.6	5402.9	9955.5	18572.7	19888.7	19893.9	17839.5
67.5°	2007.9	2021.6	2134.1	2323.4	3086.4	4941.1	8806.5	17680.6	18852.1	18970.3	17144.8
70°	1765.8	1758.9	1880.5	2018.8	2522.4	4195.3	7088.3	16093.9	17320.4	17369.1	15739.9
72.5°	1389.4	1395.7	1429.6	1525.4	1914.9	3301.5	5143.6	13597.2	15719.2	15805.9	13944.3
75°	933.9	944.3	1102.0	1195.5	1377.4	2372.7	3234.4	9178.2	13288.6	13533.0	11412.7
77.5°	712.5	718.8	764.7	866.8	996.5	1691.2	1753.1	5001.3	9674.4	10254.4	8928.1
80°	504.8	507.1	461.8	410.8	530.6	1147.3	1035.5	2130.1	3855.1	4555.5	5244.0
82.5°	226.0	222.6	262.2	218.0	305.8	444.0	488.8	1033.8	1601.1	1721.0	1873.6
85°	105.0	117.6	134.8	113.0	181.9	171.5	190.5	440.6	750.4	828.4	823.8
87.5°	25.8	28.1	35.6	45.3	66.0	58.5	57.4	129.7	167.5	166.9	256.4
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°	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1	4482.1
2.5°	4485.0	4455.2	4384.6	4316.3	4251.5	4208.5	4160.3	4109.8	4079.4	4065.1	4096.0
5°	4507.4	4450.6	4315.8	4180.4	4065.6	3967.5	3898.7	3840.2	3808.6	3811.5	3813.2
7.5°	4526.3	4446.5	4257.8	4066.8	3887.8	3766.2	3676.1	3613.0	3576.9	3549.3	3570.0
10°	4542.9	4429.9	4190.1	3935.4	3740.9	3560.8	3438.6	3362.3	3295.8	3258.5	3287.7
12.5°	4560.7	4423.6	4114.4	3817.8	3566.0	3364.6	3197.1	3121.4	3056.0	3027.9	3045.6
15°	4638.2	4447.7	4043.8	3679.5	3393.3	3132.8	2952.1	2859.2	2807.6	2773.7	2781.2
17.5°	4771.2	4511.4	3998.5	3535.0	3200.5	2925.2	2691.1	2582.7	2497.2	2473.1	2466.8
20°	4960.6	4632.4	3998.5	3412.8	2982.0	2694.5	2424.9	2241.9	2108.8	2058.9	2097.4
22.5°	5278.4	4838.4	4038.1	3302.1	2793.8	2455.3	2134.1	1854.7	1675.1	1602.3	1644.7
25°	5723.0	5156.8	4102.3	3205.1	2622.3	2180.0	1765.2	1443.9	1246.0	1159.4	1158.2
27.5°	6303.5	5643.8	4232.0	3126.0	2416.9	1823.7	1380.3	1071.0	885.2	833.0	840.4
30°	6947.2	6171.6	4477.0	3011.2	2167.3	1425.0	1005.1	787.1	656.3	587.4	588.6
32.5°	7567.9	6718.3	4767.8	2936.6	1843.2	1074.5	716.5	561.6	480.2	439.4	445.7
35°	8233.4	7189.9	4984.1	2811.6	1462.9	776.8	506.6	421.1	387.2	366.0	367.2
37.5°	8952.2	7708.5	5161.9	2644.1	1106.0	533.5	374.0	360.8	346.5	319.5	317.2
40°	9703.1	8309.1	5268.0	2373.3	768.7	369.4	317.8	332.7	324.7	289.7	286.8
42.5°	10339.9	8772.6	5294.4	2014.7	497.4	299.5	288.0	310.9	312.7	277.1	272.5
45°	10951.4	9185.7	5242.8	1542.6	344.8	281.7	269.6	301.2	303.5	271.3	263.9
47.5°	11635.8	9750.7	5149.3	1029.2	285.1	266.2	263.3	285.1	293.1	266.8	257.6
50°	12467.1	10210.3	4872.2	632.2	269.1	256.4	256.4	269.6	280.5	257.6	253.0
52.5°	13319.6	10610.7	4462.0	433.7	259.3	246.1	253.6	259.3	263.3	242.7	246.7
55°	13930.5	10965.8	3850.5	348.8	253.6	239.2	257.0	245.5	239.8	222.0	218.0
57.5°	14608.6	11388.0	3225.2	309.2	246.1	243.2	245.5	223.7	207.7	189.3	185.3
60°	15081.9	11615.2	2459.9	290.9	237.5	239.2	226.6	197.3	168.1	154.9	152.0
62.5°	15494.9	11744.8	1803.1	267.3	229.5	228.9	205.4	168.7	138.3	123.9	121.6
65°	15432.4	11542.3	1168.6	248.4	223.2	215.7	184.1	144.6	115.3	104.4	103.3
67.5°	14744.6	10646.2	736.0	228.9	212.3	199.1	165.2	129.1	106.1	93.5	92.4
70°	13300.6	9408.8	450.3	203.7	188.7	176.1	146.3	121.0	100.4	85.5	82.6
72.5°	11304.8	8058.4	318.4	179.6	164.6	149.7	123.9	115.3	95.8	76.9	74.6
75°	9287.8	5935.8	266.8	156.6	140.6	120.5	105.6	107.3	90.1	70.0	68.3
77.5°	6540.5	3700.8	248.4	127.9	110.7	95.8	91.2	98.1	82.6	64.3	62.5
80°	3817.2	2078.4	205.4	101.0	83.2	74.0	76.3	83.2	72.3	57.9	55.6
82.5°	1540.9	822.6	144.6	78.6	60.8	59.1	62.5	67.7	59.7	48.8	47.6
85°	550.2	257.0	82.0	51.6	39.0	40.7	40.2	48.2	43.0	35.6	35.0
87.5°	144.6	51.1	36.7	20.7	16.6	16.6	15.5	22.4	20.7	16.1	17.8
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)