

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: P510506

Luminaire Tested: **CST-CA10-310-760-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510506
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-CA10-310-760-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 43955 lumens
Efficiency: N/A
Efficacy: 140.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

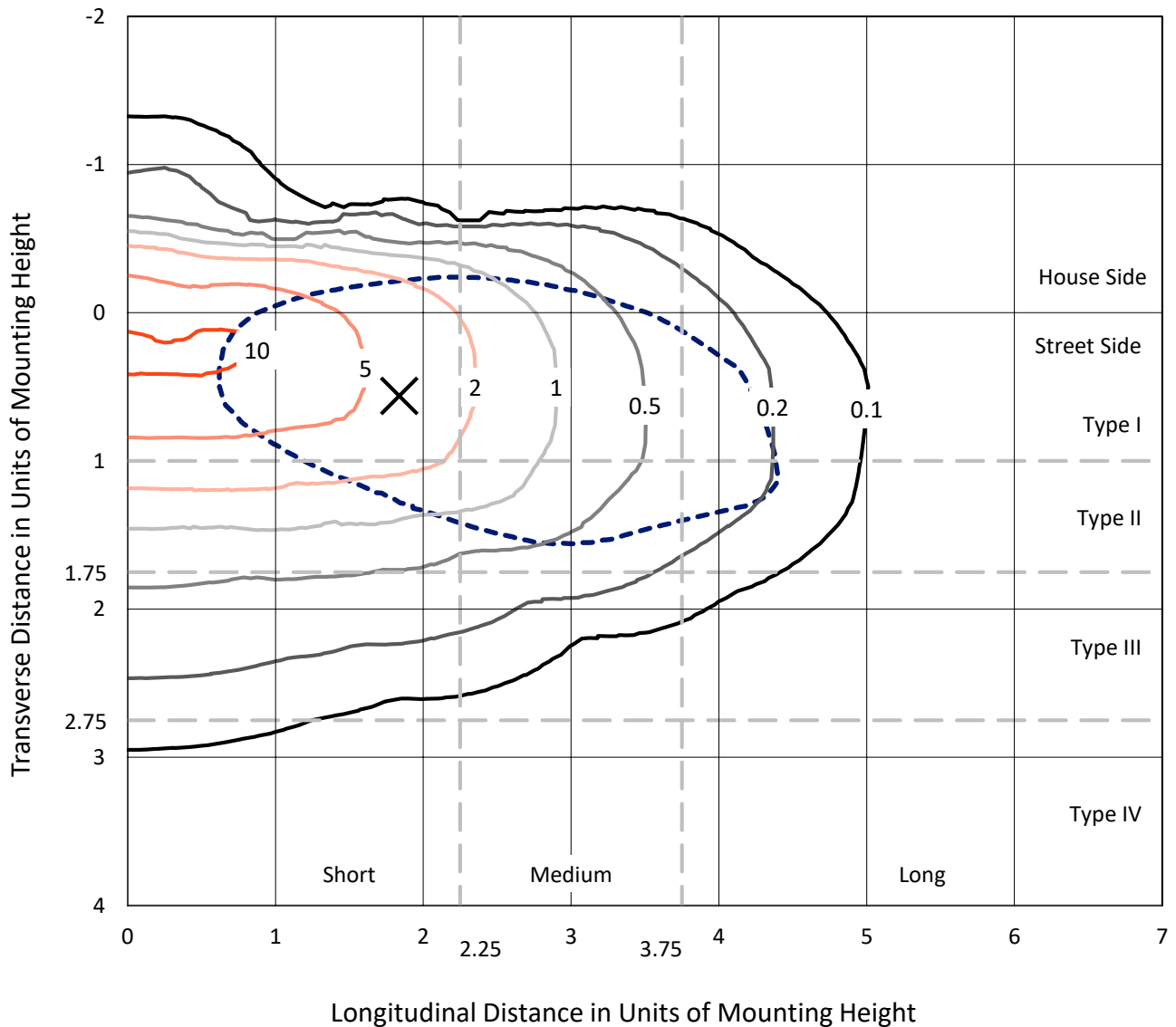
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

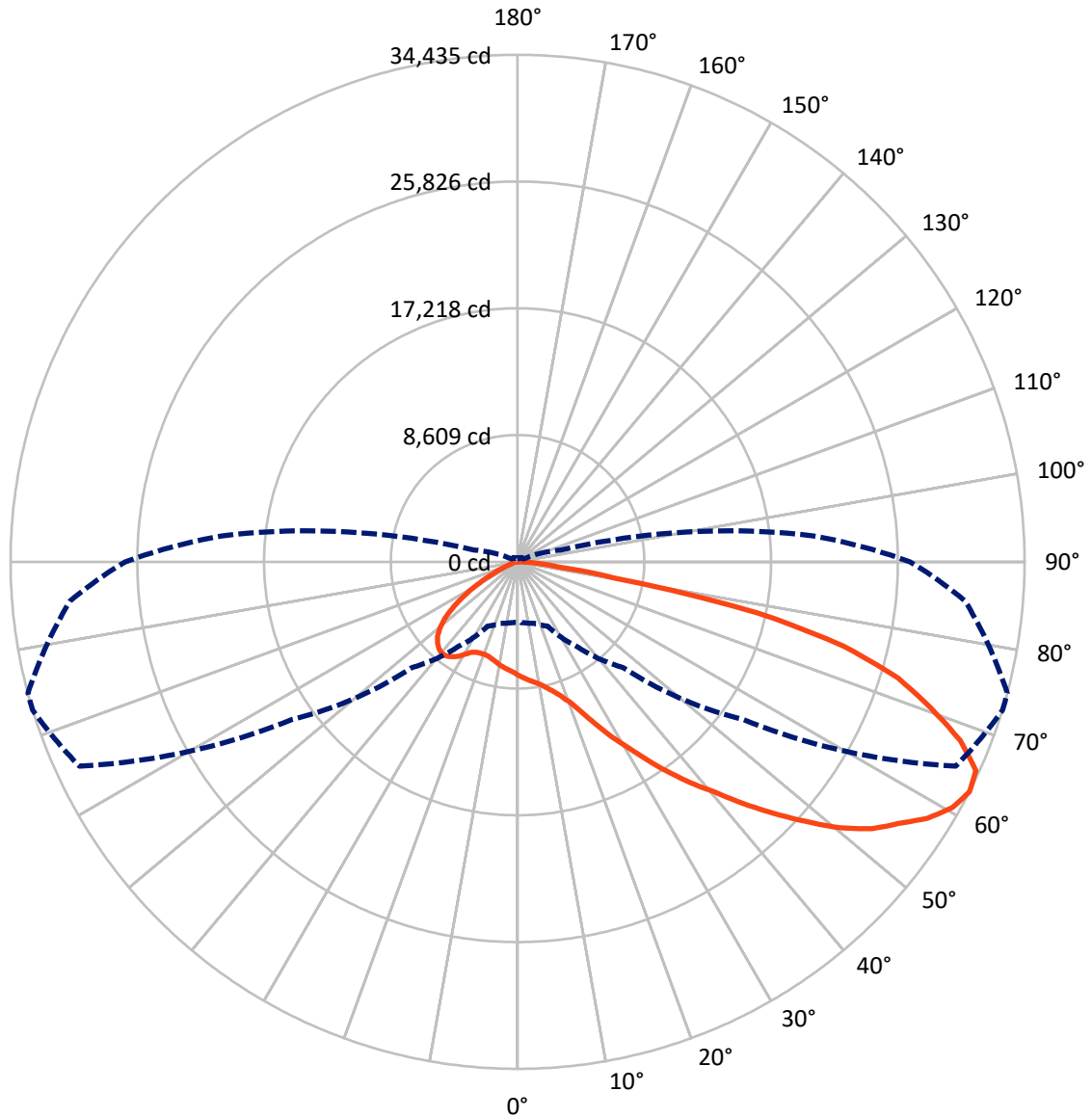
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.7 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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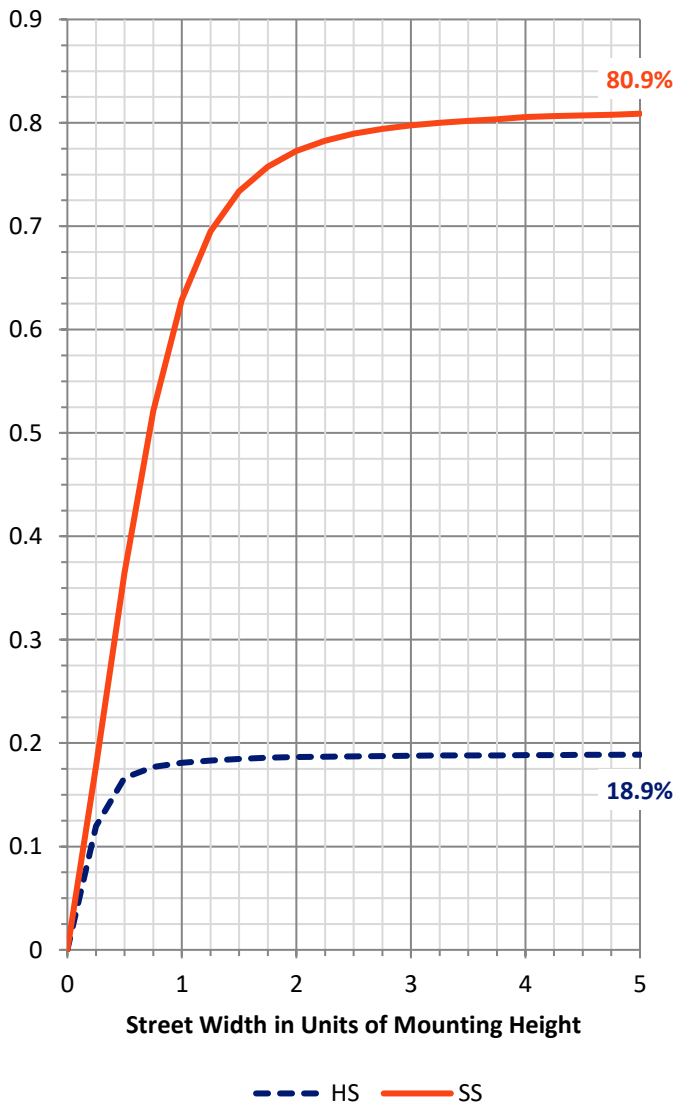
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8408.4	0.0	8408.4
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	35546.6	0.0	35546.6
	% Fixture	80.9	0.0	80.9
Total	Lumens	43955.0	0.0	43955.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	736.3	1.7
10°-20°	2214.6	5.0
20°-30°	3826.3	8.7
30°-40°	5753.8	13.1
40°-50°	7672.2	17.5
50°-60°	9035.5	20.6
60°-70°	8982.9	20.4
70°-80°	5157.3	11.7
80°-90°	576.1	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°	43955.0	100.0
0°-180°	43955.0	100.0

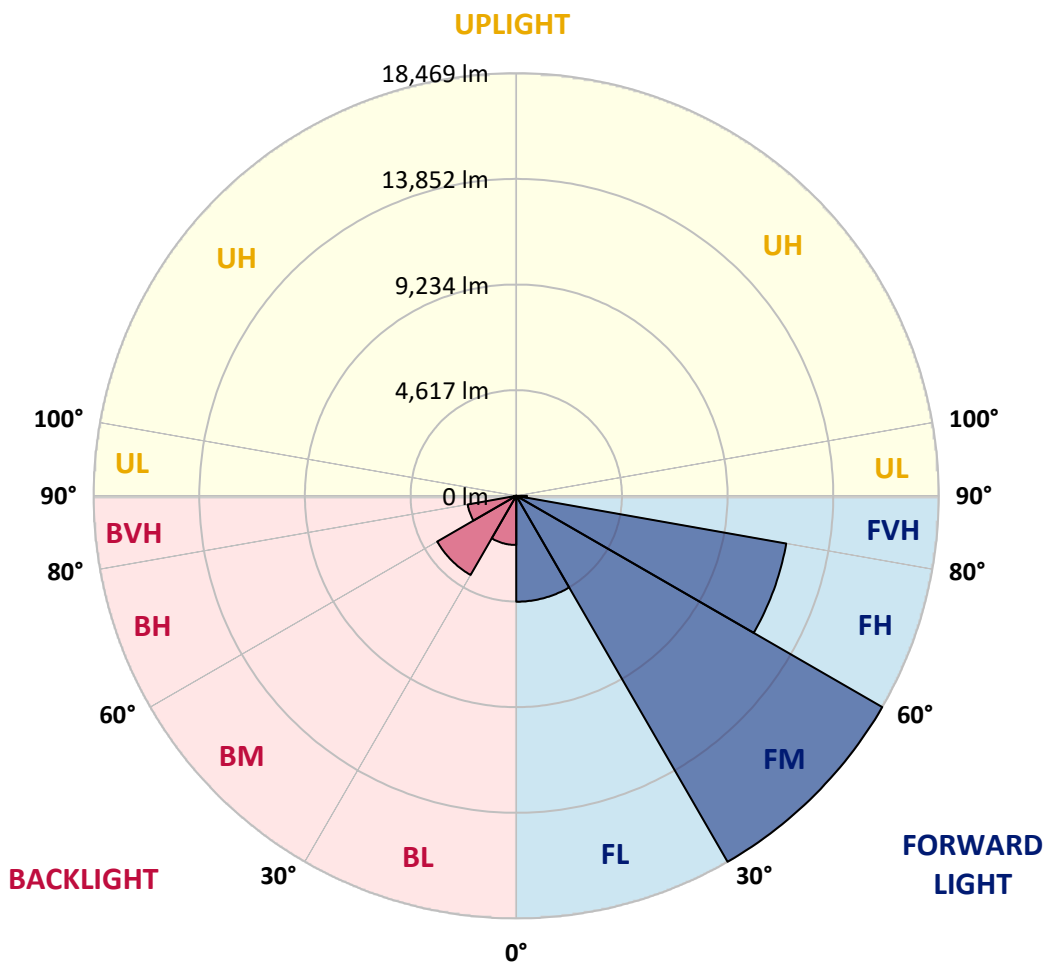


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4628.4	10.5			
FM (30°-60°)	18468.8	42.0			
FH (60°-80°)	11981.4	27.3			G4/12000
FVH (80°-90°)	467.9	1.1			G3/500
BL (0°-30°)	2148.7	4.9	B3/2500		
BM (30°-60°)	3992.7	9.1	B3/5000		
BH (60°-80°)	2158.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	108.2	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-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7
2.5°	8247.4	8268.1	8243.5	8232.6	8220.8	8143.8	8054.0	7962.3	7888.3	7876.4	7779.7
5°	8826.6	8837.4	8797.0	8750.6	8670.7	8543.4	8382.6	8223.7	8075.7	8036.3	7859.7
7.5°	9271.6	9250.8	9241.0	9201.5	9131.5	8991.4	8747.6	8487.2	8258.3	8203.0	7934.6
10°	9688.9	9680.0	9605.0	9555.7	9444.2	9315.0	9114.7	8784.2	8461.5	8372.7	7999.8
12.5°	10140.8	10121.1	10090.5	9983.9	9893.2	9675.1	9433.4	9132.4	8773.3	8654.9	8111.3
15°	10547.3	10494.0	10477.2	10365.8	10274.0	10107.3	9864.5	9515.3	9131.5	9029.8	8323.4
17.5°	10934.1	10909.4	10871.9	10795.9	10693.3	10565.1	10370.7	9996.8	9600.1	9452.1	8683.5
20°	11262.6	11232.0	11199.5	11220.2	11197.5	11115.6	10993.3	10674.6	10190.1	10047.1	9121.6
22.5°	11491.5	11490.5	11620.8	11696.8	11740.2	11737.2	11707.6	11527.0	11039.6	10894.6	9776.7
25°	11682.0	11696.8	11861.5	12150.6	12409.1	12432.8	12642.0	12556.1	12141.7	11990.8	10762.4
27.5°	11738.2	11767.8	12066.7	12521.6	12914.3	13291.2	13598.0	13754.9	13371.1	13190.5	11822.1
30°	11778.6	11790.5	12083.5	12628.1	13455.9	14052.9	14601.5	14866.9	14536.3	14404.1	13003.1
32.5°	11493.5	11497.4	11946.4	12771.2	13853.6	14888.6	15537.8	16038.0	15951.2	15776.6	14294.6
35°	11100.8	11173.8	11688.9	12633.1	14181.1	15656.2	16540.2	17286.1	17459.8	17334.5	15585.1
37.5°	10615.4	10672.6	11224.1	12427.9	14253.2	16184.0	17319.7	18555.0	19008.8	18988.1	17143.1
40°	10018.5	10088.5	10748.6	11985.8	14217.6	16567.8	18234.3	19960.0	20536.2	20471.0	18688.2
42.5°	9313.0	9415.6	10055.9	11417.5	13958.2	16802.7	18983.2	21390.6	22427.6	22385.1	20055.7
45°	8615.4	8670.7	9254.8	10626.2	13480.6	16878.6	19687.6	23361.9	24367.3	24320.0	21703.4
47.5°	7896.2	7944.5	8554.3	9792.5	12651.8	16725.7	20245.1	25055.0	26343.6	26296.2	23340.2
50°	6222.8	6405.3	7655.4	9059.4	11707.6	16292.6	20771.0	27164.5	28411.6	28210.3	24773.8
52.5°	5324.0	5390.1	6038.3	8320.4	10765.4	15553.6	21122.2	29119.0	30112.6	29822.5	26240.0
55°	4976.7	5021.1	5338.8	6957.9	9880.3	14435.7	21535.6	31078.5	31388.3	31314.3	27435.8
57.5°	4713.2	4762.6	4989.5	5811.4	8947.9	12868.9	21406.4	32456.9	32844.6	32607.8	28705.6
60°	4340.3	4400.5	4701.4	5217.4	7888.3	11278.4	20268.8	33021.2	33903.3	33636.9	29671.6
62.5°	4105.5	4144.9	4317.6	4817.8	7010.2	10159.5	18649.7	32839.7	34435.1	34425.2	30509.2
65°	3786.8	3845.0	4029.5	4435.0	6228.7	9292.3	17122.3	31942.8	34206.2	34215.1	30681.9
67.5°	3453.3	3477.0	3670.3	3995.9	5308.2	8498.0	15146.1	30408.6	32423.3	32626.6	29487.1
70°	3036.9	3025.1	3234.2	3472.0	4338.3	7215.4	12191.1	27679.5	29789.0	29872.8	27070.8
72.5°	2389.7	2400.5	2458.7	2623.5	3293.4	5678.2	8846.3	23385.6	27035.2	27184.2	23982.5
75°	1606.3	1624.0	1895.4	2056.2	2368.9	4080.8	5562.7	15785.4	22854.8	23275.1	19628.4
77.5°	1225.4	1236.3	1315.2	1490.8	1713.8	2908.6	3015.2	8601.6	16638.9	17636.4	15355.3
80°	868.3	872.2	794.3	706.4	912.7	1973.3	1780.9	3663.4	6630.3	7835.0	9019.0
82.5°	388.7	382.8	450.9	374.9	525.9	763.7	840.6	1777.9	2753.7	2960.0	3222.4
85°	180.6	202.3	231.9	194.4	312.8	295.0	327.6	757.7	1290.5	1424.7	1416.8
87.5°	44.4	48.3	61.2	77.9	113.5	100.6	98.7	223.0	288.1	287.1	441.0
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°	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7	7708.7
2.5°	7713.6	7662.3	7541.0	7423.6	7312.1	7238.1	7155.2	7068.4	7016.1	6991.4	7044.7
5°	7752.1	7654.4	7422.6	7189.7	6992.4	6823.7	6705.3	6604.6	6550.4	6555.3	6558.3
7.5°	7784.7	7647.5	7322.9	6994.4	6686.5	6477.4	6322.5	6213.9	6151.8	6104.4	6139.9
10°	7813.3	7618.9	7206.5	6768.4	6434.0	6124.1	5914.0	5782.8	5668.3	5604.2	5654.5
12.5°	7843.9	7608.1	7076.3	6566.2	6133.0	5786.7	5498.6	5368.4	5255.9	5207.5	5238.1
15°	7977.1	7649.5	6954.9	6328.4	5836.0	5388.1	5077.3	4917.5	4828.7	4770.5	4783.3
17.5°	8206.0	7759.0	6877.0	6079.7	5504.5	5030.9	4628.4	4441.9	4294.9	4253.5	4242.6
20°	8531.6	7967.2	6877.0	5869.6	5128.6	4634.3	4170.6	3855.8	3626.9	3541.1	3607.2
22.5°	9078.2	8321.4	6945.0	5679.2	4805.0	4222.9	3670.3	3189.8	2881.0	2755.7	2828.7
25°	9842.8	8869.0	7055.5	5512.4	4510.0	3749.3	3035.9	2483.4	2143.0	1994.0	1992.0
27.5°	10841.3	9706.7	7278.5	5376.3	4156.8	3136.6	2373.9	1842.1	1522.4	1432.6	1445.4
30°	11948.3	10614.4	7699.8	5178.9	3727.6	2450.8	1728.6	1353.7	1128.7	1010.3	1012.3
32.5°	13015.9	11554.7	8200.1	5050.7	3170.1	1848.0	1232.3	965.9	825.8	755.8	766.6
35°	14160.4	12365.7	8572.0	4835.6	2516.0	1335.9	871.2	724.2	666.0	629.5	631.5
37.5°	15396.7	13257.6	8877.9	4547.5	1902.3	917.6	643.3	620.6	595.9	549.6	545.6
40°	16688.2	14290.7	9060.4	4081.8	1322.1	635.4	546.6	572.3	558.4	498.3	493.3
42.5°	17783.4	15087.9	9105.8	3465.1	855.4	515.0	495.3	534.8	537.7	476.6	468.7
45°	18835.2	15798.3	9017.0	2653.1	593.0	484.4	463.7	518.0	521.9	466.7	453.9
47.5°	20012.2	16770.1	8856.2	1770.1	490.4	457.8	452.9	490.4	504.2	458.8	443.0
50°	21441.9	17560.4	8379.6	1087.3	462.7	441.0	441.0	463.7	482.5	443.0	435.1
52.5°	22908.1	18249.1	7674.2	745.9	446.0	423.3	436.1	446.0	452.9	417.4	424.3
55°	23958.9	18859.8	6622.4	599.9	436.1	411.4	442.0	422.3	412.4	381.8	374.9
57.5°	25125.1	19586.0	5547.0	531.8	423.3	418.3	422.3	384.8	357.2	325.6	318.7
60°	25939.1	19976.7	4230.8	500.2	408.5	411.4	389.7	339.4	289.1	266.4	261.5
62.5°	26649.5	20199.7	3101.0	459.8	394.7	393.7	353.2	290.1	237.8	213.1	209.2
65°	26541.9	19851.4	2009.8	427.2	383.8	371.0	316.7	248.6	198.3	179.6	177.6
67.5°	25358.9	18310.3	1265.9	393.7	365.1	342.4	284.2	222.0	182.5	160.8	158.9
70°	22875.5	16182.1	774.5	350.3	324.6	302.9	251.6	208.2	172.7	147.0	142.1
72.5°	19442.9	13859.5	547.6	308.8	283.2	257.5	213.1	198.3	164.8	132.2	128.3
75°	15973.9	10208.9	458.8	269.4	241.7	207.2	181.5	184.5	154.9	120.4	117.4
77.5°	11248.8	6364.9	427.2	220.0	190.4	164.8	156.9	168.7	142.1	110.5	107.5
80°	6565.2	3574.6	353.2	173.7	143.1	127.3	131.2	143.1	124.3	99.7	95.7
82.5°	2650.1	1414.9	248.6	135.2	104.6	101.6	107.5	116.4	102.6	83.9	81.9
85°	946.2	442.0	141.1	88.8	67.1	70.1	69.1	82.9	74.0	61.2	60.2
87.5°	248.6	87.8	63.1	35.5	28.6	28.6	26.6	38.5	35.5	27.6	30.6
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)