

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: P510446

Luminaire Tested: **CST-CA10-210-760-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510446
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-CA10-210-760-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: 31662 lumens
Efficiency: N/A
Efficacy: 148.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

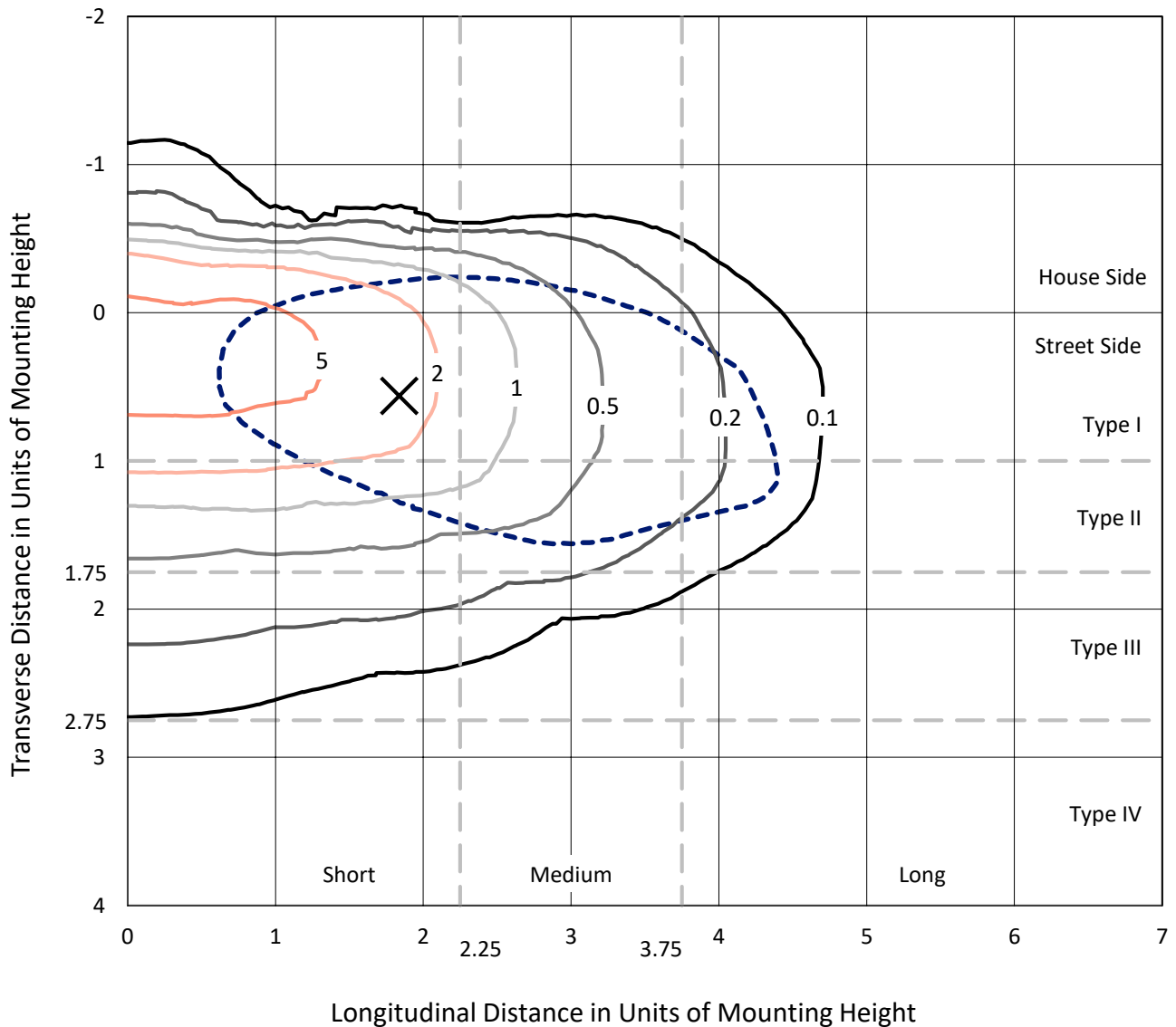
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

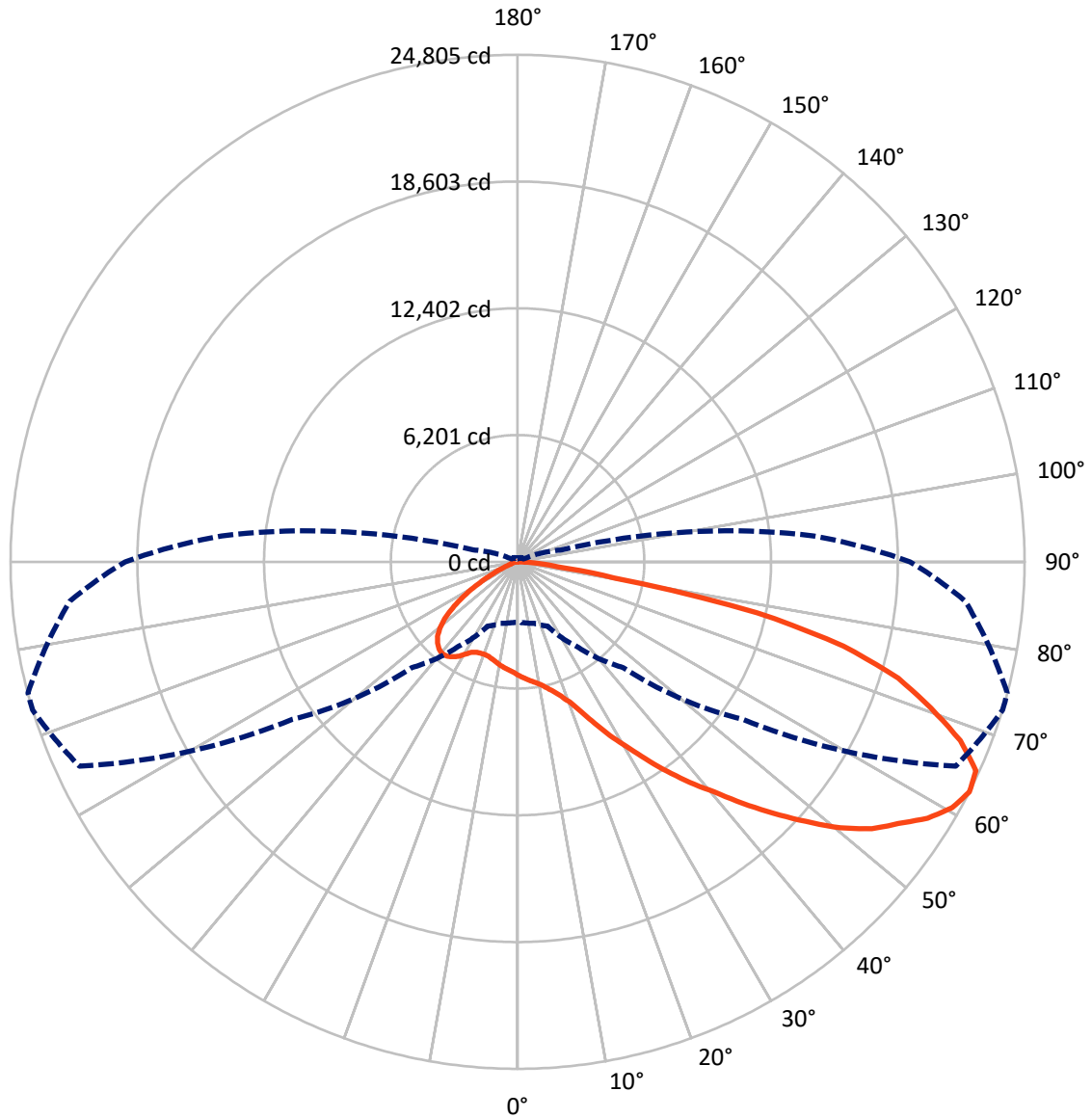
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.7 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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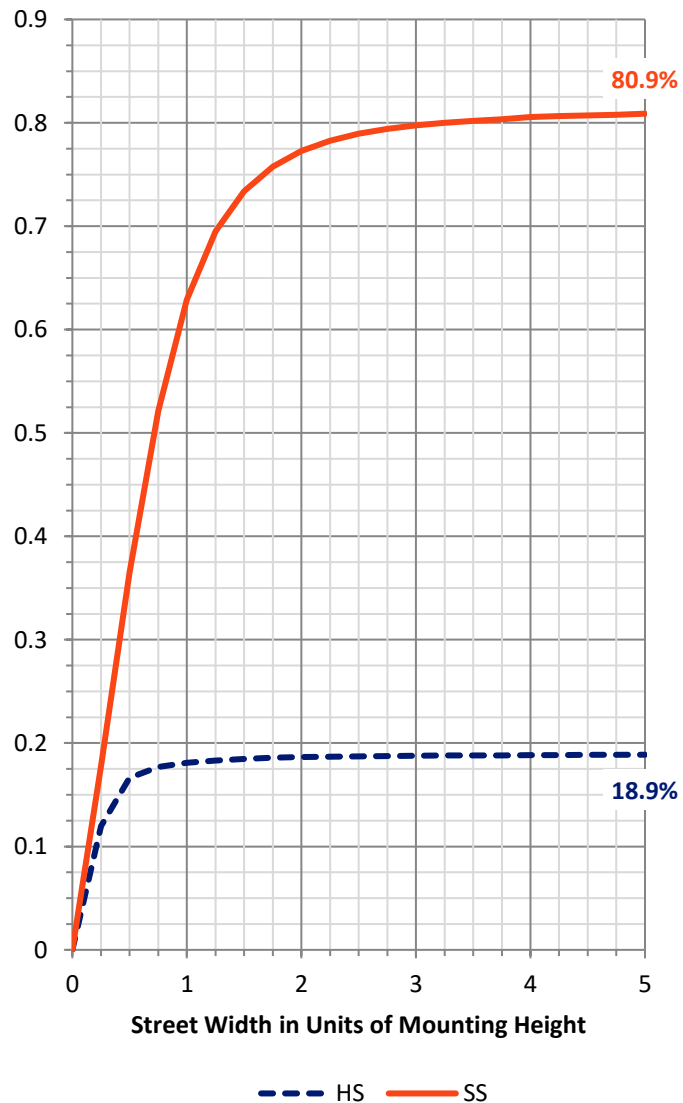
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6056.8	0.0	6056.8
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	25605.2	0.0	25605.2
	% Fixture	80.9	0.0	80.9
Total	Lumens	31662.0	0.0	31662.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.4	1.7
10°-20°	1595.2	5.0
20°-30°	2756.2	8.7
30°-40°	4144.6	13.1
40°-50°	5526.5	17.5
50°-60°	6508.5	20.6
60°-70°	6470.6	20.4
70°-80°	3714.9	11.7
80°-90°	415.0	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°	31662.0	100.0
0°-180°	31662.0	100.0

Coefficient of Utilization

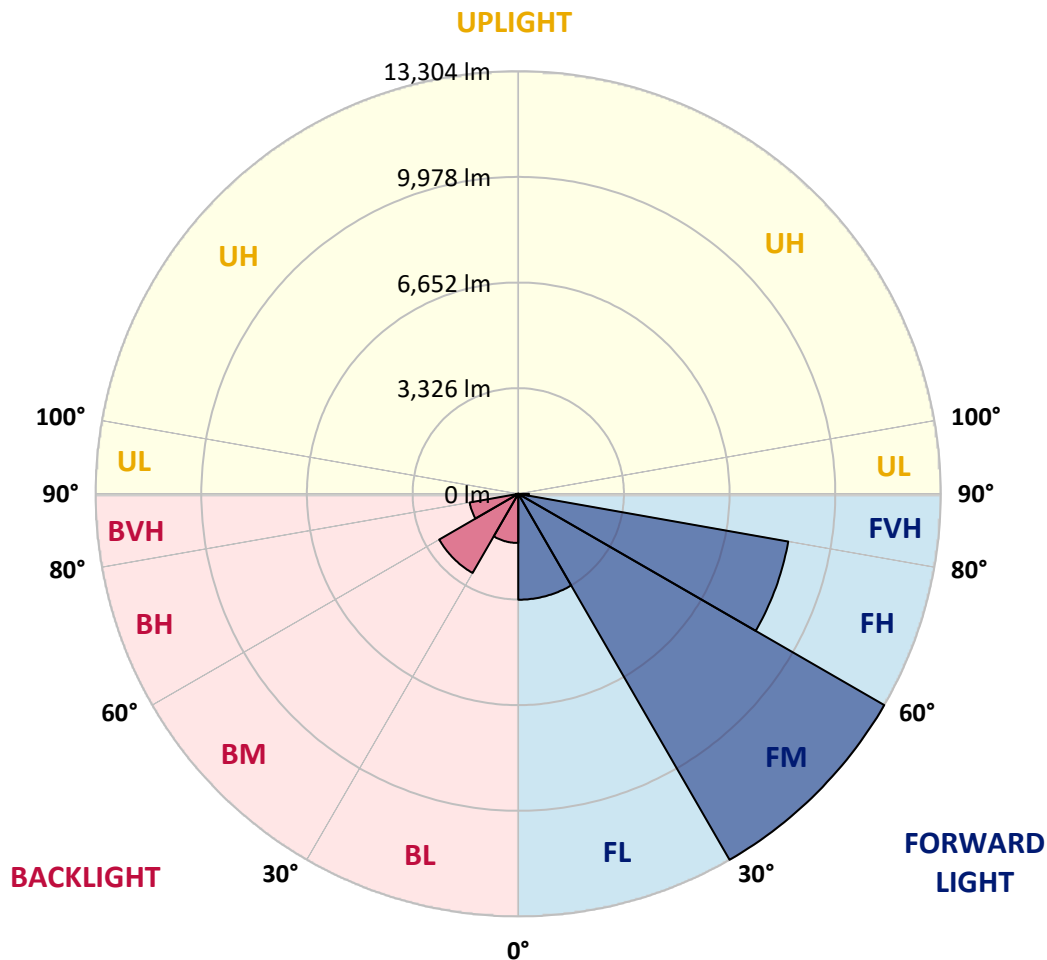


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3334.0	10.5			
FM (30°-60°)	13303.6	42.0			
FH (60°-80°)	8630.6	27.3			G4/12000
FVH (80°-90°)	337.1	1.1			G3/500
BL (0°-30°)	1547.8	4.9	B3/2500		
BM (30°-60°)	2876.0	9.1	B3/5000		
BH (60°-80°)	1555.0	4.9	B3/2500		G3/2500
BVH (80°-90°)	77.9	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-G4
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8
2.5°	5940.8	5955.8	5938.0	5930.2	5921.7	5866.2	5801.5	5735.4	5682.1	5673.6	5604.0
5°	6358.0	6365.8	6336.7	6303.3	6245.7	6154.1	6038.2	5923.8	5817.2	5788.8	5661.5
7.5°	6678.6	6663.6	6656.5	6628.1	6577.6	6476.7	6301.2	6113.5	5948.7	5908.9	5715.5
10°	6979.2	6972.8	6918.8	6883.2	6802.9	6709.8	6565.6	6327.5	6095.1	6031.1	5762.5
12.5°	7304.7	7290.5	7268.5	7191.7	7126.3	6969.2	6795.1	6578.4	6319.7	6234.4	5842.8
15°	7597.5	7559.1	7547.1	7466.7	7400.6	7280.5	7105.7	6854.1	6577.6	6504.4	5995.6
17.5°	7876.1	7858.3	7831.3	7776.6	7702.7	7610.3	7470.3	7200.9	6915.2	6808.6	6255.0
20°	8112.8	8090.7	8067.3	8082.2	8065.9	8006.9	7918.8	7689.2	7340.2	7237.2	6570.5
22.5°	8277.7	8277.0	8370.8	8425.5	8456.8	8454.6	8433.3	8303.2	7952.2	7847.7	7042.4
25°	8414.8	8425.5	8544.2	8752.4	8938.6	8955.7	9106.4	9044.5	8746.0	8637.3	7752.4
27.5°	8455.3	8476.7	8692.0	9019.6	9302.5	9574.0	9795.0	9908.0	9631.6	9501.5	8515.8
30°	8484.5	8493.0	8704.1	9096.4	9692.7	10122.7	10517.8	10709.0	10470.9	10375.7	9366.5
32.5°	8279.1	8281.9	8605.3	9199.5	9979.1	10724.6	11192.3	11552.6	11490.1	11364.3	10296.8
35°	7996.2	8048.8	8419.8	9100.0	10215.1	11277.6	11914.4	12451.7	12576.8	12486.5	11226.4
37.5°	7646.6	7687.8	8085.1	8952.1	10266.9	11657.8	12475.8	13365.7	13692.6	13677.7	12348.6
40°	7216.6	7267.0	7742.5	8633.7	10241.4	11934.3	13134.7	14377.7	14792.8	14745.9	13461.6
42.5°	6708.4	6782.3	7243.6	8224.4	10054.4	12103.4	13674.1	15408.2	16155.2	16124.6	14446.6
45°	6205.9	6245.7	6666.5	7654.4	9710.5	12158.2	14181.5	16828.2	17552.5	17518.3	15633.5
47.5°	5687.8	5722.7	6161.9	7053.8	9113.5	12048.0	14583.1	18047.8	18976.0	18941.9	16812.6
50°	4482.5	4613.9	5514.4	6525.8	8433.3	11736.0	14961.9	19567.3	20465.7	20320.7	17845.3
52.5°	3835.0	3882.6	4349.6	5993.4	7754.6	11203.7	15214.9	20975.2	21690.9	21482.0	18901.4
55°	3584.8	3616.8	3845.7	5011.9	7117.1	10398.4	15512.7	22386.7	22609.9	22556.6	19762.8
57.5°	3395.1	3430.6	3594.1	4186.1	6445.4	9269.8	15419.6	23379.6	23658.9	23488.3	20677.5
60°	3126.4	3169.8	3386.5	3758.2	5682.1	8124.2	14600.2	23786.1	24421.5	24229.6	21373.2
62.5°	2957.3	2985.7	3110.1	3470.4	5049.6	7318.2	13433.9	23655.3	24804.6	24797.5	21976.6
65°	2727.7	2769.6	2902.5	3194.7	4486.7	6693.5	12333.7	23009.3	24639.7	24646.1	22101.0
67.5°	2487.5	2504.5	2643.8	2878.4	3823.6	6121.4	10910.1	21904.1	23355.4	23501.8	21240.3
70°	2187.6	2179.0	2329.7	2501.0	3125.0	5197.4	8781.6	19938.3	21457.8	21518.2	19499.8
72.5°	1721.3	1729.2	1771.1	1889.8	2372.4	4090.1	6372.2	16845.3	19474.2	19581.5	17275.3
75°	1157.0	1169.8	1365.3	1481.1	1706.4	2939.5	4007.0	11370.7	16462.9	16765.7	14138.9
77.5°	882.7	890.5	947.4	1073.9	1234.5	2095.2	2171.9	6196.0	11985.4	12704.0	11060.8
80°	625.4	628.3	572.1	508.9	657.4	1421.4	1282.8	2638.9	4776.0	5643.8	6496.6
82.5°	280.0	275.8	324.8	270.1	378.8	550.1	605.5	1280.7	1983.6	2132.1	2321.2
85°	130.1	145.7	167.0	140.0	225.3	212.5	236.0	545.8	929.6	1026.3	1020.6
87.5°	32.0	34.8	44.1	56.1	81.7	72.5	71.1	160.6	207.5	206.8	317.7
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°	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8	5552.8
2.5°	5556.3	5519.4	5432.0	5347.4	5267.1	5213.8	5154.1	5091.5	5053.9	5036.1	5074.5
5°	5584.1	5513.7	5346.7	5179.0	5036.8	4915.3	4830.0	4757.5	4718.4	4722.0	4724.1
7.5°	5607.5	5508.7	5274.9	5038.2	4816.5	4665.8	4554.2	4476.1	4431.3	4397.2	4422.8
10°	5628.1	5488.1	5191.0	4875.5	4634.6	4411.4	4260.0	4165.5	4083.0	4036.8	4073.1
12.5°	5650.2	5480.3	5097.2	4729.8	4417.8	4168.3	3960.8	3867.0	3786.0	3751.1	3773.2
15°	5746.1	5510.2	5009.8	4558.5	4203.9	3881.2	3657.3	3542.2	3478.2	3436.3	3445.5
17.5°	5911.0	5589.0	4953.7	4379.4	3965.1	3623.9	3334.0	3199.6	3093.7	3063.9	3056.1
20°	6145.5	5739.0	4953.7	4228.0	3694.3	3338.2	3004.2	2777.5	2612.6	2550.7	2598.4
22.5°	6539.3	5994.1	5002.7	4090.9	3461.2	3041.8	2643.8	2297.7	2075.3	1985.0	2037.6
25°	7090.1	6388.6	5082.3	3970.7	3248.7	2700.7	2186.9	1788.9	1543.7	1436.3	1434.9
27.5°	7809.3	6992.0	5242.9	3872.7	2994.2	2259.4	1710.0	1326.9	1096.6	1032.0	1041.2
30°	8606.7	7645.8	5546.4	3730.5	2685.1	1765.4	1245.2	975.1	813.1	727.8	729.2
32.5°	9375.7	8323.1	5906.7	3638.1	2283.5	1331.2	887.7	695.8	594.9	544.4	552.2
35°	10200.1	8907.4	6174.7	3483.2	1812.3	962.3	627.6	521.7	479.7	453.4	454.9
37.5°	11090.7	9549.8	6395.0	3275.7	1370.3	661.0	463.4	447.0	429.3	395.9	393.0
40°	12021.0	10294.0	6526.5	2940.2	952.4	457.7	393.7	412.2	402.3	358.9	355.4
42.5°	12809.9	10868.2	6559.2	2496.0	616.2	371.0	356.8	385.2	387.3	343.3	337.6
45°	13567.5	11379.9	6495.2	1911.1	427.1	349.0	334.0	373.1	376.0	336.2	326.9
47.5°	14415.4	12080.0	6379.4	1275.0	353.2	329.8	326.2	353.2	363.2	330.5	319.1
50°	15445.2	12649.3	6036.1	783.2	333.3	317.7	317.7	334.0	347.5	319.1	313.4
52.5°	16501.3	13145.3	5527.9	537.3	321.2	304.9	314.1	321.2	326.2	300.6	305.6
55°	17258.2	13585.3	4770.3	432.1	314.1	296.4	318.4	304.2	297.1	275.0	270.1
57.5°	18098.3	14108.3	3995.6	383.1	304.9	301.3	304.2	277.2	257.3	234.5	229.6
60°	18684.6	14389.8	3047.5	360.3	294.2	296.4	280.7	244.5	208.2	191.9	188.3
62.5°	19196.3	14550.4	2233.8	331.2	284.3	283.6	254.4	208.9	171.3	153.5	150.7
65°	19118.9	14299.5	1447.7	307.7	276.5	267.2	228.1	179.1	142.9	129.3	127.9
67.5°	18266.7	13189.4	911.8	283.6	263.0	246.6	204.7	159.9	131.5	115.8	114.4
70°	16477.9	11656.4	557.9	252.3	233.8	218.2	181.2	150.0	124.4	105.9	102.3
72.5°	14005.3	9983.4	394.4	222.5	204.0	185.5	153.5	142.9	118.7	95.2	92.4
75°	11506.4	7353.7	330.5	194.0	174.1	149.2	130.8	132.9	111.6	86.7	84.6
77.5°	8102.8	4584.8	307.7	158.5	137.2	118.7	113.0	121.5	102.3	79.6	77.5
80°	4729.1	2574.9	254.4	125.1	103.1	91.7	94.5	103.1	89.5	71.8	68.9
82.5°	1909.0	1019.2	179.1	97.4	75.3	73.2	77.5	83.9	73.9	60.4	59.0
85°	681.6	318.4	101.6	64.0	48.3	50.5	49.7	59.7	53.3	44.1	43.4
87.5°	179.1	63.3	45.5	25.6	20.6	20.6	19.2	27.7	25.6	19.9	22.0
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)