

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: P510766

Luminaire Tested: **CST-CA8-330-727-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510766
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-CA8-330-727-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37725 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

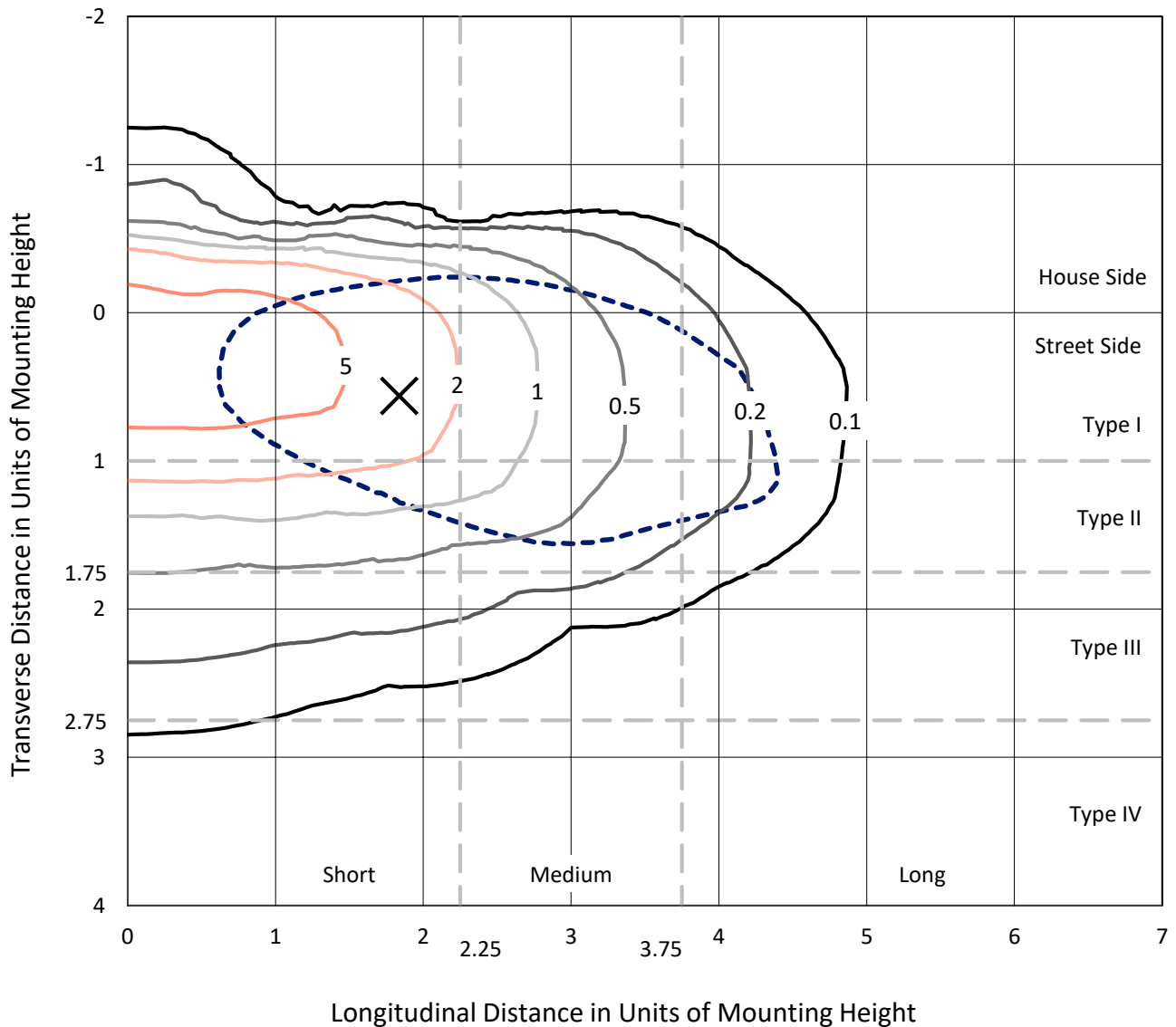
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

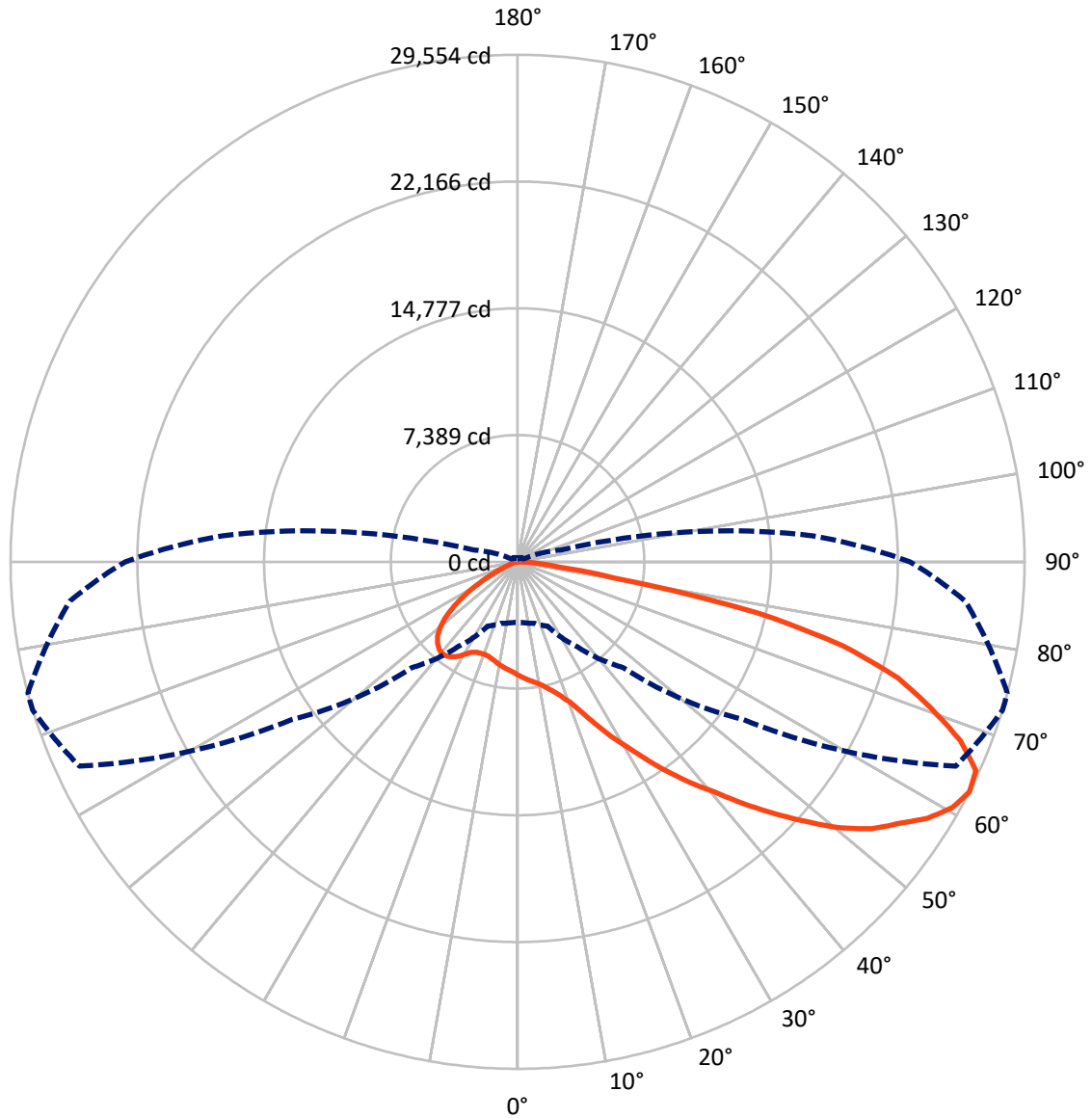
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.2 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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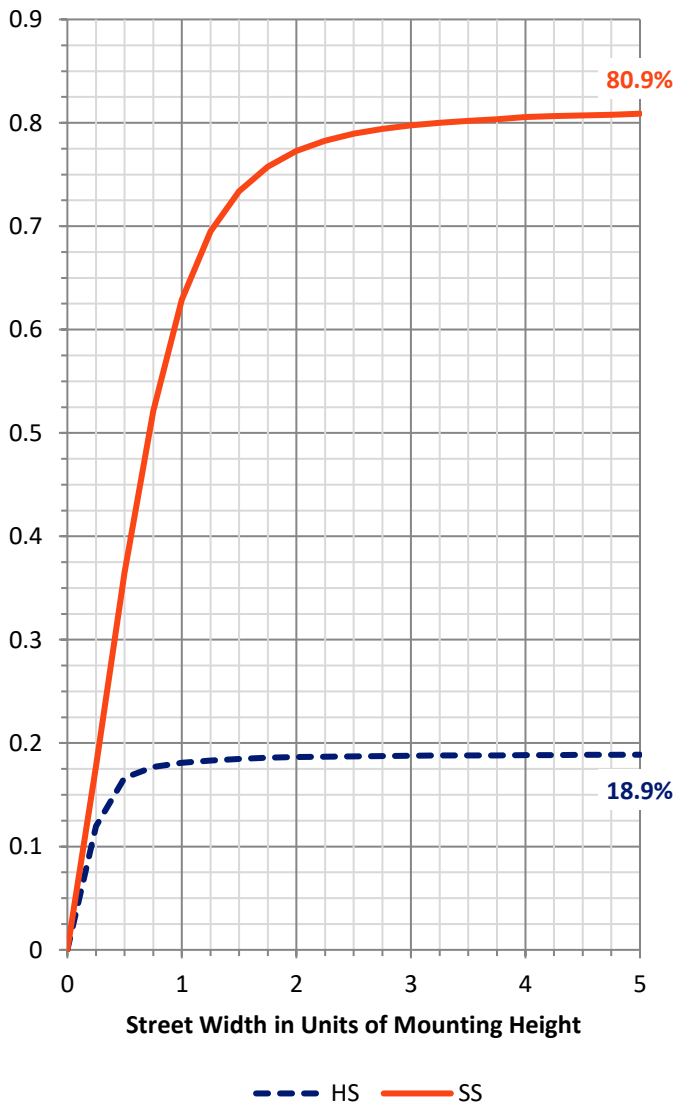
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7216.6	0.0	7216.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	30508.4	0.0	30508.4
	% Fixture	80.9	0.0	80.9
Total	Lumens	37725.0	0.0	37725.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	631.9	1.7
10°-20°	1900.7	5.0
20°-30°	3284.0	8.7
30°-40°	4938.3	13.1
40°-50°	6584.8	17.5
50°-60°	7754.9	20.6
60°-70°	7709.7	20.4
70°-80°	4426.3	11.7
80°-90°	494.5	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°	37725.0	100.0
0°-180°	37725.0	100.0

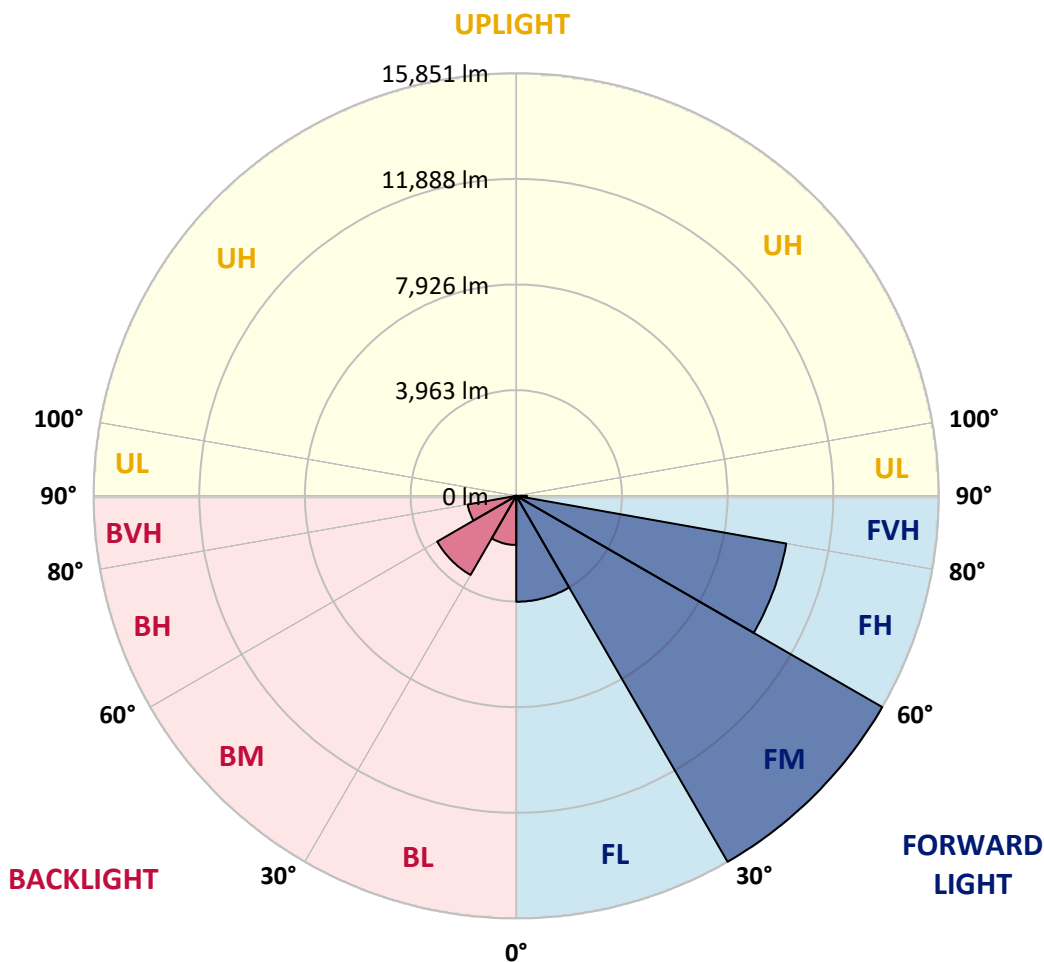


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3972.4	10.5			
FM (30°-60°)	15851.1	42.0			
FH (60°-80°)	10283.2	27.3			G4/12000
FVH (80°-90°)	401.6	1.1			G3/500
BL (0°-30°)	1844.2	4.9	B3/2500		
BM (30°-60°)	3426.8	9.1	B3/5000		
BH (60°-80°)	1852.8	4.9	B3/2500		G3/2500
BVH (80°-90°)	92.9	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°	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1
2.5°	7078.5	7096.2	7075.1	7065.8	7055.6	6989.5	6912.5	6833.7	6770.2	6760.1	6677.1
5°	7575.5	7584.9	7550.1	7510.3	7441.7	7332.5	7194.5	7058.1	6931.1	6897.2	6745.7
7.5°	7957.4	7939.7	7931.2	7897.3	7837.2	7717.0	7507.8	7284.2	7087.8	7040.4	6810.0
10°	8315.6	8308.0	8243.7	8201.3	8105.6	7994.7	7822.8	7539.1	7262.2	7186.0	6865.9
12.5°	8703.5	8686.6	8660.3	8568.8	8490.9	8303.8	8096.3	7838.0	7529.8	7428.2	6961.6
15°	9052.4	9006.6	8992.2	8896.6	8817.8	8674.7	8466.4	8166.6	7837.2	7750.0	7143.7
17.5°	9384.3	9363.1	9331.0	9265.8	9177.7	9067.6	8900.8	8579.9	8239.4	8112.4	7452.8
20°	9666.3	9640.1	9612.1	9629.9	9610.4	9540.1	9435.1	9161.6	8745.8	8623.0	7828.7
22.5°	9862.8	9861.9	9973.7	10038.9	10076.2	10073.6	10048.2	9893.3	9474.9	9350.4	8391.0
25°	10026.2	10038.9	10180.3	10428.4	10650.3	10670.6	10850.1	10776.5	10420.8	10291.3	9237.0
27.5°	10074.5	10099.9	10356.5	10746.8	11083.9	11407.3	11670.7	11805.3	11475.9	11321.0	10146.4
30°	10109.2	10119.3	10370.8	10838.3	11548.8	12061.1	12531.9	12759.7	12476.0	12362.5	11160.1
32.5°	9864.5	9867.8	10253.1	10961.1	11890.0	12778.3	13335.5	13764.9	13690.3	13540.4	12268.5
35°	9527.4	9590.1	10032.1	10842.5	12171.2	13437.1	14195.9	14836.1	14985.1	14877.6	13376.2
37.5°	9110.8	9159.9	9633.3	10666.4	12233.0	13890.2	14864.9	15925.1	16314.6	16296.8	14713.3
40°	8598.5	8658.6	9225.1	10287.0	12202.5	14219.6	15649.8	17130.9	17625.4	17569.6	16039.4
42.5°	7993.0	8081.1	8630.7	9799.3	11979.8	14421.1	16292.6	18358.8	19248.8	19212.4	17213.1
45°	7394.3	7441.7	7943.1	9120.1	11569.9	14486.3	16897.2	20050.7	20913.6	20873.0	18627.2
47.5°	6777.0	6818.5	7341.8	8404.6	10858.6	14355.1	17375.6	21503.8	22609.8	22569.1	20032.1
50°	5340.8	5497.5	6570.4	7775.4	10048.2	13983.3	17827.0	23314.3	24384.7	24211.9	21262.5
52.5°	4569.4	4626.1	5182.5	7141.1	9239.5	13349.1	18128.5	24991.8	25844.6	25595.6	22520.8
55°	4271.3	4309.4	4582.1	5971.7	8479.9	12389.6	18483.3	26673.6	26939.5	26876.0	23547.2
57.5°	4045.2	4087.5	4282.3	4987.7	7679.7	11044.9	18372.3	27856.6	28189.4	27986.1	24637.0
60°	3725.1	3776.8	4035.0	4477.9	6770.2	9679.9	17396.0	28340.9	29098.0	28869.4	25466.0
62.5°	3523.6	3557.4	3705.6	4135.0	6016.6	8719.6	16006.4	28185.1	29554.4	29546.0	26185.0
65°	3250.0	3300.0	3458.4	3806.4	5345.9	7975.2	14695.5	27415.4	29358.0	29365.6	26333.2
67.5°	2963.8	2984.1	3150.1	3429.6	4555.8	7293.6	12999.3	26098.6	27827.8	28002.2	25307.7
70°	2606.5	2596.3	2775.8	2979.9	3723.4	6192.7	10463.2	23756.3	25566.8	25638.8	23233.9
72.5°	2051.0	2060.3	2110.2	2251.7	2826.6	4873.4	7592.5	20071.0	23203.4	23331.2	20583.3
75°	1378.6	1393.8	1626.7	1764.7	2033.2	3502.4	4774.3	13548.1	19615.4	19976.2	16846.4
77.5°	1051.7	1061.0	1128.8	1279.5	1470.9	2496.4	2587.8	7382.5	14280.6	15136.7	13178.9
80°	745.2	748.6	681.7	606.3	783.3	1693.6	1528.5	3144.2	5690.5	6724.5	7740.7
82.5°	333.6	328.6	387.0	321.8	451.3	655.4	721.5	1525.9	2363.4	2540.4	2765.7
85°	155.0	173.6	199.0	166.8	268.4	253.2	281.1	650.3	1107.6	1222.8	1216.0
87.5°	38.1	41.5	52.5	66.9	97.4	86.4	84.7	191.4	247.3	246.4	378.5
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°	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1	6616.1
2.5°	6620.3	6576.3	6472.1	6371.4	6275.7	6212.2	6141.0	6066.5	6021.6	6000.5	6046.2
5°	6653.4	6569.5	6370.5	6170.7	6001.3	5856.5	5754.9	5668.5	5622.0	5626.2	5628.7
7.5°	6681.3	6563.6	6285.0	6003.0	5738.8	5559.3	5426.3	5333.2	5279.8	5239.2	5269.7
10°	6705.9	6539.0	6185.1	5809.1	5522.0	5256.1	5075.8	4963.1	4864.9	4809.9	4853.1
12.5°	6732.1	6529.7	6073.3	5635.5	5263.8	4966.5	4719.3	4607.5	4510.9	4469.4	4495.7
15°	6846.4	6565.3	5969.1	5431.4	5008.9	4624.4	4357.7	4220.5	4144.3	4094.3	4105.3
17.5°	7042.9	6659.3	5902.2	5218.0	4724.3	4317.9	3972.4	3812.3	3686.2	3650.6	3641.3
20°	7322.3	6838.0	5902.2	5037.7	4401.7	3977.5	3579.5	3309.3	3112.9	3039.2	3095.9
22.5°	7791.5	7142.0	5960.7	4874.2	4124.0	3624.3	3150.1	2737.7	2472.7	2365.1	2427.8
25°	8447.8	7612.0	6055.5	4731.1	3870.8	3217.9	2605.6	2131.4	1839.3	1711.4	1709.7
27.5°	9304.7	8330.9	6246.9	4614.3	3567.6	2692.0	2037.4	1581.0	1306.6	1229.6	1240.6
30°	10254.8	9110.0	6608.5	4444.9	3199.2	2103.5	1483.6	1161.8	968.7	867.1	868.8
32.5°	11171.1	9917.0	7037.8	4334.8	2720.8	1586.1	1057.7	829.0	708.8	648.7	658.0
35°	12153.4	10613.0	7357.1	4150.2	2159.4	1146.6	747.7	621.6	571.6	540.3	542.0
37.5°	13214.4	11378.6	7619.6	3902.9	1632.6	787.5	552.1	532.6	511.5	471.7	468.3
40°	14322.9	12265.2	7776.2	3503.2	1134.7	545.3	469.1	491.1	479.3	427.6	423.4
42.5°	15262.9	12949.4	7815.2	2974.0	734.2	442.0	425.1	459.0	461.5	409.0	402.2
45°	16165.6	13559.1	7739.0	2277.1	508.9	415.8	398.0	444.6	448.0	400.5	389.5
47.5°	17175.8	14393.2	7600.9	1519.2	420.9	392.9	388.7	420.9	432.7	393.8	380.2
50°	18402.8	15071.5	7191.9	933.2	397.2	378.5	378.5	398.0	414.1	380.2	373.4
52.5°	19661.2	15662.5	6586.5	640.2	382.8	363.3	374.3	382.8	388.7	358.2	364.1
55°	20563.0	16186.7	5683.8	514.9	374.3	353.1	379.4	362.4	354.0	327.7	321.8
57.5°	21563.9	16810.0	4760.8	456.4	363.3	359.0	362.4	330.3	306.5	279.4	273.5
60°	22262.6	17145.3	3631.1	429.3	350.6	353.1	334.5	291.3	248.1	228.6	224.4
62.5°	22872.3	17336.7	2661.5	394.6	338.7	337.9	303.2	249.0	204.1	182.9	179.5
65°	22780.0	17037.8	1724.9	366.7	329.4	318.4	271.8	213.4	170.2	154.1	152.4
67.5°	21764.6	15715.1	1086.5	337.9	313.3	293.8	243.9	190.5	156.7	138.0	136.3
70°	19633.2	13888.5	664.7	300.6	278.6	260.0	215.9	178.7	148.2	126.2	121.9
72.5°	16687.2	11895.1	470.0	265.1	243.0	221.0	182.9	170.2	141.4	113.5	110.1
75°	13709.8	8761.9	393.8	231.2	207.5	177.8	155.8	158.4	132.9	103.3	100.8
77.5°	9654.5	5462.8	366.7	188.8	163.4	141.4	134.6	144.8	121.9	94.8	92.3
80°	5634.7	3068.0	303.2	149.0	122.8	109.2	112.6	122.8	106.7	85.5	82.1
82.5°	2274.5	1214.3	213.4	116.0	89.8	87.2	92.3	99.9	88.1	72.0	70.3
85°	812.1	379.4	121.1	76.2	57.6	60.1	59.3	71.1	63.5	52.5	51.7
87.5°	213.4	75.4	54.2	30.5	24.6	24.6	22.9	33.0	30.5	23.7	26.3
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)