

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: P510846

Luminaire Tested: **CST-CA8-480-740-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510846  
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-CA8-480-740-U-T2-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 64681 lumens  
Efficiency: N/A  
Efficacy: 134.5 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

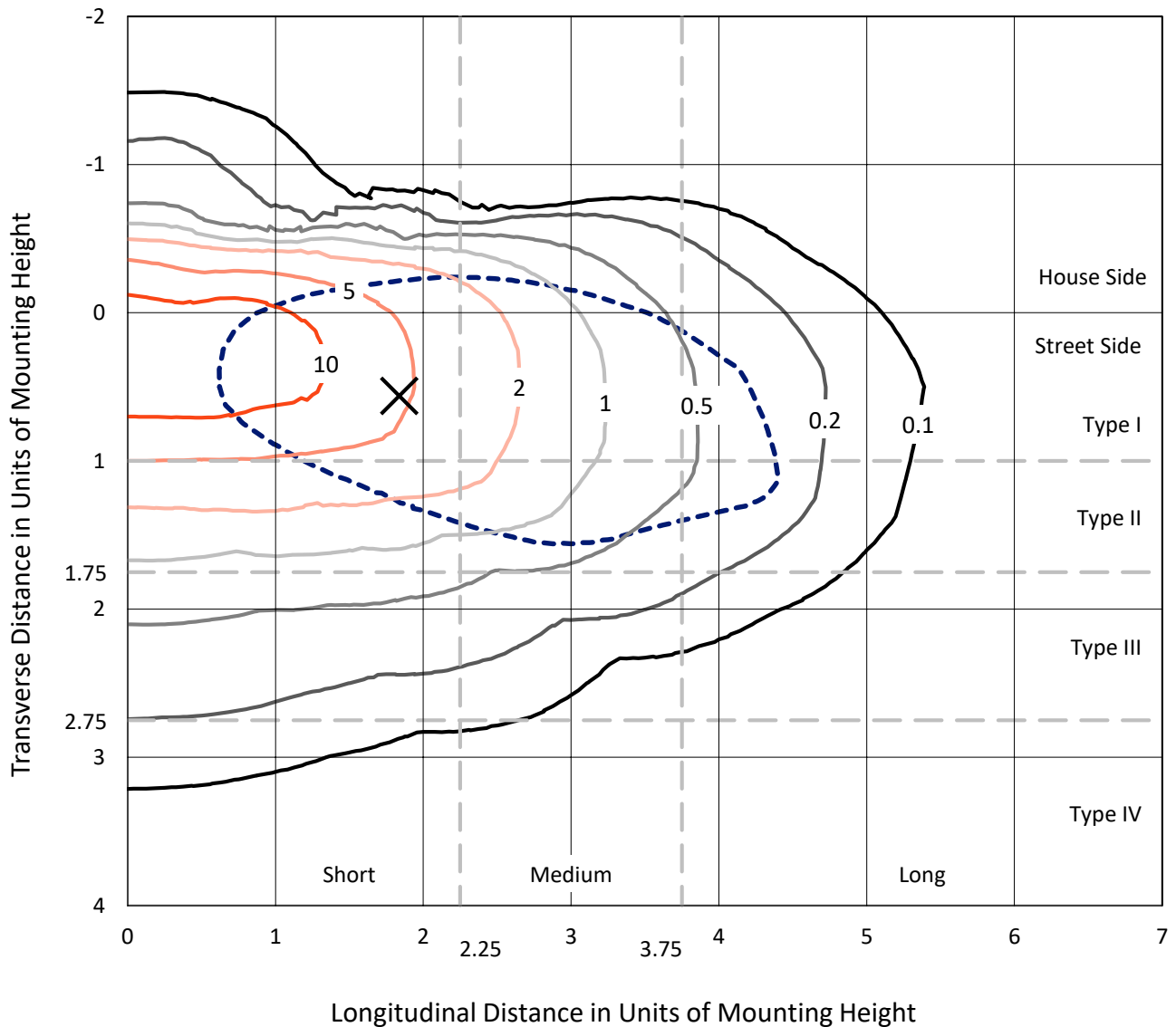
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

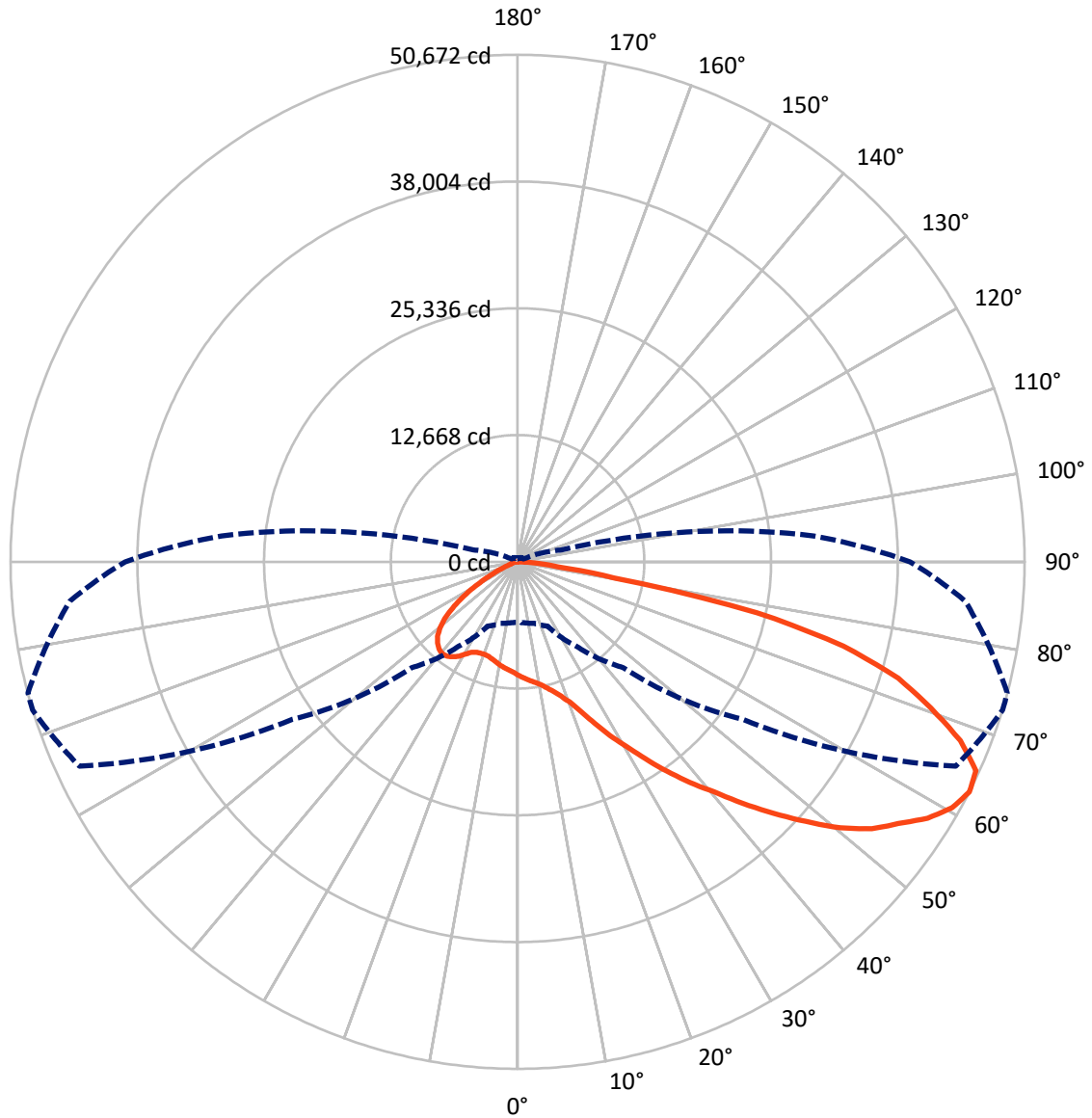
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.7 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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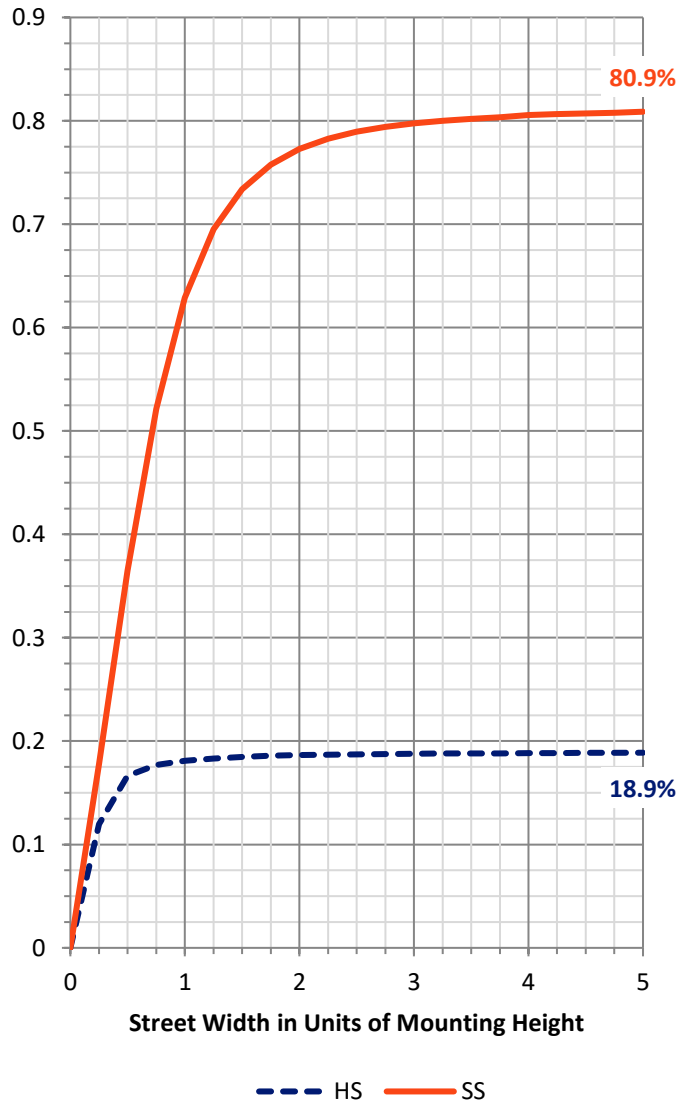
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12373.2	0.0	12373.2
	% Fixture	19.1	0.0	19.1
<b>Street Side</b>	Lumens	52307.8	0.0	52307.8
	% Fixture	80.9	0.0	80.9
<b>Total</b>	Lumens	64681.0	0.0	64681.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1083.4	1.7
10°-20°	3258.8	5.0
20°-30°	5630.5	8.7
30°-40°	8466.9	13.1
40°-50°	11289.8	17.5
50°-60°	13296.0	20.6
60°-70°	13218.6	20.4
70°-80°	7589.1	11.7
80°-90°	847.8	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°	64681.0	100.0
0°-180°	64681.0	100.0

**Coefficient of Utilization**

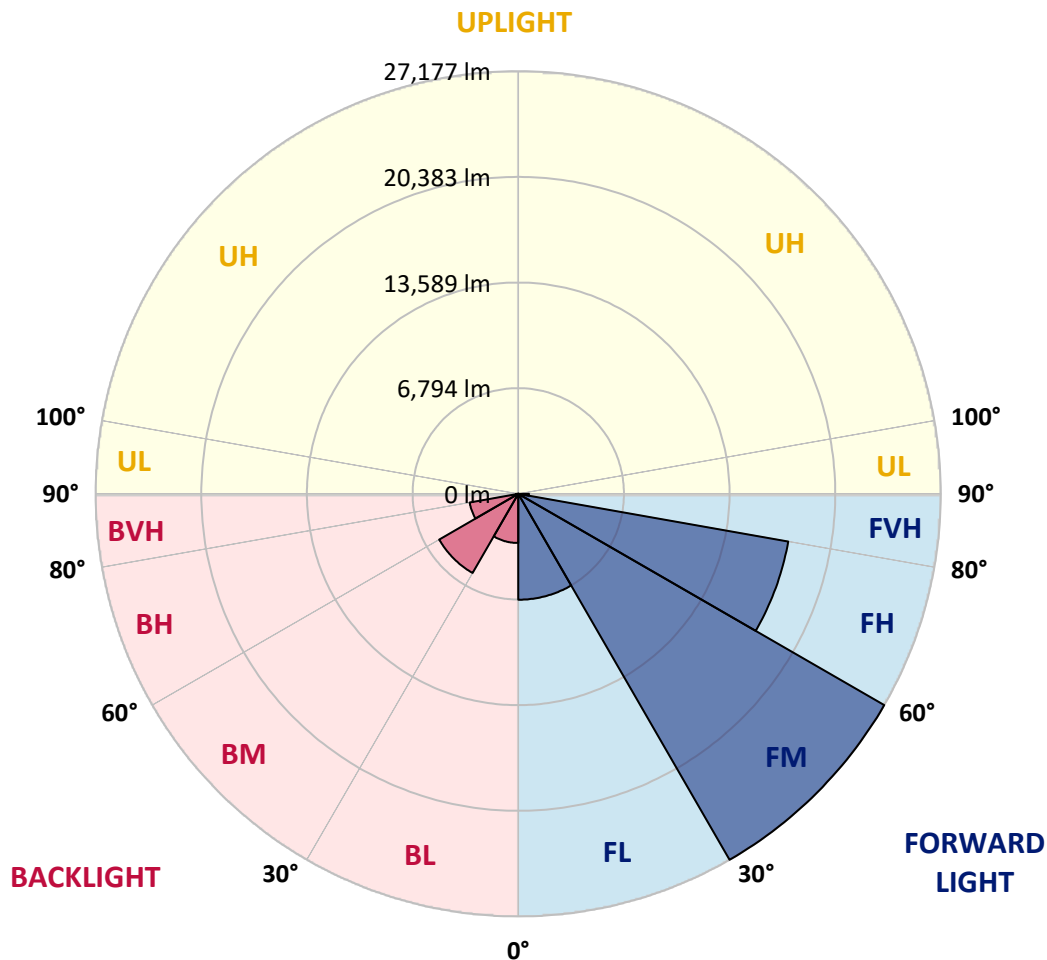


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6810.8	10.5			
FM (30°-60°)	27177.4	42.0			
FH (60°-80°)	17631.0	27.3			G5
FVH (80°-90°)	688.6	1.1			G4/750
BL (0°-30°)	3161.9	4.9	B4/5000		
BM (30°-60°)	5875.4	9.1	B4/8500		
BH (60°-80°)	3176.7	4.9	B4/5000		G4/5000
BVH (80°-90°)	159.2	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6
2.5°	12136.3	12166.8	12130.5	12114.5	12097.1	11983.9	11851.7	11716.7	11607.8	11590.4	11448.1
5°	12988.6	13004.5	12945.0	12876.8	12759.2	12571.9	12335.2	12101.5	11883.7	11825.6	11565.7
7.5°	13643.4	13612.9	13598.4	13540.3	13437.2	13231.0	12872.4	12489.1	12152.3	12071.0	11676.1
10°	14257.5	14244.4	14134.1	14061.5	13897.4	13707.2	13412.5	12926.1	12451.4	12320.7	11771.9
12.5°	14922.5	14893.4	14848.4	14691.6	14558.0	14237.2	13881.5	13438.6	12910.2	12735.9	11935.9
15°	15520.6	15442.2	15417.6	15253.5	15118.5	14873.1	14515.9	14002.0	13437.2	13287.6	12248.1
17.5°	16089.8	16053.5	15998.3	15886.5	15735.5	15546.8	15260.8	14710.5	14126.8	13909.1	12778.0
20°	16573.3	16528.3	16480.3	16510.8	16477.4	16356.9	16176.9	15707.9	14995.1	14784.5	13422.7
22.5°	16910.1	16908.6	17100.3	17212.1	17276.0	17271.6	17228.1	16962.4	16245.1	16031.7	14386.7
25°	17190.3	17212.1	17454.6	17880.0	18260.4	18295.2	18603.0	18476.7	17866.9	17644.8	15837.2
27.5°	17273.1	17316.6	17756.5	18425.9	19003.7	19558.3	20009.9	20240.7	19675.9	19410.2	17396.5
30°	17332.6	17350.0	17781.2	18582.7	19800.8	20679.2	21486.4	21877.0	21390.6	21196.1	19134.4
32.5°	16913.0	16918.8	17579.4	18793.2	20385.9	21908.9	22864.3	23600.4	23472.6	23215.6	21034.9
35°	16335.2	16442.6	17200.5	18589.9	20867.9	23038.5	24339.4	25437.0	25692.6	25508.2	22934.0
37.5°	15620.8	15705.0	16516.6	18287.9	20973.9	23815.3	25486.4	27304.1	27972.0	27941.5	25226.5
40°	14742.4	14845.5	15816.8	17637.5	20921.7	24380.0	26832.3	29371.6	30219.5	30123.7	27500.1
42.5°	13704.3	13855.3	14797.6	16801.2	20539.8	24725.6	27934.3	31476.9	33002.8	32940.4	29512.5
45°	12677.9	12759.2	13618.7	15636.8	19837.1	24837.4	28970.9	34377.7	35857.2	35787.5	31937.1
47.5°	11619.4	11690.6	12587.8	14410.0	18617.5	24612.3	29791.2	36869.2	38765.3	38695.6	34345.8
50°	9157.0	9425.6	11265.2	13331.2	17228.1	23975.0	30565.1	39973.3	41808.5	41512.3	36455.4
52.5°	7834.4	7931.6	8885.5	12243.7	15841.5	22887.5	31081.9	42849.5	44311.5	43884.7	38612.9
55°	7323.3	7388.6	7856.1	10238.7	14539.2	21242.5	31690.3	45732.9	46188.8	46079.9	40372.6
57.5°	6935.7	7008.2	7342.2	8551.6	13167.1	18936.9	31500.1	47761.2	48331.8	47983.3	42241.1
60°	6386.8	6475.4	6918.2	7677.6	11607.8	16596.5	29826.1	48591.7	49889.7	49497.7	43662.5
62.5°	6041.3	6099.4	6353.4	7089.6	10315.6	14950.1	27443.5	48324.5	50672.2	50657.7	44895.2
65°	5572.3	5658.0	5929.5	6526.2	9165.7	13673.8	25196.0	47004.8	50335.4	50348.5	45149.3
67.5°	5081.6	5116.4	5401.0	5880.1	7811.1	12505.1	22287.9	44747.1	47711.8	48010.9	43391.0
70°	4468.9	4451.5	4759.3	5109.2	6383.9	10617.6	17939.5	40731.2	43835.3	43958.7	39835.4
72.5°	3516.5	3532.4	3618.1	3860.6	4846.4	8355.6	13017.6	34412.6	39783.1	40002.3	35291.0
75°	2363.7	2389.8	2789.1	3025.7	3486.0	6005.0	8185.7	23228.7	33631.5	34250.0	28883.8
77.5°	1803.2	1819.2	1935.4	2193.8	2521.9	4280.2	4437.0	12657.5	24484.6	25952.4	22595.7
80°	1277.7	1283.5	1168.8	1039.5	1343.0	2903.8	2620.7	5390.8	9756.7	11529.4	13271.7
82.5°	572.0	563.3	663.5	551.7	773.9	1123.8	1237.0	2616.3	4052.2	4355.7	4741.9
85°	265.7	297.6	341.2	286.0	460.2	434.1	482.0	1115.0	1899.1	2096.5	2084.9
87.5°	65.3	71.1	90.0	114.7	167.0	148.1	145.2	328.1	424.0	422.5	649.0
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°	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6	11343.6
2.5°	11350.8	11275.3	11096.8	10924.0	10759.9	10651.0	10529.1	10401.3	10324.4	10288.1	10366.5
5°	11407.5	11263.7	10922.5	10579.9	10289.5	10041.2	9867.0	9718.9	9639.1	9646.3	9650.7
7.5°	11455.4	11253.6	10775.9	10292.4	9839.4	9531.6	9303.7	9144.0	9052.5	8982.8	9035.1
10°	11497.5	11211.5	10604.6	9959.9	9467.7	9011.8	8702.6	8509.5	8341.1	8246.7	8320.8
12.5°	11542.5	11195.5	10412.9	9662.3	9024.9	8515.3	8091.4	7899.7	7734.2	7663.0	7708.1
15°	11738.5	11256.5	10234.3	9312.4	8587.9	7928.7	7471.4	7236.2	7105.5	7019.9	7038.7
17.5°	12075.3	11417.6	10119.6	8946.5	8100.1	7403.2	6810.8	6536.4	6320.1	6259.1	6243.1
20°	12554.4	11724.0	10119.6	8637.3	7546.9	6819.5	6137.1	5674.0	5337.1	5210.8	5308.1
22.5°	13358.8	12245.2	10219.8	8357.0	7070.7	6214.1	5401.0	4693.9	4239.5	4055.1	4162.6
25°	14484.0	13051.0	10382.4	8111.7	6636.6	5517.2	4467.4	3654.4	3153.5	2934.3	2931.4
27.5°	15953.3	14283.6	10710.6	7911.3	6116.8	4615.5	3493.2	2710.7	2240.3	2108.1	2127.0
30°	17582.3	15619.4	11330.5	7620.9	5485.2	3606.5	2543.7	1992.0	1661.0	1486.7	1489.6
32.5°	19153.3	17003.0	12066.6	7432.2	4664.9	2719.4	1813.4	1421.4	1215.2	1112.1	1128.1
35°	20837.4	18196.5	12614.0	7115.7	3702.3	1965.9	1282.0	1065.7	980.0	926.3	929.2
37.5°	22656.7	19509.0	13064.1	6691.7	2799.2	1350.3	946.6	913.2	876.9	808.7	802.9
40°	24557.2	21029.1	13332.7	6006.4	1945.5	935.0	804.3	842.1	821.8	733.2	725.9
42.5°	26168.8	22202.2	13399.4	5099.0	1258.8	757.9	728.8	786.9	791.3	701.3	689.6
45°	27716.5	23247.6	13268.8	3904.1	872.6	712.9	682.4	762.2	768.0	686.7	667.9
47.5°	29448.6	24677.7	13032.1	2604.7	721.6	673.7	666.4	721.6	741.9	675.1	651.9
50°	31552.4	25840.6	12330.9	1600.0	680.9	649.0	649.0	682.4	710.0	651.9	640.3
52.5°	33709.9	26854.1	11292.8	1097.6	656.3	622.9	641.7	656.3	666.4	614.1	624.3
55°	35256.1	27752.8	9745.0	882.7	641.7	605.4	650.4	621.4	606.9	561.9	551.7
57.5°	36972.2	28821.4	8162.5	782.6	622.9	615.6	621.4	566.2	525.6	479.1	469.0
60°	38170.0	29396.3	6225.7	736.1	601.1	605.4	573.5	499.4	425.4	392.0	384.7
62.5°	39215.4	29724.4	4563.3	676.6	580.8	579.3	519.8	426.9	349.9	313.6	307.8
65°	39057.1	29211.9	2957.5	628.7	564.8	545.9	466.1	365.9	291.8	264.2	261.3
67.5°	37316.3	26944.1	1862.8	579.3	537.2	503.8	418.1	326.7	268.6	236.7	233.8
70°	33661.9	23812.4	1139.7	515.4	477.7	445.7	370.2	306.3	254.1	216.3	209.1
72.5°	28610.8	20394.6	805.8	454.4	416.7	378.9	313.6	291.8	242.5	194.6	188.7
75°	23506.0	15022.7	675.1	396.4	355.7	304.9	267.1	271.5	227.9	177.1	172.8
77.5°	16552.9	9366.1	628.7	323.8	280.2	242.5	230.8	248.3	209.1	162.6	158.3
80°	9660.8	5260.2	519.8	255.5	210.5	187.3	193.1	210.5	182.9	146.6	140.8
82.5°	3899.8	2082.0	365.9	198.9	153.9	149.5	158.3	171.3	151.0	123.4	120.5
85°	1392.4	650.4	207.6	130.7	98.7	103.1	101.6	122.0	108.9	90.0	88.6
87.5°	365.9	129.2	92.9	52.3	42.1	42.1	39.2	56.6	52.3	40.7	45.0
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)