

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: P510427

Luminaire Tested: **CST-CA10-210-740-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510427  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA10-210-740-U-T2  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 4000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 34645 lumens  
Efficiency: N/A  
Efficacy: 162.7 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

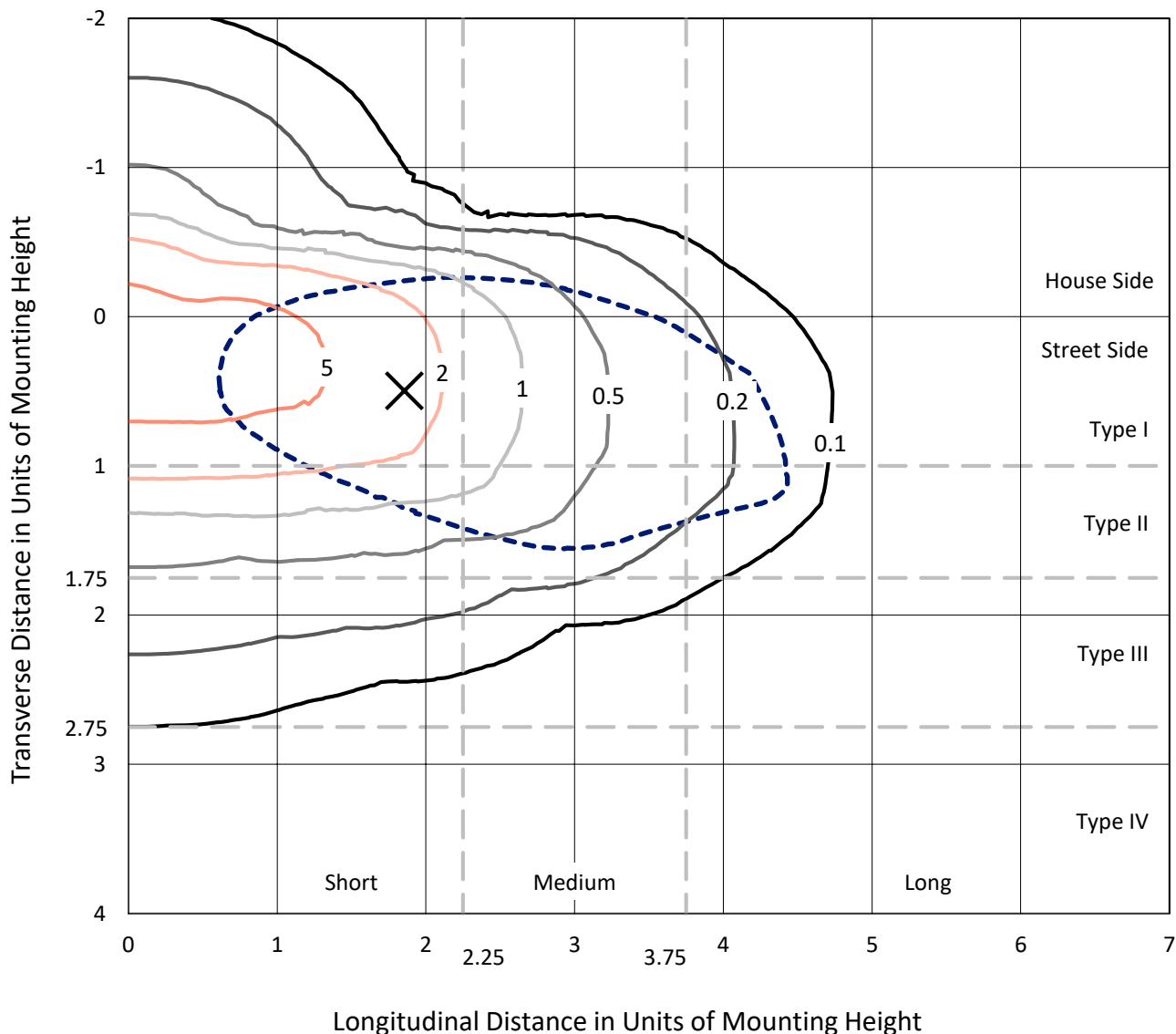
Input Watts (W): 212.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P510427  
 CATALOG NUMBER: CST-CA10-210-740-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

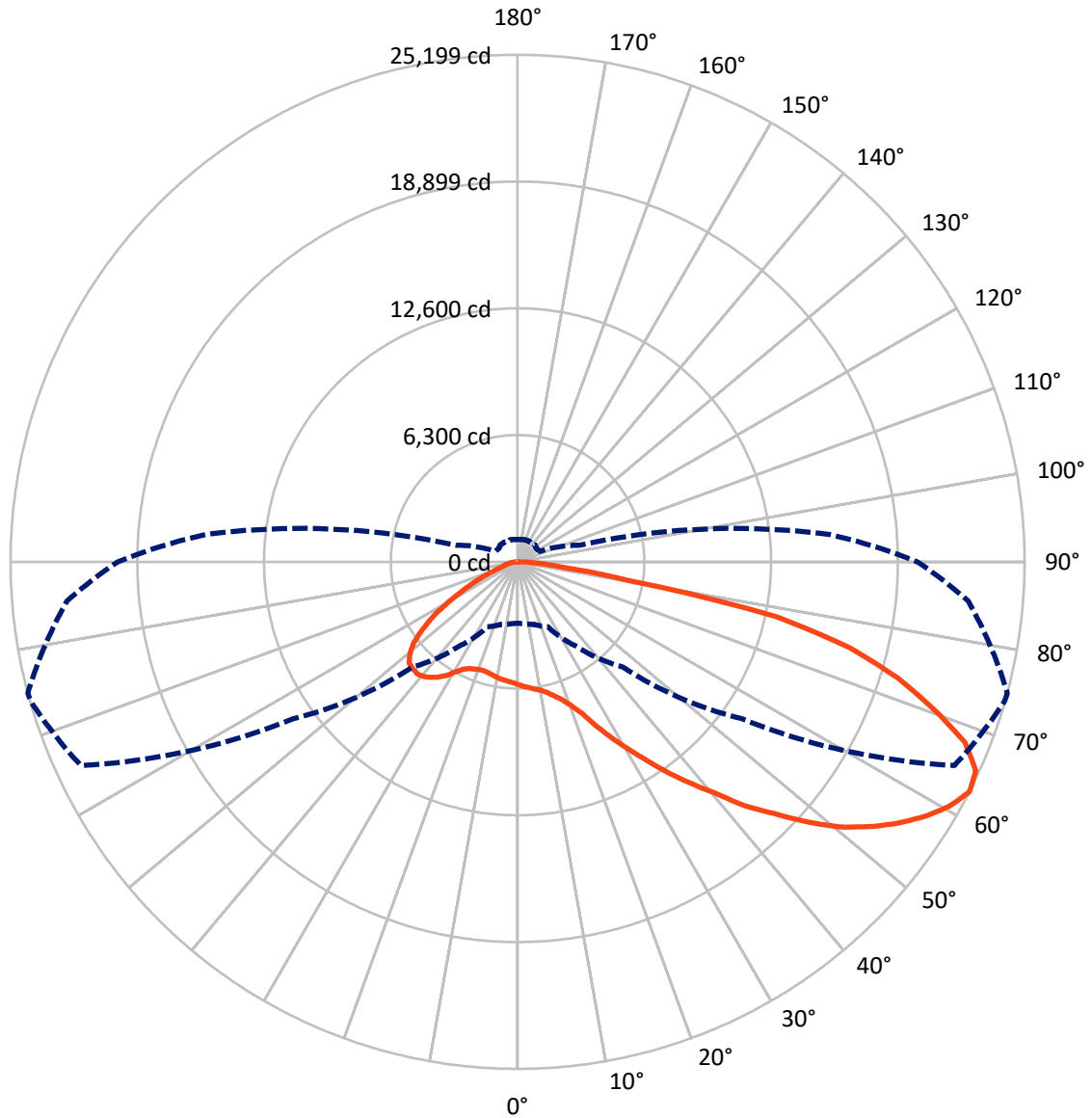
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8 fc  
 Type II - Short - N/A

REPORT NUMBER: P510427  
CATALOG NUMBER: CST-CA10-210-740-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P510427  
 CATALOG NUMBER: CST-CA10-210-740-U-T2

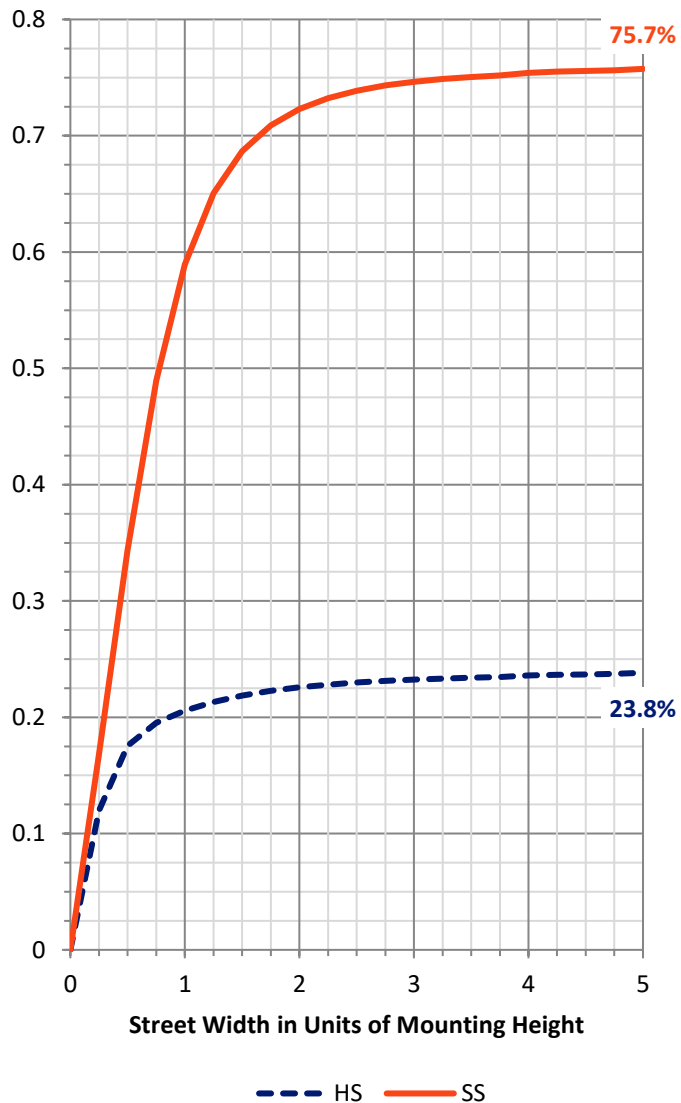
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	8393.9	0.0	8393.9
	% Fixture	24.2	0.0	24.2
<b>Street Side</b>	Lumens	26251.1	0.0	26251.1
	% Fixture	75.8	0.0	75.8
<b>Total</b>	Lumens	34645.0	0.0	34645.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	587.5	1.7
10°-20°	1783.1	5.1
20°-30°	3075.4	8.9
30°-40°	4534.7	13.1
40°-50°	5977.8	17.3
50°-60°	7035.3	20.3
60°-70°	6999.4	20.2
70°-80°	4081.9	11.8
80°-90°	570.0	1.6
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°	34645.0	100.0
0°-180°	34645.0	100.0

**Coefficient of Utilization**



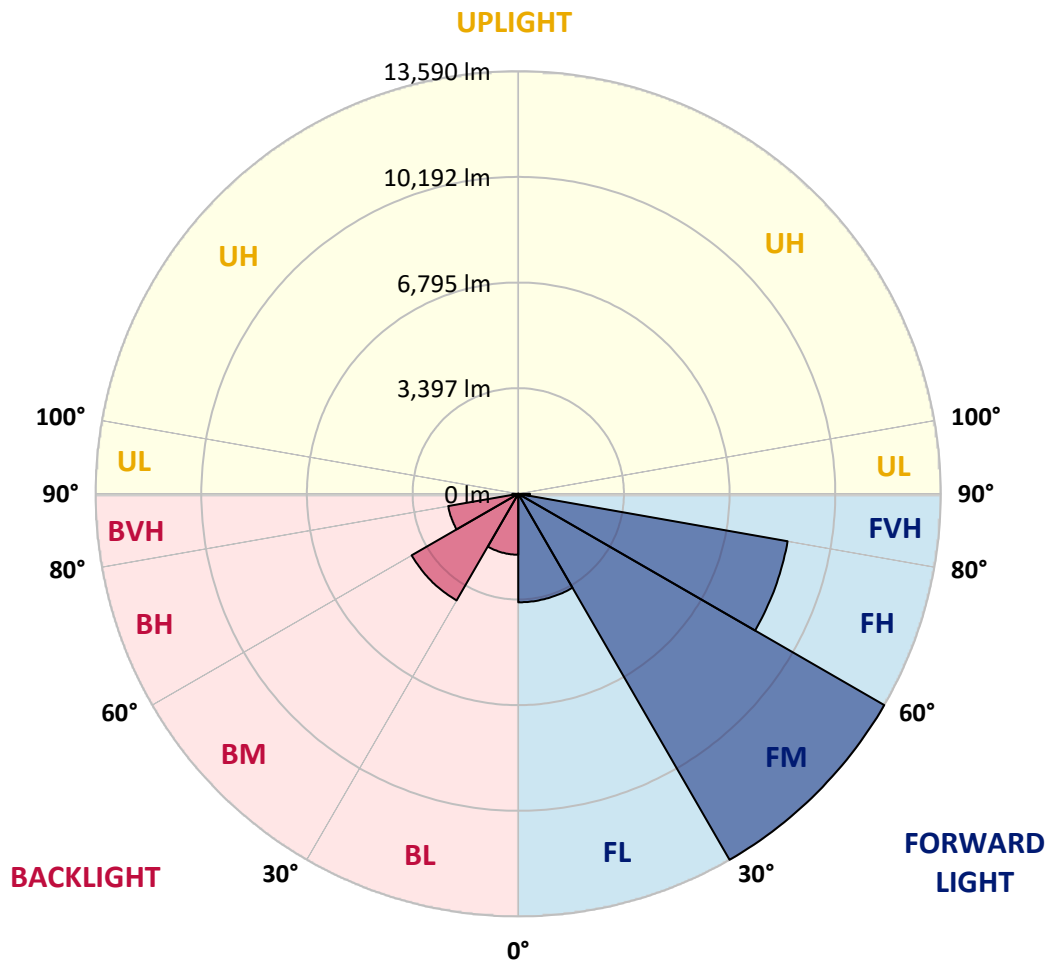
REPORT NUMBER: P510427  
 CATALOG NUMBER: CST-CA10-210-740-U-T2

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3488.6	10.1			
FM (30°-60°)	13589.8	39.2			
FH (60°-80°)	8794.5	25.4			G4/12000
FVH (80°-90°)	378.2	1.1			G3/500
BL (0°-30°)	1957.4	5.6	B3/2500		
BM (30°-60°)	3958.0	11.4	B3/5000		
BH (60°-80°)	2286.8	6.6	B3/2500		G3/2500
BVH (80°-90°)	191.7	0.6			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





REPORT NUMBER: P510427  
 CATALOG NUMBER: CST-CA10-210-740-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1
2.5°	6441.5	6415.2	6418.7	6400.2	6372.4	6351.7	6297.5	6239.0	6204.1	6201.2	6151.3
5°	6765.3	6773.8	6775.9	6716.8	6658.3	6592.0	6509.3	6396.6	6304.6	6290.4	6193.4
7.5°	7060.4	7059.7	7055.5	7022.7	6995.6	6897.2	6731.7	6554.9	6405.2	6391.6	6234.0
10°	7362.8	7360.6	7317.9	7262.9	7201.6	7111.1	6969.2	6757.4	6515.0	6497.2	6271.8
12.5°	7692.2	7668.7	7641.6	7575.3	7502.5	7345.7	7196.6	6966.3	6713.2	6681.1	6338.9
15°	7963.9	7939.6	7901.8	7856.9	7780.6	7660.8	7502.5	7229.4	6957.8	6926.4	6489.3
17.5°	8232.7	8221.3	8194.2	8146.4	8087.9	7984.5	7839.1	7607.3	7251.5	7213.0	6739.6
20°	8453.0	8425.9	8405.9	8428.0	8433.0	8356.7	8276.9	8082.2	7690.1	7630.9	7046.9
22.5°	8578.5	8572.8	8681.9	8763.2	8796.0	8813.1	8788.1	8631.3	8276.2	8172.8	7474.7
25°	8697.6	8688.3	8836.6	9039.8	9233.1	9331.5	9397.8	9418.4	9092.6	8999.2	8162.8
27.5°	8701.1	8726.8	8942.1	9283.0	9577.5	9877.6	10195.7	10232.0	9946.1	9871.9	8945.7
30°	8720.4	8731.8	8945.0	9336.4	9949.7	10431.0	10845.2	11049.9	10803.2	10768.9	9807.8
32.5°	8475.8	8490.8	8822.3	9429.9	10230.6	11003.5	11553.3	11857.0	11795.7	11752.2	10727.6
35°	8221.3	8234.1	8619.1	9297.2	10439.5	11523.3	12192.9	12789.7	12901.6	12868.8	11753.6
37.5°	7822.0	7864.7	8268.3	9138.9	10475.9	11905.5	12803.2	13718.7	14056.7	13958.3	12838.9
40°	7388.4	7419.8	7889.7	8807.4	10435.2	12156.5	13402.9	14746.9	15156.2	15103.5	13916.3
42.5°	6840.8	6925.0	7395.6	8383.8	10226.3	12312.6	13957.6	15912.7	16507.4	16578.0	14905.9
45°	6379.5	6377.4	6814.5	7770.6	9847.7	12349.7	14468.1	17091.4	17961.3	17828.7	16214.4
47.5°	5836.9	5859.0	6315.3	7160.3	9289.4	12232.1	14866.0	18484.7	19365.2	19293.2	17287.5
50°	4581.2	4740.2	5604.4	6635.5	8534.3	11904.1	15197.6	19841.6	20682.2	20715.0	18262.9
52.5°	3949.5	4010.8	4487.8	6107.1	7864.0	11353.6	15561.2	21368.2	21955.0	21871.6	19370.2
55°	3696.4	3729.2	3958.0	5158.1	7215.9	10501.5	15735.9	22762.1	22947.5	22934.0	20281.5
57.5°	3513.1	3538.1	3700.6	4304.6	6504.3	9407.7	15588.3	23669.1	23957.2	23868.8	21141.4
60°	3248.6	3268.5	3511.0	3878.9	5772.0	8303.3	14680.6	24080.5	24689.5	24656.7	21901.5
62.5°	3049.6	3083.9	3219.3	3564.4	5146.7	7393.4	13599.0	23952.2	25170.0	25199.3	22481.9
65°	2839.3	2870.0	2984.8	3286.4	4579.8	6795.2	12432.4	23309.0	24949.0	25026.7	22576.0
67.5°	2579.8	2603.3	2739.5	3000.4	3917.4	6197.0	11116.9	22171.7	23722.6	23972.9	21639.1
70°	2253.2	2261.7	2428.6	2606.1	3252.9	5295.0	8839.5	20310.0	21947.8	21952.8	19870.1
72.5°	1793.3	1800.4	1844.6	1979.4	2443.6	4190.5	6497.2	16970.2	19790.2	19753.8	17659.7
75°	1219.3	1282.0	1435.3	1563.7	1762.6	2942.7	4040.8	11433.5	16767.0	17052.2	14505.9
77.5°	963.3	969.0	1032.5	1150.1	1322.0	2198.3	2264.6	6326.0	12500.2	13178.3	11402.1
80°	671.7	681.7	647.4	676.0	922.0	1504.5	1323.4	2753.0	5213.0	5565.9	6845.8
82.5°	320.2	331.6	380.8	353.7	458.5	639.6	698.8	1422.5	2251.8	2310.9	2665.3
85°	211.1	211.1	211.8	200.4	267.4	278.8	317.3	606.8	1099.5	1136.6	1130.2
87.5°	67.7	74.9	72.7	84.9	102.7	92.7	97.0	190.4	377.2	373.6	312.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510427  
 CATALOG NUMBER: CST-CA10-210-740-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1	6107.1
2.5°	6115.7	6086.4	6018.0	5958.1	5898.9	5854.0	5815.5	5764.2	5739.9	5717.8	5764.2
5°	6133.5	6081.5	5958.8	5836.2	5723.5	5640.8	5590.2	5553.1	5519.6	5519.6	5535.3
7.5°	6154.2	6083.6	5908.2	5734.2	5565.2	5471.1	5399.1	5352.0	5324.9	5326.4	5359.9
10°	6167.7	6059.3	5850.4	5615.8	5431.9	5280.7	5210.1	5142.4	5091.1	5060.4	5094.6
12.5°	6183.4	6051.5	5772.7	5508.2	5284.3	5113.2	4966.3	4915.6	4865.7	4827.2	4845.8
15°	6280.4	6081.5	5707.8	5371.3	5111.7	4898.5	4706.0	4613.3	4599.1	4572.7	4579.1
17.5°	6438.7	6162.0	5665.8	5203.7	4904.2	4652.5	4408.7	4288.9	4260.4	4246.8	4254.0
20°	6674.7	6315.3	5678.6	5086.1	4670.4	4388.7	4073.6	3933.1	3838.3	3844.0	3871.8
22.5°	7035.5	6562.8	5748.5	4957.0	4417.2	4047.9	3729.9	3538.8	3443.2	3422.6	3453.9
25°	7610.2	6961.3	5825.5	4833.6	4172.7	3680.0	3327.7	3120.9	2998.3	2990.5	3025.4
27.5°	8346.8	7572.4	5993.0	4726.7	3868.9	3237.9	2887.8	2710.9	2580.5	2564.8	2553.4
30°	9100.4	8251.2	6296.1	4564.1	3514.5	2781.5	2477.1	2338.7	2192.6	2133.4	2146.2
32.5°	9899.0	8883.7	6651.2	4450.0	3118.1	2380.1	2115.6	1983.7	1849.6	1764.0	1744.1
35°	10703.3	9512.6	6949.9	4279.6	2742.3	2061.4	1808.3	1672.1	1555.1	1485.2	1480.3
37.5°	11644.5	10167.1	7189.5	4098.5	2352.3	1811.8	1507.4	1428.9	1372.6	1311.3	1317.7
40°	12587.2	10930.1	7381.3	3799.0	2028.6	1543.7	1282.7	1298.4	1310.6	1259.2	1254.9
42.5°	13370.1	11571.1	7469.0	3411.1	1741.9	1310.6	1183.6	1254.9	1307.7	1274.2	1269.9
45°	14165.1	12110.9	7434.8	2929.9	1503.8	1199.3	1175.8	1248.5	1316.3	1308.4	1304.8
47.5°	15029.3	12818.2	7375.6	2381.5	1333.4	1188.6	1192.9	1227.1	1312.7	1327.0	1321.2
50°	16086.0	13469.2	7025.5	1854.6	1250.7	1205.7	1231.4	1213.6	1286.3	1315.5	1320.5
52.5°	17137.7	13970.4	6557.0	1607.2	1217.9	1222.1	1284.9	1224.3	1256.4	1282.0	1305.6
55°	17949.2	14481.0	5799.1	1458.2	1207.2	1230.0	1299.9	1247.1	1246.4	1246.4	1254.2
57.5°	18779.8	15164.8	5041.1	1361.9	1188.6	1238.5	1282.0	1251.4	1241.4	1227.1	1217.9
60°	19358.1	15417.9	4067.1	1298.4	1169.4	1226.4	1232.1	1227.8	1197.2	1183.6	1172.9
62.5°	19871.5	15555.5	3166.6	1225.7	1143.0	1197.9	1167.9	1158.7	1140.9	1108.1	1113.8
65°	19733.9	15260.3	2412.9	1143.7	1124.5	1163.7	1111.6	1089.5	1090.9	1056.7	1068.1
67.5°	18848.3	13936.2	1732.7	1018.2	1073.8	1095.9	1047.4	1031.0	1006.8	989.7	1005.4
70°	17059.3	12354.0	1168.7	844.9	958.3	1006.1	974.0	945.5	907.7	896.3	913.4
72.5°	14358.3	10312.6	806.4	679.5	827.1	889.2	877.0	847.8	820.7	848.5	882.0
75°	11795.7	7629.4	658.1	556.9	636.0	740.8	776.5	785.0	866.3	1137.3	1165.1
77.5°	8490.8	4729.5	591.8	452.8	507.7	592.5	663.8	693.1	1058.1	1013.2	1011.1
80°	4950.6	2756.6	451.3	357.2	410.7	434.2	519.1	813.6	912.7	782.9	763.7
82.5°	2258.9	1216.4	314.4	285.9	285.2	287.4	353.7	782.9	700.2	616.8	594.0
85°	830.7	427.8	191.1	165.4	189.7	164.7	231.7	574.0	405.7	399.3	333.0
87.5°	204.6	87.7	64.9	54.2	44.2	42.1	70.6	189.0	99.1	90.6	87.0
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)