

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: P510727

Luminaire Tested: **CST-CA8-230-740-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510727
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-CA8-230-740-U-T2
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: 35582 lumens
Efficiency: N/A
Efficacy: 155.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

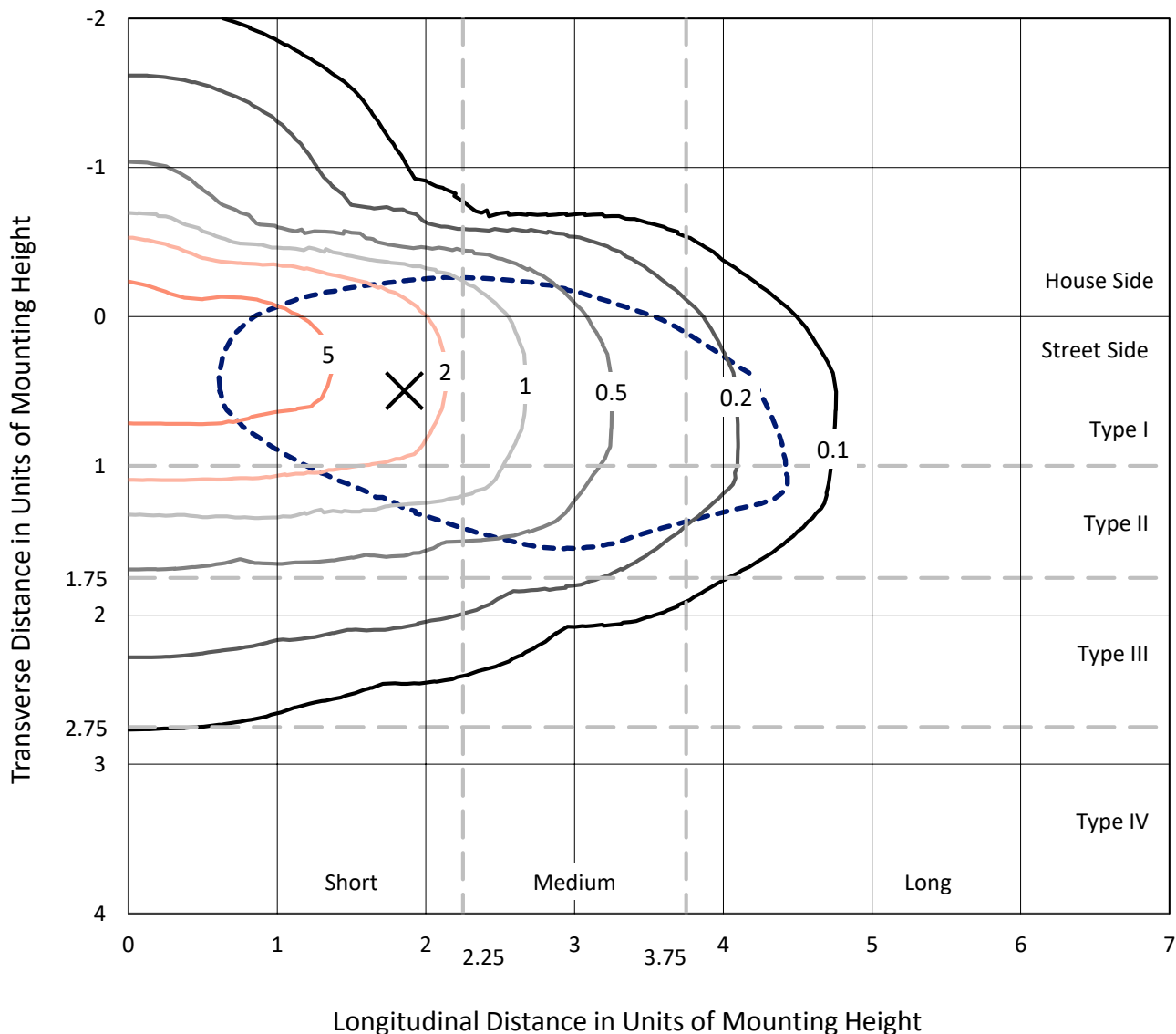
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

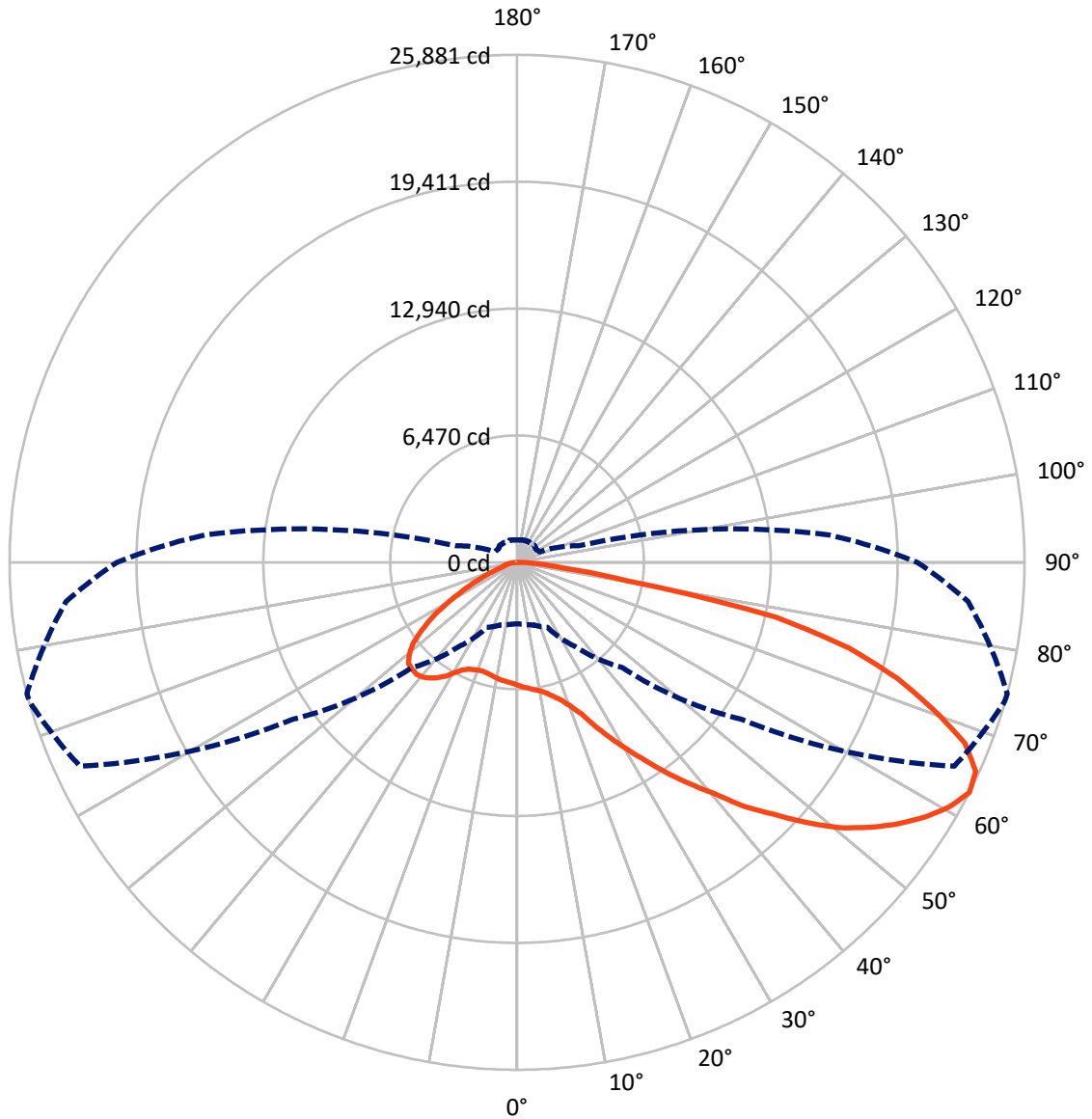
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 8.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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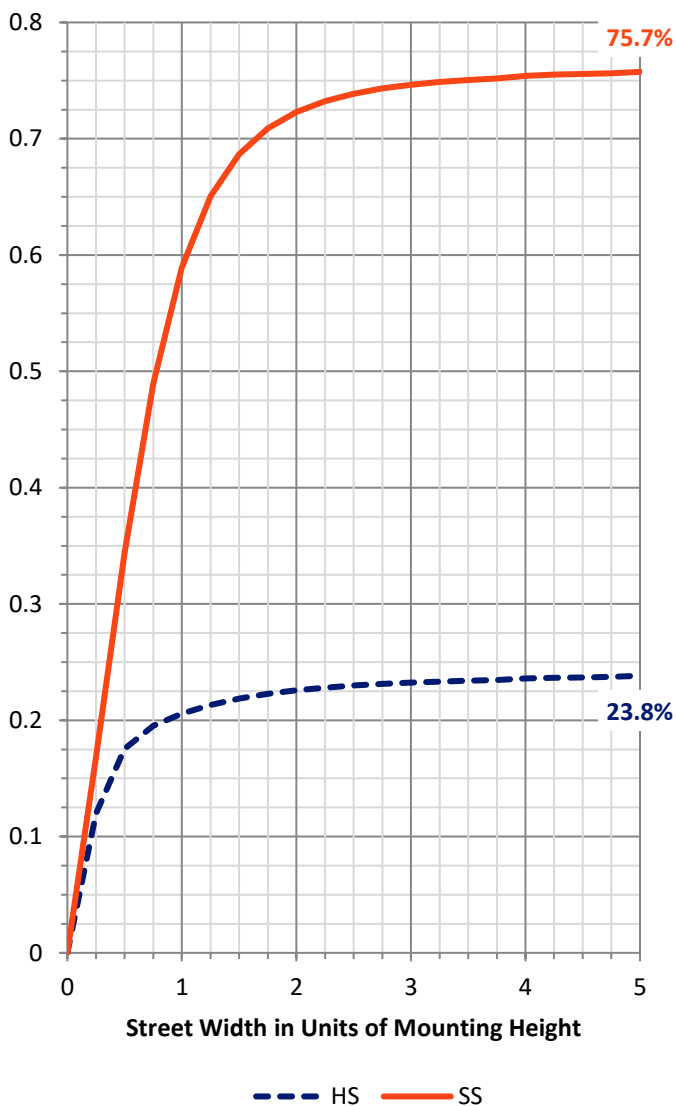
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8620.9	0.0	8620.9
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	26961.1	0.0	26961.1
	% Fixture	75.8	0.0	75.8
Total	Lumens	35582.0	0.0	35582.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	603.4	1.7
10°-20°	1831.3	5.1
20°-30°	3158.6	8.9
30°-40°	4657.4	13.1
40°-50°	6139.4	17.3
50°-60°	7225.6	20.3
60°-70°	7188.7	20.2
70°-80°	4192.3	11.8
80°-90°	585.4	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°	35582.0	100.0
0°-180°	35582.0	100.0

Coefficient of Utilization



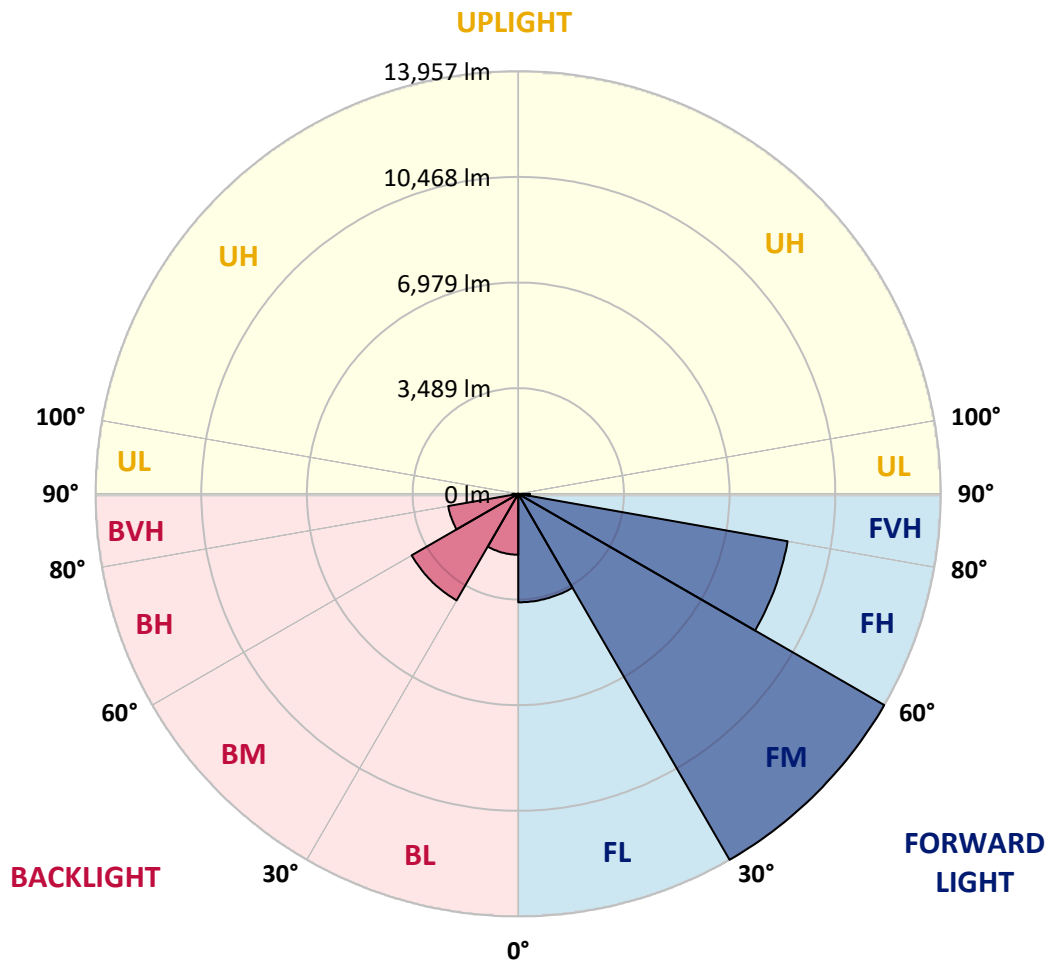
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3583.0	10.1			
FM	(30°-60°)	13957.4	39.2			
FH	(60°-80°)	9032.4	25.4			G4/12000
FVH	(80°-90°)	388.4	1.1			G3/500
BL	(0°-30°)	2010.3	5.6	B3/2500		
BM	(30°-60°)	4065.0	11.4	B3/5000		
BH	(60°-80°)	2348.6	6.6	B3/2500		G3/2500
BVH	(80°-90°)	196.9	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3
2.5°	6615.8	6588.7	6592.3	6573.3	6544.7	6523.5	6467.8	6407.8	6371.9	6369.0	6317.7
5°	6948.2	6957.0	6959.2	6898.4	6838.4	6770.3	6685.3	6569.6	6475.1	6460.5	6360.9
7.5°	7251.4	7250.7	7246.3	7212.6	7184.8	7083.7	6913.8	6732.2	6578.4	6564.5	6402.6
10°	7561.9	7559.7	7515.8	7459.4	7396.4	7303.4	7157.7	6940.2	6691.2	6672.9	6441.5
12.5°	7900.2	7876.1	7848.2	7780.1	7705.4	7544.3	7391.3	7154.7	6894.8	6861.8	6510.3
15°	8179.2	8154.3	8115.5	8069.4	7991.0	7868.0	7705.4	7425.0	7145.9	7113.7	6664.8
17.5°	8455.3	8443.6	8415.8	8366.7	8306.7	8200.5	8051.1	7813.1	7447.7	7408.1	6921.9
20°	8681.6	8653.8	8633.3	8656.0	8661.1	8582.8	8500.7	8300.8	7898.0	7837.3	7237.5
22.5°	8810.5	8804.6	8916.7	9000.2	9033.9	9051.4	9025.8	8864.7	8500.0	8393.8	7676.9
25°	8932.8	8923.3	9075.6	9284.3	9482.8	9583.8	9651.9	9673.2	9338.5	9242.6	8383.6
27.5°	8936.5	8962.8	9184.0	9534.0	9836.5	10144.8	10471.4	10508.7	10215.1	10138.9	9187.6
30°	8956.2	8968.0	9186.9	9589.0	10218.7	10713.1	11138.5	11348.7	11095.3	11060.2	10073.0
32.5°	8705.1	8720.4	9061.0	9684.9	10507.3	11301.1	11865.7	12177.7	12114.7	12070.0	11017.7
35°	8443.6	8456.8	8852.2	9548.7	10721.9	11835.0	12522.6	13135.6	13250.5	13216.9	12071.5
37.5°	8033.5	8077.5	8491.9	9386.1	10759.2	12227.5	13149.5	14089.8	14436.9	14335.8	13186.1
40°	7588.3	7620.5	8103.1	9045.6	10717.5	12485.3	13765.4	15145.8	15566.1	15511.9	14292.6
42.5°	7025.8	7112.3	7595.6	8610.6	10502.9	12645.6	14335.1	16343.1	16953.9	17026.4	15309.1
45°	6552.0	6549.8	6998.8	7980.8	10114.0	12683.7	14859.4	17553.6	18447.1	18310.9	16652.9
47.5°	5994.7	6017.4	6486.1	7353.9	9540.6	12562.9	15268.1	18984.6	19889.0	19815.0	17755.0
50°	4705.1	4868.4	5756.0	6814.9	8765.1	12226.0	15608.6	20378.2	21241.6	21275.3	18756.8
52.5°	4056.3	4119.3	4609.2	6272.3	8076.7	11660.7	15982.1	21946.1	22548.8	22463.1	19894.1
55°	3796.3	3830.0	4065.1	5297.6	7411.0	10785.6	16161.5	23377.8	23568.2	23554.2	20830.0
57.5°	3608.1	3633.8	3800.7	4421.0	6680.2	9662.2	16009.9	24309.3	24605.1	24514.3	21713.2
60°	3336.4	3356.9	3605.9	3983.8	5928.1	8527.8	15077.7	24731.8	25357.2	25323.5	22493.8
62.5°	3132.1	3167.3	3306.4	3660.9	5285.9	7593.4	13966.7	24600.0	25850.8	25880.8	23090.0
65°	2916.1	2947.6	3065.5	3375.2	4703.7	6979.0	12768.7	23939.4	25623.8	25703.6	23186.6
67.5°	2649.5	2673.7	2813.6	3081.6	4023.3	6364.6	11417.6	22771.4	24364.2	24621.2	22224.4
70°	2314.1	2322.9	2494.3	2676.6	3340.8	5438.2	9078.5	20859.3	22541.4	22546.6	20407.5
72.5°	1841.8	1849.1	1894.5	2032.9	2509.6	4303.8	6672.9	17429.1	20325.5	20288.1	18137.3
75°	1252.3	1316.7	1474.2	1606.0	1810.3	3022.3	4150.0	11742.7	17220.4	17513.4	14898.3
77.5°	989.4	995.2	1060.4	1181.2	1357.7	2257.7	2325.8	6497.1	12838.2	13534.7	11710.5
80°	689.8	700.1	664.9	694.2	946.9	1545.2	1359.2	2827.5	5354.0	5716.5	7031.0
82.5°	328.8	340.5	391.1	363.2	470.9	656.9	717.7	1461.0	2312.7	2373.4	2737.4
85°	216.8	216.8	217.5	205.8	274.6	286.3	325.9	623.2	1129.2	1167.3	1160.7
87.5°	69.6	76.9	74.7	87.1	105.5	95.2	99.6	195.5	387.4	383.7	320.8
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°	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3	6272.3
2.5°	6281.1	6251.1	6180.8	6119.2	6058.5	6012.3	5972.8	5920.0	5895.2	5872.4	5920.0
5°	6299.4	6245.9	6120.0	5994.0	5878.3	5793.4	5741.4	5703.3	5668.9	5668.9	5685.0
7.5°	6320.6	6248.1	6068.0	5889.3	5715.7	5619.1	5545.1	5496.8	5468.9	5470.4	5504.8
10°	6334.5	6223.2	6008.7	5767.7	5578.8	5423.5	5351.0	5281.5	5228.7	5197.3	5232.4
12.5°	6350.7	6215.2	5928.8	5657.1	5427.2	5251.4	5100.6	5048.6	4997.3	4957.8	4976.8
15°	6450.2	6245.9	5862.2	5516.5	5250.0	5031.0	4833.3	4738.1	4723.4	4696.3	4702.9
17.5°	6612.8	6328.7	5819.0	5344.4	5036.9	4778.4	4527.9	4404.9	4375.6	4361.7	4369.0
20°	6855.2	6486.1	5832.2	5223.6	4796.7	4507.4	4183.7	4039.5	3942.1	3947.9	3976.5
22.5°	7225.8	6740.2	5903.9	5091.1	4536.7	4157.4	3830.7	3634.5	3536.4	3515.1	3547.3
25°	7816.0	7149.6	5983.0	4964.4	4285.5	3779.5	3417.7	3205.4	3079.4	3071.3	3107.2
27.5°	8572.5	7777.2	6155.1	4854.5	3973.6	3325.5	2965.9	2784.3	2650.3	2634.1	2622.4
30°	9346.6	8474.4	6466.4	4687.6	3609.6	2856.8	2544.1	2402.0	2251.9	2191.1	2204.3
32.5°	10166.8	9123.9	6831.1	4570.4	3202.4	2444.5	2172.8	2037.3	1899.6	1811.8	1791.2
35°	10992.8	9769.8	7137.9	4395.4	2816.5	2117.1	1857.2	1717.3	1597.2	1525.4	1520.3
37.5°	11959.5	10442.1	7384.0	4209.4	2415.9	1860.8	1548.1	1467.6	1409.7	1346.7	1353.3
40°	12927.6	11225.7	7580.9	3901.8	2083.4	1585.5	1317.4	1333.5	1346.0	1293.3	1288.9
42.5°	13731.7	11884.0	7671.0	3503.4	1789.1	1346.0	1215.6	1288.9	1343.1	1308.7	1304.3
45°	14548.2	12438.4	7635.9	3009.1	1544.5	1231.8	1207.6	1282.3	1351.9	1343.8	1340.1
47.5°	15435.8	13164.9	7575.1	2445.9	1369.4	1220.8	1225.2	1260.3	1348.2	1362.8	1357.0
50°	16521.1	13833.5	7215.5	1904.8	1284.5	1238.3	1264.7	1246.4	1321.1	1351.1	1356.3
52.5°	17601.2	14348.3	6734.4	1650.6	1250.8	1255.2	1319.6	1257.4	1290.3	1316.7	1340.9
55°	18434.6	14872.6	5955.9	1497.6	1239.8	1263.2	1335.0	1280.8	1280.1	1280.1	1288.1
57.5°	19287.8	15574.9	5177.5	1398.7	1220.8	1272.0	1316.7	1285.2	1275.0	1260.3	1250.8
60°	19881.7	15834.9	4177.1	1333.5	1201.0	1259.6	1265.4	1261.0	1229.6	1215.6	1204.7
62.5°	20408.9	15976.2	3252.2	1258.9	1173.9	1230.3	1199.5	1190.0	1171.7	1138.0	1143.9
65°	20267.6	15673.0	2478.2	1174.6	1154.9	1195.1	1141.7	1119.0	1120.4	1085.3	1097.0
67.5°	19358.1	14313.1	1779.5	1045.7	1102.9	1125.6	1075.8	1058.9	1034.0	1016.5	1032.6
70°	17520.7	12688.1	1200.3	867.8	984.2	1033.3	1000.3	971.1	932.2	920.5	938.1
72.5°	14746.7	10591.5	828.3	697.9	849.5	913.2	900.7	870.7	842.9	871.5	905.9
75°	12114.7	7835.8	675.9	571.9	653.2	760.9	797.5	806.3	889.8	1168.0	1196.6
77.5°	8720.4	4857.5	607.8	465.0	521.4	608.6	681.8	711.8	1086.8	1040.6	1038.4
80°	5084.5	2831.1	463.6	366.9	421.8	446.0	533.1	835.6	937.4	804.1	784.3
82.5°	2320.0	1249.3	323.0	293.7	292.9	295.1	363.2	804.1	719.1	633.5	610.0
85°	853.1	439.4	196.3	169.9	194.8	169.2	238.0	589.5	416.7	410.1	342.0
87.5°	210.2	90.1	66.6	55.7	45.4	43.2	72.5	194.1	101.8	93.0	89.3
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)