

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: P510747

Luminaire Tested: **CST-CA8-230-760-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510747
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-CA8-230-760-U-T2
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35466 lumens
Efficiency: N/A
Efficacy: 155.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

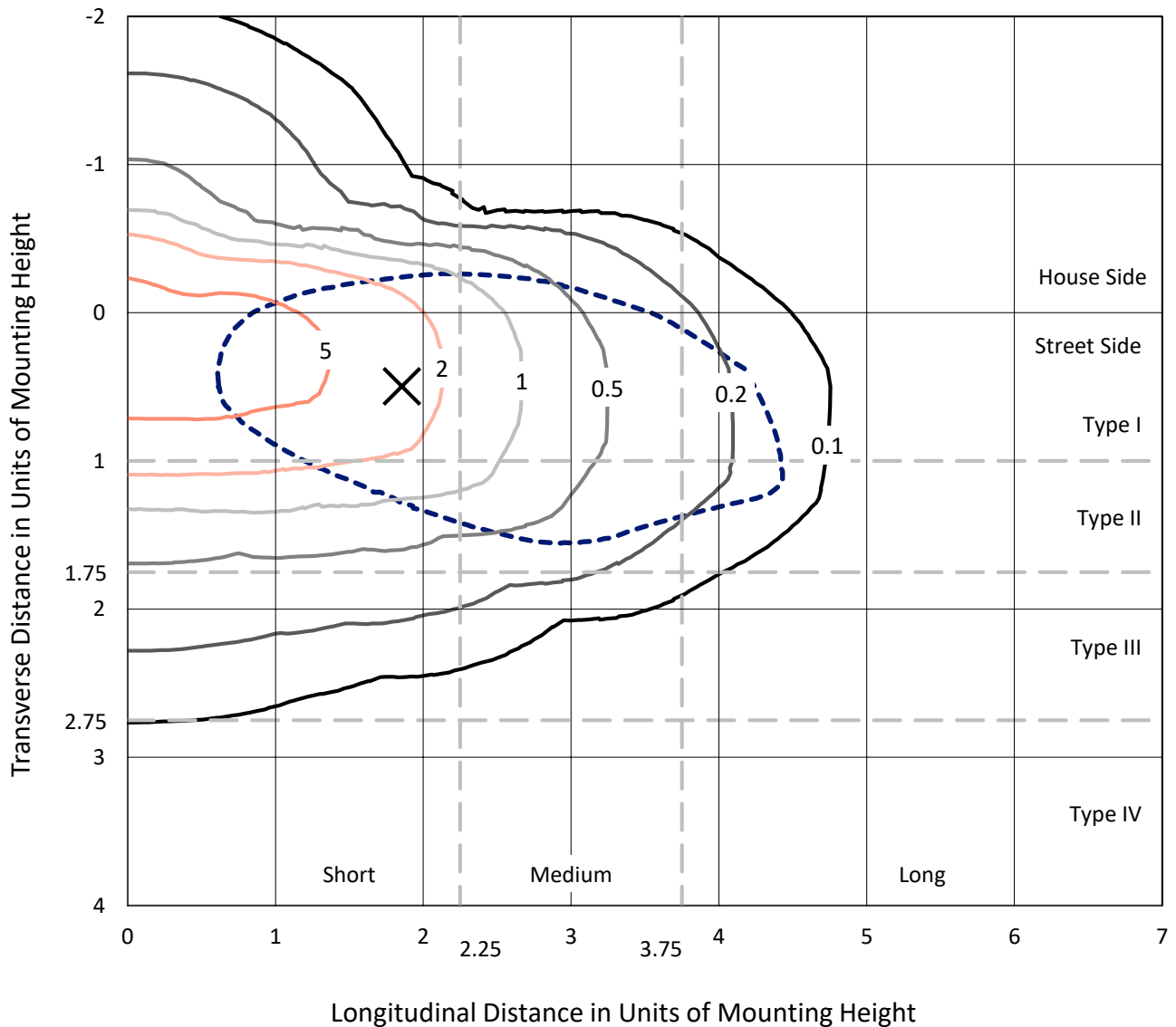
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

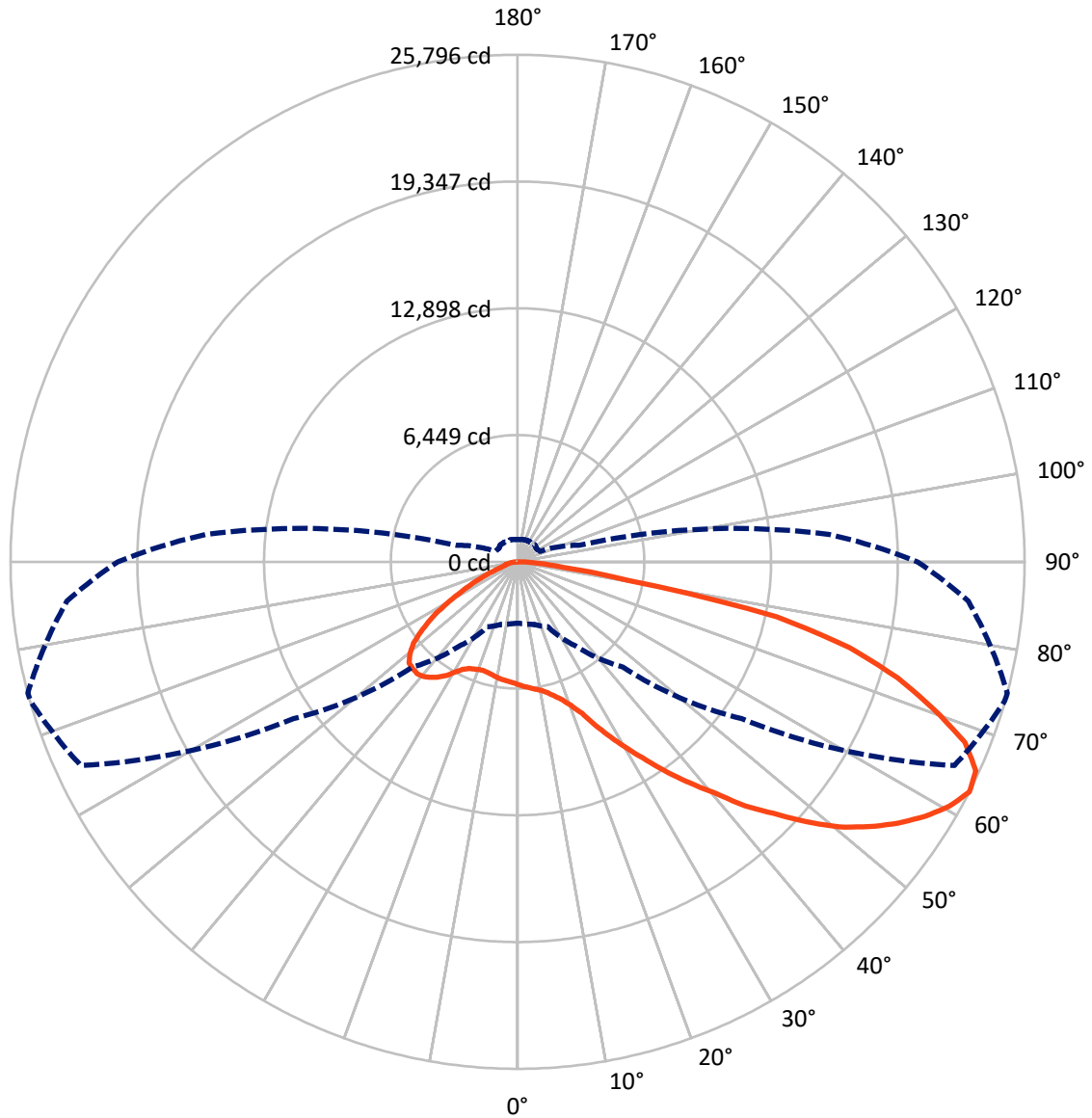
× Max cd
 - - - 1/2 Max cd



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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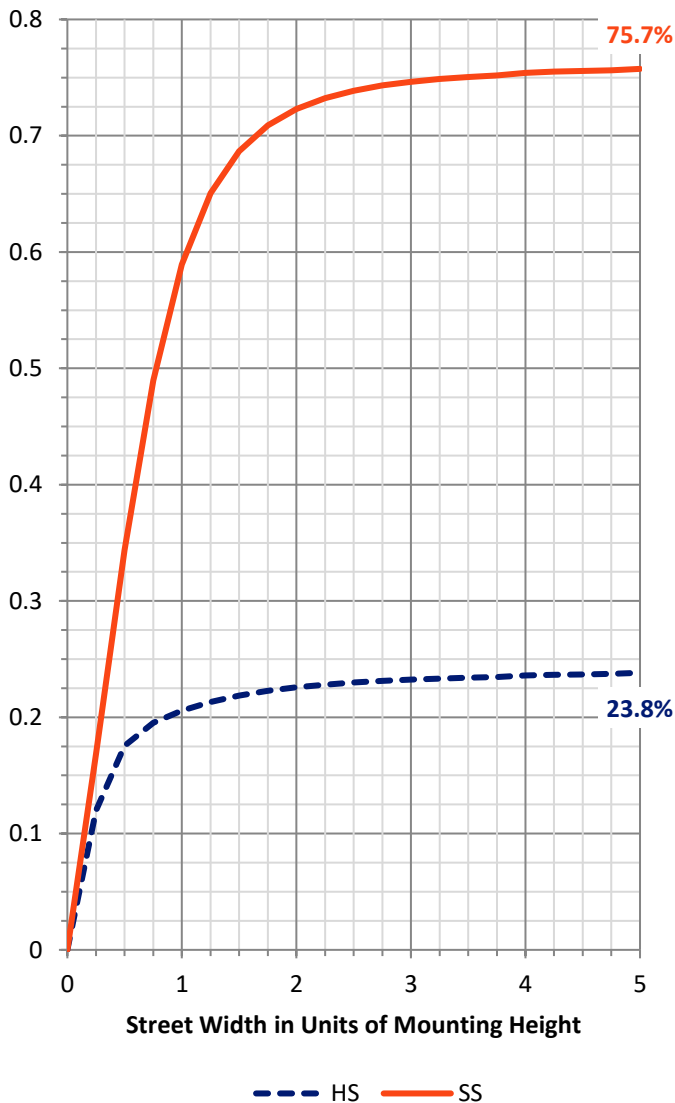
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8592.8	0.0	8592.8
	% Fixture	24.2	0.0	24.2
Street Side	Lumens	26873.2	0.0	26873.2
	% Fixture	75.8	0.0	75.8
Total	Lumens	35466.0	0.0	35466.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	601.4	1.7
10°-20°	1825.3	5.1
20°-30°	3148.3	8.9
30°-40°	4642.2	13.1
40°-50°	6119.4	17.3
50°-60°	7202.0	20.3
60°-70°	7165.3	20.2
70°-80°	4178.6	11.8
80°-90°	583.5	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°	35466.0	100.0
0°-180°	35466.0	100.0

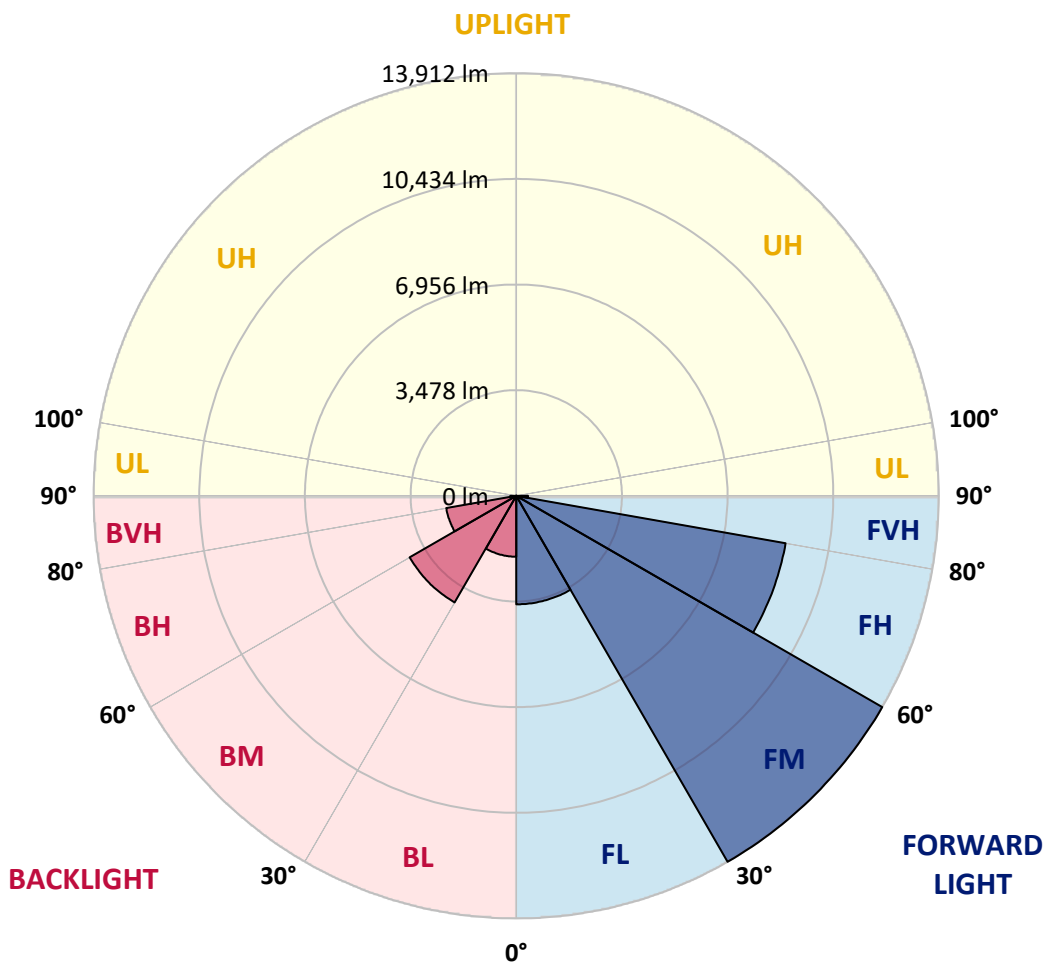


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3571.3	10.1			
FM (30°-60°)	13911.9	39.2			
FH (60°-80°)	9002.9	25.4			G4/12000
FVH (80°-90°)	387.2	1.1			G3/500
BL (0°-30°)	2003.8	5.6	B3/2500		
BM (30°-60°)	4051.7	11.4	B3/5000		
BH (60°-80°)	2341.0	6.6	B3/2500		G3/2500
BVH (80°-90°)	196.3	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°	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8
2.5°	6594.2	6567.2	6570.8	6551.8	6523.4	6502.2	6446.7	6386.9	6351.1	6348.2	6297.1
5°	6925.6	6934.3	6936.5	6875.9	6816.1	6748.2	6663.5	6548.2	6454.0	6439.4	6340.2
7.5°	7227.8	7227.0	7222.7	7189.1	7161.3	7060.6	6891.3	6710.2	6557.0	6543.1	6381.8
10°	7537.3	7535.1	7491.3	7435.1	7372.3	7279.6	7134.3	6917.5	6669.4	6651.1	6420.5
12.5°	7874.5	7850.4	7822.7	7754.8	7680.3	7519.7	7367.2	7131.4	6872.3	6839.4	6489.1
15°	8152.6	8127.8	8089.1	8043.1	7965.0	7842.4	7680.3	7400.8	7122.7	7090.5	6643.1
17.5°	8427.8	8416.1	8388.3	8339.4	8279.6	8173.8	8024.8	7787.6	7423.4	7384.0	6899.3
20°	8653.3	8625.6	8605.1	8627.8	8632.9	8554.8	8473.0	8273.8	7872.3	7811.7	7213.9
22.5°	8781.8	8775.9	8887.6	8970.8	9004.4	9021.9	8996.4	8835.8	8472.3	8366.5	7651.9
25°	8903.7	8894.2	9046.0	9254.0	9451.9	9552.6	9620.5	9641.6	9308.1	9212.4	8356.2
27.5°	8907.3	8933.6	9154.0	9503.0	9804.4	10111.7	10437.3	10474.5	10181.8	10105.9	9157.7
30°	8927.0	8938.7	9157.0	9557.7	10185.4	10678.1	11102.2	11311.7	11059.2	11024.1	10040.2
32.5°	8676.7	8692.0	9031.4	9653.3	10473.0	11264.3	11827.0	12138.0	12075.2	12030.7	10981.8
35°	8416.1	8429.2	8823.4	9517.6	10686.9	11796.4	12481.8	13092.7	13207.3	13173.8	12032.2
37.5°	8007.3	8051.1	8464.3	9355.5	10724.1	12187.6	13106.6	14043.8	14389.8	14289.1	13143.1
40°	7563.5	7595.6	8076.7	9016.1	10682.5	12444.6	13720.5	15096.4	15515.4	15461.4	14246.0
42.5°	7002.9	7089.1	7570.8	8582.5	10468.6	12604.4	14288.4	16289.8	16898.6	16970.9	15259.2
45°	6530.7	6528.5	6975.9	7954.8	10081.1	12642.4	14811.0	17496.4	18386.9	18251.2	16598.6
47.5°	5975.2	5997.8	6465.0	7330.0	9509.5	12521.9	15218.3	18922.7	19824.2	19750.4	17697.1
50°	4689.8	4852.6	5737.2	6792.7	8736.5	12186.2	15557.7	20311.7	21172.3	21205.9	18695.7
52.5°	4043.1	4105.9	4594.2	6251.8	8050.4	11622.7	15930.0	21874.5	22475.3	22389.9	19829.3
55°	3784.0	3817.5	4051.8	5280.3	7386.9	10750.4	16108.8	23301.5	23491.3	23477.5	20762.1
57.5°	3596.4	3621.9	3788.3	4406.6	6658.4	9630.7	15957.7	24230.0	24524.9	24434.4	21642.4
60°	3325.6	3346.0	3594.2	3970.8	5908.8	8500.0	15028.5	24651.2	25274.5	25241.0	22420.5
62.5°	3121.9	3156.9	3295.6	3648.9	5268.6	7568.6	13921.2	24519.8	25766.5	25796.4	23014.7
65°	2906.6	2938.0	3055.5	3364.2	4688.3	6956.2	12727.1	23861.4	25540.2	25619.8	23111.0
67.5°	2640.9	2665.0	2804.4	3071.5	4010.2	6343.8	11380.3	22697.2	24284.8	24541.0	22151.9
70°	2306.6	2315.3	2486.1	2667.9	3329.9	5420.5	9048.9	20791.3	22468.0	22473.1	20340.9
72.5°	1835.8	1843.1	1888.3	2026.3	2501.5	4289.8	6651.1	17372.3	20259.2	20222.0	18078.2
75°	1248.2	1312.4	1469.3	1600.7	1804.4	3012.4	4136.5	11704.4	17164.3	17456.3	14849.7
77.5°	986.1	992.0	1056.9	1177.4	1353.3	2250.4	2318.3	6475.9	12796.4	13490.6	11672.3
80°	687.6	697.8	662.8	692.0	943.8	1540.2	1354.7	2818.3	5336.5	5697.8	7008.1
82.5°	327.7	339.4	389.8	362.0	469.3	654.7	715.3	1456.2	2305.1	2365.7	2728.5
85°	216.1	216.1	216.8	205.1	273.7	285.4	324.8	621.2	1125.6	1163.5	1156.9
87.5°	69.3	76.6	74.5	86.9	105.1	94.9	99.3	194.9	386.1	382.5	319.7
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°	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8	6251.8
2.5°	6260.6	6230.7	6160.6	6099.3	6038.7	5992.7	5953.3	5900.7	5875.9	5853.3	5900.7
5°	6278.9	6225.6	6100.0	5974.5	5859.1	5774.5	5722.6	5684.7	5650.4	5650.4	5666.4
7.5°	6300.0	6227.8	6048.2	5870.1	5697.1	5600.7	5527.0	5478.9	5451.1	5452.6	5486.9
10°	6313.9	6202.9	5989.1	5748.9	5560.6	5405.9	5333.6	5264.3	5211.7	5180.3	5215.3
12.5°	6329.9	6194.9	5909.5	5638.7	5409.5	5234.3	5084.0	5032.1	4981.0	4941.6	4960.6
15°	6429.2	6225.6	5843.1	5498.6	5232.9	5014.6	4817.5	4722.6	4708.0	4681.0	4687.6
17.5°	6591.3	6308.1	5800.0	5327.0	5020.5	4762.8	4513.2	4390.5	4361.3	4347.5	4354.8
20°	6832.9	6465.0	5813.2	5206.6	4781.0	4492.7	4170.1	4026.3	3929.2	3935.0	3963.5
22.5°	7202.2	6718.3	5884.7	5074.5	4521.9	4143.8	3818.3	3622.6	3524.8	3503.7	3535.8
25°	7790.5	7126.3	5963.5	4948.2	4271.5	3767.2	3406.6	3194.9	3069.4	3061.3	3097.1
27.5°	8544.6	7751.9	6135.1	4838.7	3960.6	3314.6	2956.2	2775.2	2641.6	2625.6	2613.9
30°	9316.1	8446.7	6445.3	4672.3	3597.8	2847.5	2535.8	2394.2	2244.5	2183.9	2197.1
32.5°	10133.6	9094.2	6808.8	4555.5	3192.0	2436.5	2165.7	2030.7	1893.4	1805.8	1785.4
35°	10957.0	9738.0	7114.6	4381.0	2807.3	2110.2	1851.1	1711.7	1592.0	1520.4	1515.3
37.5°	11920.5	10408.1	7359.9	4195.6	2408.0	1854.8	1543.1	1462.8	1405.1	1342.3	1348.9
40°	12885.4	11189.1	7556.2	3889.1	2076.6	1580.3	1313.1	1329.2	1341.6	1289.1	1284.7
42.5°	13686.9	11845.3	7646.0	3492.0	1783.2	1341.6	1211.7	1284.7	1338.7	1304.4	1300.0
45°	14500.8	12397.9	7611.0	2999.3	1539.4	1227.7	1203.7	1278.1	1347.4	1339.4	1335.8
47.5°	15385.5	13121.9	7550.4	2438.0	1365.0	1216.8	1221.2	1256.2	1343.8	1358.4	1352.6
50°	16467.2	13788.4	7192.0	1898.5	1280.3	1234.3	1260.6	1242.3	1316.8	1346.7	1351.8
52.5°	17543.9	14301.5	6712.4	1645.3	1246.7	1251.1	1315.3	1253.3	1286.1	1312.4	1336.5
55°	18374.5	14824.1	5936.5	1492.7	1235.8	1259.1	1330.7	1276.6	1275.9	1275.9	1283.9
57.5°	19224.9	15524.1	5160.6	1394.2	1216.8	1267.9	1312.4	1281.0	1270.8	1256.2	1246.7
60°	19816.9	15783.3	4163.5	1329.2	1197.1	1255.5	1261.3	1256.9	1225.6	1211.7	1200.7
62.5°	20342.4	15924.1	3241.6	1254.7	1170.1	1226.3	1195.6	1186.1	1167.9	1134.3	1140.1
65°	20201.5	15622.0	2470.1	1170.8	1151.1	1191.2	1138.0	1115.3	1116.8	1081.8	1093.4
67.5°	19295.0	14266.5	1773.7	1042.3	1099.3	1121.9	1072.3	1055.5	1030.7	1013.1	1029.2
70°	17463.6	12646.8	1196.4	865.0	981.0	1029.9	997.1	967.9	929.2	917.5	935.0
72.5°	14698.6	10557.0	825.6	695.6	846.7	910.2	897.8	867.9	840.1	868.6	902.9
75°	12075.2	7810.2	673.7	570.1	651.1	758.4	794.9	803.7	886.9	1164.2	1192.7
77.5°	8692.0	4841.6	605.8	463.5	519.7	606.6	679.6	709.5	1083.2	1037.2	1035.0
80°	5067.9	2821.9	462.0	365.7	420.4	444.5	531.4	832.8	934.3	801.5	781.8
82.5°	2312.4	1245.3	321.9	292.7	292.0	294.2	362.0	801.5	716.8	631.4	608.0
85°	850.4	438.0	195.6	169.3	194.2	168.6	237.2	587.6	415.3	408.8	340.9
87.5°	209.5	89.8	66.4	55.5	45.3	43.1	72.3	193.4	101.5	92.7	89.1
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)