

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: P510729

Luminaire Tested: **CST-CA8-230-740-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510729
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)
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-T3
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: 35919 lumens
Efficiency: N/A
Efficacy: 157.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

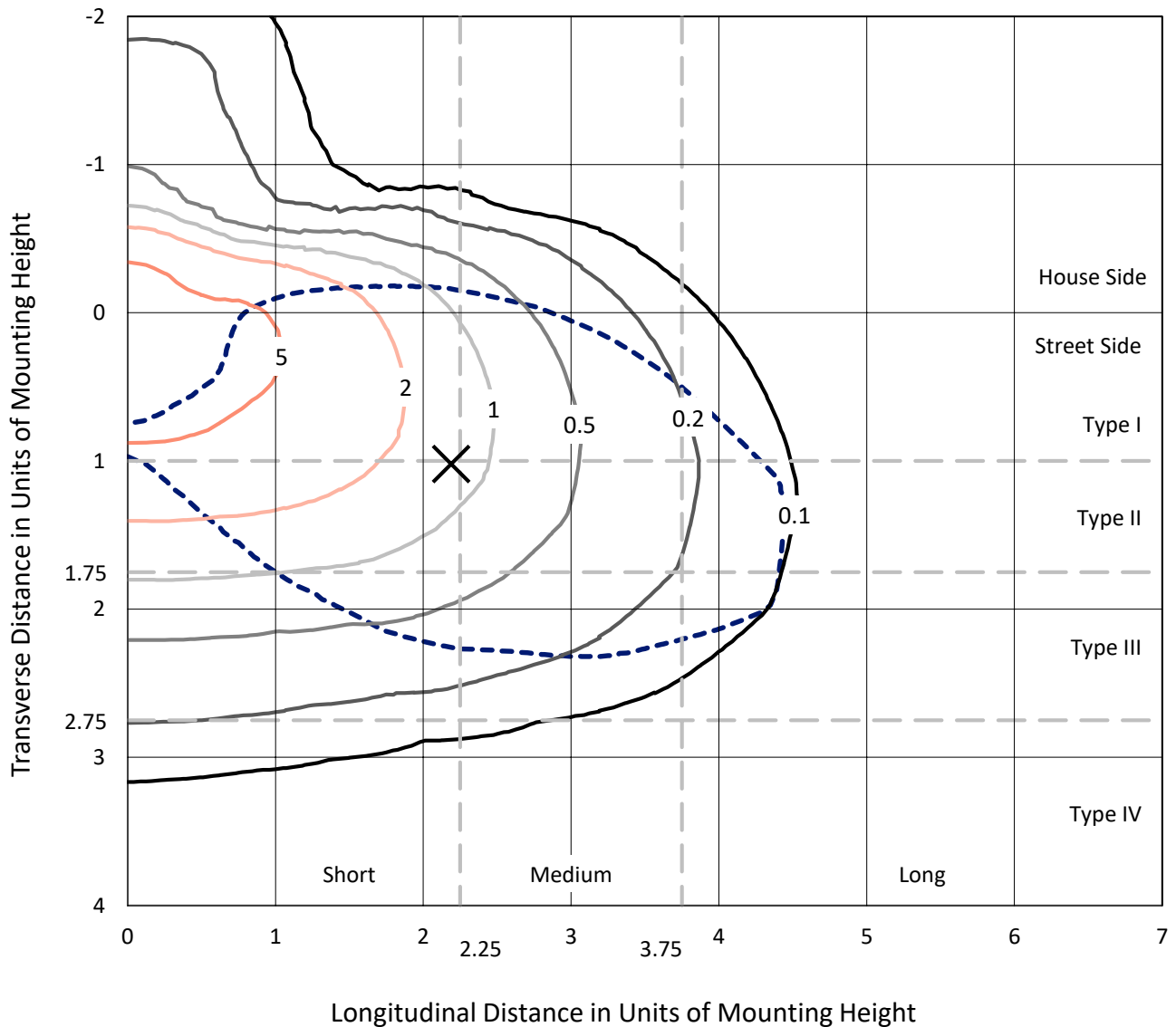
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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 CATALOG NUMBER: CST-CA8-230-740-U-T3

Iso-Footcandle Lines of Horizontal Illumination

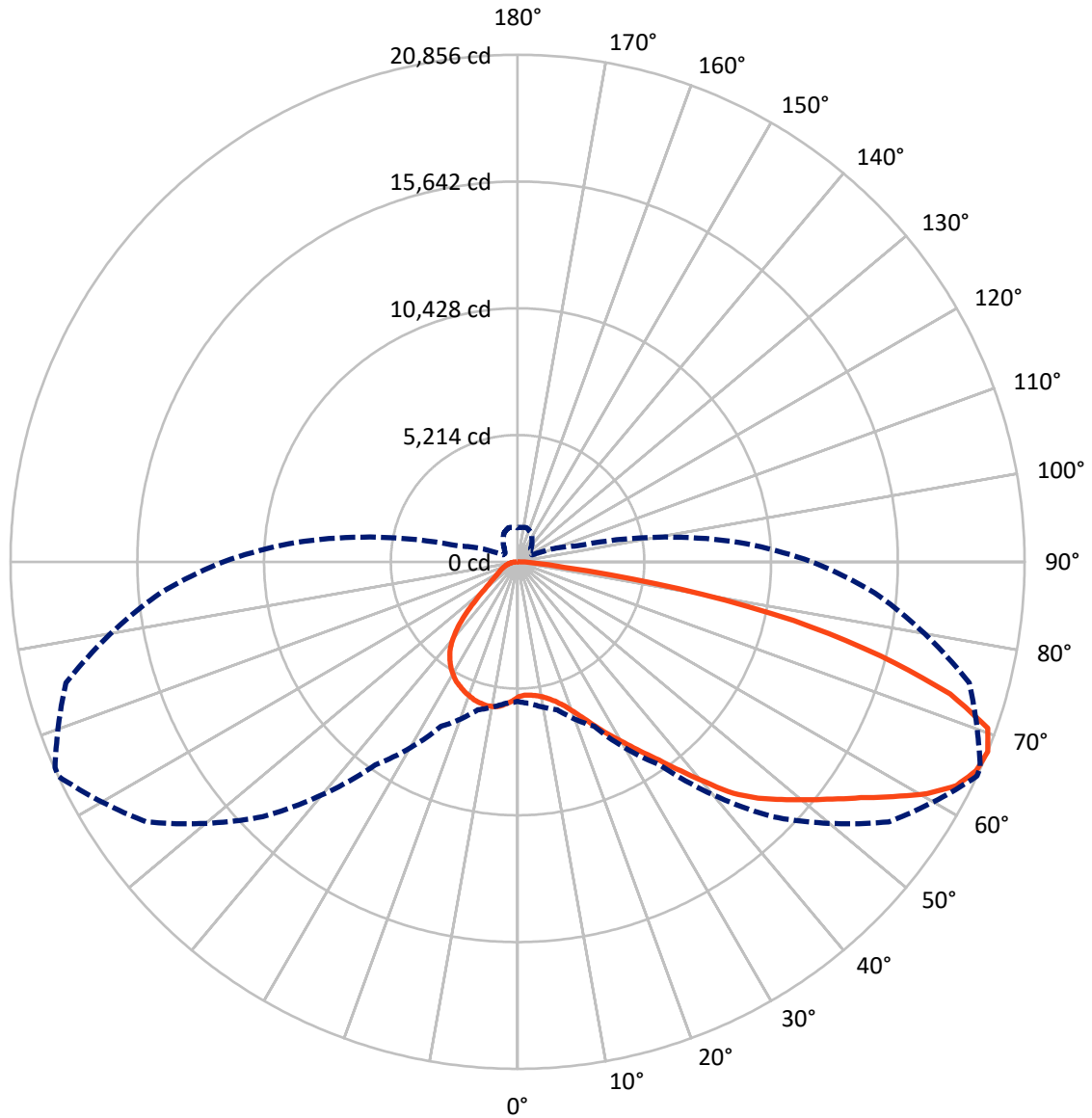
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Short - N/A

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CATALOG NUMBER: CST-CA8-230-740-U-T3

Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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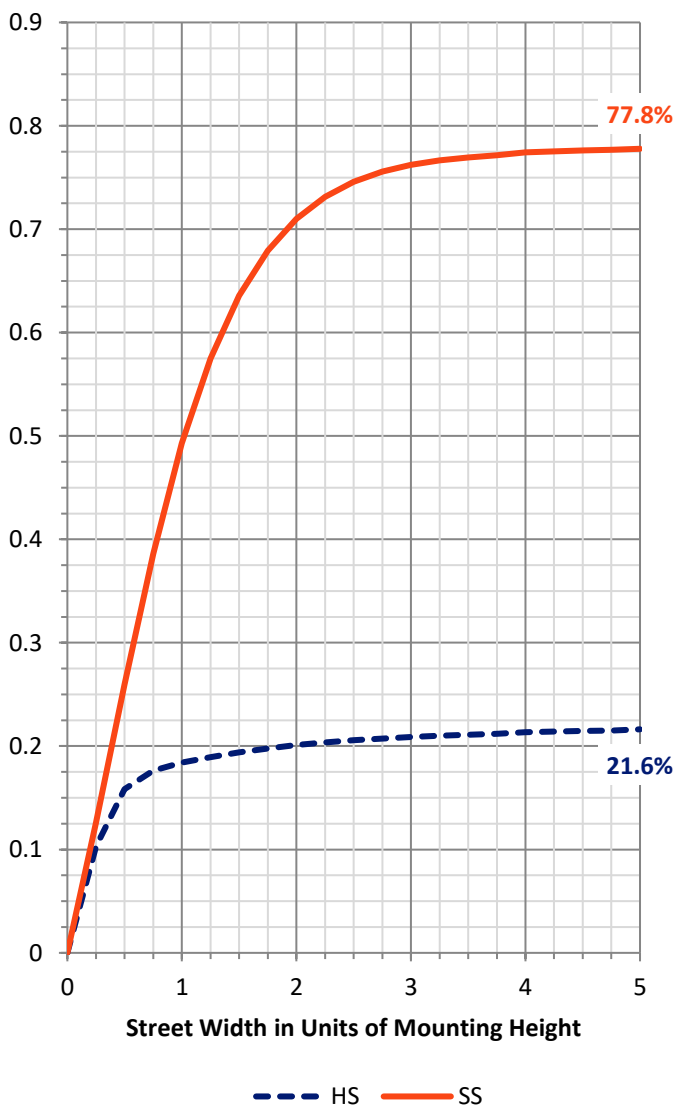
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7934.0	0.0	7934.0
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	27984.9	0.0	27984.9
	% Fixture	77.9	0.0	77.9
Total	Lumens	35919.0	0.0	35919.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	552.8	1.5
10°-20°	1727.1	4.8
20°-30°	2989.8	8.3
30°-40°	4393.2	12.2
40°-50°	5938.0	16.5
50°-60°	7302.0	20.3
60°-70°	7824.5	21.8
70°-80°	4614.8	12.8
80°-90°	576.8	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°	35919.0	100.0
0°-180°	35919.0	100.0

Coefficient of Utilization

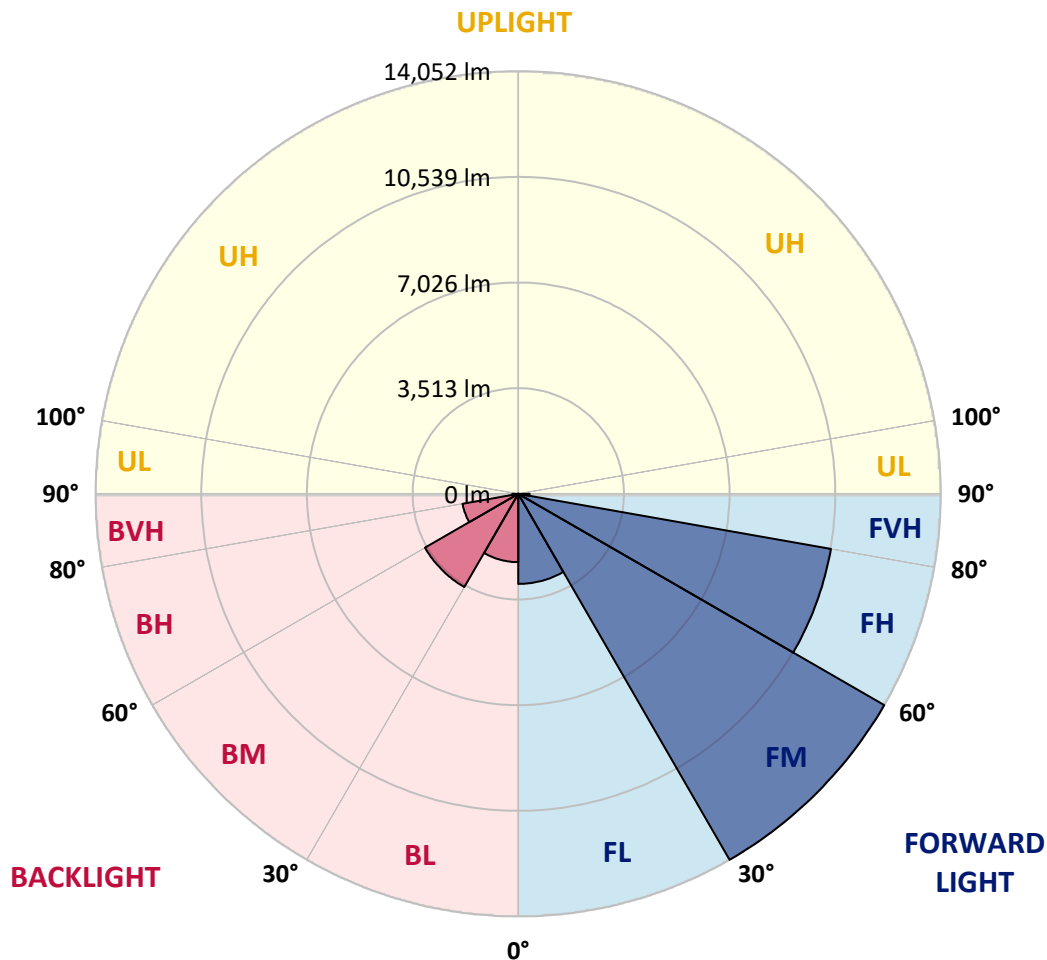


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 CATALOG NUMBER: CST-CA8-230-740-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2997.2	8.3			
FM (30°-60°)	14051.8	39.1			
FH (60°-80°)	10557.8	29.4			G4/12000
FVH (80°-90°)	378.3	1.1			G3/500
BL (0°-30°)	2272.5	6.3	B3/2500		
BM (30°-60°)	3581.4	10.0	B3/5000		
BH (60°-80°)	1881.5	5.2	B3/2500		G3/2500
BVH (80°-90°)	198.6	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 III Short





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 CATALOG NUMBER: CST-CA8-230-740-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1
2.5°	5443.4	5433.1	5428.8	5442.7	5452.9	5464.6	5481.5	5497.6	5499.8	5521.0	5548.9
5°	5509.3	5500.5	5491.0	5488.8	5485.1	5484.4	5488.8	5507.1	5511.5	5532.0	5592.1
7.5°	5655.8	5647.0	5629.4	5622.8	5603.0	5567.9	5551.1	5560.6	5562.8	5587.7	5662.4
10°	5894.5	5867.4	5846.2	5824.2	5762.0	5706.3	5665.3	5647.7	5644.1	5668.2	5754.6
12.5°	6179.4	6156.7	6133.3	6075.4	5996.3	5896.0	5823.5	5783.2	5780.3	5800.8	5866.0
15°	6480.4	6480.4	6464.3	6395.4	6317.8	6151.6	6039.5	5972.1	5976.5	5992.6	6022.7
17.5°	6869.2	6837.0	6829.7	6751.3	6664.9	6513.3	6335.4	6227.7	6232.9	6240.2	6217.5
20°	7264.7	7255.2	7244.2	7192.2	7113.8	6919.0	6719.1	6577.8	6578.5	6552.1	6451.1
22.5°	7787.6	7756.1	7764.2	7705.6	7599.4	7399.5	7169.5	7001.8	7012.8	6974.7	6791.6
25°	8306.8	8275.3	8258.5	8218.9	8127.4	7937.7	7664.6	7510.8	7497.6	7428.7	7162.9
27.5°	8825.3	8807.0	8820.9	8773.3	8698.6	8487.0	8236.5	8065.9	8074.7	8027.1	7630.9
30°	9362.1	9341.6	9402.4	9325.5	9279.3	9073.6	8833.4	8632.7	8640.0	8657.6	8213.1
32.5°	9767.1	9791.2	9897.4	9888.6	9879.8	9650.6	9398.0	9286.7	9297.6	9359.2	8904.4
35°	10158.1	10160.3	10309.7	10422.5	10470.1	10278.2	10016.1	10012.4	10084.2	10271.6	9868.1
37.5°	10482.6	10475.2	10674.4	10849.5	10979.8	10831.1	10686.9	10911.7	10976.9	11365.7	10838.5
40°	10659.8	10675.2	10931.5	11149.7	11406.0	11335.7	11351.1	11926.0	12086.4	12426.9	11564.2
42.5°	10535.3	10582.2	10981.3	11426.5	11813.2	11906.9	12216.0	13021.5	13089.6	13151.2	12278.2
45°	10326.6	10375.6	10818.0	11537.1	12149.3	12545.5	13076.5	13864.5	13939.1	13870.3	12872.1
47.5°	10109.1	10159.6	10652.5	11492.4	12427.6	13187.0	13841.7	14610.0	14705.2	14492.1	13443.4
50°	9833.0	9911.3	10450.3	11398.0	12653.2	13879.1	14566.0	15377.4	15421.4	15113.8	13876.2
52.5°	9493.2	9579.6	10162.5	11236.1	12829.7	14362.4	15299.1	16210.1	16205.7	15840.3	14371.2
55°	9135.8	9214.2	9814.7	10981.3	12928.5	14734.5	15884.9	17127.7	17180.4	16874.3	14819.4
57.5°	8678.1	8749.1	9403.8	10638.5	12826.0	15050.1	16834.0	18218.1	18244.5	17594.2	15176.1
60°	8071.7	8176.5	8834.1	10202.8	12531.6	15415.5	17879.8	19365.0	19397.2	18302.4	15405.3
62.5°	7406.0	7447.8	8117.9	9532.0	12103.2	15697.5	18604.8	20262.1	20215.2	18856.0	15474.1
65°	6594.6	6627.6	7207.6	8669.3	11307.2	15542.9	18864.8	20723.4	20665.6	19203.9	15262.5
67.5°	5745.1	5846.9	6302.4	7472.7	10196.2	14829.7	18645.1	20856.0	20826.7	19230.2	14757.2
70°	4642.2	4678.1	5089.7	6087.9	8507.5	13401.6	17912.8	20516.2	20493.5	18641.4	13725.3
72.5°	3273.5	3238.4	3438.3	4221.1	6145.0	10660.5	15294.0	18607.0	18645.1	16675.9	11952.3
75°	1737.8	1805.2	2116.4	2584.4	3483.7	6853.1	12193.3	15399.4	15386.2	13944.3	9447.8
77.5°	925.7	924.2	1138.0	1338.0	1705.6	3149.0	8042.4	11613.3	11677.7	10804.0	6487.0
80°	444.5	461.4	474.5	544.1	850.2	1455.1	3364.3	6734.5	7173.9	6443.8	3081.6
82.5°	355.9	357.4	358.8	343.5	351.5	592.5	1296.2	1948.7	2019.0	1622.8	993.8
85°	263.6	247.5	245.3	208.0	235.1	355.9	654.0	831.9	790.9	769.7	561.0
87.5°	106.2	99.6	96.7	90.8	90.8	134.0	230.7	301.0	300.3	273.9	188.2
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: P510729
 CATALOG NUMBER: CST-CA8-230-740-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1	5548.1
2.5°	5570.8	5597.2	5658.7	5711.4	5731.2	5779.5	5824.9	5851.3	5869.6	5880.6	5930.4
5°	5628.7	5681.4	5779.5	5853.5	5925.3	6014.6	6072.5	6109.1	6129.6	6141.3	6177.2
7.5°	5717.3	5770.8	5874.7	5988.3	6054.2	6127.4	6164.7	6191.1	6204.3	6200.6	6229.2
10°	5796.4	5849.1	5953.1	6040.2	6077.6	6119.3	6139.1	6145.0	6145.7	6148.6	6177.2
12.5°	5904.0	5936.3	5991.9	6049.0	6041.0	6042.4	6059.3	6052.0	6035.1	6032.2	6051.2
15°	6019.7	6020.5	6024.9	6012.4	5961.9	5939.9	5916.5	5896.7	5850.6	5847.6	5877.7
17.5°	6164.7	6130.3	6050.5	5965.6	5845.4	5762.7	5679.2	5644.8	5588.4	5577.4	5592.1
20°	6351.5	6279.7	6085.7	5874.7	5649.9	5502.0	5400.9	5299.1	5220.8	5201.7	5215.6
22.5°	6619.5	6478.2	6130.3	5778.1	5430.2	5177.6	4981.3	4859.0	4727.2	4659.8	4666.4
25°	6943.2	6722.0	6208.0	5655.8	5171.7	4807.0	4488.4	4243.1	4094.5	3995.6	4022.0
27.5°	7367.2	7063.3	6301.0	5534.9	4850.2	4333.2	3871.1	3538.6	3387.0	3340.2	3309.4
30°	7858.6	7475.6	6399.1	5356.3	4503.1	3746.6	3154.9	2878.1	2704.5	2676.7	2653.2
32.5°	8516.3	7994.8	6582.9	5162.2	4088.6	3160.0	2517.7	2199.2	2159.6	2136.9	2131.8
35°	9364.3	8675.2	6775.5	4910.3	3548.1	2472.3	1904.8	1732.7	1713.6	1738.5	1740.7
37.5°	10264.3	9413.4	7006.2	4626.1	2926.4	1844.7	1457.3	1338.0	1359.2	1436.8	1454.4
40°	10873.6	9899.6	7215.6	4240.2	2158.2	1340.2	1060.4	1034.8	1152.0	1251.6	1272.1
42.5°	11458.0	10268.0	7300.6	3729.8	1539.4	954.2	856.1	944.0	1108.0	1217.1	1231.8
45°	11956.7	10696.4	7086.7	3117.5	1043.6	797.5	820.2	941.8	1124.1	1245.0	1255.9
47.5°	12431.3	11046.4	6794.5	2456.2	823.1	767.5	819.5	961.5	1160.0	1274.3	1280.8
50°	12884.6	11313.0	6295.8	1868.9	771.1	753.6	826.1	992.3	1179.8	1251.6	1248.6
52.5°	13220.7	11450.7	5764.9	1508.6	750.6	742.6	843.6	1031.1	1183.4	1226.7	1223.7
55°	13467.5	11424.3	5416.3	1235.4	733.8	738.2	872.2	1060.4	1218.6	1283.8	1281.6
57.5°	13490.2	11305.0	5020.1	1043.6	713.3	737.5	903.0	1101.4	1394.4	1514.5	1477.8
60°	13463.1	11107.2	4624.7	916.1	690.6	741.8	935.2	1224.5	1647.7	1742.2	1716.6
62.5°	13329.9	10738.9	4032.2	831.9	670.8	758.0	959.4	1321.9	1635.3	1646.3	1609.7
65°	12918.3	10246.0	3254.5	747.0	651.0	768.9	979.1	1347.5	1502.0	1466.9	1448.5
67.5°	12103.9	9145.3	2510.4	669.3	625.4	766.7	1037.7	1310.9	1451.5	1425.8	1402.4
70°	10946.9	7894.5	1742.9	589.5	582.2	752.8	1023.1	1323.3	1427.3	1387.8	1356.3
72.5°	9145.3	6193.3	1108.7	524.3	517.8	719.9	986.4	1315.3	1411.2	1393.6	1350.4
75°	6886.1	4322.9	704.5	453.3	460.6	659.8	927.9	1272.1	1403.1	1348.2	1265.5
77.5°	4335.4	2134.0	547.8	385.2	396.2	569.0	801.9	1110.9	1346.8	1313.8	1207.6
80°	1639.7	866.3	428.4	312.7	322.2	442.3	657.6	913.9	1239.8	1294.0	1248.6
82.5°	755.0	541.9	321.5	251.2	254.9	322.2	490.7	676.7	1049.4	1187.8	1301.3
85°	440.9	355.2	214.6	167.7	174.3	190.4	276.1	413.0	680.3	905.9	1013.5
87.5°	150.1	123.8	83.5	71.0	68.8	78.4	66.6	135.5	202.1	355.9	406.4
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)