

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: P510469

Luminaire Tested: **CST-CA10-310-727-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510469
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-CA10-310-727-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41113 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

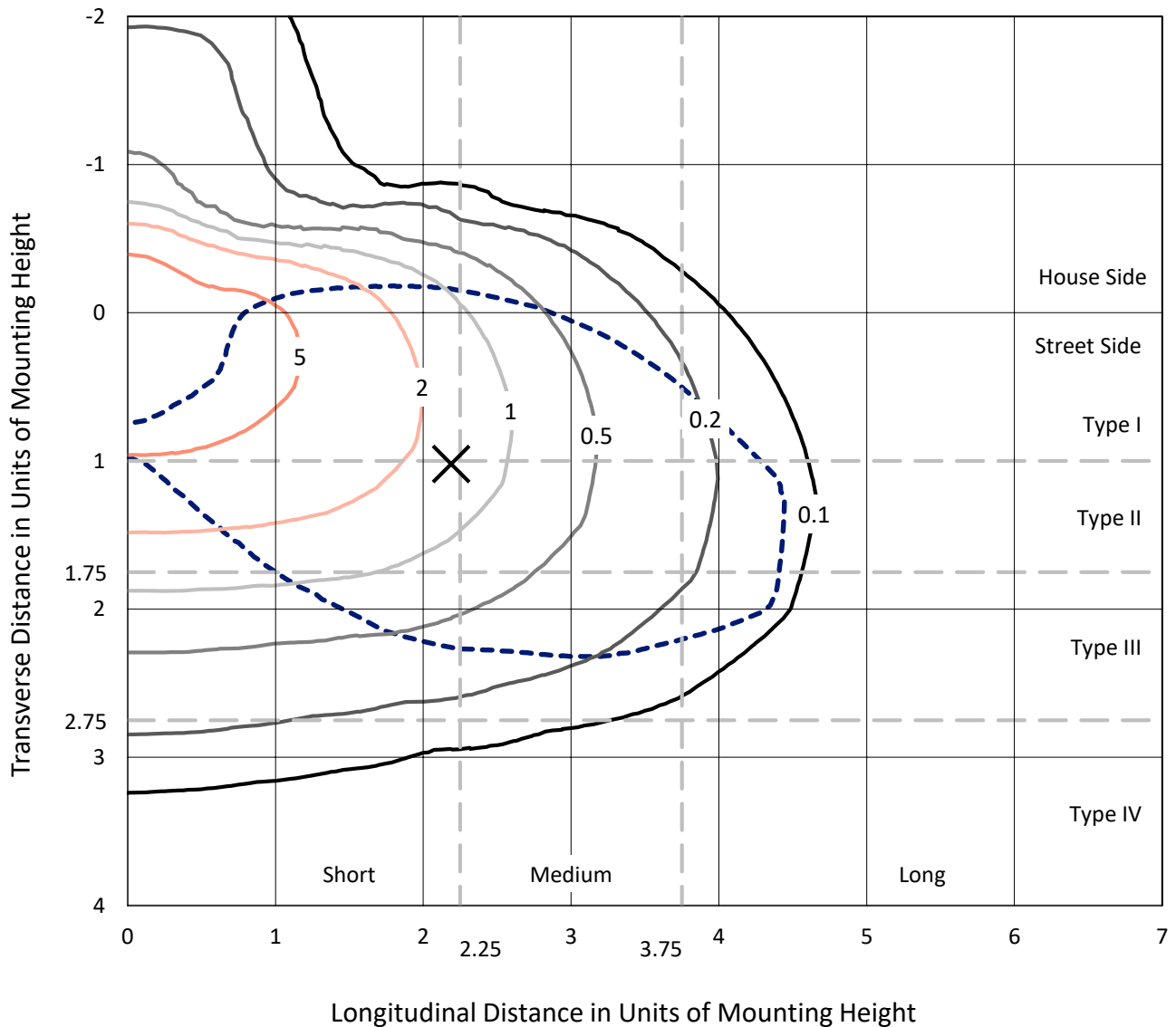
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

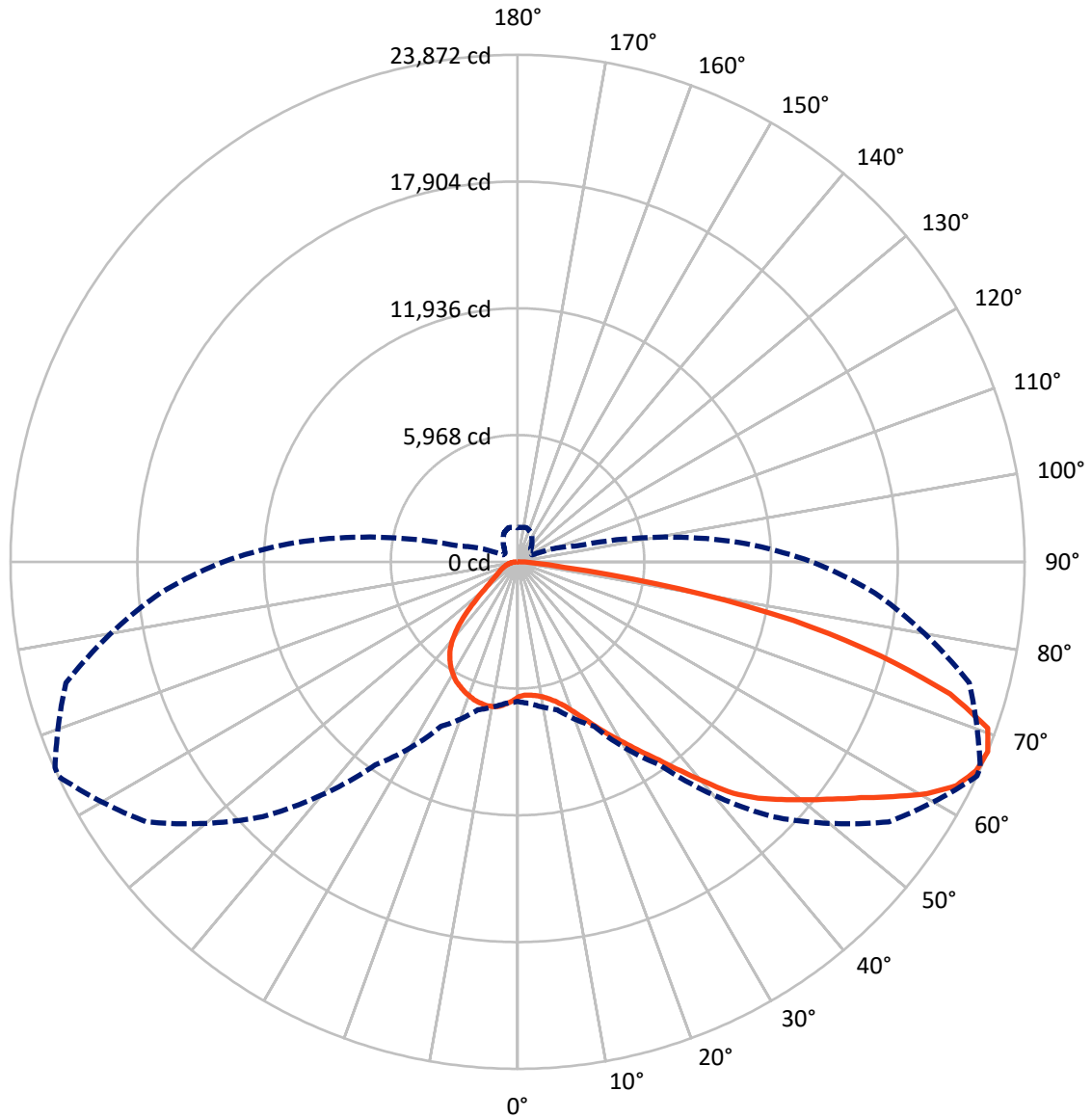
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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

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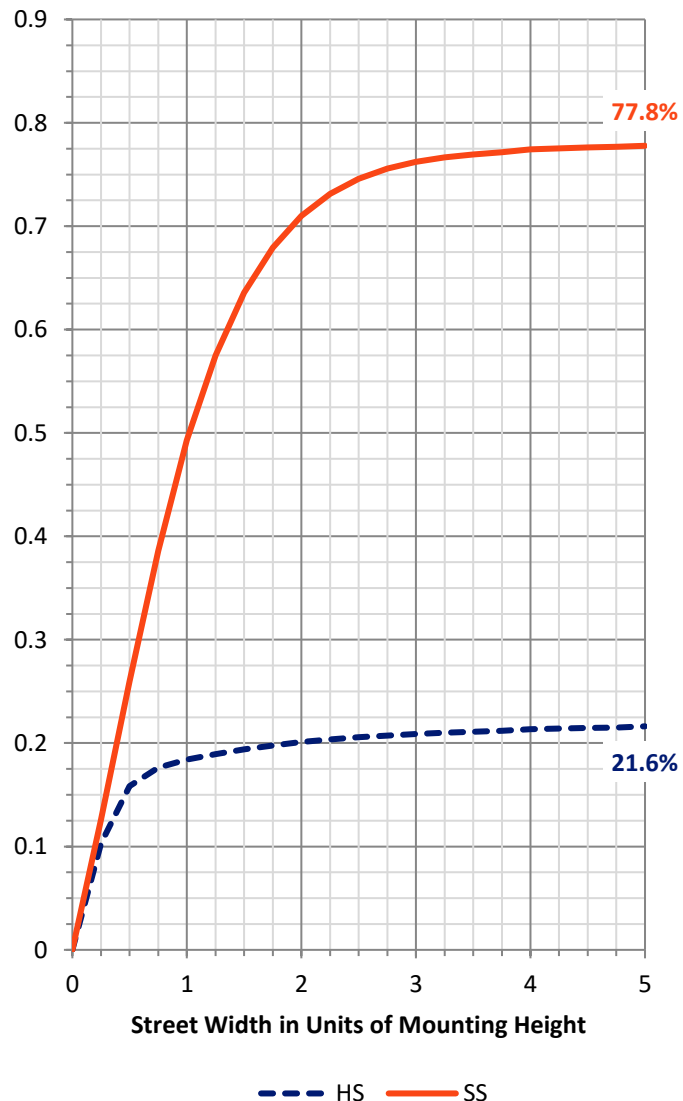
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9081.3	0.0	9081.3
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	32031.7	0.0	32031.7
	% Fixture	77.9	0.0	77.9
Total	Lumens	41113.0	0.0	41113.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	632.7	1.5
10°-20°	1976.8	4.8
20°-30°	3422.1	8.3
30°-40°	5028.5	12.2
40°-50°	6796.6	16.5
50°-60°	8357.8	20.3
60°-70°	8956.0	21.8
70°-80°	5282.1	12.8
80°-90°	660.3	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°	41113.0	100.0
0°-180°	41113.0	100.0

Coefficient of Utilization

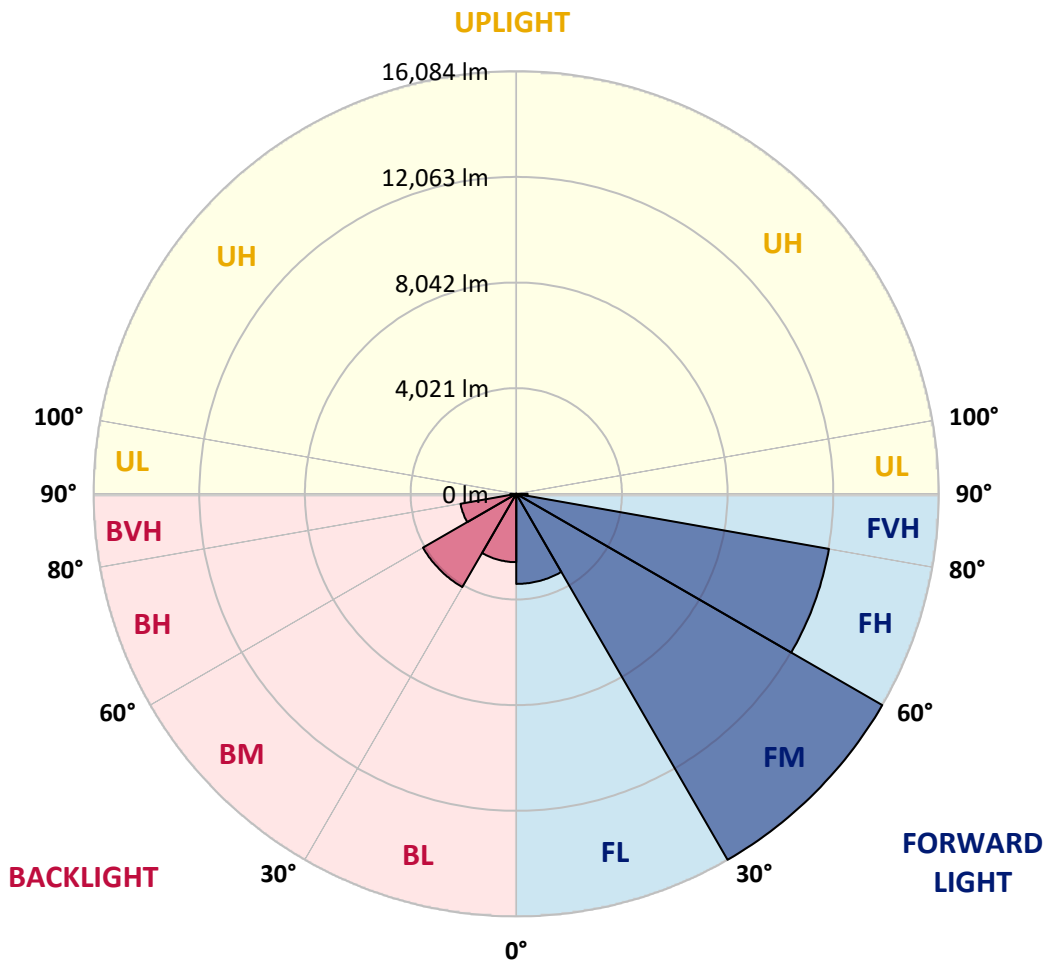


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3430.6	8.3			
FM (30°-60°)	16083.7	39.1			
FH (60°-80°)	12084.5	29.4			G5
FVH (80°-90°)	433.0	1.1			G3/500
BL (0°-30°)	2601.1	6.3	B4/5000		
BM (30°-60°)	4099.3	10.0	B3/5000		
BH (60°-80°)	2153.6	5.2	B3/2500		G3/2500
BVH (80°-90°)	227.3	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4
2.5°	6230.5	6218.8	6213.8	6229.7	6241.4	6254.8	6274.1	6292.6	6295.1	6319.4	6351.2
5°	6306.0	6295.9	6285.0	6282.5	6278.3	6277.5	6282.5	6303.5	6308.5	6332.0	6400.7
7.5°	6473.6	6463.6	6443.4	6435.9	6413.3	6373.0	6353.8	6364.6	6367.2	6395.7	6481.2
10°	6746.9	6715.9	6691.6	6666.4	6595.2	6531.5	6484.5	6464.4	6460.2	6487.9	6586.8
12.5°	7073.0	7047.0	7020.1	6953.9	6863.4	6748.6	6665.6	6619.5	6616.1	6639.6	6714.2
15°	7417.5	7417.5	7399.0	7320.2	7231.4	7041.1	6912.8	6835.7	6840.8	6859.2	6893.6
17.5°	7862.6	7825.7	7817.3	7727.6	7628.7	7455.2	7251.5	7128.3	7134.1	7142.5	7116.5
20°	8315.2	8304.3	8291.7	8232.2	8142.5	7919.6	7690.7	7528.9	7529.8	7499.6	7383.9
22.5°	8913.7	8877.7	8886.9	8819.8	8698.3	8469.4	8206.2	8014.3	8026.9	7983.3	7773.7
25°	9508.0	9472.0	9452.7	9407.4	9302.6	9085.5	8772.9	8596.8	8581.8	8503.0	8198.7
27.5°	10101.5	10080.5	10096.4	10041.9	9956.4	9714.2	9427.5	9232.2	9242.3	9187.8	8734.3
30°	10715.9	10692.4	10762.0	10674.0	10621.2	10385.6	10110.7	9881.0	9889.4	9909.5	9400.7
32.5°	11179.4	11207.1	11328.6	11318.6	11308.5	11046.1	10757.0	10629.5	10642.1	10712.5	10192.0
35°	11627.0	11629.5	11800.5	11929.6	11984.1	11764.5	11464.4	11460.2	11542.4	11757.0	11295.1
37.5°	11998.4	11990.0	12218.0	12418.3	12567.5	12397.4	12232.2	12489.6	12564.2	13009.3	12405.7
40°	12201.2	12218.8	12512.2	12762.0	13055.4	12974.9	12992.5	13650.5	13834.1	14223.9	13236.4
42.5°	12058.7	12112.4	12569.2	13078.8	13521.4	13628.7	13982.4	14904.5	14982.5	15052.9	14053.7
45°	11819.8	11876.0	12382.3	13205.4	13906.2	14359.6	14967.4	15869.3	15954.8	15876.0	14733.5
47.5°	11570.9	11628.7	12192.8	13154.3	14224.7	15093.9	15843.3	16722.6	16831.6	16587.7	15387.3
50°	11254.9	11344.6	11961.5	13046.1	14482.9	15886.1	16672.3	17601.1	17651.4	17299.3	15882.7
52.5°	10865.9	10964.8	11632.1	12860.9	14684.9	16439.3	17511.4	18554.1	18549.1	18130.8	16449.3
55°	10456.9	10546.6	11233.9	12569.2	14798.0	16865.1	18182.0	19604.4	19664.8	19314.4	16962.3
57.5°	9933.0	10014.3	10763.7	12176.9	14680.7	17226.4	19268.3	20852.5	20882.7	20138.4	17370.6
60°	9238.9	9358.8	10111.5	11678.2	14343.7	17644.7	20465.3	22165.2	22202.1	20948.9	17632.9
62.5°	8477.0	8524.8	9291.7	10910.3	13853.4	17967.4	21295.1	23192.0	23138.4	21582.6	17711.7
65°	7548.2	7585.9	8249.8	9922.9	12942.2	17790.5	21592.7	23720.1	23653.9	21980.8	17469.5
67.5°	6575.9	6692.4	7213.8	8553.3	11670.6	16974.1	21341.2	23871.8	23838.3	22011.0	16891.1
70°	5313.5	5354.6	5825.7	6968.2	9737.7	15339.5	20503.0	23482.9	23456.9	21337.0	15710.0
72.5°	3746.9	3706.6	3935.5	4831.5	7033.6	12202.1	17505.5	21297.6	21341.2	19087.2	13680.7
75°	1989.1	2066.2	2422.5	2958.1	3987.4	7844.1	13956.5	17626.2	17611.1	15960.7	10814.0
77.5°	1059.5	1057.8	1302.6	1531.4	1952.2	3604.4	9205.4	13292.6	13366.4	12366.3	7425.0
80°	508.8	528.1	543.2	622.8	973.2	1665.6	3850.8	7708.3	8211.3	7375.6	3527.3
82.5°	407.4	409.1	410.7	393.1	402.3	678.1	1483.7	2230.5	2311.0	1857.5	1137.5
85°	301.8	283.3	280.8	238.1	269.1	407.4	748.5	952.2	905.3	881.0	642.1
87.5°	121.5	114.0	110.6	103.9	103.9	153.4	264.0	344.5	343.7	313.5	215.4
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°	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4	6350.4
2.5°	6376.4	6406.6	6477.0	6537.3	6560.0	6615.3	6667.2	6697.4	6718.4	6731.0	6788.0
5°	6442.6	6503.0	6615.3	6699.9	6782.1	6884.3	6950.6	6992.5	7016.0	7029.4	7070.4
7.5°	6544.0	6605.2	6724.2	6854.2	6929.6	7013.4	7056.2	7086.4	7101.5	7097.3	7130.0
10°	6634.6	6694.9	6813.9	6913.7	6956.4	7004.2	7026.8	7033.6	7034.4	7037.7	7070.4
12.5°	6757.8	6794.7	6858.4	6923.7	6914.5	6916.2	6935.5	6927.1	6907.8	6904.5	6926.3
15°	6890.2	6891.1	6896.1	6881.8	6824.0	6798.9	6772.0	6749.4	6696.6	6693.2	6727.6
17.5°	7056.2	7016.8	6925.4	6828.2	6690.7	6596.0	6500.4	6461.0	6396.5	6383.9	6400.7
20°	7269.9	7187.8	6965.7	6724.2	6466.9	6297.6	6181.9	6065.4	5975.7	5953.9	5969.8
22.5°	7576.7	7414.9	7016.8	6613.6	6215.4	5926.3	5701.6	5561.6	5410.7	5333.6	5341.2
25°	7947.2	7694.1	7105.6	6473.6	5919.6	5502.1	5137.5	4856.7	4686.5	4573.4	4603.5
27.5°	8432.6	8084.7	7212.1	6335.3	5551.6	4959.8	4430.9	4050.3	3876.8	3823.1	3787.9
30°	8995.0	8556.6	7324.4	6130.8	5154.3	4288.4	3611.1	3294.2	3095.6	3063.7	3036.9
32.5°	9747.7	9150.9	7534.8	5908.7	4679.8	3616.9	2881.8	2517.2	2471.9	2445.9	2440.1
35°	10718.4	9929.6	7755.3	5620.3	4061.2	2829.9	2180.2	1983.2	1961.4	1989.9	1992.5
37.5°	11748.6	10774.6	8019.3	5295.1	3349.6	2111.5	1668.1	1531.4	1555.7	1644.6	1664.7
40°	12446.0	11331.1	8259.0	4853.3	2470.3	1534.0	1213.8	1184.4	1318.5	1432.5	1456.0
42.5°	13114.9	11752.8	8356.3	4269.1	1762.0	1092.2	979.9	1080.5	1268.2	1393.1	1409.9
45°	13685.7	12243.1	8111.5	3568.3	1194.5	912.8	938.8	1078.0	1286.7	1425.0	1437.6
47.5°	14228.9	12643.8	7777.1	2811.4	942.2	878.5	938.0	1100.6	1327.7	1458.5	1466.1
50°	14747.7	12948.9	7206.2	2139.2	882.7	862.5	945.5	1135.8	1350.4	1432.5	1429.2
52.5°	15132.5	13106.5	6598.5	1726.7	859.2	850.0	965.6	1180.2	1354.6	1404.0	1400.7
55°	15415.0	13076.3	6199.5	1414.1	839.9	844.9	998.3	1213.8	1394.8	1469.4	1466.9
57.5°	15441.0	12939.7	5746.0	1194.5	816.4	844.1	1033.5	1260.7	1596.0	1733.5	1691.5
60°	15409.9	12713.4	5293.4	1048.6	790.4	849.1	1070.4	1401.5	1886.0	1994.1	1964.8
62.5°	15257.4	12291.7	4615.3	952.2	767.8	867.6	1098.1	1513.0	1871.8	1884.3	1842.4
65°	14786.3	11727.6	3725.1	855.0	745.2	880.1	1120.7	1542.3	1719.2	1679.0	1658.0
67.5°	13854.2	10467.8	2873.4	766.1	715.8	877.6	1187.8	1500.4	1661.4	1632.0	1605.2
70°	12529.8	9036.1	1995.0	674.8	666.4	861.7	1171.0	1514.7	1633.7	1588.4	1552.4
72.5°	10467.8	7088.9	1269.1	600.2	592.6	824.0	1129.1	1505.5	1615.3	1595.1	1545.7
75°	7881.8	4948.0	806.4	518.9	527.2	755.2	1062.0	1456.0	1606.0	1543.2	1448.5
77.5°	4962.3	2442.6	627.0	440.9	453.5	651.3	917.9	1271.6	1541.5	1503.8	1382.2
80°	1876.8	991.6	490.4	357.9	368.8	506.3	752.7	1046.1	1419.1	1481.1	1429.2
82.5°	864.2	620.3	368.0	287.5	291.7	368.8	561.6	774.5	1201.2	1359.6	1489.5
85°	504.6	406.5	245.6	192.0	199.5	217.9	316.0	472.8	778.7	1036.9	1160.1
87.5°	171.8	141.7	95.6	81.3	78.8	89.7	76.3	155.1	231.4	407.4	465.2
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)