

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: P510459

Luminaire Tested: **CST-CA10-310-722-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510459
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-CA10-310-722-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39569 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

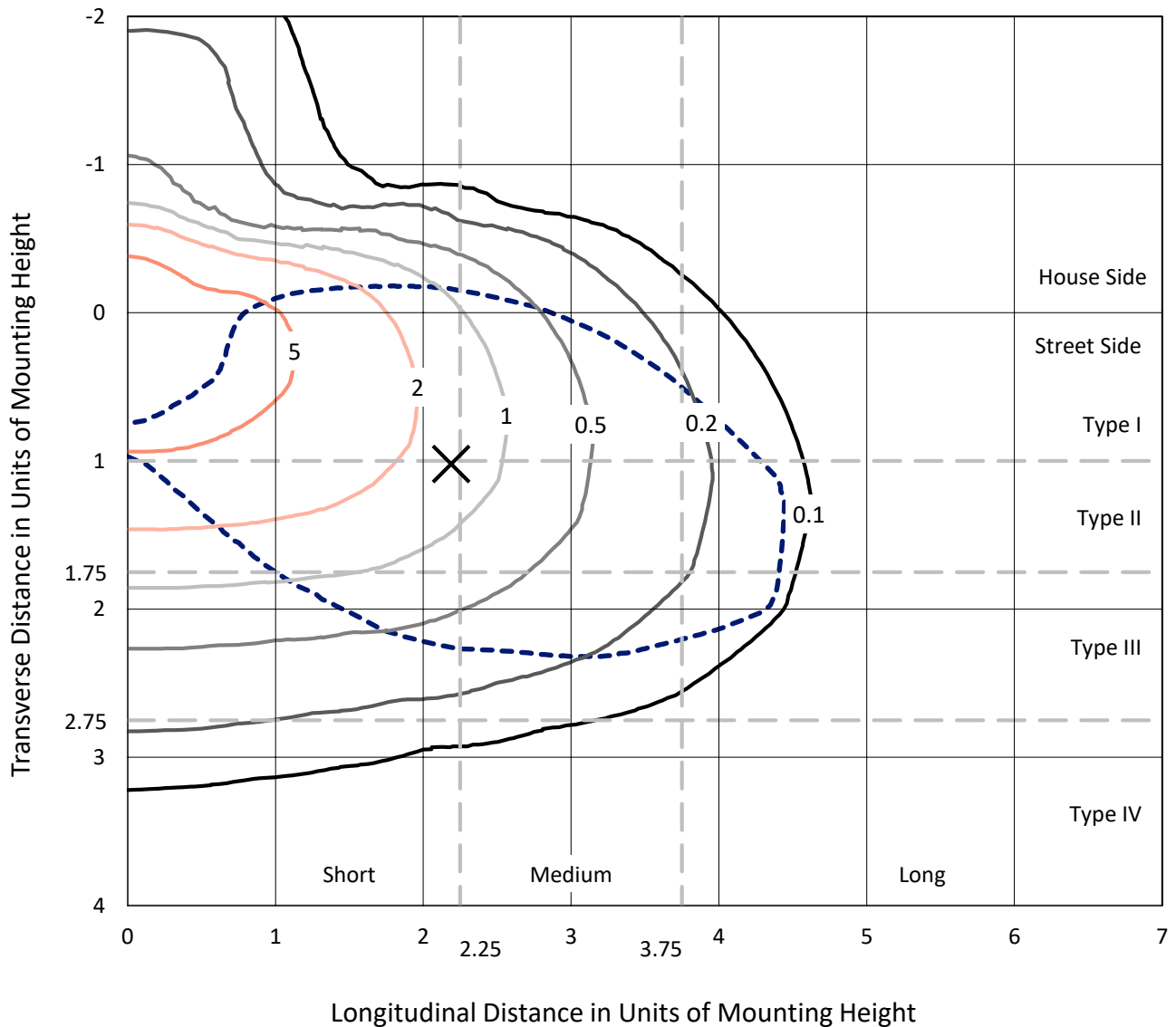
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

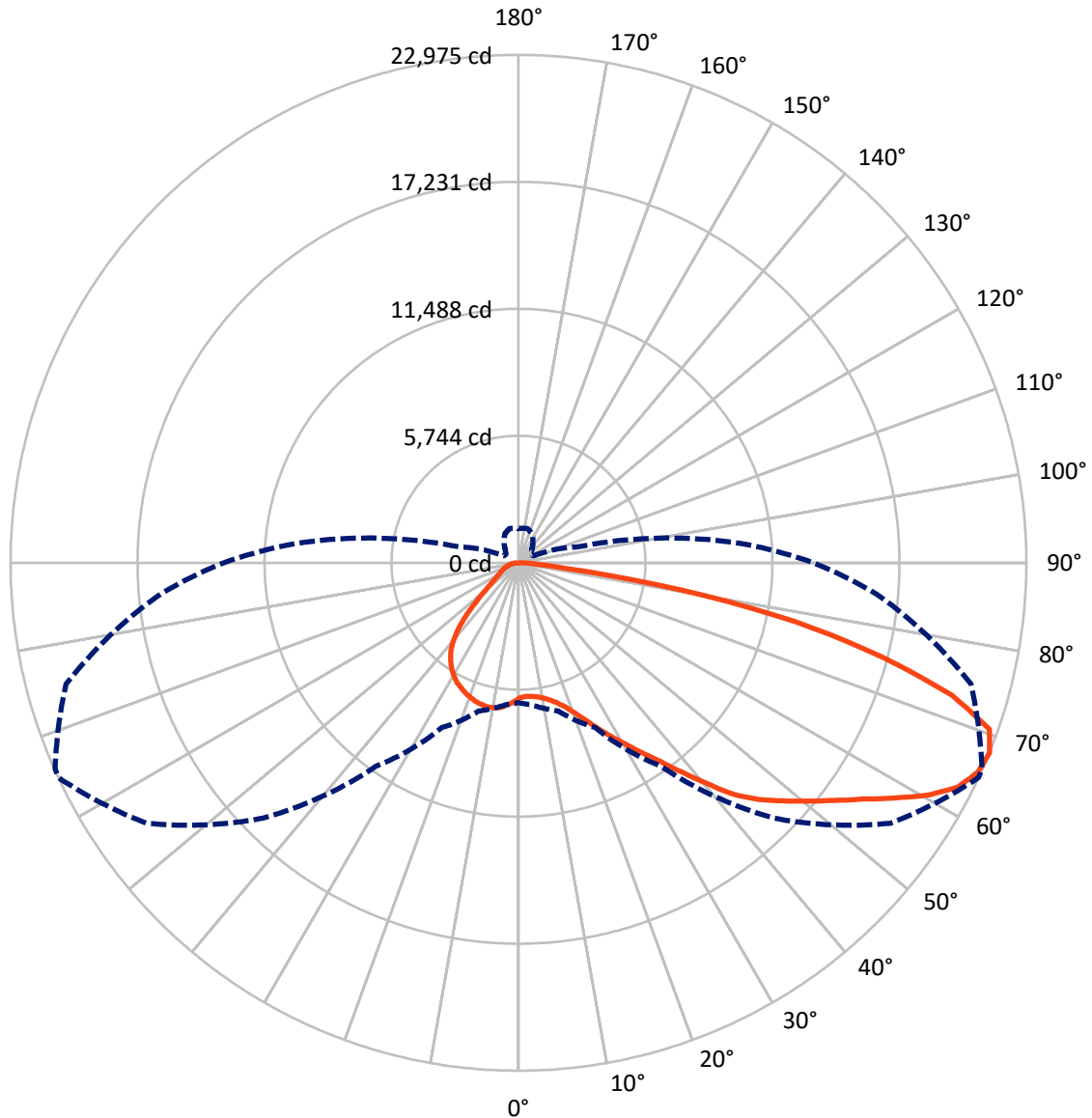
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.6 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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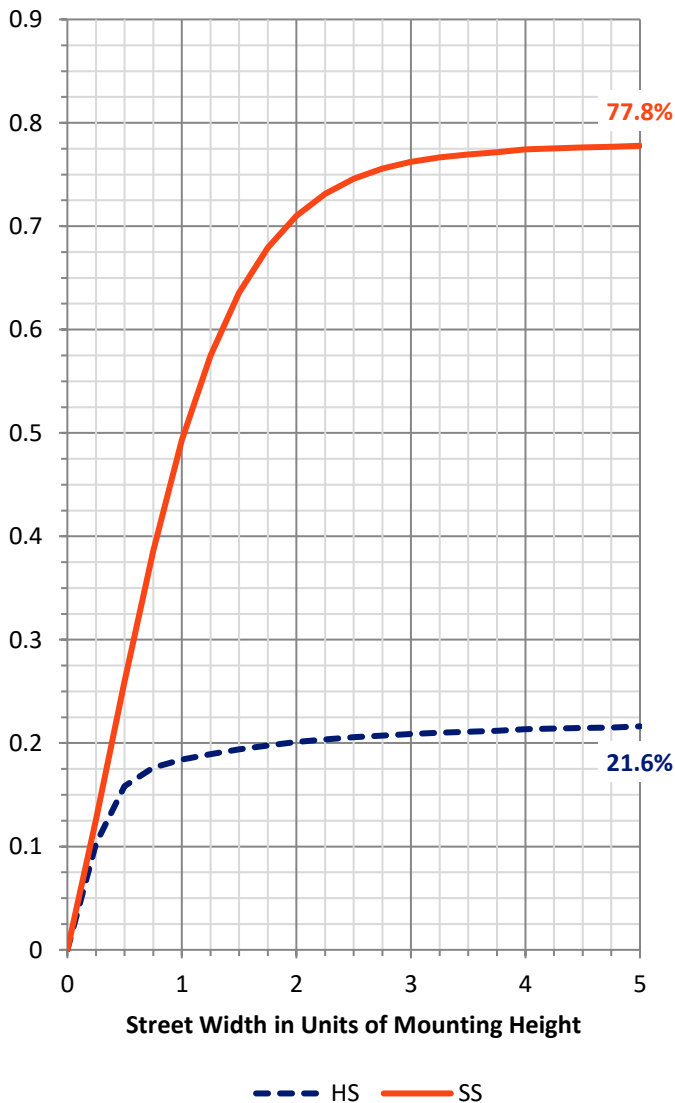
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8740.3	0.0	8740.3
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	30828.7	0.0	30828.7
	% Fixture	77.9	0.0	77.9
Total	Lumens	39569.0	0.0	39569.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	609.0	1.5
10°-20°	1902.6	4.8
20°-30°	3293.6	8.3
30°-40°	4839.6	12.2
40°-50°	6541.4	16.5
50°-60°	8044.0	20.3
60°-70°	8619.6	21.8
70°-80°	5083.7	12.8
80°-90°	635.5	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°	39569.0	100.0
0°-180°	39569.0	100.0

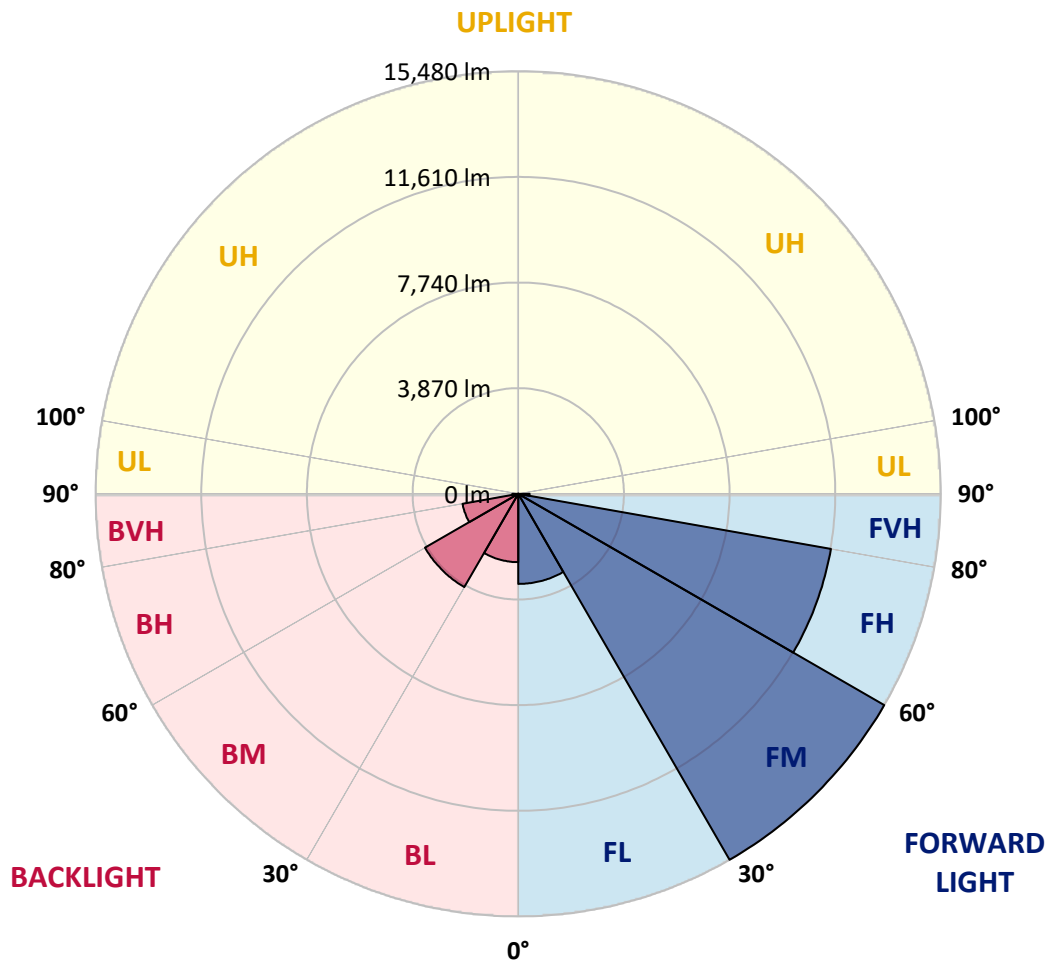


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3301.7	8.3			
FM (30°-60°)	15479.7	39.1			
FH (60°-80°)	11630.6	29.4			G4/12000
FVH (80°-90°)	416.7	1.1			G3/500
BL (0°-30°)	2503.5	6.3	B4/5000		
BM (30°-60°)	3945.3	10.0	B3/5000		
BH (60°-80°)	2072.7	5.2	B3/2500		G3/2500
BVH (80°-90°)	218.8	0.6			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9
2.5°	5996.5	5985.3	5980.4	5995.7	6007.0	6019.9	6038.5	6056.2	6058.7	6082.1	6112.7
5°	6069.2	6059.5	6049.0	6046.6	6042.5	6041.7	6046.6	6066.7	6071.6	6094.2	6160.3
7.5°	6230.5	6220.8	6201.5	6194.2	6172.4	6133.7	6115.1	6125.6	6128.0	6155.5	6237.8
10°	6493.5	6463.7	6440.3	6416.1	6347.5	6286.2	6241.0	6221.6	6217.6	6244.2	6339.4
12.5°	6807.3	6782.3	6756.5	6692.8	6605.6	6495.1	6415.2	6370.9	6367.6	6390.2	6462.0
15°	7138.9	7138.9	7121.2	7045.3	6959.8	6776.7	6653.2	6579.0	6583.9	6601.6	6634.7
17.5°	7567.3	7531.8	7523.7	7437.4	7342.2	7175.2	6979.2	6860.6	6866.2	6874.3	6849.3
20°	8002.9	7992.4	7980.3	7923.1	7836.7	7622.1	7401.9	7246.2	7247.0	7218.0	7106.6
22.5°	8578.9	8544.3	8553.1	8488.6	8371.6	8151.4	7898.0	7713.3	7725.4	7683.5	7481.8
25°	9150.9	9116.2	9097.7	9054.1	8953.3	8744.3	8443.4	8274.0	8259.5	8183.6	7890.8
27.5°	9722.1	9701.9	9717.3	9664.8	9582.5	9349.4	9073.5	8885.5	8895.2	8842.7	8406.3
30°	10313.4	10290.9	10357.8	10273.1	10222.3	9995.6	9731.0	9509.9	9518.0	9537.4	9047.7
32.5°	10759.6	10786.2	10903.2	10893.5	10883.8	10631.3	10353.0	10230.4	10242.5	10310.2	9809.2
35°	11190.4	11192.8	11357.4	11481.6	11534.1	11322.7	11033.9	11029.8	11108.9	11315.4	10870.9
37.5°	11547.8	11539.7	11759.1	11951.9	12095.5	11931.8	11772.8	12020.5	12092.3	12520.7	11939.8
40°	11743.0	11759.9	12042.3	12282.7	12565.1	12487.6	12504.6	13137.9	13314.5	13689.7	12739.3
42.5°	11605.9	11657.5	12097.2	12587.7	13013.6	13116.9	13457.3	14344.8	14419.8	14487.6	13525.9
45°	11375.9	11430.0	11917.3	12709.5	13383.9	13820.4	14405.3	15273.3	15355.6	15279.8	14180.2
47.5°	11136.3	11192.0	11734.9	12660.3	13690.5	14527.1	15248.3	16094.6	16199.5	15964.7	14809.4
50°	10832.2	10918.5	11512.3	12556.2	13939.0	15289.5	16046.2	16940.1	16988.5	16649.6	15286.2
52.5°	10457.9	10553.0	11195.2	12377.9	14133.4	15821.9	16853.7	17857.3	17852.5	17449.9	15831.6
55°	10064.2	10150.5	10812.0	12097.2	14242.3	16231.7	17499.1	18868.2	18926.3	18589.0	16325.3
57.5°	9559.9	9638.2	10359.4	11719.6	14129.4	16579.4	18544.7	20069.4	20098.5	19382.1	16718.2
60°	8892.0	9007.3	9731.8	11239.6	13805.0	16982.0	19696.7	21332.8	21368.3	20162.2	16970.7
62.5°	8158.6	8204.6	8942.8	10500.6	13333.1	17292.6	20495.4	22321.1	22269.4	20772.1	17046.6
65°	7264.8	7301.1	7940.0	9550.3	12456.2	17122.4	20781.8	22829.3	22765.6	21155.3	16813.4
67.5°	6328.9	6441.1	6942.9	8232.0	11232.3	16336.6	20539.8	22975.3	22943.1	21184.4	16256.7
70°	5114.0	5153.5	5606.9	6706.5	9372.0	14763.5	19733.0	22601.0	22576.0	20535.7	15120.0
72.5°	3606.2	3567.4	3787.7	4650.1	6769.4	11743.8	16848.1	20497.8	20539.8	18370.4	13166.9
75°	1914.4	1988.6	2331.5	2847.0	3837.7	7549.5	13432.3	16964.3	16949.7	15361.3	10407.8
77.5°	1019.7	1018.1	1253.7	1473.9	1878.9	3469.0	8859.7	12793.4	12864.4	11901.9	7146.2
80°	489.7	508.3	522.8	599.4	936.6	1603.0	3706.2	7418.8	7902.9	7098.6	3394.8
82.5°	392.1	393.7	395.3	378.4	387.2	652.7	1427.9	2146.8	2224.2	1787.7	1094.8
85°	290.4	272.7	270.3	229.1	259.0	392.1	720.4	916.5	871.3	847.9	618.0
87.5°	117.0	109.7	106.5	100.0	100.0	147.6	254.1	331.6	330.8	301.7	207.3
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°	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9	6111.9
2.5°	6136.9	6166.0	6233.7	6291.8	6313.6	6366.8	6416.9	6445.9	6466.1	6478.2	6533.0
5°	6200.7	6258.7	6366.8	6448.3	6527.4	6625.8	6689.5	6729.9	6752.5	6765.4	6804.9
7.5°	6298.3	6357.2	6471.7	6596.8	6669.4	6750.0	6791.2	6820.2	6834.8	6830.7	6862.2
10°	6385.4	6443.5	6558.0	6654.0	6695.2	6741.2	6763.0	6769.4	6770.2	6773.4	6804.9
12.5°	6504.0	6539.5	6600.8	6663.7	6654.9	6656.5	6675.0	6667.0	6648.4	6645.2	6666.1
15°	6631.5	6632.3	6637.1	6623.4	6567.7	6543.5	6517.7	6495.9	6445.1	6441.9	6474.9
17.5°	6791.2	6753.3	6665.3	6571.8	6439.4	6348.3	6256.3	6218.4	6156.3	6144.2	6160.3
20°	6996.9	6917.9	6704.1	6471.7	6224.0	6061.1	5949.8	5837.6	5751.3	5730.3	5745.6
22.5°	7292.2	7136.5	6753.3	6365.2	5982.0	5703.7	5487.5	5352.8	5207.5	5133.3	5140.6
25°	7648.8	7405.1	6838.8	6230.5	5697.2	5295.5	4944.5	4674.3	4510.5	4401.6	4430.7
27.5°	8115.9	7781.1	6941.2	6097.4	5343.1	4773.5	4264.5	3898.2	3731.2	3679.6	3645.7
30°	8657.2	8235.3	7049.3	5900.5	4960.7	4127.3	3475.5	3170.5	2979.3	2948.7	2922.8
32.5°	9381.7	8807.3	7251.8	5686.8	4504.1	3481.1	2773.6	2422.7	2379.1	2354.1	2348.4
35°	10315.9	9556.7	7464.0	5409.2	3908.7	2723.6	2098.3	1908.8	1887.8	1915.2	1917.6
37.5°	11307.4	10369.9	7718.1	5096.2	3223.8	2032.2	1605.4	1473.9	1497.3	1582.8	1602.2
40°	11978.6	10905.6	7948.9	4671.1	2377.5	1476.3	1168.2	1139.9	1269.0	1378.7	1401.3
42.5°	12622.4	11311.4	8042.5	4108.8	1695.8	1051.2	943.1	1039.9	1220.6	1340.8	1356.9
45°	13171.7	11783.3	7806.9	3434.3	1149.6	878.5	903.6	1037.5	1238.4	1371.5	1383.6
47.5°	13694.5	12169.0	7485.0	2705.8	906.8	845.5	902.7	1059.3	1277.9	1403.7	1411.0
50°	14193.9	12462.6	6935.6	2058.8	849.5	830.1	910.0	1093.1	1299.7	1378.7	1375.5
52.5°	14564.2	12614.3	6350.7	1661.9	826.9	818.0	929.4	1135.9	1303.7	1351.3	1348.1
55°	14836.1	12585.2	5966.7	1361.0	808.4	813.2	960.8	1168.2	1342.4	1414.2	1411.8
57.5°	14861.1	12453.7	5530.2	1149.6	785.8	812.4	994.7	1213.3	1536.0	1668.4	1628.0
60°	14831.2	12235.9	5094.6	1009.2	760.8	817.2	1030.2	1348.9	1815.2	1919.2	1891.0
62.5°	14684.4	11830.1	4441.9	916.5	739.0	835.0	1056.8	1456.2	1801.5	1813.6	1773.2
65°	14231.0	11287.2	3585.2	822.9	717.2	847.1	1078.6	1484.4	1654.6	1615.9	1595.7
67.5°	13333.9	10074.6	2765.5	737.4	689.0	844.7	1143.2	1444.1	1599.0	1570.7	1544.9
70°	12059.2	8696.7	1920.1	649.4	641.4	829.3	1127.0	1457.8	1572.3	1528.8	1494.1
72.5°	10074.6	6822.7	1221.4	577.6	570.4	793.0	1086.7	1448.9	1554.6	1535.2	1487.6
75°	7585.8	4762.2	776.1	499.4	507.4	726.9	1022.1	1401.3	1545.7	1485.2	1394.1
77.5°	4775.9	2350.9	603.4	424.3	436.4	626.8	883.4	1223.8	1483.6	1447.3	1330.3
80°	1806.3	954.4	471.9	344.5	355.0	487.3	724.5	1006.8	1365.8	1425.5	1375.5
82.5°	831.8	597.0	354.2	276.7	280.7	355.0	540.5	745.4	1156.1	1308.5	1433.6
85°	485.7	391.3	236.4	184.7	192.0	209.8	304.1	455.0	749.5	997.9	1116.5
87.5°	165.4	136.3	92.0	78.3	75.8	86.3	73.4	149.2	222.7	392.1	447.7
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)