

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: P510759

Luminaire Tested: **CST-CA8-330-722-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510759
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-CA8-330-722-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39974 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G4

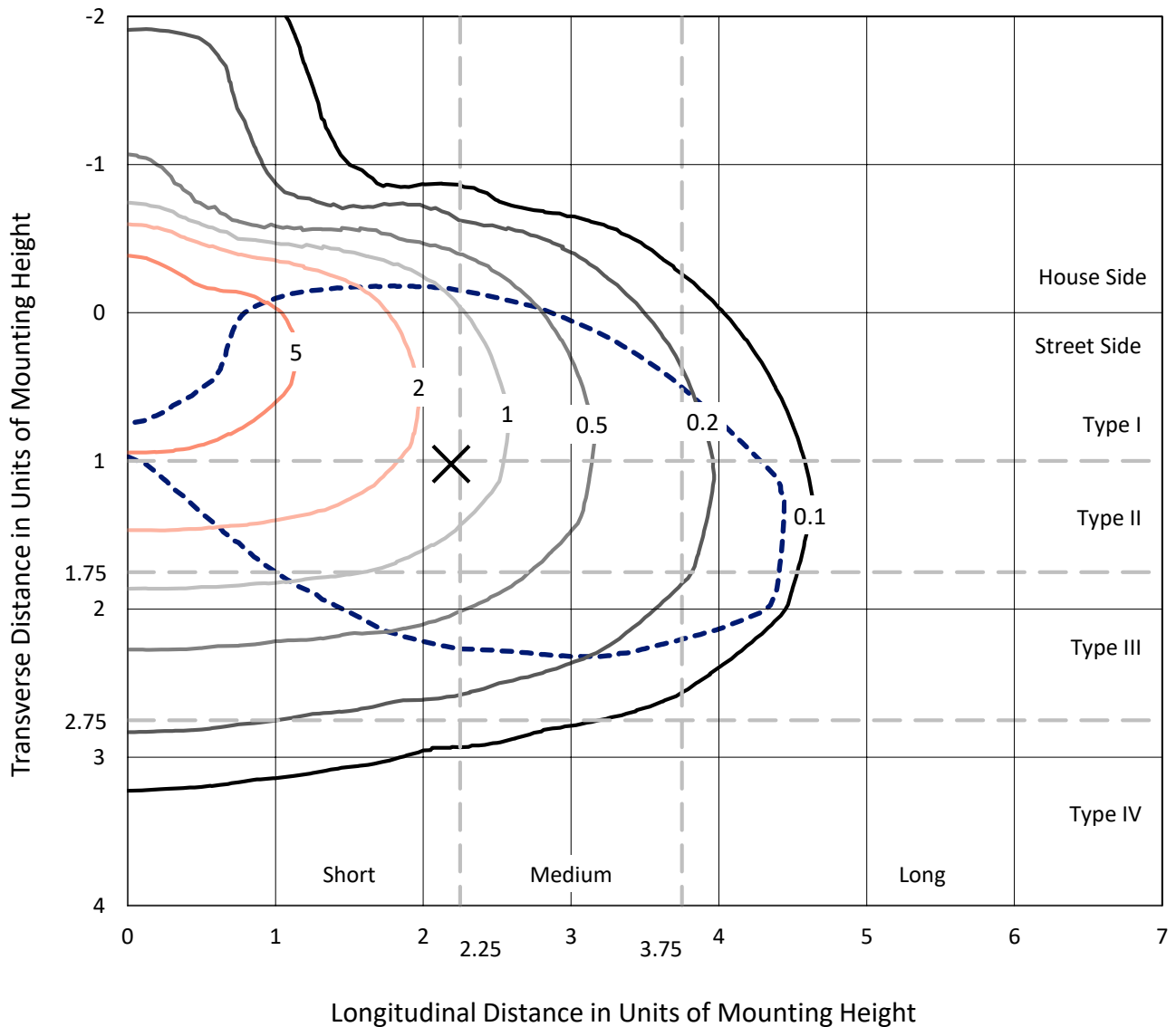
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

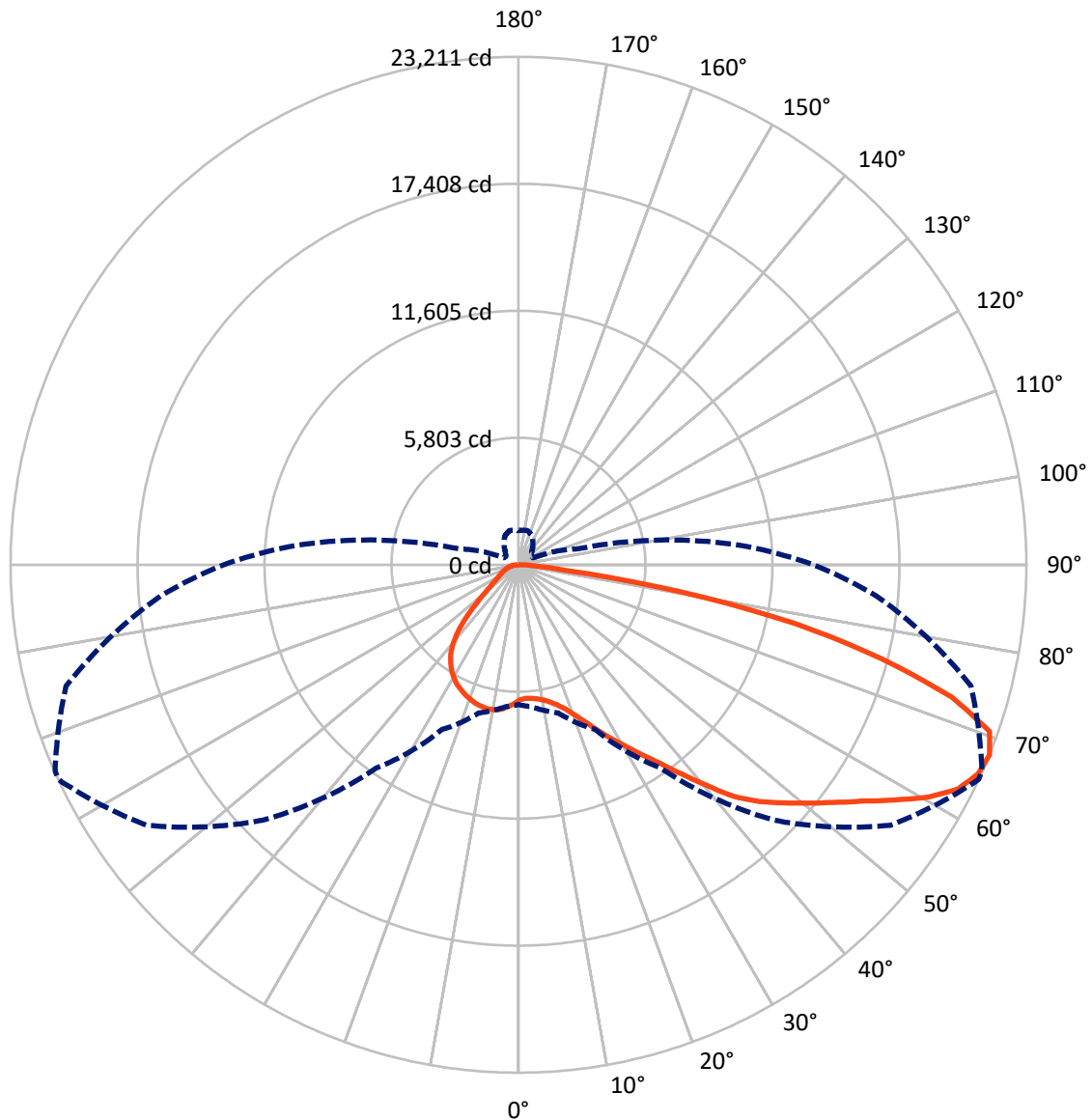
✕ Max cd
 - - - 1/2 Max cd



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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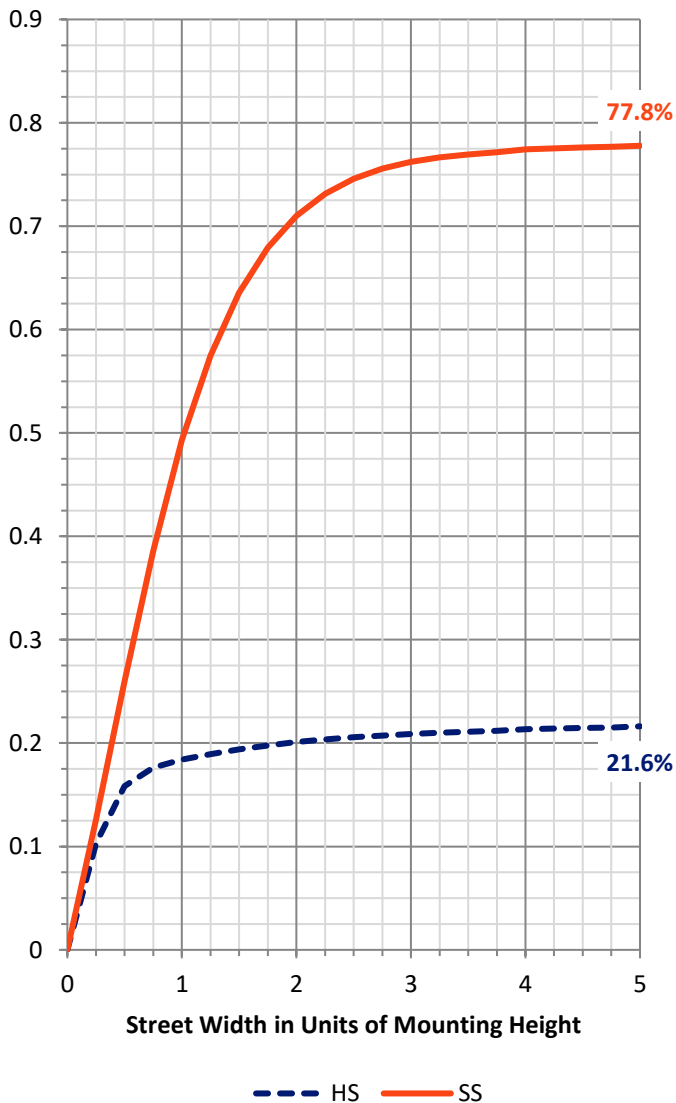
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8829.8	0.0	8829.8
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	31144.2	0.0	31144.2
	% Fixture	77.9	0.0	77.9
Total	Lumens	39974.0	0.0	39974.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	615.2	1.5
10°-20°	1922.1	4.8
20°-30°	3327.3	8.3
30°-40°	4889.2	12.2
40°-50°	6608.3	16.5
50°-60°	8126.3	20.3
60°-70°	8707.8	21.8
70°-80°	5135.8	12.8
80°-90°	642.0	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°	39974.0	100.0
0°-180°	39974.0	100.0

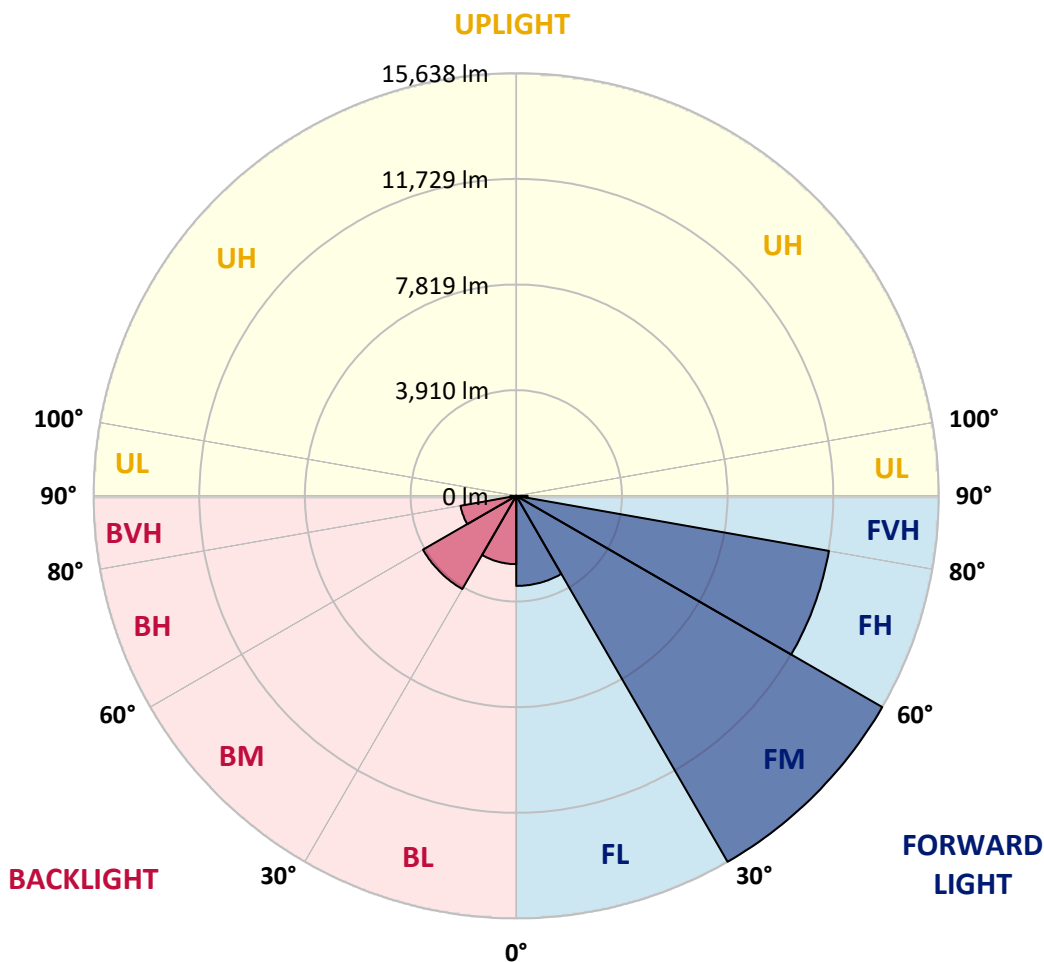


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3335.5	8.3			
FM (30°-60°)	15638.1	39.1			
FH (60°-80°)	11749.7	29.4			G4/12000
FVH (80°-90°)	421.0	1.1			G3/500
BL (0°-30°)	2529.1	6.3	B4/5000		
BM (30°-60°)	3985.7	10.0	B3/5000		
BH (60°-80°)	2094.0	5.2	B3/2500		G3/2500
BVH (80°-90°)	221.0	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°	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5
2.5°	6057.9	6046.5	6041.6	6057.1	6068.5	6081.6	6100.3	6118.2	6120.7	6144.3	6175.3
5°	6131.3	6121.5	6110.9	6108.5	6104.4	6103.6	6108.5	6128.8	6133.7	6156.5	6223.4
7.5°	6294.3	6284.5	6264.9	6257.6	6235.6	6196.5	6177.7	6188.3	6190.8	6218.5	6301.6
10°	6560.0	6529.8	6506.2	6481.7	6412.4	6350.5	6304.9	6285.3	6281.2	6308.1	6404.3
12.5°	6877.0	6851.7	6825.7	6761.3	6673.2	6561.6	6480.9	6436.1	6432.8	6455.6	6528.2
15°	7212.0	7212.0	7194.0	7117.4	7031.0	6846.0	6721.3	6646.4	6651.2	6669.2	6702.6
17.5°	7644.7	7608.9	7600.7	7513.5	7417.3	7248.6	7050.6	6930.8	6936.5	6944.6	6919.4
20°	8084.8	8074.2	8062.0	8004.2	7916.9	7700.2	7477.7	7320.4	7321.2	7291.8	7179.4
22.5°	8666.7	8631.7	8640.7	8575.5	8457.3	8234.8	7978.9	7792.2	7804.5	7762.1	7558.3
25°	9244.6	9209.5	9190.8	9146.8	9044.9	8833.8	8529.8	8358.7	8344.0	8267.4	7971.6
27.5°	9821.6	9801.2	9816.7	9763.7	9680.6	9445.1	9166.3	8976.5	8986.2	8933.3	8492.3
30°	10419.0	10396.2	10463.8	10378.3	10326.9	10097.9	9830.6	9607.3	9615.4	9635.0	9140.3
32.5°	10869.7	10896.6	11014.8	11005.0	10995.2	10740.1	10458.9	10335.1	10347.3	10415.7	9909.6
35°	11304.9	11307.4	11473.6	11599.1	11652.1	11438.6	11146.8	11142.7	11222.6	11431.2	10982.2
37.5°	11666.0	11657.8	11879.5	12074.3	12219.3	12053.9	11893.3	12143.6	12216.1	12648.9	12062.1
40°	11863.2	11880.3	12165.6	12408.4	12693.7	12615.4	12632.6	13272.3	13450.8	13829.8	12869.7
42.5°	11724.6	11776.8	12221.0	12716.5	13146.8	13251.1	13595.1	14491.6	14567.4	14635.8	13664.4
45°	11492.4	11547.0	12039.2	12839.6	13520.9	13961.8	14552.7	15429.6	15512.8	15436.2	14325.3
47.5°	11250.3	11306.5	11855.0	12789.9	13830.6	14675.8	15404.4	16259.3	16365.3	16128.1	14961.0
50°	10943.1	11030.3	11630.1	12684.7	14081.6	15445.9	16210.4	17113.4	17162.3	16820.0	15442.7
52.5°	10564.9	10661.1	11309.8	12504.6	14278.0	15983.9	17026.2	18040.1	18035.2	17628.5	15993.6
55°	10167.2	10254.4	10922.7	12221.0	14388.1	16397.9	17678.2	19061.3	19120.0	18779.3	16492.4
57.5°	9657.8	9736.8	10465.5	11839.6	14274.0	16749.1	18734.5	20274.8	20304.2	19580.5	16889.3
60°	8983.0	9099.5	9831.4	11354.6	13946.3	17155.8	19898.3	21551.1	21587.0	20368.6	17144.4
62.5°	8242.1	8288.6	9034.3	10608.1	13469.6	17469.6	20705.2	22549.5	22497.4	20984.7	17221.0
65°	7339.1	7375.8	8021.3	9648.0	12583.7	17297.6	20994.5	23063.0	22998.6	21371.8	16985.5
67.5°	6393.7	6507.0	7013.9	8316.3	11347.3	16503.8	20750.0	23210.5	23177.9	21401.2	16423.1
70°	5166.3	5206.2	5664.3	6775.1	9467.9	14914.6	19935.0	22832.3	22807.1	20745.9	15274.8
72.5°	3643.1	3603.9	3826.4	4697.7	6838.7	11864.0	17020.5	20707.6	20750.0	18558.4	13301.7
75°	1934.0	2009.0	2355.4	2876.1	3877.0	7626.8	13569.8	17137.9	17123.2	15518.5	10514.4
77.5°	1030.2	1028.5	1266.5	1489.0	1898.1	3504.5	8950.4	12924.3	12996.0	12023.7	7219.3
80°	494.7	513.5	528.1	605.5	946.2	1619.4	3744.1	7494.8	7983.8	7171.2	3429.5
82.5°	396.1	397.7	399.4	382.2	391.2	659.3	1442.6	2168.7	2247.0	1806.0	1106.0
85°	293.4	275.5	273.0	231.5	261.6	396.1	727.8	925.8	880.2	856.6	624.3
87.5°	118.2	110.8	107.6	101.1	101.1	149.1	256.7	335.0	334.2	304.8	209.5
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°	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5	6174.5
2.5°	6199.7	6229.1	6297.5	6356.2	6378.2	6432.0	6482.5	6511.9	6532.3	6544.5	6599.9
5°	6264.1	6322.8	6432.0	6514.3	6594.2	6693.6	6758.0	6798.8	6821.6	6834.6	6874.6
7.5°	6362.7	6422.2	6538.0	6664.3	6737.6	6819.1	6860.7	6890.0	6904.7	6900.6	6932.4
10°	6450.8	6509.4	6625.2	6722.2	6763.7	6810.2	6832.2	6838.7	6839.5	6842.8	6874.6
12.5°	6570.6	6606.4	6668.4	6731.9	6723.0	6724.6	6743.3	6735.2	6716.4	6713.2	6734.4
15°	6699.3	6700.1	6705.0	6691.2	6634.9	6610.5	6584.4	6562.4	6511.1	6507.8	6541.2
17.5°	6860.7	6822.4	6733.6	6639.0	6505.4	6413.3	6320.4	6282.0	6219.3	6207.1	6223.4
20°	7068.5	6988.7	6772.7	6538.0	6287.8	6123.1	6010.7	5897.4	5810.2	5789.0	5804.5
22.5°	7366.8	7209.5	6822.4	6430.4	6043.3	5762.1	5543.7	5407.5	5260.8	5185.9	5193.2
25°	7727.0	7480.9	6908.8	6294.3	5755.6	5349.7	4995.2	4722.1	4556.7	4446.7	4476.0
27.5°	8198.9	7860.7	7012.3	6159.8	5397.8	4822.4	4308.1	3938.1	3769.4	3717.2	3683.0
30°	8745.8	8319.6	7121.5	5960.9	5011.5	4169.6	3511.0	3203.0	3009.8	2978.8	2952.8
32.5°	9477.7	8897.4	7326.1	5745.0	4550.2	3516.7	2802.0	2447.5	2403.4	2378.2	2372.5
35°	10421.5	9654.5	7540.4	5464.6	3948.7	2751.5	2119.8	1928.3	1907.1	1934.8	1937.3
37.5°	11423.1	10476.1	7797.1	5148.4	3256.8	2053.0	1621.9	1489.0	1512.6	1599.0	1618.6
40°	12101.2	11017.2	8030.2	4718.9	2401.8	1491.5	1180.1	1151.6	1282.0	1392.8	1415.7
42.5°	12751.5	11427.2	8124.8	4150.8	1713.1	1061.9	952.7	1050.5	1233.1	1354.5	1370.8
45°	13306.6	11903.9	7886.8	3469.5	1161.4	887.5	912.8	1048.1	1251.0	1385.5	1397.7
47.5°	13834.7	12293.5	7561.6	2733.5	916.1	854.1	912.0	1070.1	1291.0	1418.1	1425.4
50°	14339.2	12590.2	7006.6	2079.9	858.2	838.6	919.3	1104.3	1313.0	1392.8	1389.6
52.5°	14713.3	12743.4	6415.7	1678.9	835.4	826.4	938.9	1147.5	1317.0	1365.1	1361.9
55°	14987.9	12714.1	6027.8	1374.9	816.6	821.5	970.7	1180.1	1356.2	1428.7	1426.3
57.5°	15013.2	12581.2	5586.9	1161.4	793.8	820.7	1004.9	1225.8	1551.8	1685.4	1644.7
60°	14983.0	12361.2	5146.7	1019.6	768.5	825.6	1040.8	1362.7	1833.8	1938.9	1910.4
62.5°	14834.7	11951.2	4487.4	925.8	746.5	843.5	1067.7	1471.1	1819.9	1832.1	1791.4
65°	14376.7	11402.7	3621.9	831.3	724.5	855.8	1089.7	1499.6	1671.6	1632.5	1612.1
67.5°	13470.4	10177.8	2793.8	744.9	696.0	853.3	1154.9	1458.9	1615.3	1586.8	1560.7
70°	12182.7	8785.7	1939.7	656.1	647.9	837.8	1138.6	1472.7	1588.4	1544.4	1509.4
72.5°	10177.8	6892.5	1233.9	583.5	576.2	801.1	1097.8	1463.7	1570.5	1551.0	1502.9
75°	7663.5	4811.0	784.0	504.5	512.6	734.3	1032.6	1415.7	1561.5	1500.4	1408.3
77.5°	4824.8	2374.9	609.6	428.7	440.9	633.3	892.4	1236.4	1498.8	1462.1	1343.9
80°	1824.8	964.1	476.8	348.0	358.6	492.3	731.9	1017.1	1379.8	1440.1	1389.6
82.5°	840.3	603.1	357.8	279.5	283.6	358.6	546.1	753.1	1167.9	1321.9	1448.3
85°	490.6	395.3	238.8	186.6	194.0	211.9	307.3	459.7	757.1	1008.2	1128.0
87.5°	167.1	137.7	92.9	79.1	76.6	87.2	74.2	150.8	224.9	396.1	452.3
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)