

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: P510769

Luminaire Tested: **CST-CA8-330-727-U-T3**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510769  
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-CA8-330-727-U-T3  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 41534 lumens  
Efficiency: N/A  
Efficacy: 125.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5

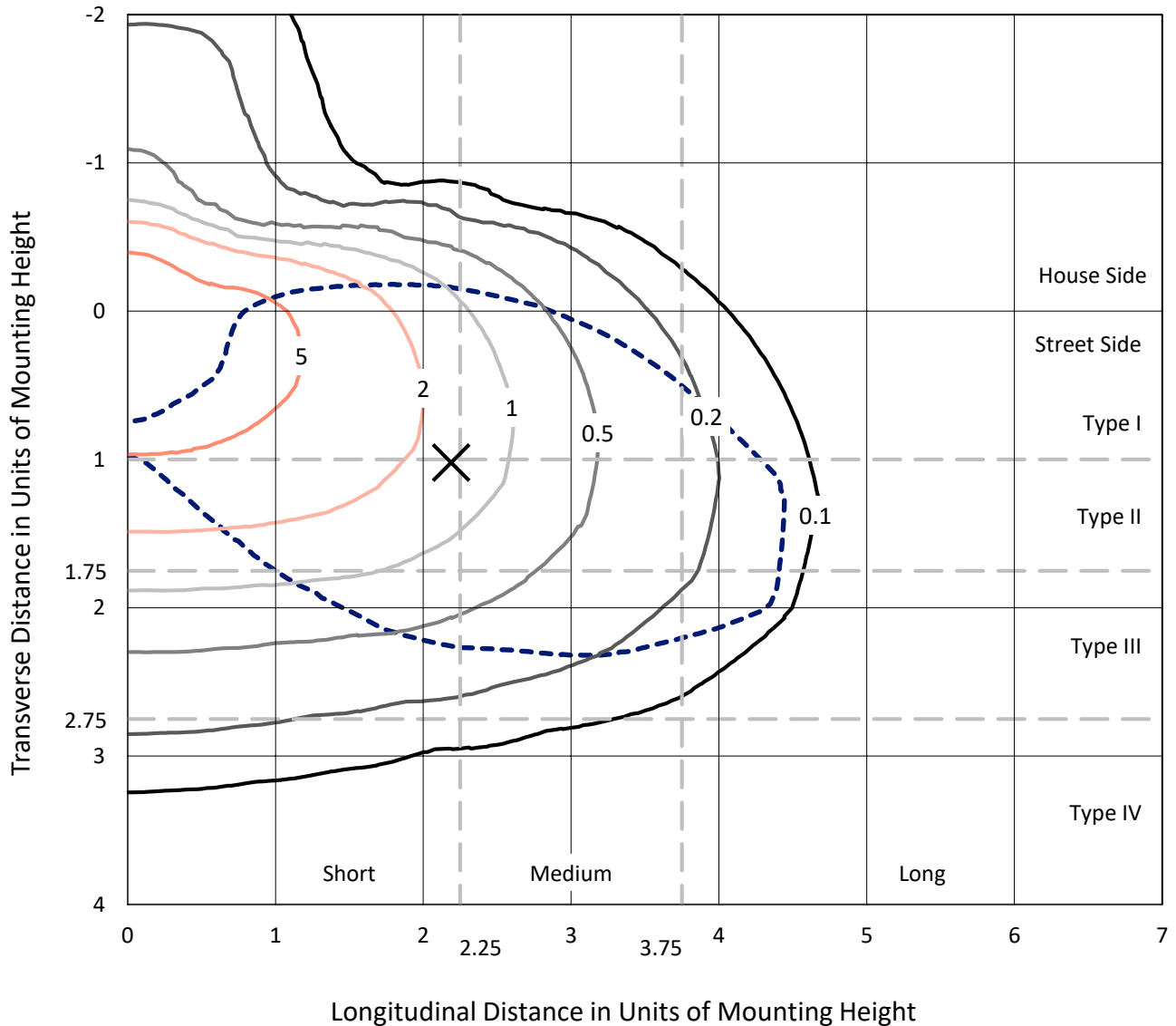
Input Watts (W): 331.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

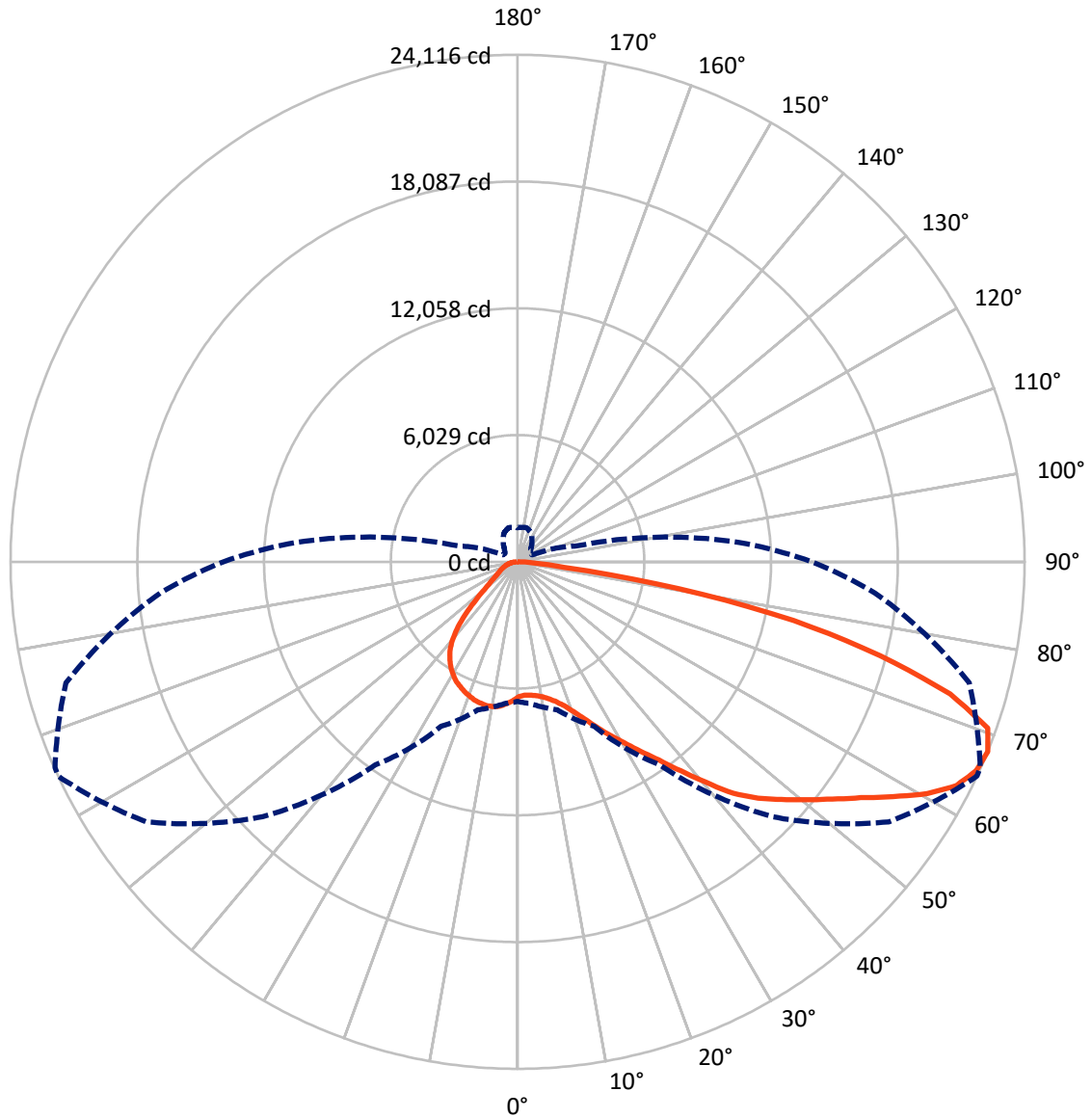
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.9 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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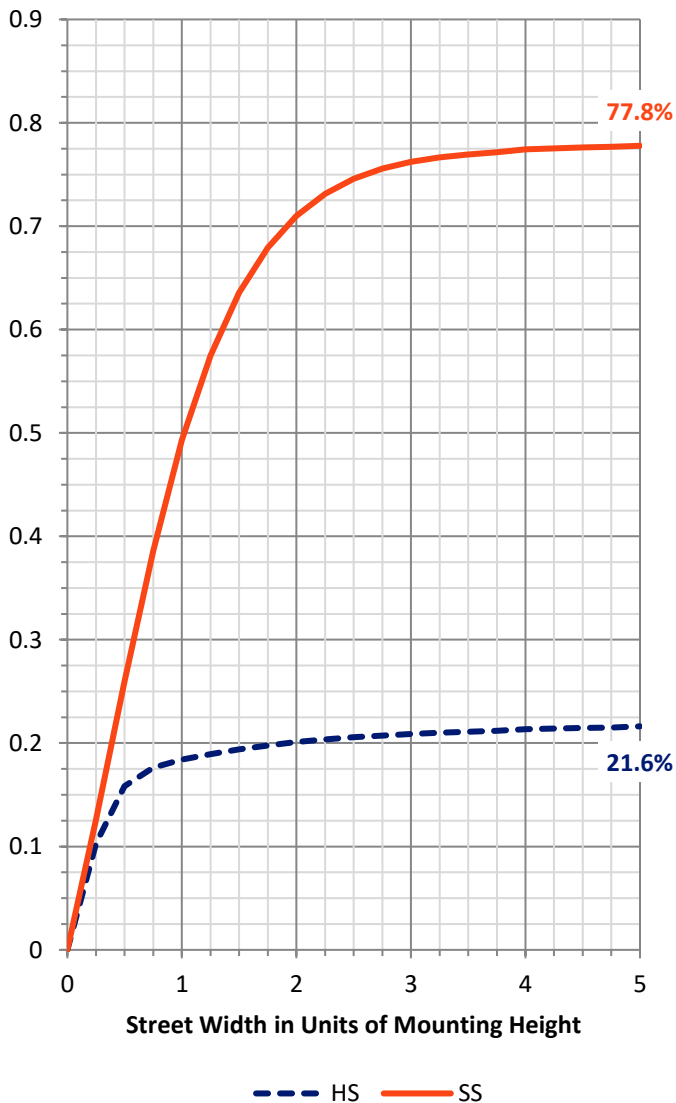
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	9174.3	0.0	9174.3
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	32359.7	0.0	32359.7
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	41534.0	0.0	41534.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	639.2	1.5
10°-20°	1997.1	4.8
20°-30°	3457.2	8.3
30°-40°	5080.0	12.2
40°-50°	6866.2	16.5
50°-60°	8443.4	20.3
60°-70°	9047.7	21.8
70°-80°	5336.2	12.8
80°-90°	667.0	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°	41534.0	100.0
0°-180°	41534.0	100.0

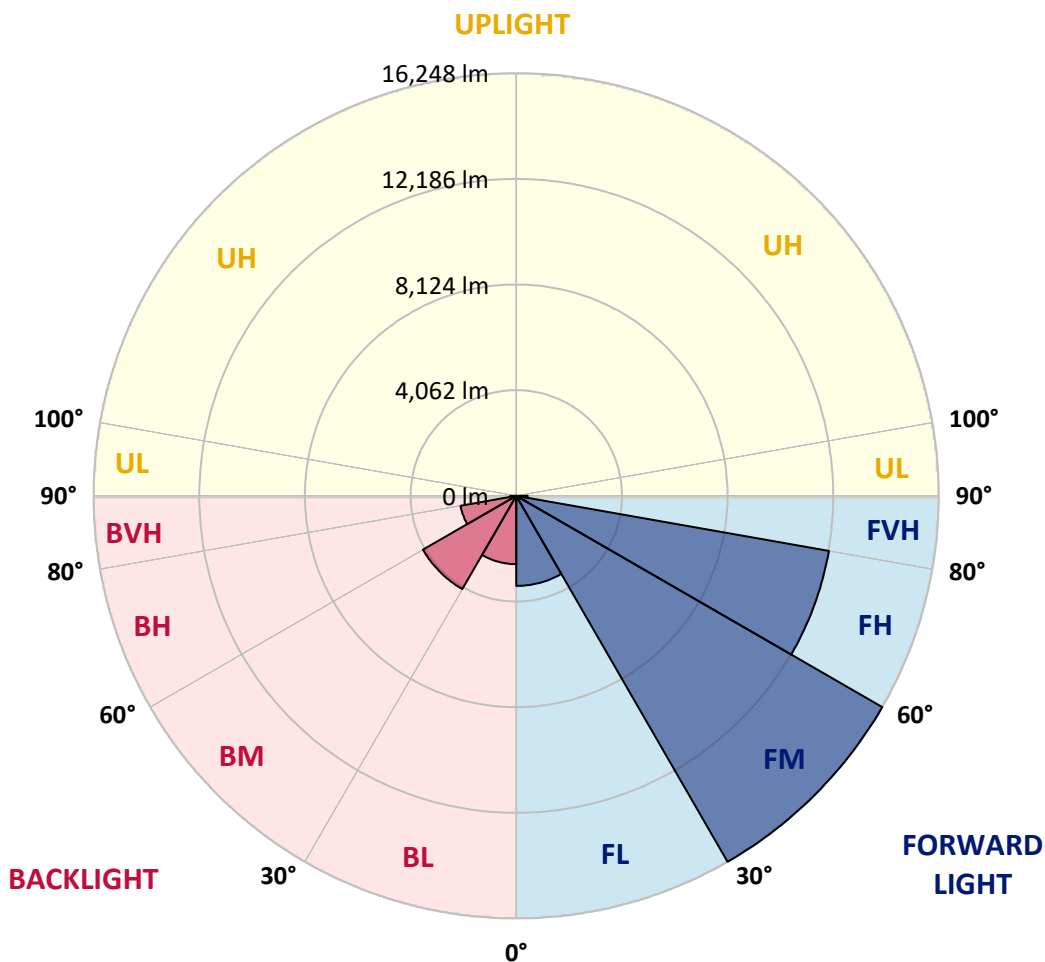


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3465.7	8.3			
FM (30°-60°)	16248.4	39.1			
FH (60°-80°)	12208.2	29.4			G5
FVH (80°-90°)	437.4	1.1			G3/500
BL (0°-30°)	2627.8	6.3	B4/5000		
BM (30°-60°)	4141.3	10.0	B3/5000		
BH (60°-80°)	2175.7	5.2	B3/2500		G3/2500
BVH (80°-90°)	229.6	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°	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4
2.5°	6294.3	6282.5	6277.4	6293.5	6305.3	6318.9	6338.4	6357.0	6359.5	6384.1	6416.3
5°	6370.5	6360.4	6349.4	6346.8	6342.6	6341.8	6346.8	6368.0	6373.1	6396.8	6466.2
7.5°	6539.9	6529.7	6509.4	6501.8	6478.9	6438.3	6418.8	6429.8	6432.4	6461.2	6547.5
10°	6816.0	6784.6	6760.1	6734.7	6662.7	6598.3	6550.9	6530.6	6526.4	6554.3	6654.2
12.5°	7145.4	7119.1	7092.0	7025.1	6933.7	6817.7	6733.8	6687.3	6683.9	6707.6	6782.9
15°	7493.4	7493.4	7474.8	7395.2	7305.4	7113.2	6983.6	6905.7	6910.8	6929.4	6964.2
17.5°	7943.1	7905.8	7897.3	7806.7	7706.8	7531.5	7325.7	7201.3	7207.2	7215.7	7189.4
20°	8400.3	8389.3	8376.6	8316.5	8225.9	8000.7	7769.5	7606.0	7606.9	7576.4	7459.5
22.5°	9005.0	8968.6	8977.9	8910.1	8787.3	8556.2	8290.3	8096.3	8109.0	8065.0	7853.3
25°	9605.4	9568.9	9549.5	9503.7	9397.9	9178.6	8862.7	8684.9	8669.6	8590.0	8282.6
27.5°	10204.9	10183.7	10199.8	10144.8	10058.4	9813.7	9524.1	9326.8	9336.9	9281.9	8823.8
30°	10825.6	10801.9	10872.2	10783.3	10729.9	10492.0	10214.2	9982.2	9990.7	10011.0	9497.0
32.5°	11293.9	11321.8	11444.6	11434.5	11424.3	11159.3	10867.1	10738.4	10751.1	10822.2	10296.4
35°	11746.1	11748.6	11921.4	12051.8	12106.8	11885.0	11581.8	11577.6	11660.6	11877.3	11410.8
37.5°	12121.2	12112.8	12343.1	12545.5	12696.2	12524.3	12357.5	12617.5	12692.8	13142.5	12532.8
40°	12326.2	12343.9	12640.3	12892.7	13189.1	13107.8	13125.5	13790.3	13975.7	14369.5	13372.0
42.5°	12182.2	12236.4	12697.9	13212.8	13659.9	13768.3	14125.6	15057.1	15135.9	15207.0	14197.6
45°	11940.9	11997.6	12509.1	13340.6	14048.6	14506.7	15120.6	16031.8	16118.2	16038.6	14884.4
47.5°	11689.4	11747.8	12317.7	13289.0	14370.4	15248.5	16005.5	16893.8	17003.9	16757.5	15544.9
50°	11370.1	11460.7	12084.0	13179.7	14631.2	16048.7	16843.0	17781.3	17832.1	17476.5	16045.3
52.5°	10977.2	11077.1	11751.2	12992.6	14835.3	16607.6	17690.7	18744.1	18739.0	18316.5	16617.8
55°	10563.9	10654.6	11348.9	12697.9	14949.6	17037.8	18368.1	19805.2	19866.2	19512.2	17136.0
57.5°	10034.7	10116.8	10873.9	12301.6	14831.0	17402.8	19465.6	21066.1	21096.6	20344.6	17548.4
60°	9333.5	9454.6	10215.1	11797.7	14490.6	17825.3	20674.9	22392.2	22429.4	21163.5	17813.5
62.5°	8563.8	8612.1	9386.9	11022.1	13995.2	18151.4	21513.2	23429.5	23375.3	21803.7	17893.1
65°	7625.5	7663.6	8334.3	10024.5	13074.7	17972.7	21813.8	23963.0	23896.1	22205.9	17648.4
67.5°	6643.2	6760.9	7287.6	8640.8	11790.1	17147.9	21559.8	24116.3	24082.4	22236.4	17064.1
70°	5367.9	5409.4	5885.3	7039.5	9837.4	15496.6	20713.0	23723.4	23697.1	21555.5	15870.9
72.5°	3785.2	3744.6	3975.8	4881.0	7105.6	12327.0	17684.8	21515.7	21559.8	19282.7	13820.8
75°	2009.5	2087.4	2447.3	2988.4	4028.3	7924.4	14099.4	17806.7	17791.5	16124.1	10924.7
77.5°	1070.4	1068.7	1315.9	1547.1	1972.2	3641.3	9299.7	13428.7	13503.2	12493.0	7501.0
80°	514.0	533.5	548.7	629.2	983.1	1682.6	3890.2	7787.3	8295.3	7451.1	3563.4
82.5°	411.5	413.2	414.9	397.2	406.5	685.1	1498.9	2253.4	2334.7	1876.5	1149.1
85°	304.9	286.2	283.7	240.5	271.8	411.5	756.2	962.0	914.6	890.0	648.7
87.5°	122.8	115.2	111.8	105.0	105.0	155.0	266.7	348.0	347.2	316.7	217.6
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°	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4	6415.4
2.5°	6441.7	6472.2	6543.3	6604.3	6627.1	6683.0	6735.5	6766.0	6787.2	6799.9	6857.5
5°	6508.6	6569.5	6683.0	6768.5	6851.5	6954.8	7021.7	7064.1	7087.8	7101.3	7142.8
7.5°	6611.0	6672.9	6793.1	6924.4	7000.6	7085.3	7128.4	7158.9	7174.2	7169.9	7203.0
10°	6702.5	6763.5	6883.7	6984.5	7027.7	7075.9	7098.8	7105.6	7106.4	7109.8	7142.8
12.5°	6827.0	6864.2	6928.6	6994.6	6985.3	6987.0	7006.5	6998.0	6978.6	6975.2	6997.2
15°	6960.8	6961.6	6966.7	6952.3	6893.9	6868.5	6841.4	6818.5	6765.2	6761.8	6796.5
17.5°	7128.4	7088.6	6996.3	6898.1	6759.2	6663.5	6567.0	6527.2	6462.0	6449.3	6466.2
20°	7344.4	7261.4	7037.0	6793.1	6533.1	6362.1	6245.2	6127.5	6036.9	6014.9	6031.0
22.5°	7654.3	7490.9	7088.6	6681.3	6279.1	5986.9	5760.0	5618.6	5466.2	5388.2	5395.9
25°	8028.6	7772.9	7178.4	6539.9	5980.2	5558.5	5190.1	4906.4	4734.5	4620.2	4650.7
27.5°	8518.9	8167.5	7285.9	6400.2	5608.4	5010.6	4476.2	4091.8	3916.5	3862.3	3826.7
30°	9087.1	8644.2	7399.4	6193.6	5207.0	4332.3	3648.1	3328.0	3127.3	3095.1	3068.0
32.5°	9847.5	9244.6	7612.0	5969.2	4727.7	3654.0	2911.3	2543.0	2497.2	2471.0	2465.1
35°	10828.2	10031.3	7834.7	5677.9	4102.8	2858.8	2202.6	2003.6	1981.5	2010.3	2012.9
37.5°	11868.9	10884.9	8101.4	5349.3	3383.9	2133.1	1685.2	1547.1	1571.7	1661.4	1681.8
40°	12573.4	11447.2	8343.6	4903.0	2495.5	1549.7	1226.2	1196.5	1332.0	1447.2	1470.9
42.5°	13249.2	11873.1	8441.8	4312.8	1780.0	1103.4	989.9	1091.5	1281.2	1407.4	1424.3
45°	13825.9	12368.5	8194.6	3604.9	1206.7	922.2	948.4	1089.0	1299.9	1439.6	1452.3
47.5°	14374.6	12773.3	7856.7	2840.2	951.8	887.5	947.6	1111.9	1341.3	1473.4	1481.1
50°	14898.8	13081.5	7280.0	2161.1	891.7	871.4	955.2	1147.4	1364.2	1447.2	1443.8
52.5°	15287.5	13240.7	6666.1	1744.4	868.0	858.7	975.5	1192.3	1368.4	1418.4	1415.0
55°	15572.8	13210.2	6263.0	1428.6	848.5	853.6	1008.6	1226.2	1409.1	1484.5	1481.9
57.5°	15599.1	13072.2	5804.9	1206.7	824.8	852.7	1044.1	1273.6	1612.3	1751.2	1708.9
60°	15567.7	12843.6	5347.6	1059.4	798.5	857.8	1081.4	1415.9	1905.3	2014.6	1984.9
62.5°	15413.6	12417.6	4662.5	962.0	775.7	876.4	1109.3	1528.5	1890.9	1903.6	1861.3
65°	14937.7	11847.7	3763.2	863.7	752.8	889.1	1132.2	1558.1	1736.8	1696.2	1675.0
67.5°	13996.1	10575.0	2902.9	774.0	723.2	886.6	1199.9	1515.8	1678.4	1648.7	1621.6
70°	12658.1	9128.6	2015.4	681.7	673.2	870.5	1183.0	1530.2	1650.4	1604.7	1568.3
72.5°	10575.0	7161.5	1282.1	606.3	598.7	832.4	1140.7	1520.9	1631.8	1611.5	1561.5
75°	7962.5	4998.7	814.6	524.2	532.6	763.0	1072.9	1470.9	1622.5	1559.0	1463.3
77.5°	5013.1	2467.6	633.4	445.4	458.1	658.0	927.3	1284.6	1557.3	1519.2	1396.4
80°	1896.0	1001.8	495.4	361.6	372.6	511.5	760.4	1056.8	1433.6	1496.3	1443.8
82.5°	873.1	626.6	371.7	290.5	294.7	372.6	567.4	782.5	1213.5	1373.5	1504.8
85°	509.8	410.7	248.1	193.9	201.5	220.2	319.2	477.6	786.7	1047.5	1172.0
87.5°	173.6	143.1	96.5	82.1	79.6	90.6	77.1	156.7	233.7	411.5	470.0
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)