

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: P721931

Luminaire Tested: **CST-CA8-430-750-U-T3**

Issue Date: 10/25/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P721931  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-430-750-U-T3  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: -

**Summary**

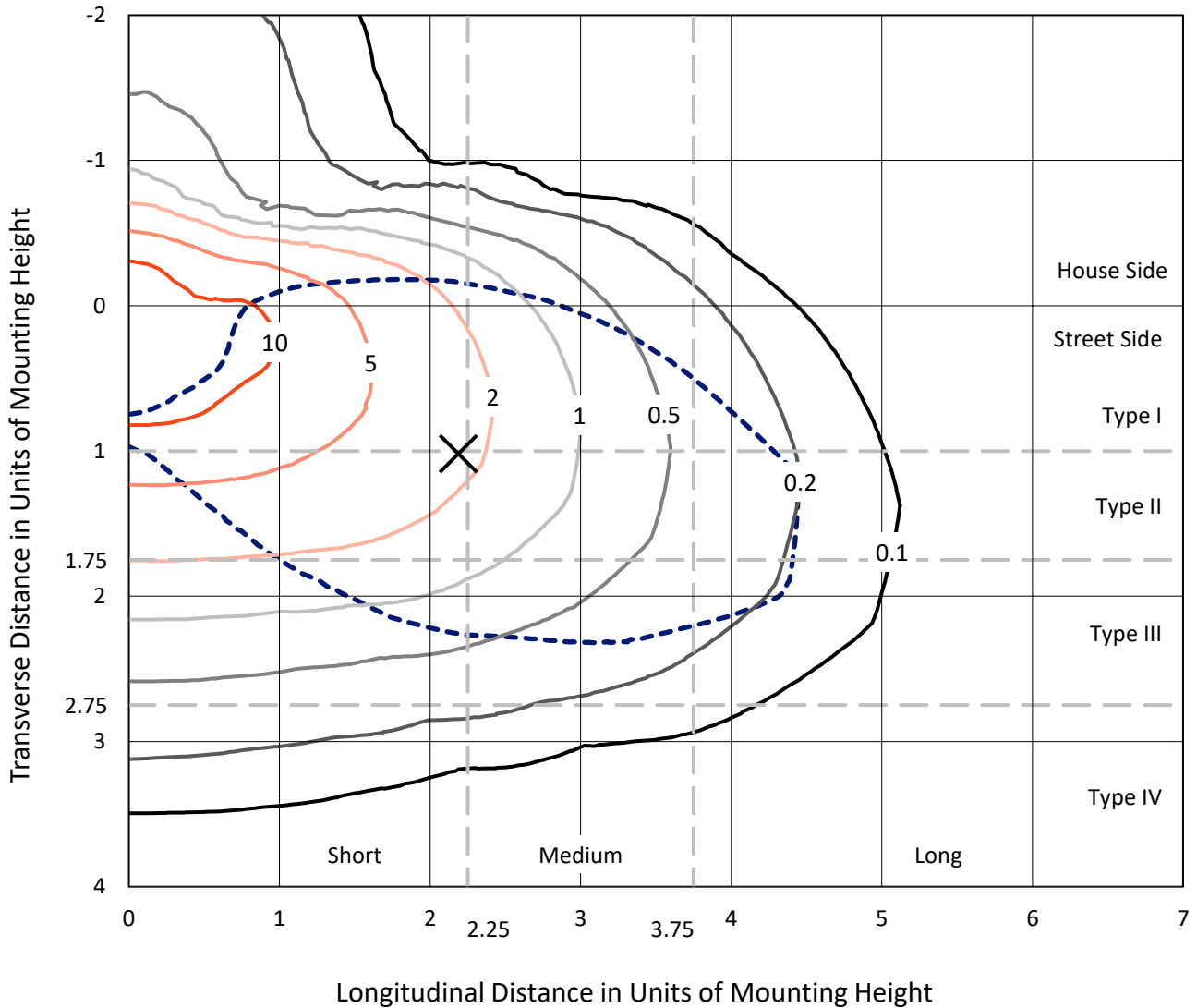
Lumens per Lamp: N/A  
Luminaire Lumens: 66543 lumens  
Efficiency: N/A  
Efficacy: 153.3 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B4 - U0 - G5  
  
Input Watts (W): 434.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage 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: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

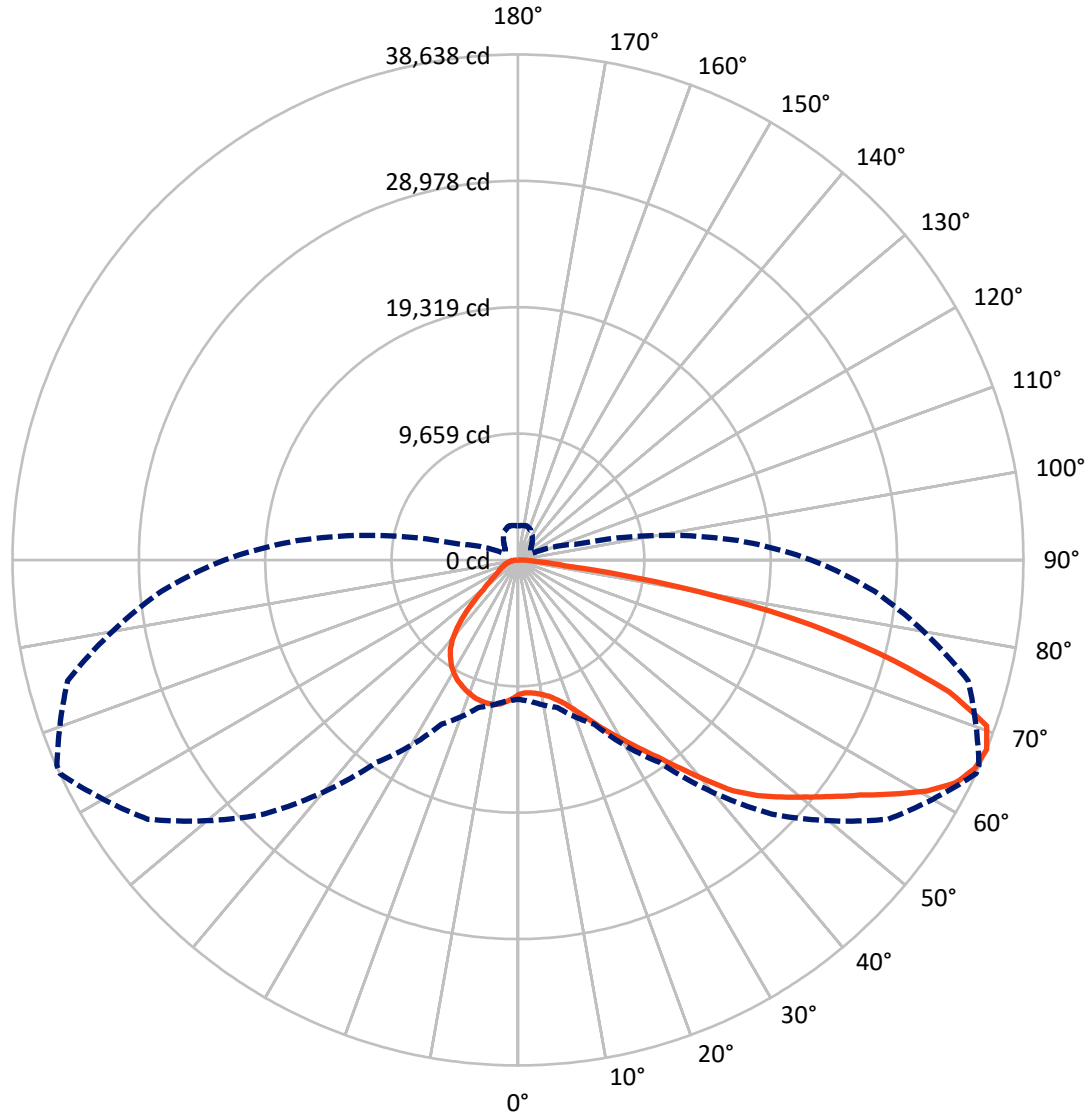
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.7 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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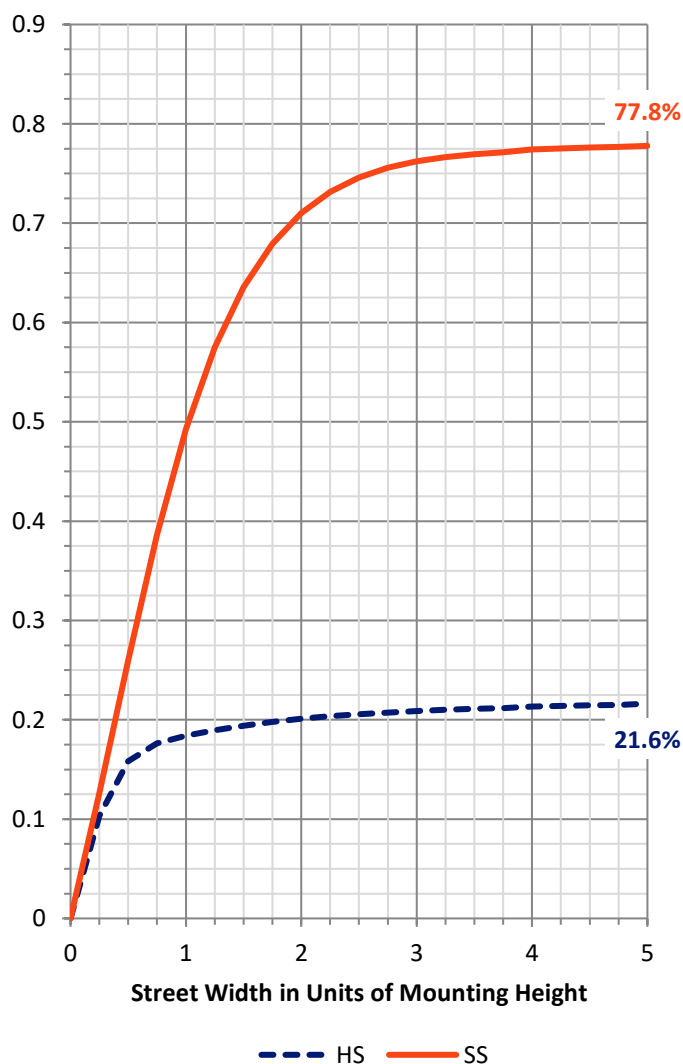
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	14698.5	0.0	14698.5
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	51844.5	0.0	51844.5
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	66543.0	0.0	66543.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1024.1	1.5
10°-20°	3199.6	4.8
20°-30°	5538.9	8.3
30°-40°	8138.8	12.2
40°-50°	11000.6	16.5
50°-60°	13527.5	20.3
60°-70°	14495.6	21.8
70°-80°	8549.3	12.8
80°-90°	1068.6	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°	66543.0	100.0
0°-180°	66543.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P721931

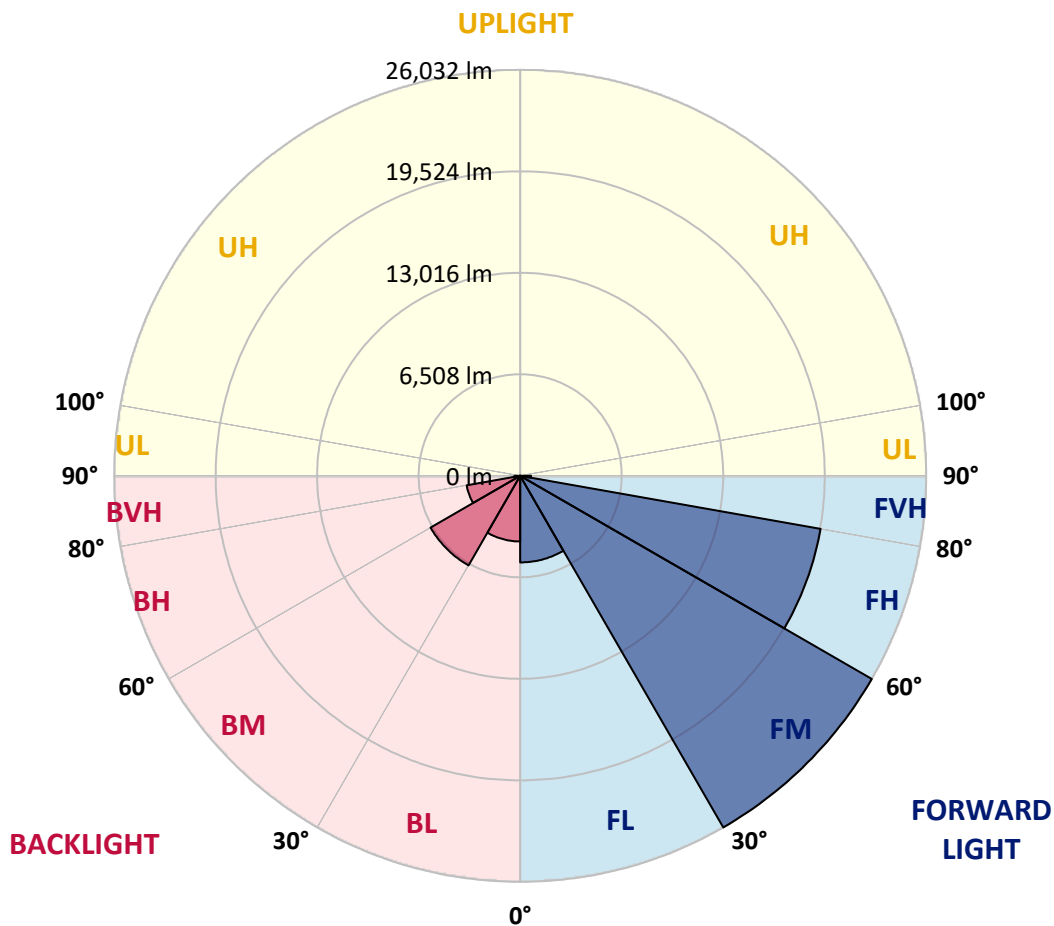
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5552.5	8.3			
FM (30°-60°)	26032.1	39.1			
FH (60°-80°)	19559.2	29.4			G5
FVH (80°-90°)	700.8	1.1			G4/750
BL (0°-30°)	4210.1	6.3	B4/5000		
BM (30°-60°)	6634.9	10.0	B4/8500		
BH (60°-80°)	3485.7	5.2	B4/5000		G4/5000
BVH (80°-90°)	367.9	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°	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4
2.5°	10084.4	10065.4	10057.2	10083.0	10102.0	10123.7	10154.9	10184.8	10188.8	10228.2	10279.7
5°	10206.5	10190.2	10172.5	10168.5	10161.7	10160.3	10168.5	10202.4	10210.5	10248.5	10359.8
7.5°	10477.8	10461.5	10429.0	10416.8	10380.1	10315.0	10283.8	10301.4	10305.5	10351.6	10490.0
10°	10920.1	10869.9	10830.5	10789.8	10674.5	10571.4	10495.4	10462.9	10456.1	10500.9	10661.0
12.5°	11447.8	11405.8	11362.4	11255.2	11108.7	10922.8	10788.5	10713.9	10708.4	10746.4	10867.2
15°	12005.5	12005.5	11975.6	11848.1	11704.3	11396.3	11188.7	11063.9	11072.0	11101.9	11157.5
17.5°	12725.9	12666.2	12652.6	12507.4	12347.3	12066.5	11736.8	11537.4	11546.9	11560.5	11518.4
20°	13458.5	13440.8	13420.5	13324.2	13179.0	12818.1	12447.7	12185.9	12187.3	12138.4	11951.2
22.5°	14427.2	14368.8	14383.7	14275.2	14078.5	13708.1	13282.1	12971.4	12991.8	12921.2	12582.1
25°	15389.1	15330.7	15299.5	15226.3	15056.7	14705.3	14199.2	13914.3	13889.9	13762.4	13269.9
27.5°	16349.6	16315.7	16341.5	16253.3	16114.9	15722.8	15258.8	14942.7	14959.0	14870.8	14136.8
30°	17344.1	17306.1	17418.7	17276.2	17190.8	16809.5	16364.5	15992.8	16006.4	16038.9	15215.4
32.5°	18094.3	18139.1	18335.8	18319.5	18303.3	17878.6	17410.6	17204.3	17224.7	17338.6	16496.1
35°	18818.8	18822.9	19099.6	19308.6	19396.8	19041.3	18555.6	18548.8	18681.8	19029.1	18281.6
37.5°	19419.8	19406.3	19775.3	20099.5	20341.0	20065.6	19798.3	20214.9	20335.6	21056.0	20079.2
40°	19748.1	19776.6	20251.5	20655.8	21130.6	21000.4	21028.9	22093.9	22391.0	23021.9	21423.7
42.5°	19517.5	19604.3	20343.7	21168.6	21885.0	22058.6	22631.1	24123.5	24249.7	24363.6	22746.5
45°	19130.8	19221.7	20041.2	21373.5	22507.7	23241.7	24225.3	25685.1	25823.5	25695.9	23846.7
47.5°	18727.9	18821.5	19734.6	21290.7	23023.2	24430.1	25643.0	27066.2	27242.6	26847.8	24905.0
50°	18216.4	18361.6	19360.1	21115.7	23441.1	25712.2	26984.8	28488.0	28569.4	27999.6	25706.8
52.5°	17586.9	17747.0	18826.9	20815.9	23768.1	26607.6	28342.9	30030.6	30022.4	29345.5	26623.9
55°	16924.9	17070.0	18182.5	20343.7	23951.2	27296.8	29428.2	31730.5	31828.2	31261.1	27454.2
57.5°	16076.9	16208.5	17421.4	19708.8	23761.3	27881.6	31186.5	33750.7	33799.5	32594.8	28114.9
60°	14953.6	15147.6	16365.9	18901.6	23215.9	28558.6	33123.9	35875.3	35935.0	33906.7	28539.6
62.5°	13720.3	13797.7	15039.0	17658.8	22422.2	29080.9	34467.0	37537.2	37450.4	34932.4	28667.1
65°	12217.1	12278.1	13352.7	16060.6	20947.5	28794.6	34948.6	38391.9	38284.8	35576.8	28275.0
67.5°	10643.3	10831.9	11675.8	13843.8	18889.4	27473.2	34541.6	38637.5	38583.2	35625.6	27338.9
70°	8600.1	8666.6	9429.1	11278.3	15760.8	24827.6	33184.9	38008.0	37965.9	34534.8	25427.3
72.5°	6064.5	5999.3	6369.7	7820.0	11384.1	19749.5	28333.4	34471.1	34541.6	30893.5	22142.7
75°	3219.5	3344.3	3920.9	4787.8	6453.8	12696.0	22589.1	28528.7	28504.3	25833.0	17502.8
77.5°	1714.9	1712.2	2108.3	2478.7	3159.8	5833.8	14899.3	21514.6	21634.0	20015.4	12017.7
80°	823.5	854.7	879.1	1008.0	1575.1	2695.8	6232.7	12476.2	13290.2	11937.6	5709.0
82.5°	659.4	662.1	664.8	636.3	651.2	1097.6	2401.4	3610.2	3740.4	3006.5	1841.0
85°	488.4	458.6	454.5	385.3	435.5	659.4	1211.5	1541.2	1465.2	1425.9	1039.2
87.5°	196.7	184.5	179.1	168.2	168.2	248.3	427.4	557.6	556.2	507.4	348.7
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°	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4	10278.4
2.5°	10320.4	10369.3	10483.2	10580.9	10617.5	10707.1	10791.2	10840.0	10874.0	10894.3	10986.6
5°	10427.6	10525.3	10707.1	10844.1	10977.1	11142.6	11249.8	11317.6	11355.6	11377.3	11443.8
7.5°	10591.8	10690.8	10883.5	11093.7	11215.9	11351.5	11420.7	11469.6	11494.0	11487.2	11540.1
10°	10738.3	10836.0	11028.6	11190.1	11259.3	11336.6	11373.2	11384.1	11385.4	11390.9	11443.8
12.5°	10937.7	10997.4	11100.5	11206.4	11191.4	11194.1	11225.3	11211.8	11180.6	11175.2	11210.4
15°	11152.1	11153.4	11161.6	11138.5	11044.9	11004.2	10960.8	10924.2	10838.7	10833.3	10888.9
17.5°	11420.7	11356.9	11209.1	11051.7	10829.2	10675.9	10521.2	10457.5	10353.0	10332.6	10359.8
20°	11766.7	11633.7	11274.2	10883.5	10467.0	10192.9	10005.7	9817.1	9671.9	9636.7	9662.4
22.5°	12263.2	12001.4	11356.9	10704.4	10059.9	9591.9	9228.3	9001.7	8757.5	8632.7	8644.9
25°	12862.9	12453.2	11500.8	10477.8	9581.0	8905.4	8315.2	7860.7	7585.3	7402.2	7451.0
27.5°	13648.4	13085.4	11673.1	10254.0	8985.4	8027.6	7171.5	6555.6	6274.7	6187.9	6130.9
30°	14558.8	13849.2	11854.9	9922.9	8342.4	6940.9	5844.7	5331.8	5010.3	4958.7	4915.3
32.5°	15777.1	14811.1	12195.4	9563.4	7574.5	5854.2	4664.3	4074.2	4000.9	3958.9	3949.4
35°	17348.1	16071.5	12552.2	9096.7	6573.2	4580.2	3528.8	3210.0	3174.7	3220.8	3224.9
37.5°	19015.5	17439.0	12979.6	8570.3	5421.4	3417.5	2699.8	2478.7	2518.0	2661.8	2694.4
40°	20144.3	18339.9	13367.6	7855.3	3998.2	2482.8	1964.5	1917.0	2134.1	2318.6	2356.6
42.5°	21227.0	19022.3	13525.0	6909.7	2851.8	1767.8	1586.0	1748.8	2052.7	2254.8	2282.0
45°	22150.9	19816.0	13128.8	5775.5	1933.3	1477.4	1519.5	1744.7	2082.5	2306.4	2326.7
47.5°	23030.0	20464.5	12587.5	4550.4	1524.9	1421.8	1518.1	1781.3	2149.0	2360.7	2372.9
50°	23869.8	20958.3	11663.6	3462.3	1428.6	1396.0	1530.4	1838.3	2185.6	2318.6	2313.2
52.5°	24492.5	21213.4	10680.0	2794.8	1390.6	1375.7	1562.9	1910.2	2192.4	2272.5	2267.0
55°	24949.7	21164.5	10034.2	2288.8	1359.4	1367.6	1615.8	1964.5	2257.6	2378.3	2374.2
57.5°	24991.8	20943.4	9300.2	1933.3	1321.4	1366.2	1672.8	2040.5	2583.2	2805.7	2737.8
60°	24941.6	20577.1	8567.6	1697.2	1279.4	1374.3	1732.5	2268.4	3052.6	3227.6	3180.1
62.5°	24694.7	19894.7	7470.0	1541.2	1242.7	1404.2	1777.3	2448.8	3029.5	3049.9	2982.0
65°	23932.2	18981.6	6029.2	1383.8	1206.1	1424.5	1813.9	2496.3	2782.6	2717.5	2683.6
67.5°	22423.6	16942.5	4650.8	1240.0	1158.6	1420.5	1922.4	2428.5	2689.0	2641.5	2598.1
70°	20280.0	14625.2	3228.9	1092.1	1078.6	1394.7	1895.3	2451.6	2644.2	2570.9	2512.6
72.5°	16942.5	11473.6	2054.0	971.4	959.2	1333.6	1827.5	2436.6	2614.4	2581.8	2501.8
75°	12757.1	8008.6	1305.1	839.8	853.4	1222.4	1718.9	2356.6	2599.4	2497.7	2344.4
77.5°	8031.7	3953.4	1014.8	713.6	734.0	1054.2	1485.6	2058.1	2495.0	2433.9	2237.2
80°	3037.7	1605.0	793.7	579.3	596.9	819.4	1218.3	1693.2	2296.9	2397.3	2313.2
82.5°	1398.8	1004.0	595.6	465.3	472.1	596.9	909.0	1253.6	1944.2	2200.6	2410.9
85°	816.7	658.0	397.5	310.7	322.9	352.7	511.5	765.2	1260.4	1678.2	1877.7
87.5°	278.1	229.3	154.7	131.6	127.5	145.2	123.5	251.0	374.4	659.4	753.0
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)