

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: P573250

Luminaire Tested: **ARCH-S-PA2-50-750-U-T2U**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573250  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-50-750-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 520mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7917 lumens  
Efficiency: N/A  
Efficacy: 147.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

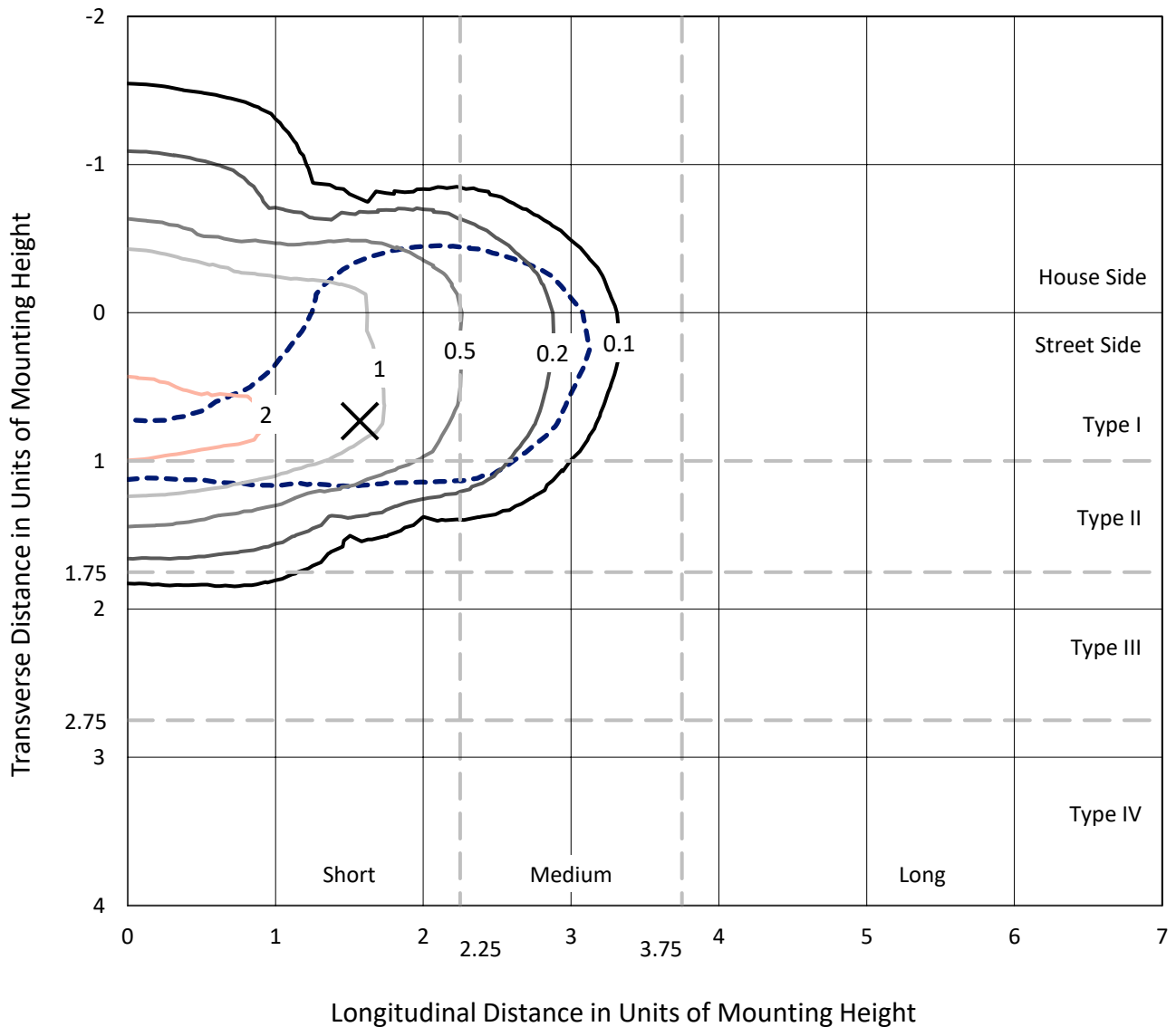
Input Watts (W): 53.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

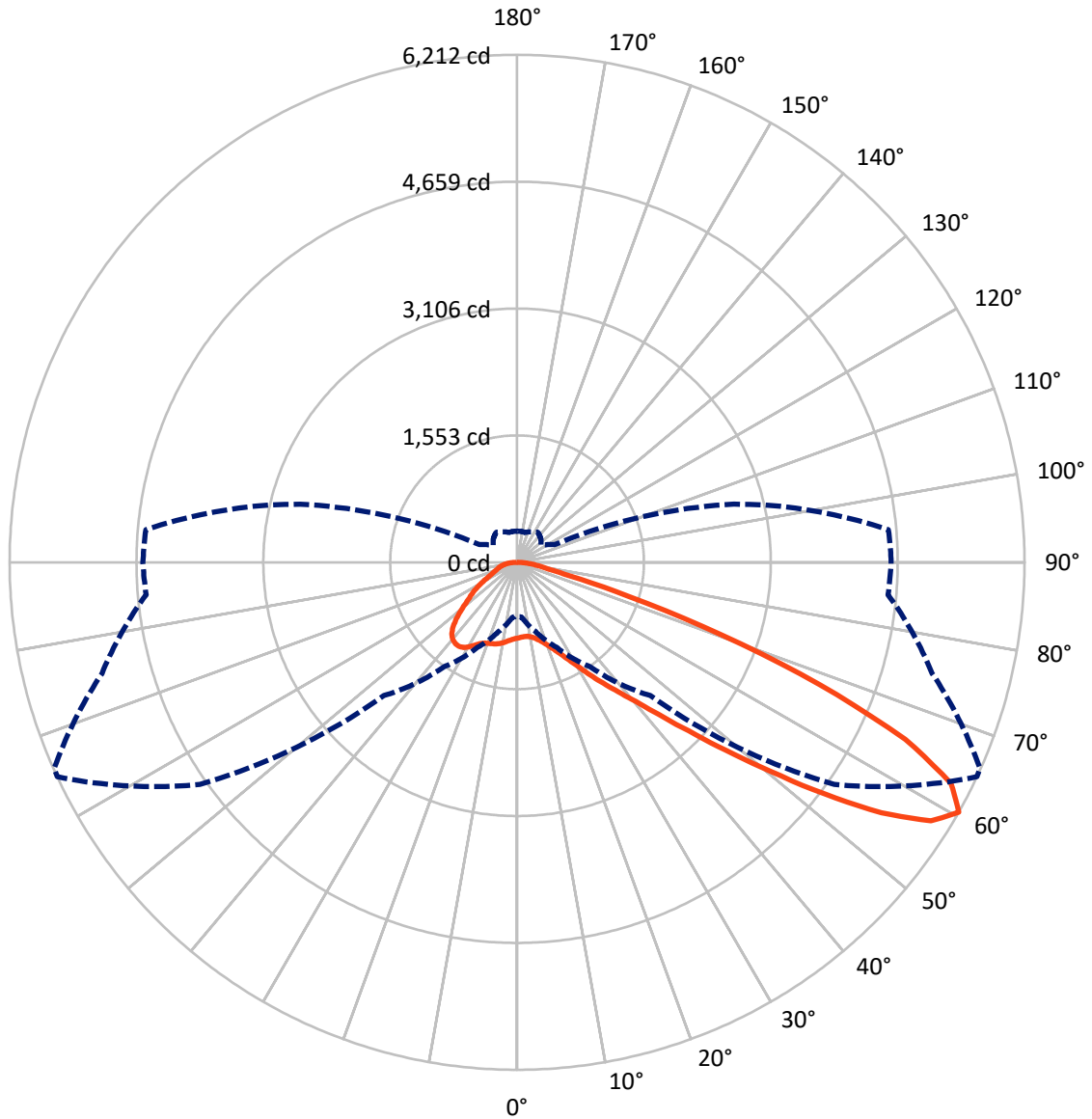
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.6 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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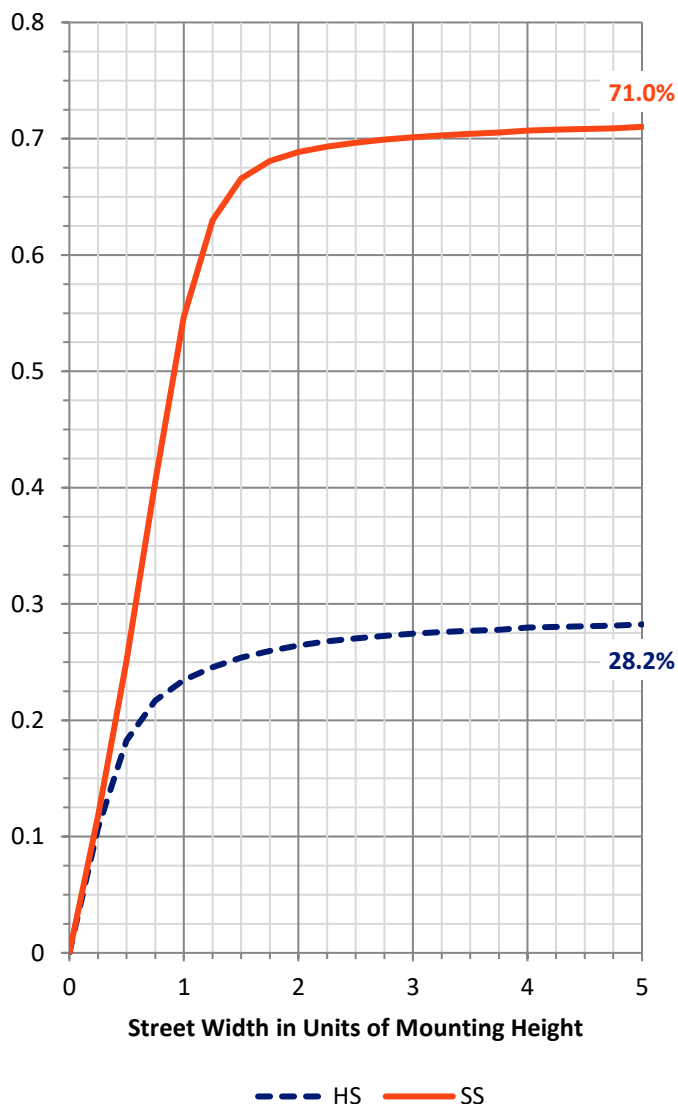
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2266.4	0.0	2266.4
	% Fixture	28.6	0.0	28.6
<b>Street Side</b>	Lumens	5650.6	0.0	5650.6
	% Fixture	71.4	0.0	71.4
<b>Total</b>	Lumens	7917.0	0.0	7917.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	89.8	1.1
10°-20°	288.8	3.6
20°-30°	553.7	7.0
30°-40°	961.6	12.1
40°-50°	1630.9	20.6
50°-60°	2030.8	25.7
60°-70°	1636.5	20.7
70°-80°	619.7	7.8
80°-90°	105.1	1.3
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°	7917.0	100.0
0°-180°	7917.0	100.0

**Coefficient of Utilization**



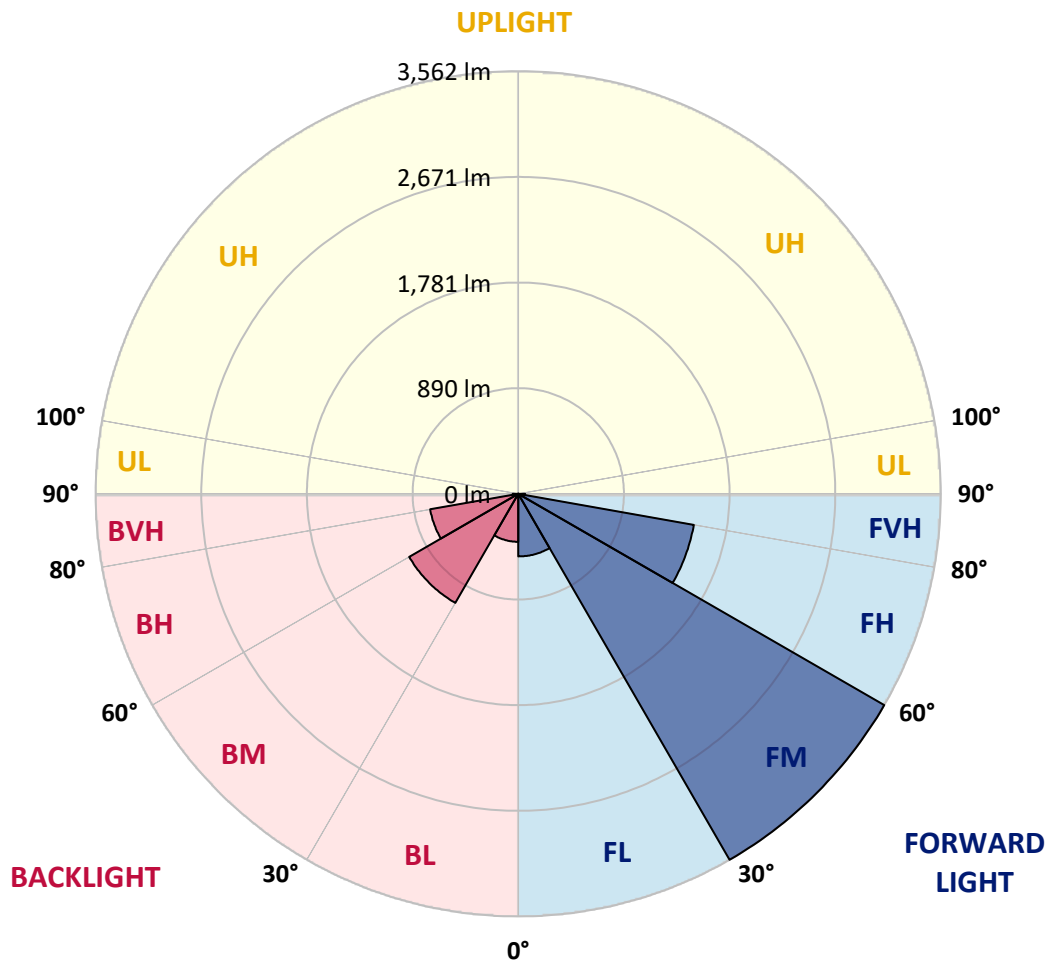
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	527.8	6.7			
FM (30°-60°)	3561.9	45.0			
FH (60°-80°)	1502.6	19.0			G1/1800
FVH (80°-90°)	58.3	0.7			G1/100
BL (0°-30°)	404.5	5.1	B1/500		
BM (30°-60°)	1061.5	13.4	B2/2500		
BH (60°-80°)	753.6	9.5	B2/1000		G2/1000
BVH (80°-90°)	46.8	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	928.9	928.9	928.9	928.9	928.9	928.9	928.9	928.9	928.9	928.9	928.9
2.5°	907.2	907.2	907.2	909.4	911.5	913.7	918.1	918.1	918.1	920.2	924.6
5°	889.8	887.7	889.8	892.0	896.3	900.7	909.4	913.7	913.7	922.4	931.1
7.5°	892.0	887.7	887.7	889.8	894.2	898.5	907.2	913.7	915.9	926.7	941.9
10°	913.7	907.2	907.2	909.4	909.4	913.7	920.2	928.9	931.1	941.9	957.1
12.5°	959.3	952.8	950.6	944.1	937.6	941.9	948.4	950.6	952.8	959.3	974.5
15°	1054.8	1043.9	1026.6	1013.5	996.2	985.3	983.2	985.3	985.3	987.5	996.2
17.5°	1191.5	1178.5	1152.4	1124.2	1083.0	1048.3	1037.4	1028.7	1028.7	1022.2	1022.2
20°	1358.6	1339.1	1308.7	1267.5	1206.7	1143.8	1106.9	1087.3	1080.8	1070.0	1054.8
22.5°	1551.8	1538.8	1499.7	1436.8	1345.6	1261.0	1200.2	1156.8	1156.8	1130.7	1098.2
25°	1779.7	1755.8	1710.2	1636.4	1512.7	1391.2	1308.7	1245.8	1239.3	1198.0	1145.9
27.5°	2001.0	1985.9	1929.4	1831.8	1684.2	1543.1	1428.1	1354.3	1343.4	1278.3	1198.0
30°	2270.2	2252.8	2168.2	2031.4	1873.0	1712.4	1577.8	1482.3	1471.5	1382.5	1269.6
32.5°	2604.4	2545.8	2441.6	2285.4	2081.3	1901.2	1747.1	1645.1	1632.1	1530.1	1395.5
35°	3010.3	2960.3	2780.2	2615.3	2372.2	2135.6	1951.1	1816.6	1799.2	1677.7	1508.4
37.5°	3296.7	3272.9	3149.2	3018.9	2741.1	2422.1	2196.4	2009.7	1992.4	1831.8	1612.6
40°	3476.9	3453.0	3418.3	3381.4	3227.3	2867.0	2491.5	2237.6	2209.4	2057.5	1820.9
42.5°	3570.2	3550.7	3557.2	3631.0	3674.4	3617.9	2912.6	2541.5	2521.9	2337.4	2074.8
45°	3515.9	3502.9	3565.9	3761.2	3973.9	4390.6	3453.0	2940.8	2888.7	2669.5	2383.0
47.5°	3255.5	3216.4	3364.0	3696.1	4151.8	4759.5	4104.1	3433.5	3377.0	3062.3	2695.6
50°	2719.4	2708.6	2910.4	3331.5	4082.4	4905.0	4800.8	4015.1	3973.9	3485.6	3042.8
52.5°	2220.2	2215.9	2372.2	2758.5	3639.6	4802.9	5306.5	4707.5	4583.7	3910.9	3420.4
55°	1723.2	1721.1	1860.0	2148.6	2903.9	4323.3	5545.2	5412.8	5321.7	4375.4	3808.9
57.5°	1178.5	1163.3	1343.4	1562.6	2181.2	3424.8	5388.9	5970.6	5914.2	4868.1	4221.3
60°	655.4	677.1	876.8	1148.1	1560.5	2307.1	4737.8	6211.5	6202.8	5260.9	4557.7
62.5°	464.5	473.1	557.8	816.0	1026.6	1321.7	3654.8	5961.9	6031.4	5477.9	4748.7
65°	386.3	390.7	431.9	603.4	750.9	764.0	2278.8	5221.8	5313.0	5410.6	4789.9
67.5°	364.6	366.8	388.5	444.9	588.2	553.4	1017.9	3986.9	4180.1	4868.1	4520.8
70°	332.1	334.2	366.8	392.8	475.3	436.2	523.1	2647.8	2908.2	3848.0	3897.9
72.5°	284.3	290.8	316.9	369.0	386.3	362.4	403.7	1415.1	1673.3	2574.0	3010.3
75°	245.2	249.6	269.1	312.5	362.4	288.7	342.9	644.6	755.3	1510.6	1905.6
77.5°	197.5	199.7	227.9	256.1	303.8	234.4	267.0	386.3	405.9	737.9	861.6
80°	149.8	149.8	169.3	204.0	225.7	225.7	195.3	269.1	280.0	351.6	340.7
82.5°	115.0	112.9	128.0	143.2	162.8	188.8	147.6	178.0	182.3	212.7	182.3
85°	76.0	76.0	84.6	97.7	108.5	104.2	115.0	104.2	108.5	132.4	99.8
87.5°	32.6	32.6	45.6	43.4	47.7	49.9	56.4	49.9	49.9	60.8	45.6
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°	928.9	928.9	928.9	928.9	928.9	928.9	928.9	928.9	928.9	928.9	928.9
2.5°	926.7	928.9	933.2	935.4	941.9	944.1	944.1	948.4	948.4	952.8	952.8
5°	933.2	939.8	946.3	952.8	959.3	961.5	965.8	968.0	968.0	972.3	970.1
7.5°	946.3	952.8	965.8	972.3	981.0	985.3	983.2	985.3	983.2	985.3	985.3
10°	963.6	972.3	987.5	996.2	1002.7	1004.9	998.4	991.8	983.2	983.2	983.2
12.5°	983.2	989.7	1009.2	1015.7	1020.1	1013.5	996.2	983.2	976.6	978.8	976.6
15°	1002.7	1009.2	1024.4	1030.9	1030.9	1011.4	996.2	991.8	989.7	991.8	991.8
17.5°	1022.2	1028.7	1041.8	1041.8	1035.2	1020.1	1004.9	989.7	978.8	972.3	972.3
20°	1048.3	1048.3	1052.6	1052.6	1050.4	1026.6	989.7	952.8	931.1	918.1	915.9
22.5°	1083.0	1074.3	1065.6	1065.6	1074.3	1011.4	939.8	883.3	848.6	844.3	835.6
25°	1119.9	1100.4	1078.7	1093.8	1078.7	972.3	870.3	794.3	753.1	737.9	742.3
27.5°	1159.0	1128.6	1096.0	1139.4	1057.0	896.3	772.6	688.0	648.9	638.1	638.1
30°	1213.2	1167.6	1119.9	1187.2	1015.7	809.5	657.6	596.8	575.1	566.5	564.3
32.5°	1317.4	1247.9	1178.5	1230.6	970.1	696.7	579.5	542.6	516.5	507.9	514.4
35°	1410.7	1313.1	1267.5	1250.1	898.5	605.5	531.7	499.2	477.5	466.6	466.6
37.5°	1495.4	1402.0	1367.3	1250.1	805.2	549.1	501.3	475.3	447.1	438.4	438.4
40°	1679.8	1556.1	1495.4	1232.7	690.2	520.9	486.2	455.8	431.9	423.2	421.0
42.5°	1933.8	1766.7	1627.7	1193.7	592.5	507.9	477.5	442.7	423.2	416.7	414.5
45°	2202.9	2055.3	1753.6	1124.2	529.6	494.8	475.3	438.4	414.5	408.0	405.9
47.5°	2528.4	2376.5	1899.0	1017.9	486.2	486.2	473.1	431.9	410.2	403.7	403.7
50°	2888.7	2762.8	2083.5	896.3	453.6	479.6	468.8	431.9	408.0	401.5	399.3
52.5°	3257.7	3199.1	2276.7	777.0	421.0	471.0	466.6	431.9	403.7	397.2	397.2
55°	3726.5	3678.7	2500.2	688.0	395.0	453.6	466.6	427.6	397.2	392.8	392.8
57.5°	4186.6	4169.2	2673.8	609.9	375.5	431.9	460.1	421.0	390.7	388.5	388.5
60°	4579.4	4562.0	2747.6	512.2	355.9	410.2	447.1	410.2	379.8	382.0	382.0
62.5°	4822.5	4722.6	2693.4	423.2	336.4	390.7	431.9	397.2	369.0	375.5	373.3
65°	4865.9	4633.7	2482.9	353.8	314.7	369.0	414.5	382.0	353.8	369.0	366.8
67.5°	4546.8	4160.5	2087.9	308.2	293.0	345.1	395.0	360.3	336.4	358.1	351.6
70°	3856.7	3379.2	1545.3	273.5	271.3	316.9	369.0	334.2	312.5	323.4	314.7
72.5°	2871.3	2439.5	1000.5	247.4	247.4	284.3	332.1	301.7	280.0	282.1	273.5
75°	1790.5	1499.7	568.6	223.5	223.5	251.8	295.2	264.8	249.6	240.9	251.8
77.5°	813.9	659.8	299.5	199.7	201.8	214.9	253.9	225.7	208.4	195.3	201.8
80°	301.7	269.1	195.3	171.5	175.8	178.0	204.0	180.1	164.9	156.3	151.9
82.5°	156.3	145.4	132.4	136.7	143.2	136.7	158.4	134.6	117.2	110.7	93.3
85°	78.1	76.0	80.3	91.2	99.8	84.6	95.5	86.8	71.6	52.1	52.1
87.5°	30.4	32.6	30.4	41.2	45.6	39.1	43.4	30.4	21.7	10.9	8.7
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)