

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: P573513

Luminaire Tested: **ARCH-S-PA2-80-827-U-T3**

Issue Date: 10/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P573513  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA2-80-827-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 2700K, 820mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8699 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G2

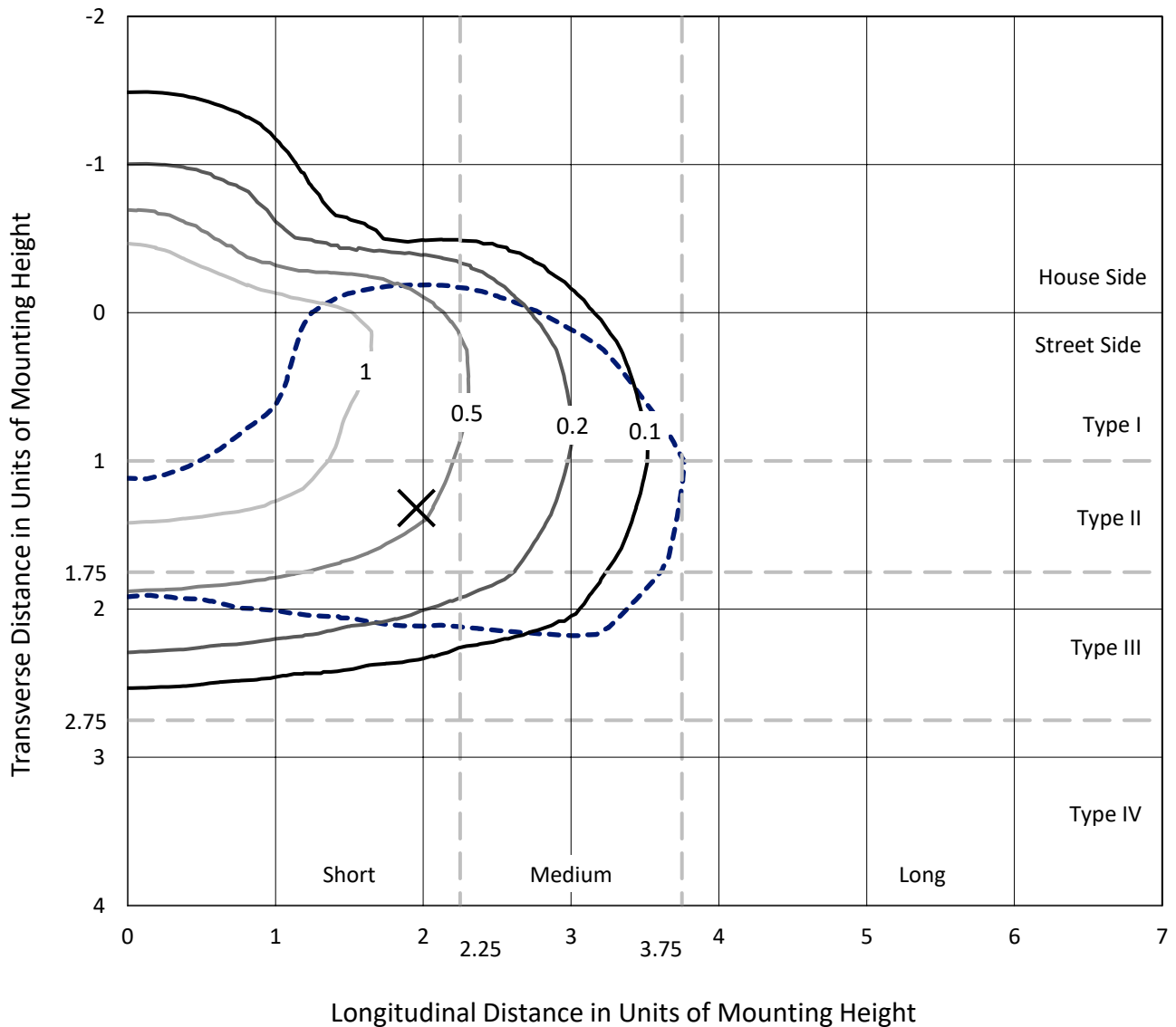
Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

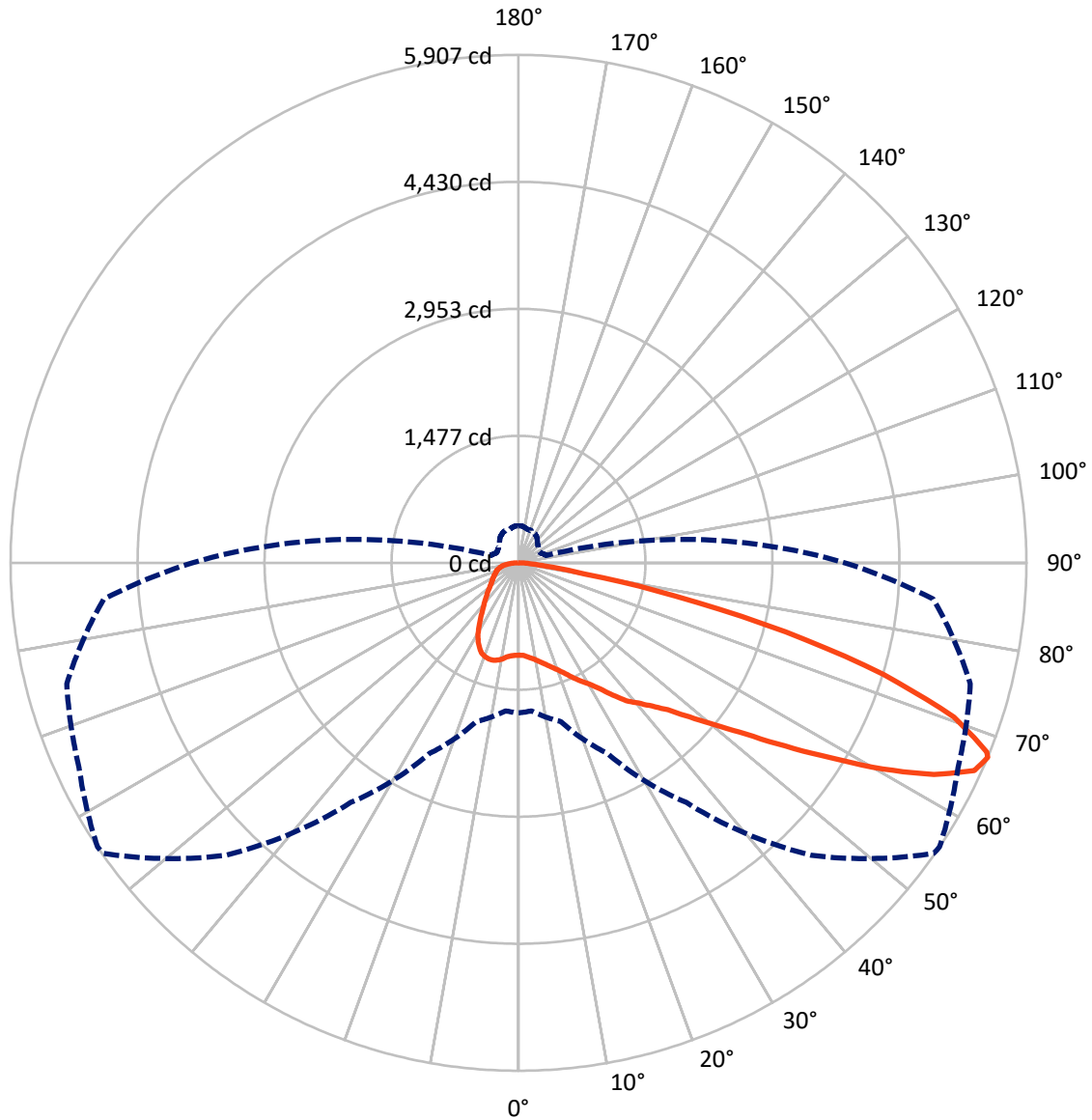
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type III - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

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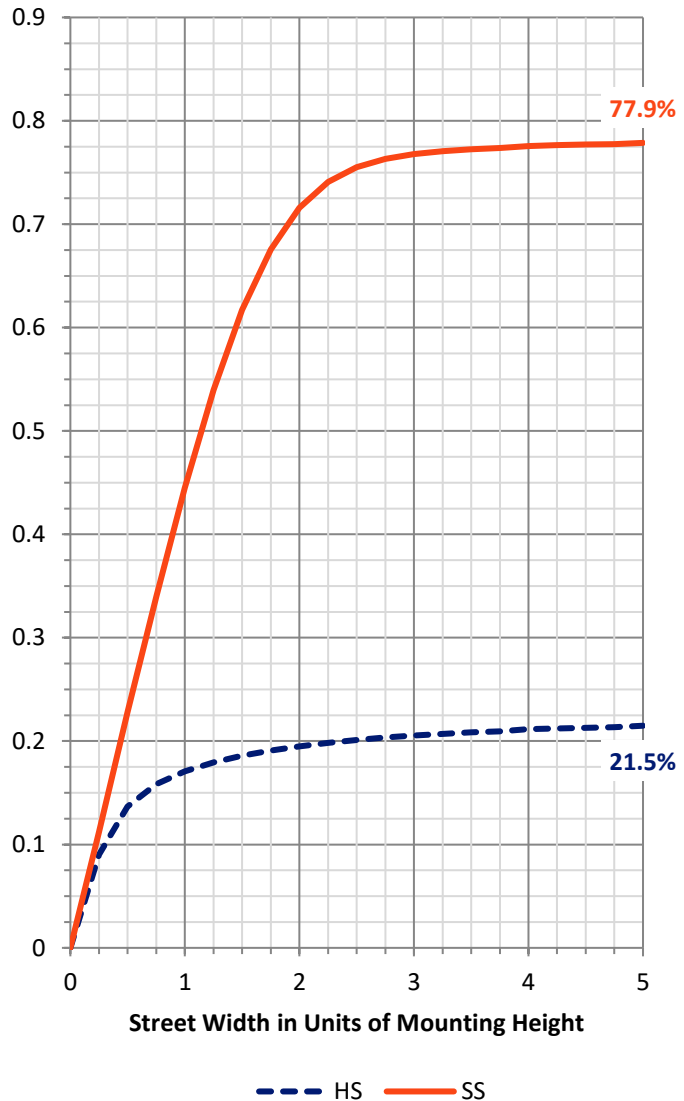
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1903.2	0.0	1903.2
	% Fixture	21.9	0.0	21.9
<b>Street Side</b>	Lumens	6795.8	0.0	6795.8
	% Fixture	78.1	0.0	78.1
<b>Total</b>	Lumens	8699.0	0.0	8699.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.6	1.2
10°-20°	338.8	3.9
20°-30°	589.7	6.8
30°-40°	864.7	9.9
40°-50°	1265.2	14.5
50°-60°	1977.3	22.7
60°-70°	2350.1	27.0
70°-80°	1070.3	12.3
80°-90°	137.2	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°	8699.0	100.0
0°-180°	8699.0	100.0

**Coefficient of Utilization**

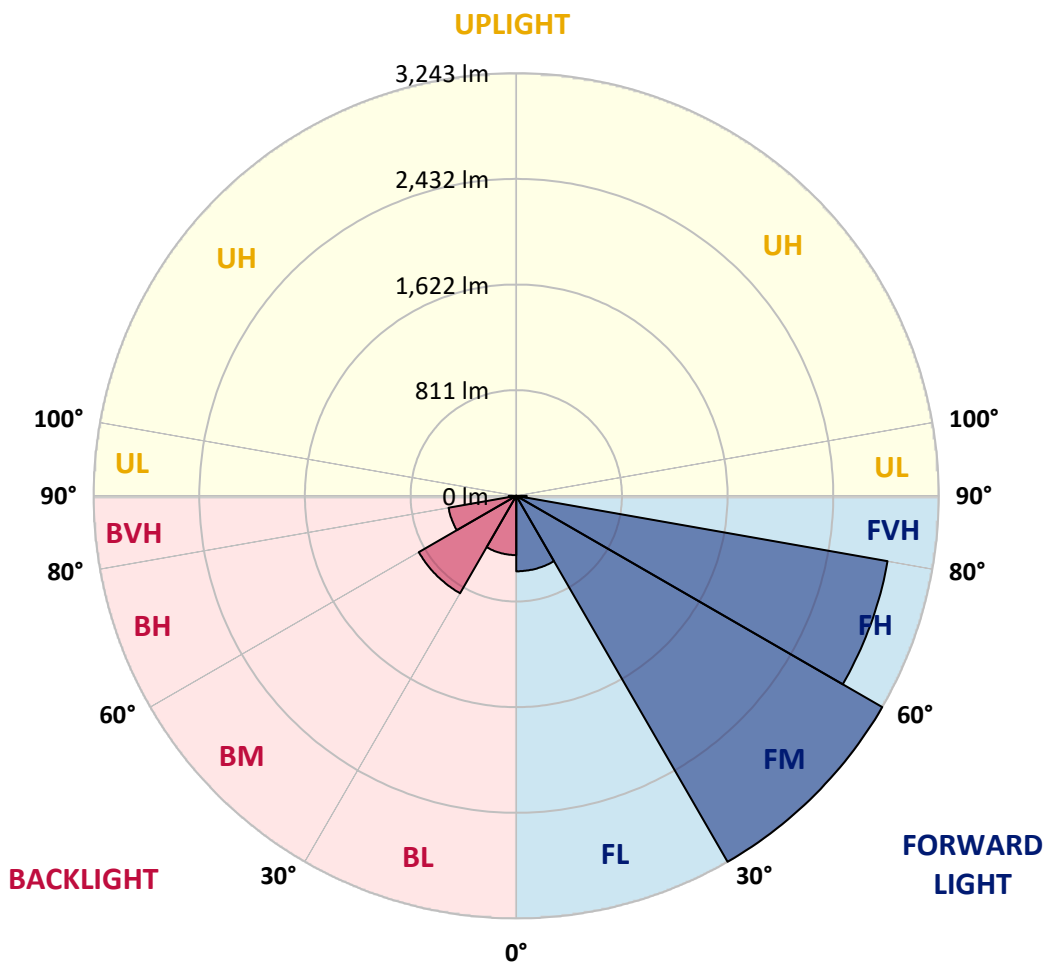


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	579.4	6.7			
FM (30°-60°)	3243.2	37.3			
FH (60°-80°)	2893.2	33.3			G2/5000
FVH (80°-90°)	80.0	0.9			G1/100
BL (0°-30°)	454.8	5.2	B1/500		
BM (30°-60°)	863.9	9.9	B1/1000		
BH (60°-80°)	527.2	6.1	B2/1000		G2/1000
BVH (80°-90°)	57.2	0.7			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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0
2.5°	1090.5	1085.8	1083.4	1085.8	1083.4	1078.7	1081.1	1078.7	1076.3	1074.0	1074.0
5°	1104.6	1099.9	1097.5	1099.9	1102.2	1097.5	1097.5	1097.5	1090.5	1088.1	1083.4
7.5°	1114.0	1107.0	1107.0	1111.7	1116.4	1118.7	1123.4	1121.1	1114.0	1109.3	1099.9
10°	1144.6	1135.2	1135.2	1135.2	1139.9	1144.6	1149.4	1151.7	1149.4	1147.0	1139.9
12.5°	1191.7	1182.3	1182.3	1182.3	1182.3	1180.0	1187.0	1189.4	1194.1	1194.1	1182.3
15°	1255.3	1243.6	1238.9	1229.4	1227.1	1222.4	1231.8	1231.8	1238.9	1241.2	1229.4
17.5°	1316.6	1302.4	1297.7	1288.3	1278.9	1267.1	1276.5	1278.9	1293.0	1295.4	1276.5
20°	1380.2	1375.5	1368.4	1354.3	1337.8	1326.0	1335.4	1333.1	1344.8	1349.5	1326.0
22.5°	1462.6	1450.8	1446.1	1427.3	1408.4	1396.7	1396.7	1401.4	1413.1	1413.1	1377.8
25°	1561.5	1545.0	1533.3	1512.1	1488.5	1474.4	1476.7	1481.4	1497.9	1486.2	1432.0
27.5°	1684.0	1667.5	1651.0	1608.6	1585.1	1556.8	1554.5	1559.2	1585.1	1554.5	1483.8
30°	1799.4	1792.3	1778.2	1745.2	1707.5	1660.4	1639.2	1641.6	1660.4	1618.0	1528.5
32.5°	1898.3	1888.9	1881.8	1858.3	1832.4	1775.8	1747.6	1749.9	1747.6	1695.8	1582.7
35°	2016.1	2001.9	1997.2	1976.0	1943.1	1905.4	1893.6	1888.9	1874.8	1804.1	1653.4
37.5°	2129.1	2115.0	2107.9	2096.2	2070.2	2037.3	2037.3	2034.9	2006.7	1907.7	1724.0
40°	2263.4	2246.9	2225.7	2218.6	2197.4	2173.9	2155.0	2143.3	2093.8	2004.3	1860.6
42.5°	2425.9	2416.5	2404.7	2374.1	2341.1	2336.4	2282.2	2277.5	2242.2	2190.4	2053.8
45°	2659.1	2640.2	2623.7	2614.3	2574.3	2531.9	2456.5	2437.7	2437.7	2425.9	2279.9
47.5°	2894.6	2861.6	2885.2	2878.1	2868.7	2821.6	2675.5	2677.9	2673.2	2703.8	2612.0
50°	3052.4	3033.5	3099.5	3130.1	3196.0	3196.0	2986.4	2960.5	2979.4	3068.9	2951.1
52.5°	3174.9	3163.1	3238.4	3358.6	3554.0	3572.9	3356.2	3302.0	3327.9	3455.1	3408.0
55°	3273.8	3262.0	3349.1	3558.8	3872.0	3987.4	3782.5	3758.9	3707.1	3843.7	3857.9
57.5°	3332.7	3306.7	3438.6	3718.9	4131.1	4397.2	4281.8	4274.7	4154.6	4281.8	4345.4
60°	3243.2	3226.7	3408.0	3784.9	4340.7	4783.5	4868.3	4868.3	4653.9	4722.2	4800.0
62.5°	2953.5	2932.3	3123.0	3631.8	4366.6	5099.1	5450.0	5421.7	5134.4	5132.0	5063.7
65°	2402.3	2376.4	2590.8	3127.7	4039.2	5136.8	5843.3	5826.8	5494.8	5400.5	5080.2
67°	1745.2	1728.7	1912.4	2444.7	3403.3	4809.4	5892.8	5906.9	5638.4	5438.2	4842.4
67.5°	1566.2	1563.9	1717.0	2244.5	3217.2	4689.3	5859.8	5873.9	5636.1	5407.6	4748.1
70°	730.1	763.1	906.8	1286.0	2169.2	3693.0	5318.1	5372.3	5334.6	5054.3	3999.2
72.5°	339.2	353.3	416.9	621.8	1165.8	2381.1	4310.1	4439.6	4604.5	4336.0	3167.8
75°	209.6	214.3	249.7	322.7	548.8	1144.6	3068.9	3210.2	3459.8	3262.0	2025.5
77.5°	164.9	167.2	190.8	230.8	320.3	492.2	1684.0	1860.6	2185.7	1928.9	1019.8
80°	122.5	127.2	146.0	179.0	226.1	252.0	716.0	781.9	1055.1	807.8	423.9
82.5°	89.5	94.2	113.1	129.5	157.8	160.2	292.0	308.5	452.2	327.4	183.7
85°	75.4	75.4	87.1	96.6	106.0	89.5	143.7	141.3	174.3	148.4	73.0
87.5°	35.3	37.7	82.4	61.2	51.8	37.7	42.4	44.7	54.2	58.9	28.3
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°	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0	1074.0
2.5°	1071.6	1071.6	1071.6	1074.0	1076.3	1076.3	1078.7	1078.7	1081.1	1083.4	1088.1
5°	1081.1	1081.1	1078.7	1081.1	1085.8	1088.1	1092.8	1097.5	1102.2	1107.0	1109.3
7.5°	1099.9	1097.5	1097.5	1097.5	1102.2	1107.0	1114.0	1118.7	1125.8	1128.2	1132.9
10°	1135.2	1130.5	1130.5	1132.9	1135.2	1128.2	1125.8	1123.4	1130.5	1135.2	1139.9
12.5°	1177.6	1172.9	1170.6	1163.5	1154.1	1139.9	1128.2	1118.7	1121.1	1125.8	1132.9
15°	1222.4	1212.9	1208.2	1191.7	1168.2	1137.6	1118.7	1107.0	1107.0	1107.0	1114.0
17.5°	1269.5	1260.0	1241.2	1210.6	1165.8	1123.4	1099.9	1078.7	1069.3	1066.9	1071.6
20°	1314.2	1300.1	1269.5	1222.4	1151.7	1095.2	1064.6	1029.2	1015.1	1005.7	1010.4
22.5°	1356.6	1337.8	1295.4	1222.4	1128.2	1052.8	998.6	951.5	928.0	923.3	925.6
25°	1401.4	1377.8	1321.3	1208.2	1076.3	989.2	913.8	864.4	833.8	829.0	836.1
27.5°	1446.1	1410.8	1342.5	1170.6	1017.5	902.1	822.0	774.9	758.4	749.0	751.3
30°	1483.8	1450.8	1363.7	1118.7	937.4	800.8	727.8	706.6	694.8	690.1	690.1
32.5°	1533.3	1502.6	1377.8	1057.5	843.2	708.9	661.8	645.3	635.9	624.1	626.5
35°	1594.5	1566.2	1370.7	979.8	753.7	647.7	610.0	586.5	565.3	548.8	546.4
37.5°	1676.9	1655.7	1335.4	885.6	671.2	602.9	565.3	534.6	504.0	478.1	473.4
40°	1813.5	1764.1	1283.6	781.9	614.7	567.6	522.9	485.2	447.5	419.2	412.2
42.5°	1987.8	1884.2	1212.9	676.0	567.6	529.9	485.2	435.7	400.4	374.5	374.5
45°	2190.4	2013.7	1128.2	595.9	518.2	492.2	438.1	395.7	374.5	358.0	355.6
47.5°	2430.6	2143.3	1019.8	532.3	478.1	459.3	405.1	379.2	365.1	350.9	348.6
50°	2753.3	2317.5	939.7	478.1	438.1	421.6	395.7	374.5	360.4	350.9	348.6
52.5°	3123.0	2541.3	883.2	435.7	405.1	398.0	393.3	376.8	362.7	355.6	353.3
55°	3523.4	2816.9	829.0	400.4	379.2	388.6	398.0	381.5	372.1	362.7	358.0
57.5°	3900.3	3050.0	741.9	369.8	360.4	376.8	395.7	383.9	372.1	365.1	362.7
60°	4157.0	3167.8	621.8	341.5	341.5	360.4	388.6	372.1	360.4	362.7	362.7
62.5°	4239.4	3123.0	492.2	315.6	322.7	341.5	367.4	358.0	353.3	365.1	365.1
65°	4116.9	2941.7	393.3	294.4	303.8	318.0	355.6	365.1	379.2	405.1	407.5
67°	3796.6	2649.6	332.1	277.9	287.3	310.9	369.8	402.7	402.7	431.0	431.0
67.5°	3702.4	2550.7	322.7	273.2	285.0	310.9	376.8	412.2	402.7	435.7	435.7
70°	3010.0	2006.7	273.2	259.1	275.6	327.4	407.5	414.5	393.3	423.9	421.6
72.5°	2232.8	1450.8	249.7	244.9	256.7	308.5	405.1	398.0	367.4	376.8	369.8
75°	1380.2	840.8	230.8	226.1	233.2	273.2	374.5	362.7	327.4	320.3	313.2
77.5°	666.5	426.3	197.8	204.9	212.0	237.9	329.7	318.0	287.3	270.9	268.5
80°	289.7	219.0	169.6	181.4	183.7	202.5	273.2	259.1	230.8	204.9	204.9
82.5°	143.7	122.5	134.2	150.7	146.0	162.5	214.3	190.8	169.6	141.3	136.6
85°	65.9	70.7	98.9	113.1	98.9	101.3	146.0	134.2	106.0	80.1	82.4
87.5°	23.6	33.0	56.5	68.3	49.5	47.1	77.7	56.5	33.0	9.4	11.8
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)