

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: P398119

Luminaire Tested: **ARCH-S-PA1-90-727-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P398119  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-90-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9692 lumens  
Efficiency: N/A  
Efficacy: 103.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B2 - U0 - G3

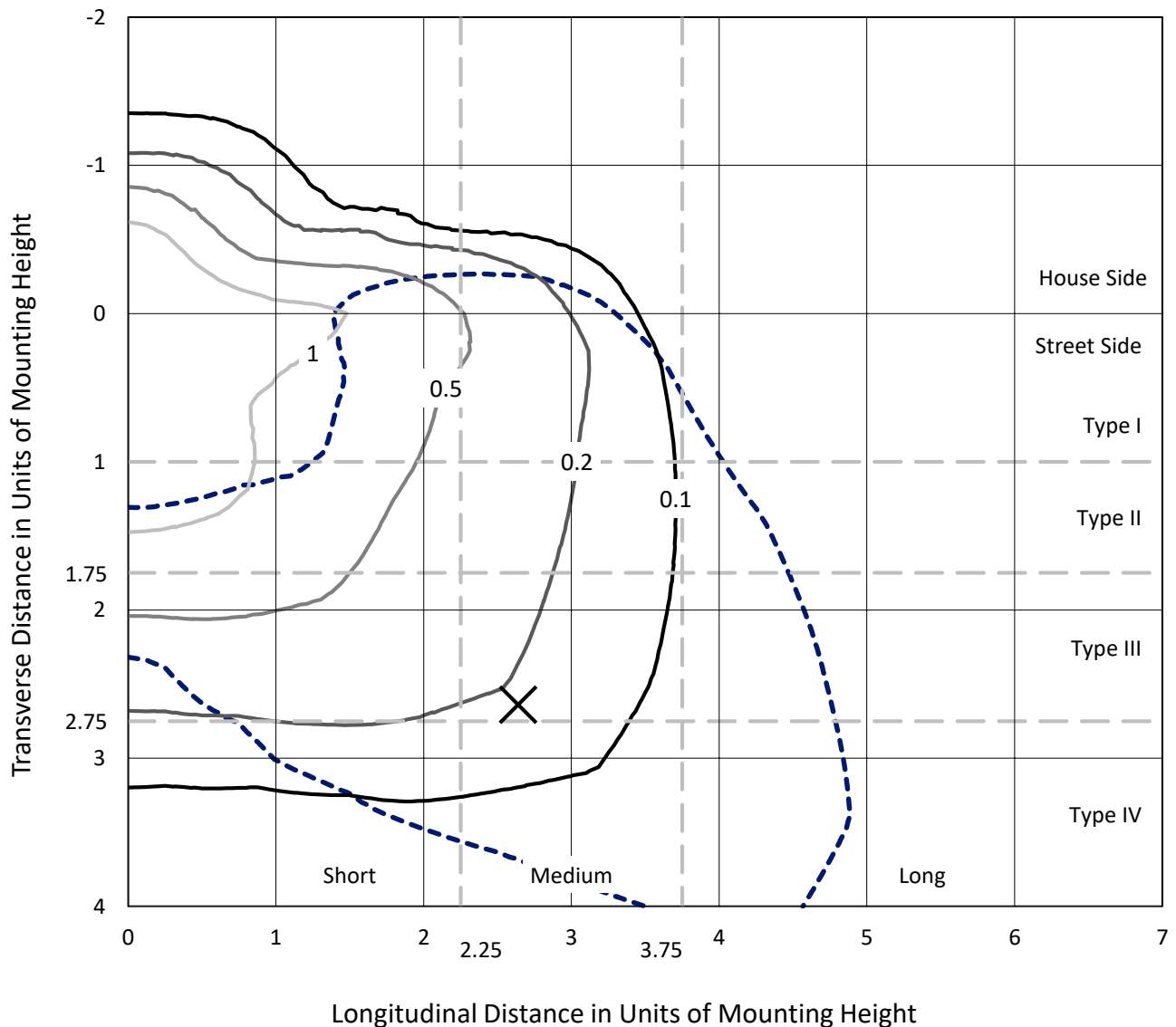
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

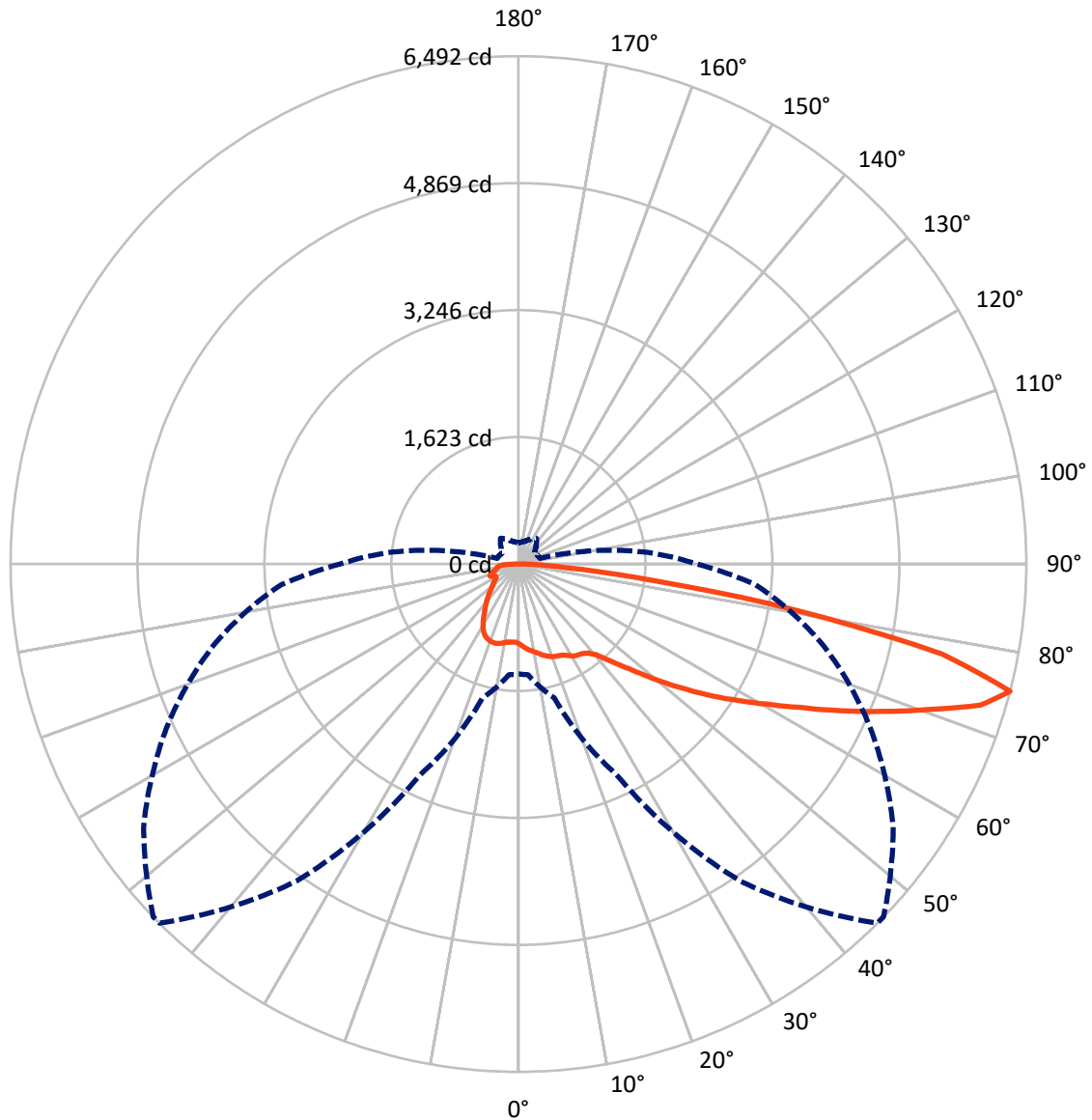
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2141.9	0.0	2141.9
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	7550.1	0.0	7550.1
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	9692.0	0.0	9692.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.7	1.0
10°-20°	320.4	3.3
20°-30°	546.2	5.6
30°-40°	765.2	7.9
40°-50°	1124.2	11.6
50°-60°	1789.2	18.5
60°-70°	2545.2	26.3
70°-80°	2131.1	22.0
80°-90°	369.9	3.8
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°	9692.0	100.0
0°-180°	9692.0	100.0

**Coefficient of Utilization**



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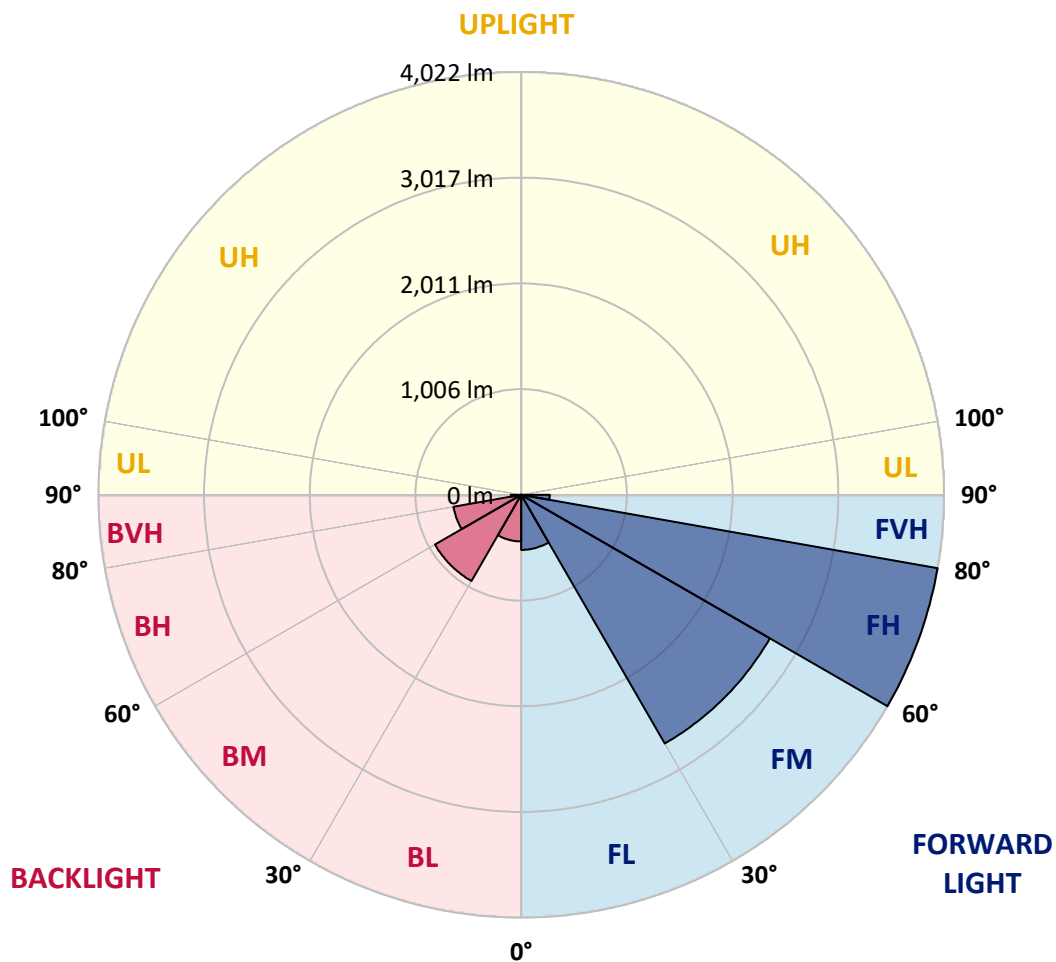
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	523.9	5.4			
FM (30°-60°)	2731.9	28.2			
FH (60°-80°)	4022.4	41.5			G2/5000
FVH (80°-90°)	271.9	2.8			G3/500
BL (0°-30°)	443.3	4.6	B1/500		
BM (30°-60°)	946.8	9.8	B1/1000		
BH (60°-80°)	653.8	6.7	B2/1000		G2/1000
BVH (80°-90°)	98.0	1.0			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9
2.5°	1076.1	1071.0	1068.4	1068.4	1058.0	1051.5	1050.2	1041.2	1033.4	1025.6	1019.2
5°	1138.3	1134.4	1126.7	1120.2	1105.9	1087.8	1085.2	1065.8	1046.4	1028.2	1012.7
7.5°	1195.3	1187.5	1178.5	1165.5	1142.2	1117.6	1113.7	1086.5	1059.3	1032.1	1011.4
10°	1243.2	1235.4	1222.5	1204.4	1174.6	1144.8	1140.9	1112.4	1083.9	1051.5	1021.8
12.5°	1288.5	1282.1	1262.6	1238.0	1203.1	1175.9	1172.0	1147.4	1117.6	1081.3	1042.5
15°	1327.4	1320.9	1300.2	1271.7	1231.5	1210.8	1205.6	1182.3	1152.6	1113.7	1073.6
17.5°	1346.8	1346.8	1324.8	1293.7	1256.2	1240.6	1236.7	1208.2	1181.0	1143.5	1103.3
20°	1353.3	1355.9	1340.3	1302.8	1270.4	1263.9	1260.0	1236.7	1205.6	1169.4	1131.8
22.5°	1357.2	1362.3	1349.4	1306.7	1279.5	1275.6	1273.0	1257.4	1232.8	1197.9	1160.3
25°	1370.1	1370.1	1361.0	1313.1	1291.1	1289.8	1289.8	1280.8	1263.9	1234.1	1196.6
27.5°	1389.5	1388.2	1376.6	1327.4	1317.0	1320.9	1319.6	1318.3	1306.7	1276.9	1236.7
30°	1421.9	1421.9	1409.0	1355.9	1349.4	1366.2	1367.5	1370.1	1352.0	1305.4	1273.0
32.5°	1471.1	1465.9	1453.0	1384.4	1374.0	1389.5	1392.1	1390.8	1375.3	1331.3	1315.7
35°	1622.6	1611.0	1564.4	1447.8	1396.0	1405.1	1406.4	1412.8	1415.4	1380.5	1372.7
37.5°	1888.1	1872.6	1801.3	1598.0	1465.9	1443.9	1442.6	1459.5	1473.7	1442.6	1442.6
40°	2176.9	2163.9	2122.5	1857.0	1595.4	1522.9	1517.7	1533.3	1551.4	1529.4	1535.9
42.5°	2425.5	2435.9	2439.8	2131.6	1789.7	1670.6	1656.3	1634.3	1662.8	1643.4	1669.3
45°	2612.0	2606.8	2678.1	2412.6	2040.9	1855.7	1836.3	1776.7	1813.0	1811.7	1868.7
47.5°	2810.2	2801.1	2830.9	2676.8	2327.1	2082.4	2052.6	1964.5	2018.9	2056.5	2151.0
50°	2997.9	3000.5	3010.9	2885.3	2637.9	2358.2	2320.6	2202.8	2280.5	2359.5	2492.9
52.5°	3242.7	3224.6	3211.6	3128.7	2986.3	2645.7	2621.1	2486.4	2595.2	2688.4	2865.8
55°	3456.4	3444.7	3436.9	3433.1	3277.7	2963.0	2937.1	2797.2	2953.9	3019.9	3281.5
57.5°	3684.3	3677.8	3719.2	3785.3	3723.1	3285.4	3258.2	3123.5	3298.4	3345.0	3732.2
60°	3851.3	3855.2	3969.2	4137.5	4094.8	3635.1	3602.7	3483.6	3633.8	3675.2	4182.9
62.5°	3852.6	3891.5	4155.7	4457.4	4506.6	4037.8	4000.3	3870.8	3978.2	3978.2	4586.9
65°	3484.9	3528.9	4122.0	4536.4	4923.6	4517.0	4480.7	4277.4	4317.5	4263.1	4966.3
67.5°	3118.4	3170.2	3728.3	4542.9	5216.3	5029.8	4987.1	4684.0	4615.4	4478.1	5231.8
70°	2874.9	2911.2	3377.4	4458.7	5392.4	5565.9	5533.5	5069.9	4849.8	4658.1	5176.1
72.5°	2420.4	2407.4	2852.9	4058.5	5490.8	6174.6	6147.4	5489.5	5053.1	4572.7	4414.7
75°	1405.1	1420.6	1770.3	2973.3	4949.5	6491.8	6489.3	5848.2	4963.7	4039.1	3042.0
77.5°	405.3	417.0	581.5	1306.7	3130.0	5537.4	5714.8	5348.4	4195.8	2878.8	1577.3
80°	177.4	186.5	252.5	435.1	1348.1	3616.9	3772.3	3616.9	2530.4	1320.9	619.0
82.5°	104.9	111.4	164.5	269.4	646.2	1721.1	1930.8	1686.1	1091.7	560.7	256.4
85°	59.6	62.2	94.5	170.9	406.6	602.2	676.0	633.3	532.2	318.6	134.7
87.5°	27.2	28.5	46.6	80.3	227.9	203.3	211.1	279.7	308.2	194.3	67.3
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°	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9	1017.9
2.5°	1016.6	1012.7	1004.9	1002.3	998.4	999.7	1001.0	1001.0	1002.3	998.4	998.4
5°	1006.2	999.7	992.0	992.0	992.0	1002.3	1011.4	1016.6	1019.2	1019.2	1016.6
7.5°	1002.3	994.6	985.5	988.1	990.7	1003.6	1020.5	1037.3	1042.5	1042.5	1039.9
10°	1010.1	1002.3	995.9	999.7	1006.2	1016.6	1029.5	1045.1	1058.0	1059.3	1058.0
12.5°	1028.2	1019.2	1012.7	1020.5	1028.2	1034.7	1041.2	1047.7	1064.5	1067.1	1067.1
15°	1058.0	1049.0	1041.2	1047.7	1050.2	1050.2	1050.2	1050.2	1067.1	1069.7	1069.7
17.5°	1087.8	1080.0	1072.3	1073.6	1065.8	1055.4	1051.5	1050.2	1059.3	1067.1	1068.4
20°	1116.3	1109.8	1102.0	1089.1	1069.7	1050.2	1043.8	1043.8	1049.0	1060.6	1060.6
22.5°	1147.4	1139.6	1126.7	1096.9	1064.5	1037.3	1030.8	1034.7	1041.2	1056.7	1055.4
25°	1182.3	1172.0	1150.0	1094.3	1047.7	1015.3	1016.6	1028.2	1039.9	1056.7	1056.7
27.5°	1221.2	1206.9	1162.9	1073.6	1010.1	979.0	990.7	1017.9	1034.7	1052.8	1055.4
30°	1263.9	1251.0	1173.3	1037.3	949.2	920.7	949.2	993.3	1019.2	1036.0	1039.9
32.5°	1315.7	1305.4	1182.3	990.7	870.2	845.6	887.1	941.5	982.9	1002.3	1006.2
35°	1380.5	1370.1	1194.0	937.6	796.4	770.5	808.1	863.8	918.2	942.8	950.5
37.5°	1464.6	1449.1	1204.4	880.6	734.3	704.5	722.6	773.1	822.3	856.0	865.1
40°	1572.1	1547.5	1213.4	815.9	679.9	646.2	652.7	677.3	705.8	735.6	747.2
42.5°	1723.6	1674.4	1214.7	747.2	624.2	593.1	590.5	598.3	598.3	598.3	602.2
45°	1934.7	1841.5	1217.3	682.5	567.2	534.8	527.1	524.5	505.1	467.5	464.9
47.5°	2201.5	2060.3	1229.0	628.1	507.6	479.2	468.8	458.4	422.2	383.3	375.6
50°	2543.4	2314.2	1252.3	576.3	457.1	437.7	424.8	400.2	360.0	330.2	322.5
52.5°	2937.1	2615.9	1274.3	521.9	419.6	406.6	391.1	361.3	318.6	300.4	297.9
55°	3389.0	2952.6	1318.3	474.0	387.2	378.1	363.9	335.4	303.0	290.1	288.8
57.5°	3851.3	3329.5	1380.5	431.2	356.1	350.9	350.9	326.3	305.6	300.4	300.4
60°	4296.8	3653.2	1332.6	391.1	327.6	330.2	354.8	348.4	332.8	339.3	343.2
62.5°	4642.6	3843.6	1081.3	358.7	306.9	330.2	393.7	393.7	375.6	373.0	373.0
65°	4790.2	3841.0	760.2	334.1	299.1	362.6	439.0	418.3	370.4	352.2	348.4
67.5°	4752.7	3672.6	524.5	317.3	296.6	396.3	459.7	401.5	347.1	331.5	319.9
70°	4422.4	3316.5	404.0	301.7	292.7	382.0	453.3	382.0	328.9	314.7	304.3
72.5°	3567.7	2659.9	335.4	286.2	277.1	353.5	431.2	363.9	314.7	299.1	288.8
75°	2275.3	1673.1	283.6	265.5	247.3	317.3	401.5	345.8	299.1	278.4	270.7
77.5°	1094.3	721.3	247.3	240.9	222.7	294.0	371.7	322.5	278.4	261.6	256.4
80°	442.9	330.2	215.0	216.3	204.6	279.7	350.9	300.4	257.7	239.6	230.5
82.5°	230.5	191.7	181.3	186.5	186.5	266.8	335.4	282.3	239.6	231.8	202.0
85°	124.3	119.1	139.9	150.2	161.9	240.9	312.1	262.9	218.9	187.8	181.3
87.5°	60.9	77.7	79.0	90.7	112.7	193.0	262.9	220.2	182.6	151.5	148.9
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)