

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: P399241

Luminaire Tested: **ARCH-L-PA3-110-827-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399241  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-110-827-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9817 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

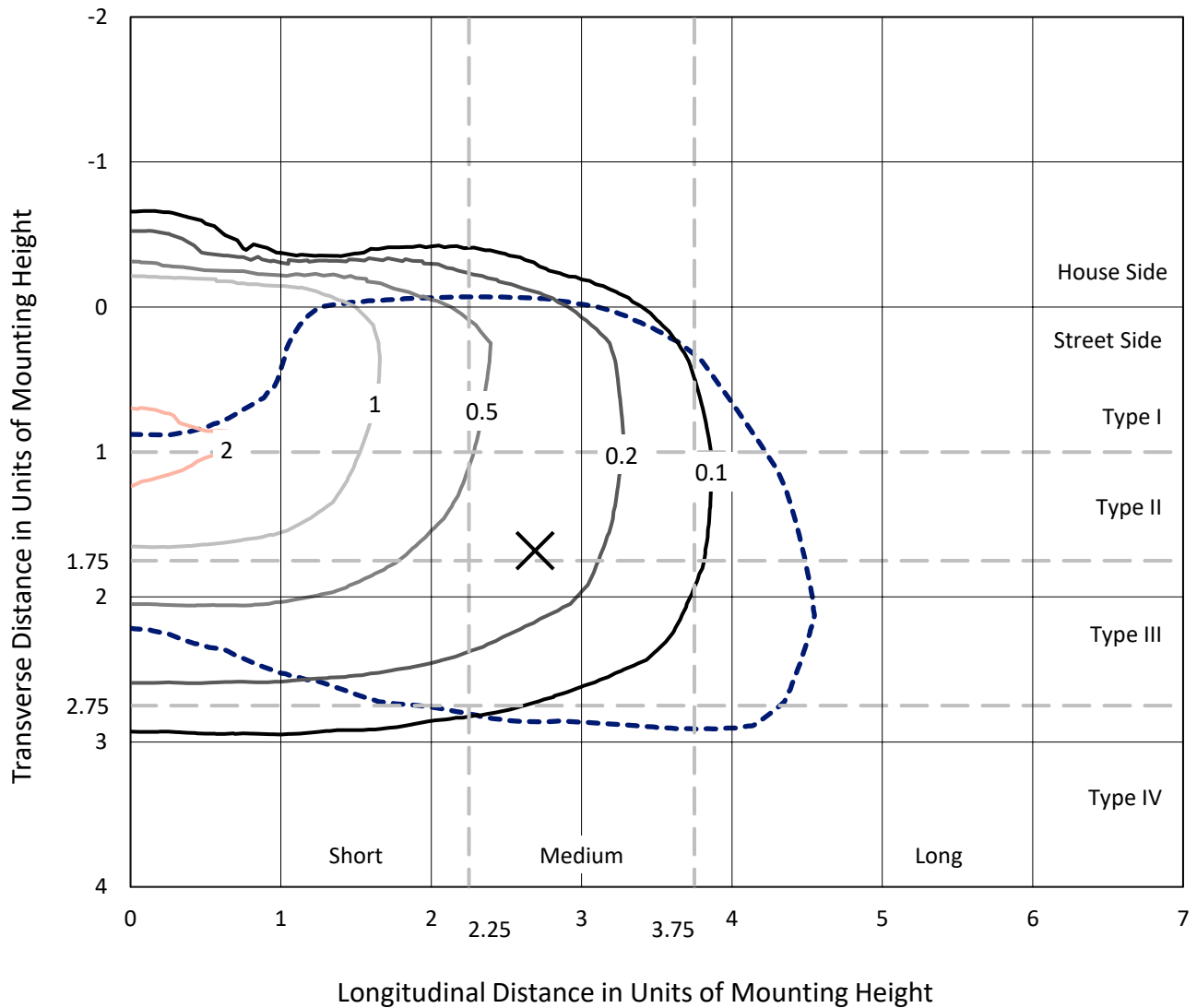
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

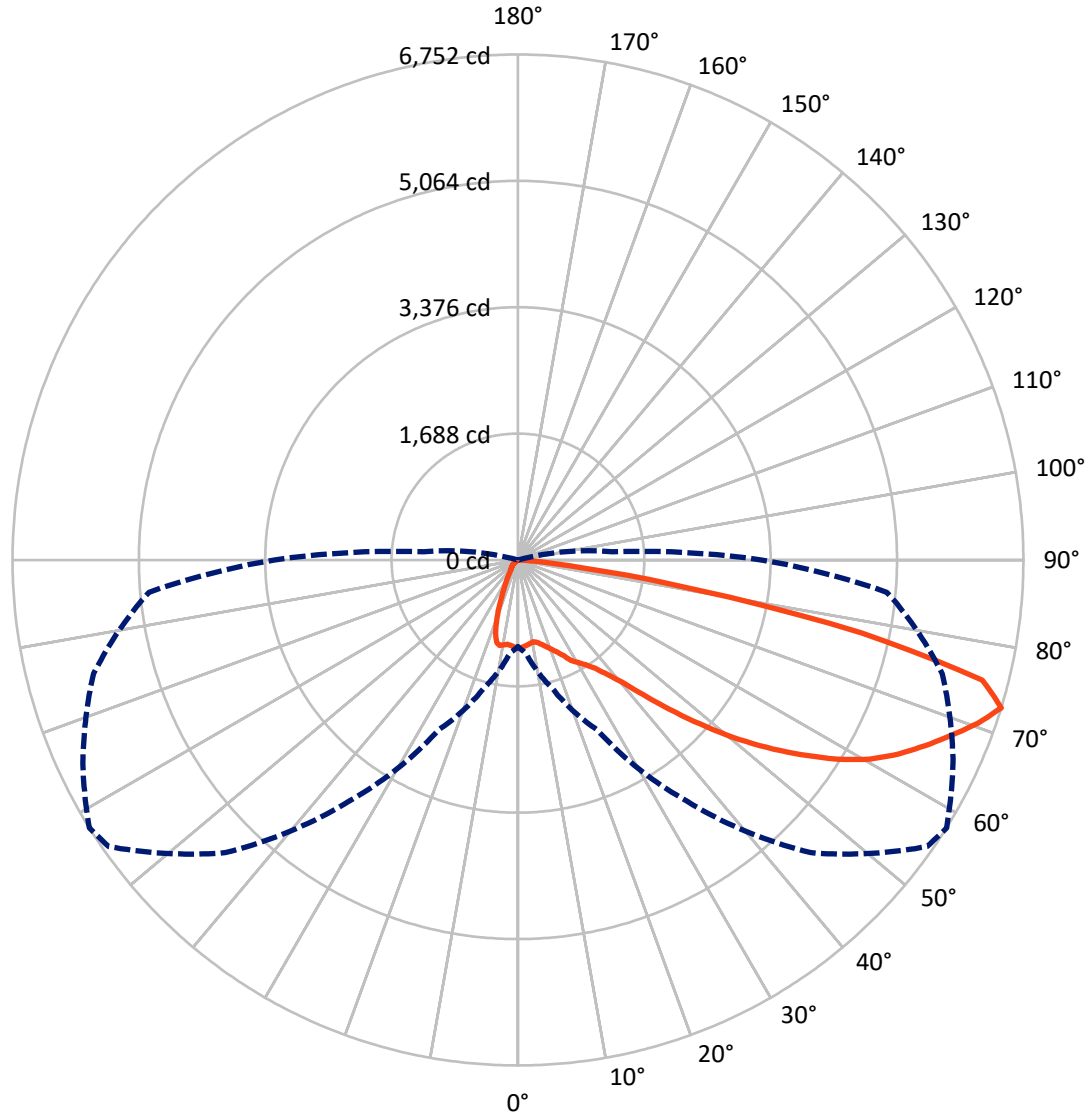
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	954.6	0.0	954.6
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	8862.4	0.0	8862.4
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	9817.0	0.0	9817.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.1	1.1
10°-20°	281.6	2.9
20°-30°	442.3	4.5
30°-40°	762.8	7.8
40°-50°	1451.4	14.8
50°-60°	2298.5	23.4
60°-70°	2682.1	27.3
70°-80°	1679.8	17.1
80°-90°	110.3	1.1
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°	9817.0	100.0
0°-180°	9817.0	100.0

**Coefficient of Utilization**

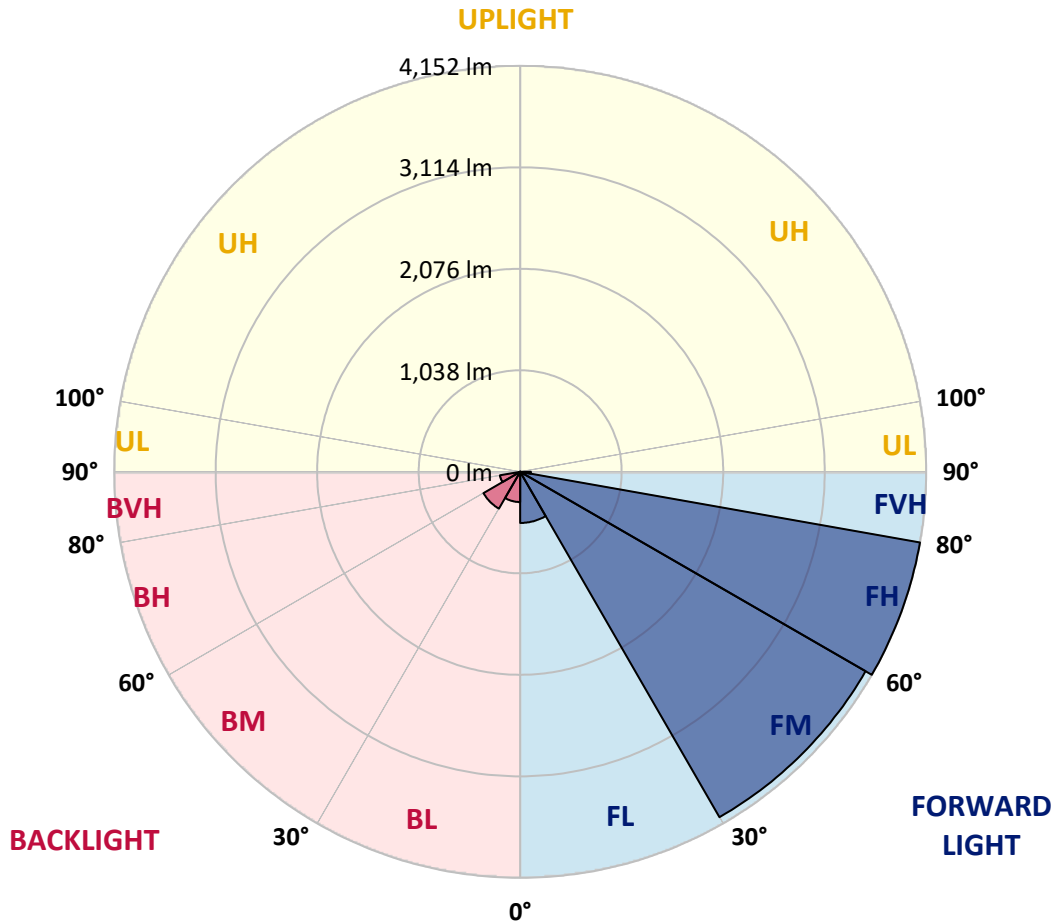


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	522.9	5.3			
FM (30°-60°)	4078.4	41.5			
FH (60°-80°)	4151.9	42.3			G2/5000
FVH (80°-90°)	109.2	1.1			G2/225
BL (0°-30°)	309.1	3.1	B1/500		
BM (30°-60°)	434.4	4.4	B1/1000		
BH (60°-80°)	210.1	2.1	B1/500		G1/500
BVH (80°-90°)	1.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**  
 Type IV Medium





REPORT NUMBER: P399241

CATALOG NUMBER: ARCH-L-PA3-110-827-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0
2.5°	1172.7	1167.4	1165.7	1163.9	1165.7	1167.4	1162.2	1167.4	1163.9	1165.7	1169.2
5°	1130.6	1125.3	1123.6	1125.3	1130.6	1139.4	1142.9	1148.1	1148.1	1153.4	1155.2
7.5°	1083.2	1079.7	1077.9	1081.4	1092.0	1111.3	1121.8	1128.8	1135.8	1146.4	1156.9
10°	1056.8	1055.1	1053.3	1058.6	1069.1	1086.7	1100.7	1111.3	1137.6	1167.4	1186.8
12.5°	1039.3	1039.3	1042.8	1053.3	1067.4	1081.4	1114.8	1128.8	1169.2	1214.8	1241.2
15°	1025.2	1025.2	1030.5	1049.8	1069.1	1102.5	1151.6	1167.4	1214.8	1271.0	1306.1
17.5°	1014.7	1018.2	1021.7	1041.0	1077.9	1134.1	1192.0	1214.8	1272.8	1334.2	1372.8
20°	1016.5	1020.0	1021.7	1041.0	1093.7	1171.0	1244.7	1271.0	1337.7	1402.7	1441.3
22.5°	1027.0	1032.3	1034.0	1060.4	1121.8	1209.6	1304.4	1334.2	1406.2	1474.7	1504.5
25°	1070.9	1074.4	1063.9	1086.7	1162.2	1269.3	1381.6	1413.2	1485.2	1548.4	1573.0
27.5°	1220.1	1223.6	1165.7	1139.4	1193.8	1318.4	1476.4	1520.3	1609.8	1652.0	1655.5
30°	1543.1	1546.6	1432.5	1307.9	1269.3	1360.6	1529.1	1590.5	1706.4	1753.8	1732.7
32.5°	1959.2	1955.7	1799.4	1615.1	1448.3	1434.3	1604.6	1669.5	1795.9	1841.6	1825.8
35°	2377.0	2382.3	2248.9	1971.5	1732.7	1573.0	1701.1	1776.6	1929.4	1994.3	1966.2
37.5°	2663.2	2698.3	2640.4	2340.2	2082.1	1829.3	1857.4	1938.1	2129.5	2217.3	2157.6
40°	3067.0	3058.2	2917.7	2696.5	2468.3	2208.5	2110.2	2148.8	2368.2	2485.9	2392.8
42.5°	3609.4	3591.9	3353.1	3137.2	2882.6	2670.2	2470.1	2463.0	2642.1	2779.1	2643.9
45°	4101.0	4074.7	3911.4	3702.5	3423.3	3179.3	2909.0	2847.5	2972.2	3088.0	2930.0
47.5°	4492.5	4448.6	4332.7	4222.1	4153.7	3774.5	3368.9	3275.9	3339.1	3425.1	3202.1
50°	4955.9	4834.8	4666.3	4599.6	4741.8	4448.6	3811.3	3721.8	3718.3	3767.4	3483.0
52.5°	5166.6	4947.2	4852.4	4908.5	5159.6	5075.3	4288.8	4160.7	4109.8	4115.0	3744.6
55°	4912.1	4887.5	4938.4	5113.9	5442.2	5393.1	4747.0	4589.0	4513.5	4418.7	3995.7
57.5°	4622.4	4697.9	4899.8	5235.1	5800.4	5724.9	5198.2	5019.1	4880.5	4662.8	4274.8
60°	4355.5	4432.8	4766.3	5263.2	5997.0	6044.4	5573.9	5403.6	5198.2	4912.1	4582.0
62.5°	3950.0	4009.7	4478.4	5222.8	5911.0	6230.5	5835.5	5707.3	5516.0	5149.1	4934.9
65°	3493.6	3532.2	3995.7	4899.8	5742.4	6209.4	6051.4	5979.4	5793.3	5396.6	5284.2
67.5°	2993.2	3038.9	3425.1	4318.7	5412.4	6111.1	6255.1	6248.0	6035.6	5670.5	5537.0
70°	2417.4	2420.9	2740.4	3581.3	4836.6	5914.5	6507.9	6523.7	6267.3	5875.9	5547.6
72.5°	1156.9	1251.7	1776.6	2499.9	3930.7	5528.3	6672.9	6751.9	6413.1	5868.8	4948.9
75°	265.1	273.9	517.9	1188.5	2305.0	4243.2	6260.3	6407.8	6058.4	5075.3	3486.5
77.5°	96.6	101.8	145.7	347.6	886.6	2192.7	4480.2	4696.1	4478.4	3281.1	1648.5
80°	65.0	63.2	75.5	154.5	407.3	621.5	2291.0	2419.2	2208.5	1120.0	395.0
82.5°	33.4	35.1	52.7	86.0	273.9	215.9	765.4	832.1	684.7	224.7	73.7
85°	15.8	15.8	29.8	54.4	115.9	75.5	170.3	205.4	184.3	98.3	24.6
87.5°	15.8	15.8	28.1	35.1	59.7	31.6	42.1	52.7	49.2	52.7	8.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399241

CATALOG NUMBER: ARCH-L-PA3-110-827-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0	1178.0
2.5°	1169.2	1167.4	1165.7	1169.2	1167.4	1171.0	1171.0	1174.5	1174.5	1171.0	1169.2
5°	1153.4	1149.9	1146.4	1146.4	1144.6	1148.1	1158.7	1167.4	1169.2	1163.9	1162.2
7.5°	1155.2	1155.2	1151.6	1144.6	1132.3	1132.3	1132.3	1142.9	1148.1	1144.6	1142.9
10°	1186.8	1188.5	1179.7	1163.9	1142.9	1123.6	1086.7	1032.3	981.4	967.3	962.0
12.5°	1241.2	1242.9	1225.4	1197.3	1153.4	1039.3	898.8	768.9	668.9	640.8	635.5
15°	1306.1	1307.9	1276.3	1230.6	1097.2	832.1	623.2	475.8	388.0	366.9	365.2
17.5°	1372.8	1369.3	1321.9	1234.2	930.4	589.9	379.2	303.7	280.9	275.6	277.4
20°	1437.8	1427.3	1362.3	1169.2	716.3	386.2	277.4	259.8	254.6	251.0	251.0
22.5°	1497.5	1476.4	1395.7	1041.0	502.1	277.4	247.5	244.0	237.0	231.7	230.0
25°	1557.2	1527.3	1416.7	874.3	337.1	242.3	233.5	226.5	217.7	210.7	208.9
27.5°	1629.2	1587.0	1406.2	663.6	252.8	224.7	217.7	207.2	194.9	184.3	180.8
30°	1697.6	1650.2	1346.5	458.2	215.9	207.2	196.6	180.8	165.0	152.7	149.2
32.5°	1783.6	1729.2	1239.4	300.2	187.8	180.8	170.3	151.0	129.9	115.9	112.4
35°	1906.5	1845.1	1102.5	210.7	165.0	152.7	138.7	117.6	94.8	84.3	82.5
37.5°	2078.6	1996.1	930.4	170.3	145.7	128.2	107.1	86.0	70.2	61.4	59.7
40°	2289.2	2162.8	739.1	151.0	129.9	107.1	80.8	61.4	50.9	43.9	43.9
42.5°	2517.5	2319.1	544.2	138.7	114.1	87.8	59.7	43.9	36.9	33.4	31.6
45°	2752.7	2457.8	366.9	128.2	100.1	66.7	42.1	29.8	24.6	24.6	22.8
47.5°	2996.7	2550.8	237.0	115.9	84.3	49.2	28.1	21.1	17.6	17.6	17.6
50°	3239.0	2600.0	168.5	105.3	68.5	33.4	21.1	15.8	14.0	14.0	14.0
52.5°	3414.6	2568.4	135.2	91.3	52.7	24.6	15.8	12.3	10.5	10.5	10.5
55°	3567.3	2514.0	117.6	79.0	38.6	17.6	12.3	10.5	8.8	8.8	8.8
57.5°	3723.5	2443.7	105.3	66.7	28.1	12.3	8.8	7.0	7.0	7.0	7.0
60°	3865.7	2324.4	91.3	52.7	19.3	8.8	7.0	5.3	5.3	5.3	5.3
62.5°	4004.4	2222.5	79.0	40.4	14.0	7.0	3.5	3.5	1.8	1.8	1.8
65°	4083.4	2085.6	63.2	26.3	8.8	5.3	1.8	1.8	0.0	0.0	0.0
67.5°	4058.9	1922.3	43.9	15.8	5.3	3.5	1.8	0.0	0.0	0.0	0.0
70°	3888.6	1702.9	26.3	8.8	5.3	3.5	1.8	0.0	0.0	0.0	0.0
72.5°	3256.6	1260.5	15.8	7.0	3.5	1.8	0.0	0.0	0.0	0.0	0.0
75°	2175.1	579.3	8.8	5.3	1.8	1.8	0.0	0.0	0.0	0.0	0.0
77.5°	995.4	173.8	5.3	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	200.1	45.6	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.1	8.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)