

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: P399313

Luminaire Tested: **ARCH-L-PA3-120-827-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399313  
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-PA3-120-827-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 530mA 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: 10580 lumens  
Efficiency: N/A  
Efficacy: 86.0 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

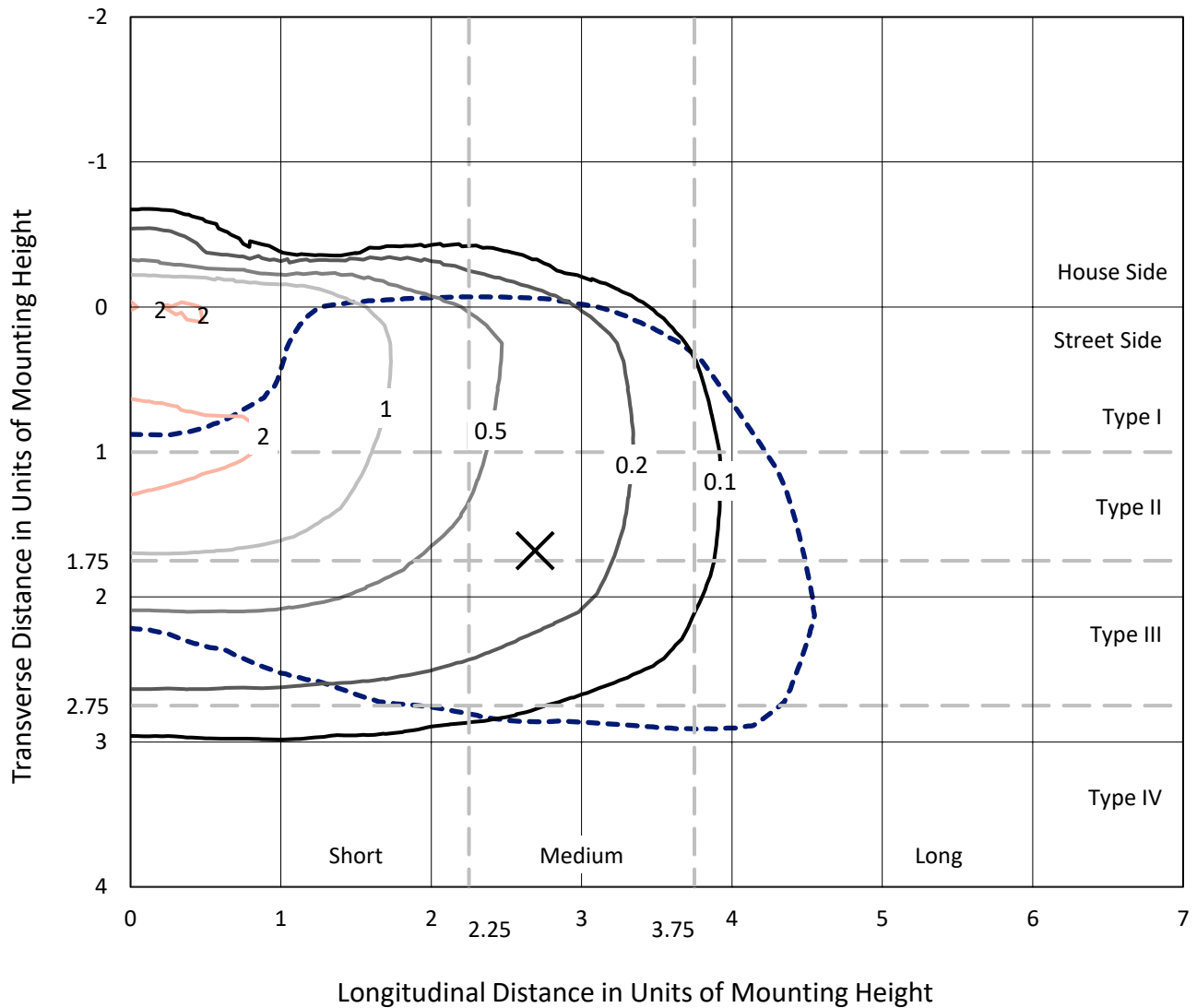
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

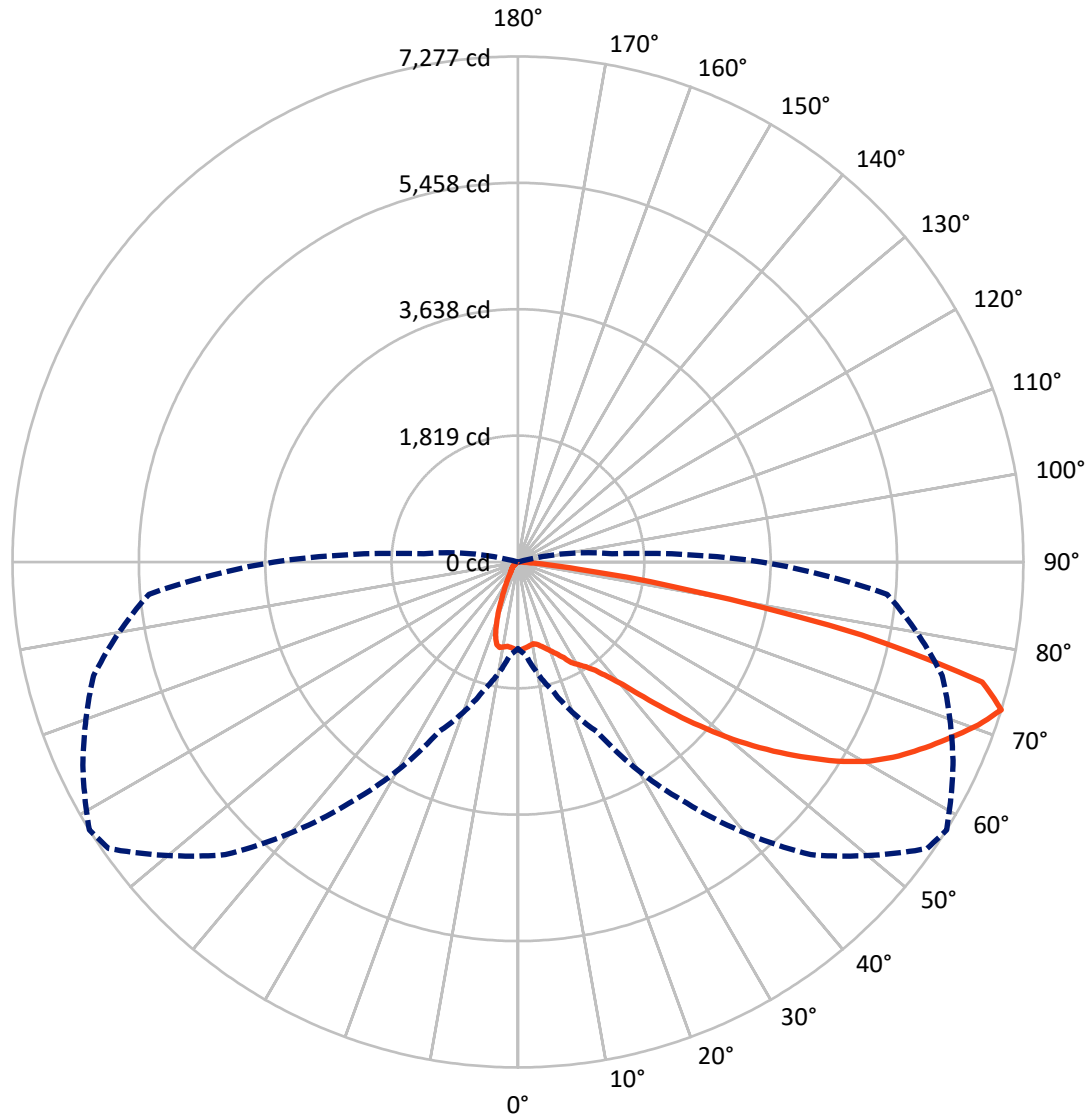
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 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	1028.8	0.0	1028.8
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	9551.2	0.0	9551.2
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	10580.0	0.0	10580.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.5	1.1
10°-20°	303.5	2.9
20°-30°	476.7	4.5
30°-40°	822.1	7.8
40°-50°	1564.2	14.8
50°-60°	2477.2	23.4
60°-70°	2890.6	27.3
70°-80°	1810.4	17.1
80°-90°	118.8	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°	10580.0	100.0
0°-180°	10580.0	100.0

**Coefficient of Utilization**

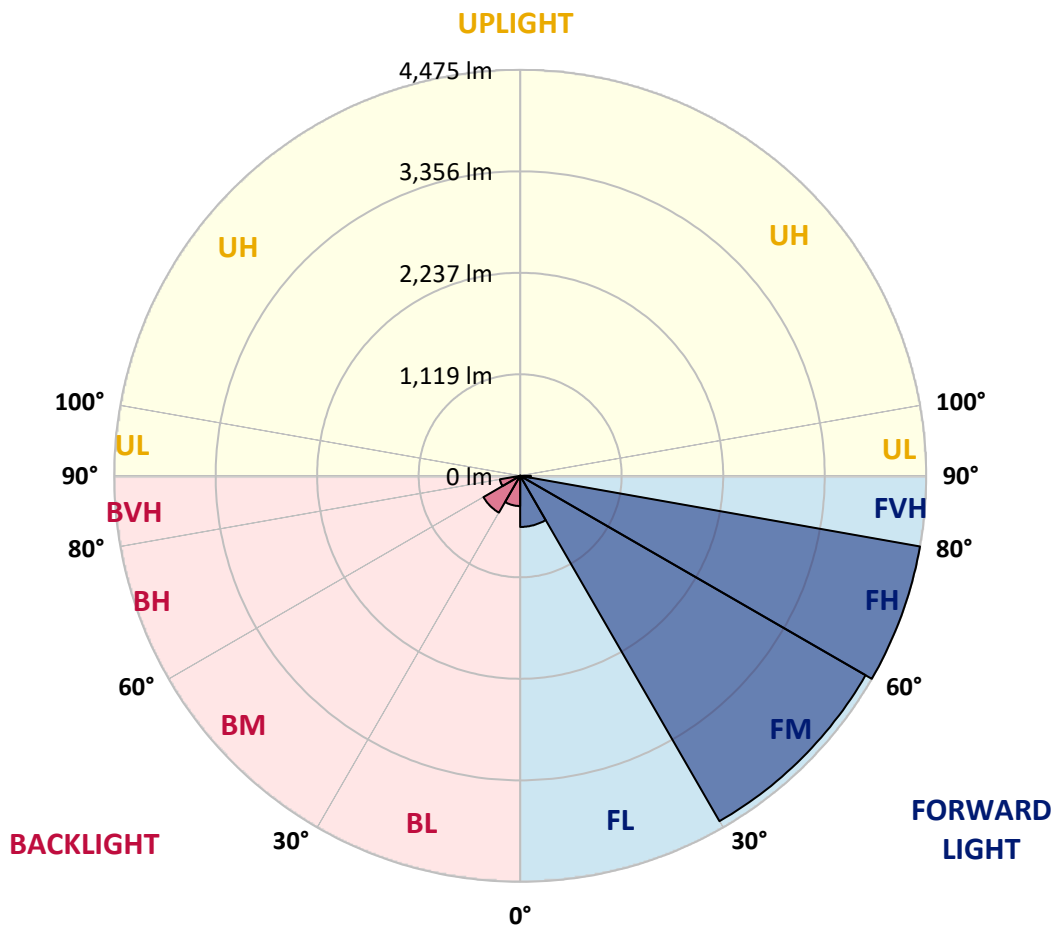


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	563.5	5.3			
FM (30°-60°)	4395.4	41.5			
FH (60°-80°)	4474.6	42.3			G2/5000
FVH (80°-90°)	117.7	1.1			G2/225
BL (0°-30°)	333.2	3.1	B1/500		
BM (30°-60°)	468.1	4.4	B1/1000		
BH (60°-80°)	226.4	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5
2.5°	1263.9	1258.2	1256.3	1254.4	1256.3	1258.2	1252.5	1258.2	1254.4	1256.3	1260.1
5°	1218.5	1212.8	1210.9	1212.8	1218.5	1227.9	1231.7	1237.4	1237.4	1243.0	1244.9
7.5°	1167.4	1163.6	1161.7	1165.5	1176.8	1197.6	1209.0	1216.6	1224.1	1235.5	1246.8
10°	1139.0	1137.1	1135.2	1140.9	1152.2	1171.2	1186.3	1197.6	1226.0	1258.2	1279.0
12.5°	1120.1	1120.1	1123.9	1135.2	1150.3	1165.5	1201.4	1216.6	1260.1	1309.3	1337.6
15°	1104.9	1104.9	1110.6	1131.4	1152.2	1188.2	1241.2	1258.2	1309.3	1369.8	1407.7
17.5°	1093.6	1097.4	1101.1	1122.0	1161.7	1222.2	1284.7	1309.3	1371.7	1437.9	1479.5
20°	1095.5	1099.3	1101.1	1122.0	1178.7	1262.0	1341.4	1369.8	1441.7	1511.7	1553.3
22.5°	1106.8	1112.5	1114.4	1142.8	1209.0	1303.6	1405.8	1437.9	1515.5	1589.3	1621.4
25°	1154.1	1157.9	1146.6	1171.2	1252.5	1367.9	1489.0	1523.1	1600.6	1668.7	1695.2
27.5°	1314.9	1318.7	1256.3	1227.9	1286.6	1420.9	1591.2	1638.5	1735.0	1780.4	1784.2
30°	1663.1	1666.9	1543.9	1409.5	1367.9	1466.3	1647.9	1714.2	1839.0	1890.1	1867.4
32.5°	2111.5	2107.7	1939.3	1740.6	1560.9	1545.8	1729.3	1799.3	1935.5	1984.7	1967.7
35°	2561.8	2567.5	2423.7	2124.7	1867.4	1695.2	1833.4	1914.7	2079.3	2149.3	2119.0
37.5°	2870.2	2908.0	2845.6	2522.0	2243.9	1971.5	2001.7	2088.8	2295.0	2389.6	2325.3
40°	3305.3	3295.9	3144.5	2906.1	2660.2	2380.1	2274.2	2315.8	2552.3	2679.1	2578.8
42.5°	3890.0	3871.0	3613.7	3381.0	3106.7	2877.7	2662.1	2654.5	2847.5	2995.0	2849.4
45°	4419.7	4391.3	4215.4	3990.2	3689.4	3426.4	3135.1	3068.8	3203.2	3328.0	3157.8
47.5°	4841.6	4794.3	4669.5	4550.3	4476.5	4067.8	3630.8	3530.5	3598.6	3691.3	3451.0
50°	5341.1	5210.6	5028.9	4957.1	5110.3	4794.3	4107.5	4011.1	4007.3	4060.2	3753.7
52.5°	5568.2	5331.7	5229.5	5290.0	5560.6	5469.8	4622.2	4484.1	4429.2	4434.9	4035.6
55°	5293.8	5267.3	5322.2	5511.4	5865.2	5812.2	5116.0	4945.7	4864.3	4762.2	4306.2
57.5°	4981.6	5063.0	5280.6	5642.0	6251.2	6169.8	5602.2	5409.2	5259.8	5025.2	4607.0
60°	4694.1	4777.3	5136.8	5672.2	6463.1	6514.2	6007.1	5823.6	5602.2	5293.8	4938.1
62.5°	4257.0	4321.3	4826.5	5628.7	6370.4	6714.7	6289.0	6150.9	5944.7	5549.3	5318.4
65°	3765.1	3806.7	4306.2	5280.6	6188.7	6692.0	6521.7	6444.2	6243.6	5816.0	5694.9
67.5°	3225.9	3275.1	3691.3	4654.3	5833.1	6586.1	6741.2	6733.6	6504.7	6111.2	5967.4
70°	2605.3	2609.1	2953.4	3859.7	5212.5	6374.2	7013.7	7030.7	6754.5	6332.5	5978.7
72.5°	1246.8	1349.0	1914.7	2694.2	4236.2	5957.9	7191.5	7276.7	6911.5	6325.0	5333.6
75°	285.7	295.2	558.1	1280.9	2484.2	4573.0	6746.9	6905.8	6529.3	5469.8	3757.5
77.5°	104.1	109.7	157.0	374.6	955.5	2363.1	4828.4	5061.1	4826.5	3536.2	1776.6
80°	70.0	68.1	81.4	166.5	438.9	669.8	2469.1	2607.2	2380.1	1207.1	425.7
82.5°	35.9	37.8	56.8	92.7	295.2	232.7	824.9	896.8	737.9	242.2	79.5
85°	17.0	17.0	32.2	58.7	124.9	81.4	183.5	221.4	198.7	106.0	26.5
87.5°	17.0	17.0	30.3	37.8	64.3	34.1	45.4	56.8	53.0	56.8	9.5
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°	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5	1269.5
2.5°	1260.1	1258.2	1256.3	1260.1	1258.2	1262.0	1262.0	1265.8	1265.8	1262.0	1260.1
5°	1243.0	1239.3	1235.5	1235.5	1233.6	1237.4	1248.7	1258.2	1260.1	1254.4	1252.5
7.5°	1244.9	1244.9	1241.2	1233.6	1220.3	1220.3	1220.3	1231.7	1237.4	1233.6	1231.7
10°	1279.0	1280.9	1271.4	1254.4	1231.7	1210.9	1171.2	1112.5	1057.6	1042.5	1036.8
12.5°	1337.6	1339.5	1320.6	1290.3	1243.0	1120.1	968.7	828.7	720.9	690.6	684.9
15°	1407.7	1409.5	1375.5	1326.3	1182.5	896.8	671.7	512.7	418.1	395.4	393.5
17.5°	1479.5	1475.8	1424.7	1330.1	1002.8	635.7	408.7	327.3	302.7	297.0	298.9
20°	1549.6	1538.2	1468.2	1260.1	771.9	416.2	298.9	280.0	274.3	270.6	270.6
22.5°	1613.9	1591.2	1504.1	1122.0	541.1	298.9	266.8	263.0	255.4	249.7	247.9
25°	1678.2	1646.0	1526.8	942.2	363.3	261.1	251.6	244.1	234.6	227.0	225.1
27.5°	1755.8	1710.4	1515.5	715.2	272.4	242.2	234.6	223.3	210.0	198.7	194.9
30°	1829.6	1778.5	1451.2	493.8	232.7	223.3	211.9	194.9	177.8	164.6	160.8
32.5°	1922.3	1863.6	1335.8	323.5	202.4	194.9	183.5	162.7	140.0	124.9	121.1
35°	2054.7	1988.5	1188.2	227.0	177.8	164.6	149.5	126.8	102.2	90.8	88.9
37.5°	2240.1	2151.2	1002.8	183.5	157.0	138.1	115.4	92.7	75.7	66.2	64.3
40°	2467.2	2331.0	796.5	162.7	140.0	115.4	87.0	66.2	54.9	47.3	47.3
42.5°	2713.1	2499.3	586.5	149.5	123.0	94.6	64.3	47.3	39.7	35.9	34.1
45°	2966.7	2648.8	395.4	138.1	107.8	71.9	45.4	32.2	26.5	26.5	24.6
47.5°	3229.7	2749.1	255.4	124.9	90.8	53.0	30.3	22.7	18.9	18.9	18.9
50°	3490.7	2802.1	181.6	113.5	73.8	35.9	22.7	17.0	15.1	15.1	15.1
52.5°	3680.0	2768.0	145.7	98.4	56.8	26.5	17.0	13.2	11.4	11.4	11.4
55°	3844.6	2709.4	126.8	85.1	41.6	18.9	13.2	11.4	9.5	9.5	9.5
57.5°	4012.9	2633.7	113.5	71.9	30.3	13.2	9.5	7.6	7.6	7.6	7.6
60°	4166.2	2505.0	98.4	56.8	20.8	9.5	7.6	5.7	5.7	5.7	5.7
62.5°	4315.7	2395.3	85.1	43.5	15.1	7.6	3.8	3.8	1.9	1.9	1.9
65°	4400.8	2247.7	68.1	28.4	9.5	5.7	1.9	1.9	0.0	0.0	0.0
67.5°	4374.3	2071.7	47.3	17.0	5.7	3.8	1.9	0.0	0.0	0.0	0.0
70°	4190.8	1835.2	28.4	9.5	5.7	3.8	1.9	0.0	0.0	0.0	0.0
72.5°	3509.7	1358.5	17.0	7.6	3.8	1.9	0.0	0.0	0.0	0.0	0.0
75°	2344.2	624.4	9.5	5.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0
77.5°	1072.8	187.3	5.7	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	215.7	49.2	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.4	9.5	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.5	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.8	1.9	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)