

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: P400546

Luminaire Tested: **ARCH-L-PA3-90-830-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400546  
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-PA3-90-830-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 400mA 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: 9015 lumens  
Efficiency: N/A  
Efficacy: 96.9 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

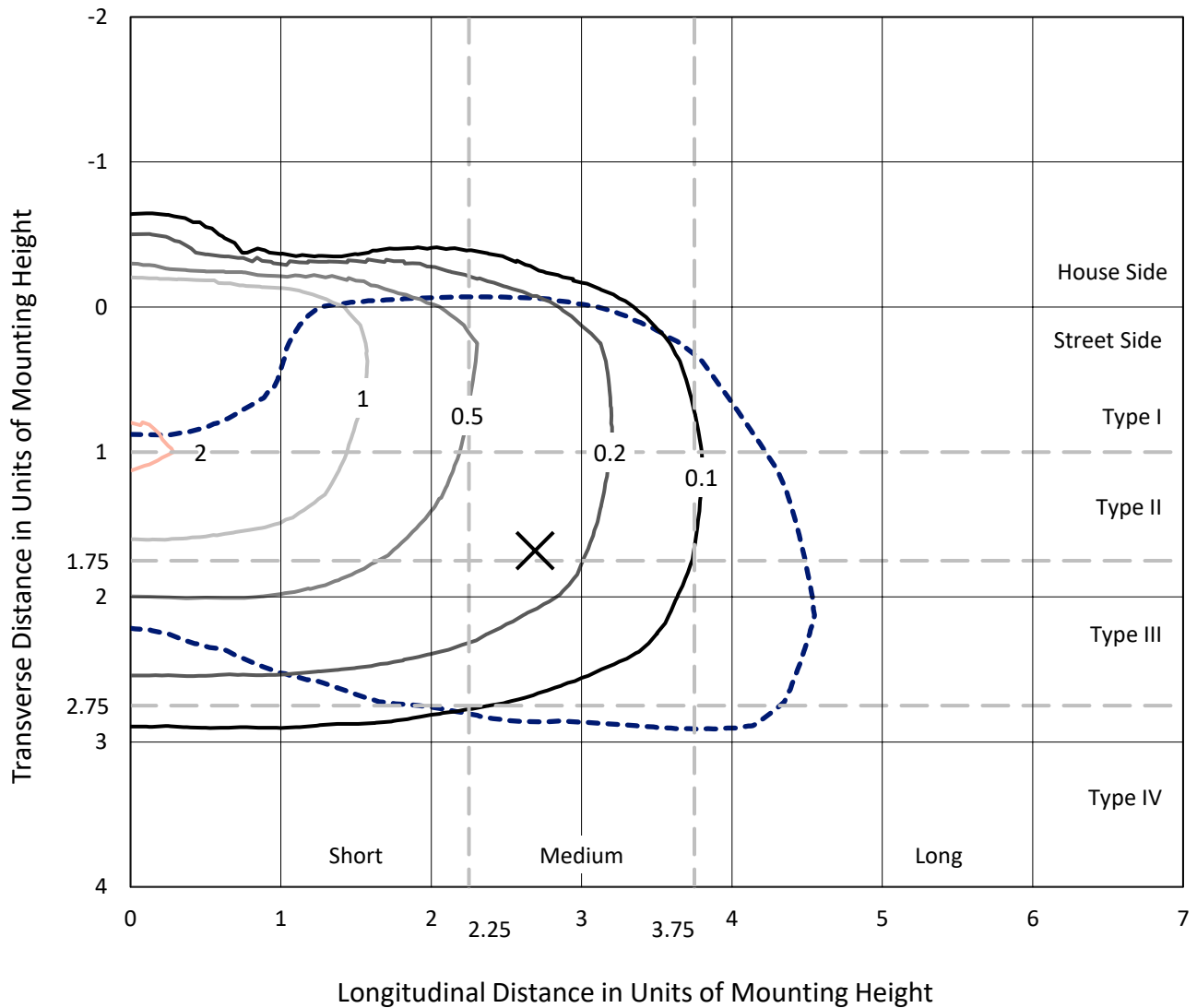
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

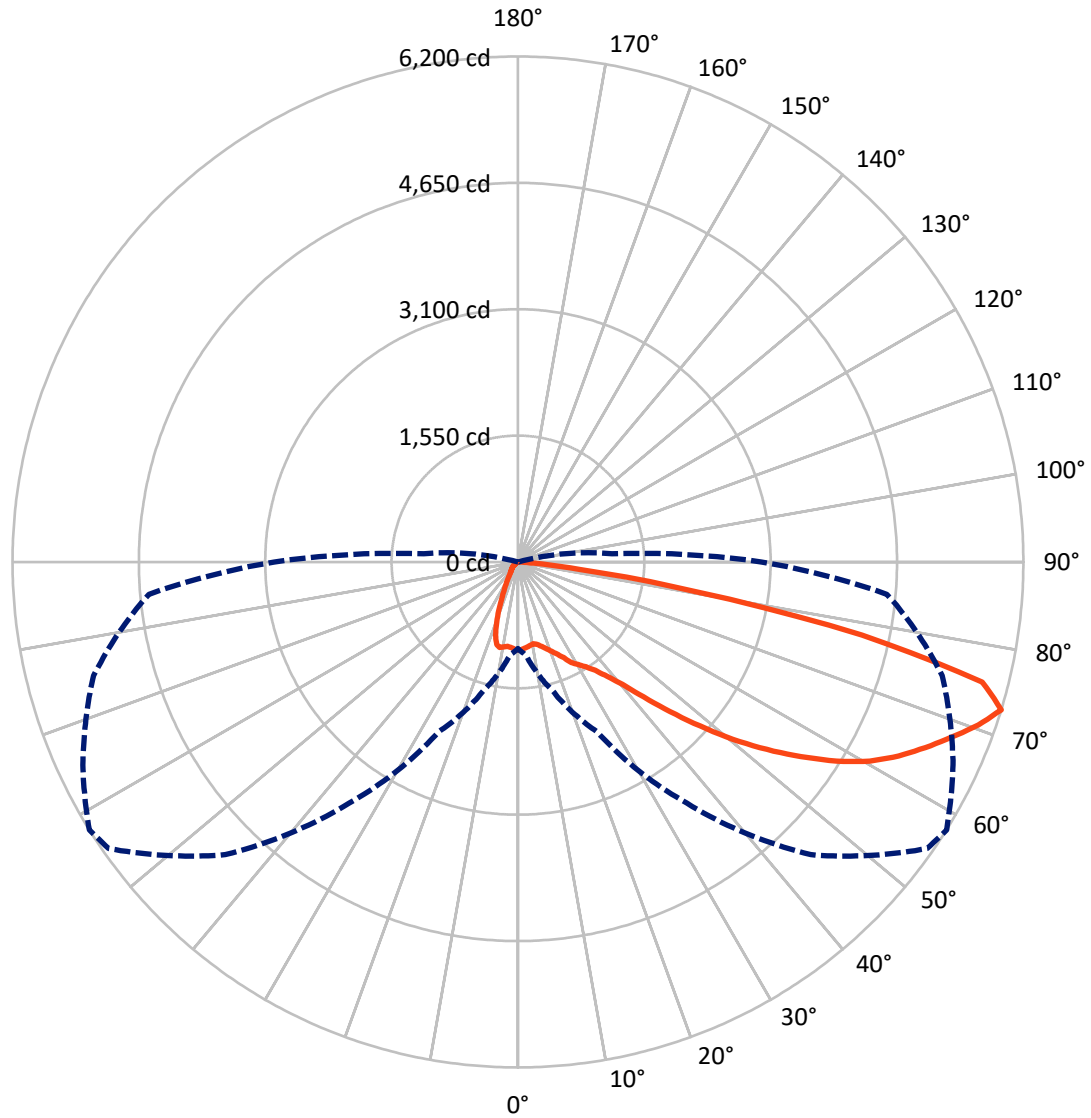
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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	876.6	0.0	876.6
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	8138.4	0.0	8138.4
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	9015.0	0.0	9015.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.3	1.1
10°-20°	258.6	2.9
20°-30°	406.2	4.5
30°-40°	700.5	7.8
40°-50°	1332.8	14.8
50°-60°	2110.8	23.4
60°-70°	2463.0	27.3
70°-80°	1542.6	17.1
80°-90°	101.3	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°	9015.0	100.0
0°-180°	9015.0	100.0

**Coefficient of Utilization**



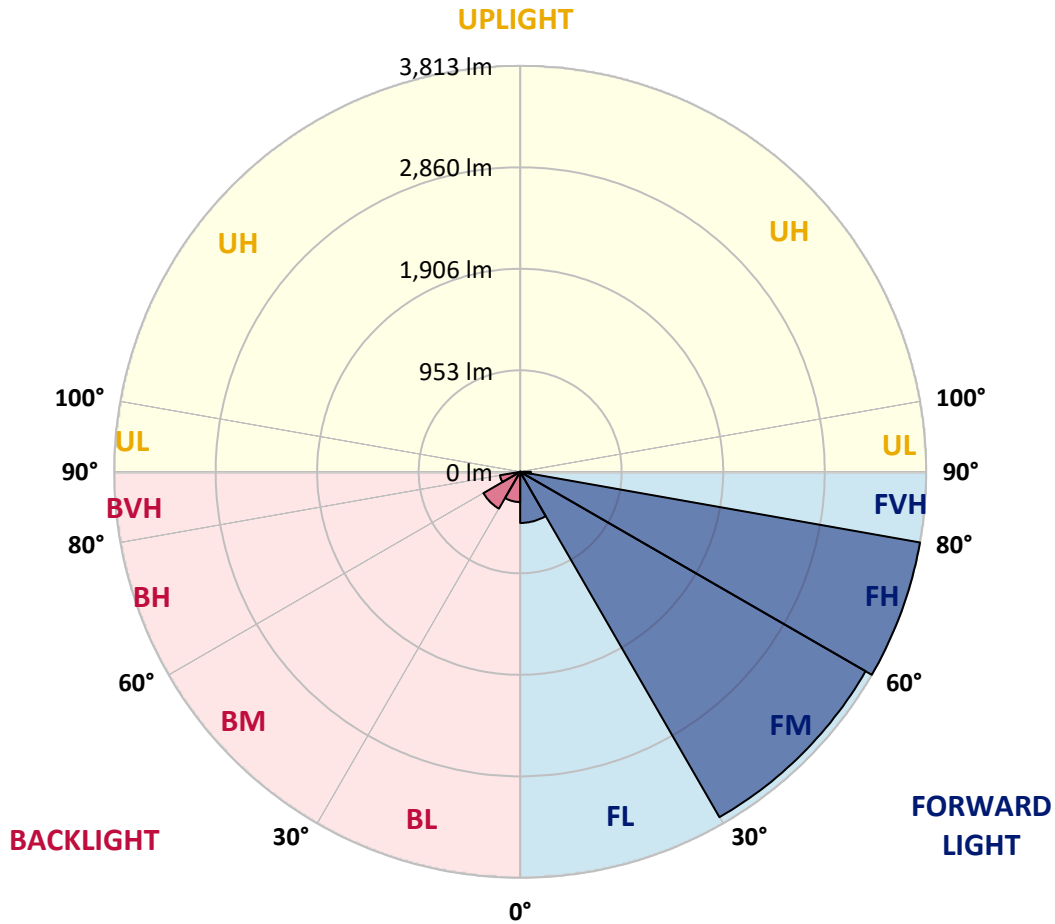
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	480.2	5.3			
FM (30°-60°)	3745.2	41.5			
FH (60°-80°)	3812.7	42.3			G2/5000
FVH (80°-90°)	100.3	1.1			G2/225
BL (0°-30°)	283.9	3.1	B1/500		
BM (30°-60°)	398.9	4.4	B1/1000		
BH (60°-80°)	192.9	2.1	B1/500		G1/500
BVH (80°-90°)	1.0	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°	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7
2.5°	1076.9	1072.1	1070.5	1068.8	1070.5	1072.1	1067.2	1072.1	1068.8	1070.5	1073.7
5°	1038.2	1033.4	1031.8	1033.4	1038.2	1046.3	1049.5	1054.3	1054.3	1059.2	1060.8
7.5°	994.7	991.5	989.9	993.1	1002.8	1020.5	1030.2	1036.6	1043.1	1052.7	1062.4
10°	970.5	968.9	967.3	972.1	981.8	997.9	1010.8	1020.5	1044.7	1072.1	1089.8
12.5°	954.4	954.4	957.6	967.3	980.2	993.1	1023.7	1036.6	1073.7	1115.6	1139.8
15°	941.5	941.5	946.3	964.1	981.8	1012.4	1057.6	1072.1	1115.6	1167.2	1199.4
17.5°	931.8	935.0	938.3	956.0	989.9	1041.4	1094.6	1115.6	1168.8	1225.2	1260.7
20°	933.4	936.7	938.3	956.0	1004.4	1075.3	1143.0	1167.2	1228.4	1288.1	1323.6
22.5°	943.1	947.9	949.5	973.7	1030.2	1110.8	1197.8	1225.2	1291.3	1354.2	1381.6
25°	983.4	986.6	977.0	997.9	1067.2	1165.6	1268.8	1297.8	1363.9	1421.9	1444.5
27.5°	1120.4	1123.7	1070.5	1046.3	1096.3	1210.7	1355.8	1396.1	1478.3	1517.0	1520.2
30°	1417.1	1420.3	1315.5	1201.0	1165.6	1249.4	1404.2	1460.6	1567.0	1610.5	1591.2
32.5°	1799.1	1795.9	1652.4	1483.2	1330.0	1317.1	1473.5	1533.1	1649.2	1691.1	1676.6
35°	2182.8	2187.7	2065.1	1810.4	1591.2	1444.5	1562.2	1631.5	1771.7	1831.4	1805.6
37.5°	2445.6	2477.9	2424.7	2149.0	1912.0	1679.8	1705.6	1779.8	1955.5	2036.1	1981.3
40°	2816.4	2808.3	2679.4	2476.2	2266.7	2028.1	1937.8	1973.3	2174.8	2282.8	2197.3
42.5°	3314.6	3298.4	3079.2	2880.9	2647.1	2452.1	2268.3	2261.8	2426.3	2552.0	2427.9
45°	3766.0	3741.8	3591.8	3400.0	3143.7	2919.6	2671.3	2614.9	2729.4	2835.8	2690.7
47.5°	4125.5	4085.2	3978.8	3877.2	3814.3	3466.1	3093.7	3008.3	3066.3	3145.3	2940.5
50°	4551.1	4439.8	4285.1	4223.8	4354.4	4085.2	3500.0	3417.7	3414.5	3459.6	3198.5
52.5°	4744.5	4543.0	4456.0	4507.5	4738.1	4660.7	3938.5	3820.8	3774.0	3778.9	3438.7
55°	4510.8	4488.2	4534.9	4696.2	4997.6	4952.5	4359.2	4214.1	4144.8	4057.8	3669.2
57.5°	4244.8	4314.1	4499.5	4807.4	5326.5	5257.2	4773.5	4609.1	4481.7	4281.8	3925.6
60°	3999.7	4070.7	4377.0	4833.2	5507.1	5550.6	5118.5	4962.2	4773.5	4510.8	4207.7
62.5°	3627.3	3682.1	4112.6	4796.1	5428.1	5721.5	5358.7	5241.1	5065.3	4728.4	4531.7
65°	3208.2	3243.6	3669.2	4499.5	5273.3	5702.1	5557.0	5490.9	5320.1	4955.7	4852.5
67.5°	2748.7	2790.6	3145.3	3965.9	4970.2	5611.9	5744.1	5737.6	5542.5	5207.2	5084.7
70°	2219.9	2223.1	2516.5	3288.8	4441.4	5431.3	5976.2	5990.7	5755.3	5395.8	5094.4
72.5°	1062.4	1149.5	1631.5	2295.7	3609.6	5076.6	6127.7	6200.3	5889.1	5389.4	4544.6
75°	243.4	251.5	475.6	1091.4	2116.7	3896.5	5748.9	5884.3	5563.5	4660.7	3201.7
77.5°	88.7	93.5	133.8	319.2	814.1	2013.6	4114.2	4312.5	4112.6	3013.1	1513.8
80°	59.6	58.0	69.3	141.9	374.0	570.7	2103.8	2221.5	2028.1	1028.5	362.7
82.5°	30.6	32.2	48.4	79.0	251.5	198.3	702.9	764.2	628.7	206.4	67.7
85°	14.5	14.5	27.4	50.0	106.4	69.3	156.4	188.6	169.3	90.3	22.6
87.5°	14.5	14.5	25.8	32.2	54.8	29.0	38.7	48.4	45.1	48.4	8.1
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°	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7	1081.7
2.5°	1073.7	1072.1	1070.5	1073.7	1072.1	1075.3	1075.3	1078.5	1078.5	1075.3	1073.7
5°	1059.2	1056.0	1052.7	1052.7	1051.1	1054.3	1064.0	1072.1	1073.7	1068.8	1067.2
7.5°	1060.8	1060.8	1057.6	1051.1	1039.8	1039.8	1039.8	1049.5	1054.3	1051.1	1049.5
10°	1089.8	1091.4	1083.4	1068.8	1049.5	1031.8	997.9	947.9	901.2	888.3	883.5
12.5°	1139.8	1141.4	1125.3	1099.5	1059.2	954.4	825.4	706.1	614.2	588.4	583.6
15°	1199.4	1201.0	1172.0	1130.1	1007.6	764.2	572.3	436.9	356.3	336.9	335.3
17.5°	1260.7	1257.5	1213.9	1133.3	854.4	541.7	348.2	278.9	257.9	253.1	254.7
20°	1320.3	1310.7	1251.0	1073.7	657.8	354.7	254.7	238.6	233.8	230.5	230.5
22.5°	1375.2	1355.8	1281.7	956.0	461.1	254.7	227.3	224.1	217.6	212.8	211.2
25°	1430.0	1402.6	1301.0	802.8	309.5	222.5	214.4	208.0	199.9	193.5	191.8
27.5°	1496.1	1457.4	1291.3	609.4	232.1	206.4	199.9	190.2	178.9	169.3	166.1
30°	1558.9	1515.4	1236.5	420.8	198.3	190.2	180.6	166.1	151.5	140.3	137.0
32.5°	1637.9	1588.0	1138.2	275.7	172.5	166.1	156.4	138.6	119.3	106.4	103.2
35°	1750.8	1694.4	1012.4	193.5	151.5	140.3	127.4	108.0	87.1	77.4	75.8
37.5°	1908.8	1833.0	854.4	156.4	133.8	117.7	98.3	79.0	64.5	56.4	54.8
40°	2102.2	1986.2	678.7	138.6	119.3	98.3	74.2	56.4	46.8	40.3	40.3
42.5°	2311.8	2129.6	499.8	127.4	104.8	80.6	54.8	40.3	33.9	30.6	29.0
45°	2527.8	2257.0	336.9	117.7	91.9	61.3	38.7	27.4	22.6	22.6	21.0
47.5°	2751.9	2342.4	217.6	106.4	77.4	45.1	25.8	19.3	16.1	16.1	16.1
50°	2974.4	2387.6	154.8	96.7	62.9	30.6	19.3	14.5	12.9	12.9	12.9
52.5°	3135.6	2358.6	124.1	83.8	48.4	22.6	14.5	11.3	9.7	9.7	9.7
55°	3275.9	2308.6	108.0	72.5	35.5	16.1	11.3	9.7	8.1	8.1	8.1
57.5°	3419.3	2244.1	96.7	61.3	25.8	11.3	8.1	6.4	6.4	6.4	6.4
60°	3549.9	2134.5	83.8	48.4	17.7	8.1	6.4	4.8	4.8	4.8	4.8
62.5°	3677.3	2041.0	72.5	37.1	12.9	6.4	3.2	3.2	1.6	1.6	1.6
65°	3749.8	1915.2	58.0	24.2	8.1	4.8	1.6	1.6	0.0	0.0	0.0
67.5°	3727.3	1765.3	40.3	14.5	4.8	3.2	1.6	0.0	0.0	0.0	0.0
70°	3570.9	1563.8	24.2	8.1	4.8	3.2	1.6	0.0	0.0	0.0	0.0
72.5°	2990.5	1157.5	14.5	6.4	3.2	1.6	0.0	0.0	0.0	0.0	0.0
75°	1997.4	532.0	8.1	4.8	1.6	1.6	0.0	0.0	0.0	0.0	0.0
77.5°	914.1	159.6	4.8	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	183.8	41.9	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.7	8.1	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.1	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	1.6	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)