

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: P399466

Luminaire Tested: **ARCH-L-PA3-140-830-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399466  
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-PA3-140-830-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 620mA 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: 13042 lumens  
Efficiency: N/A  
Efficacy: 91.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3

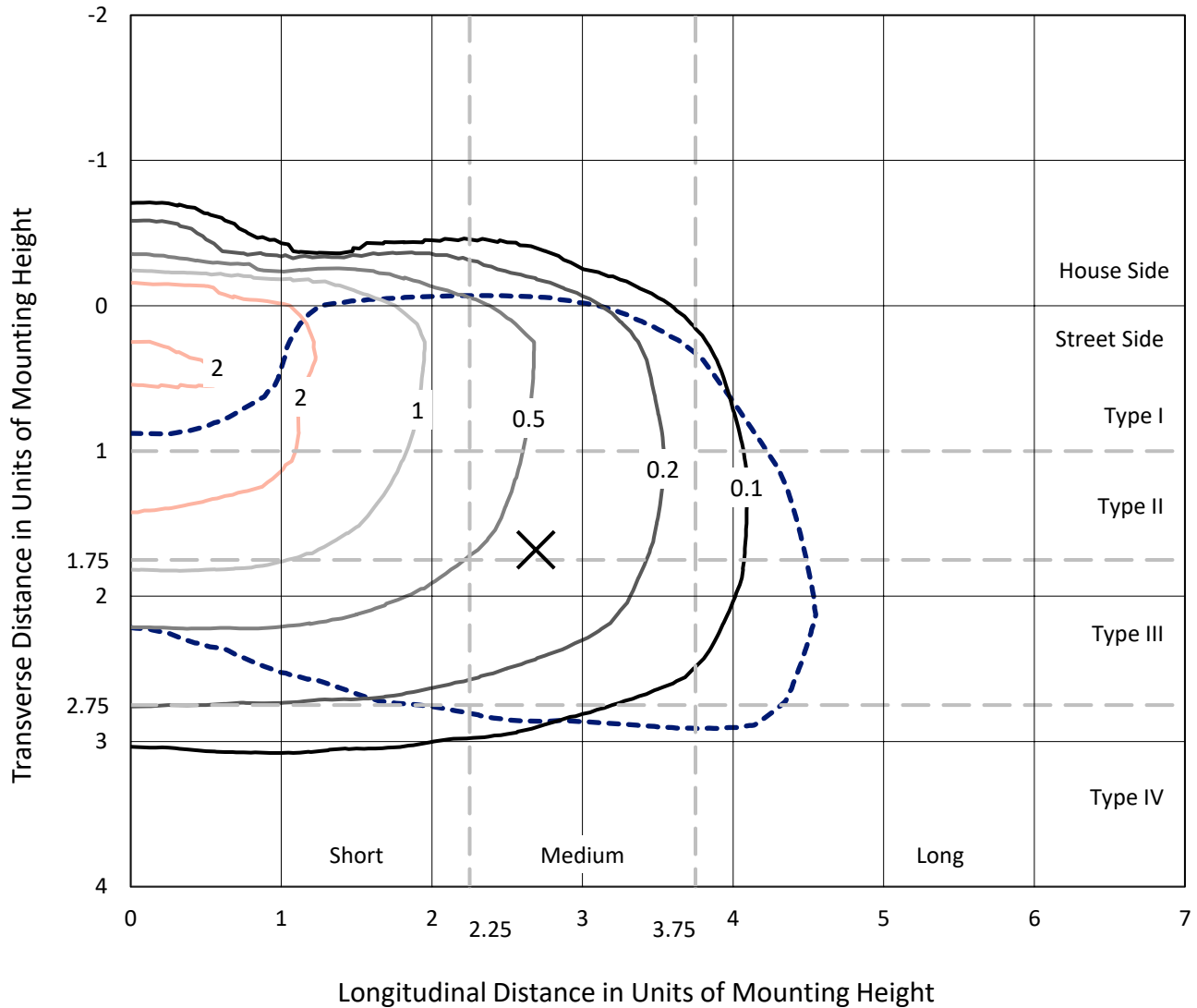
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

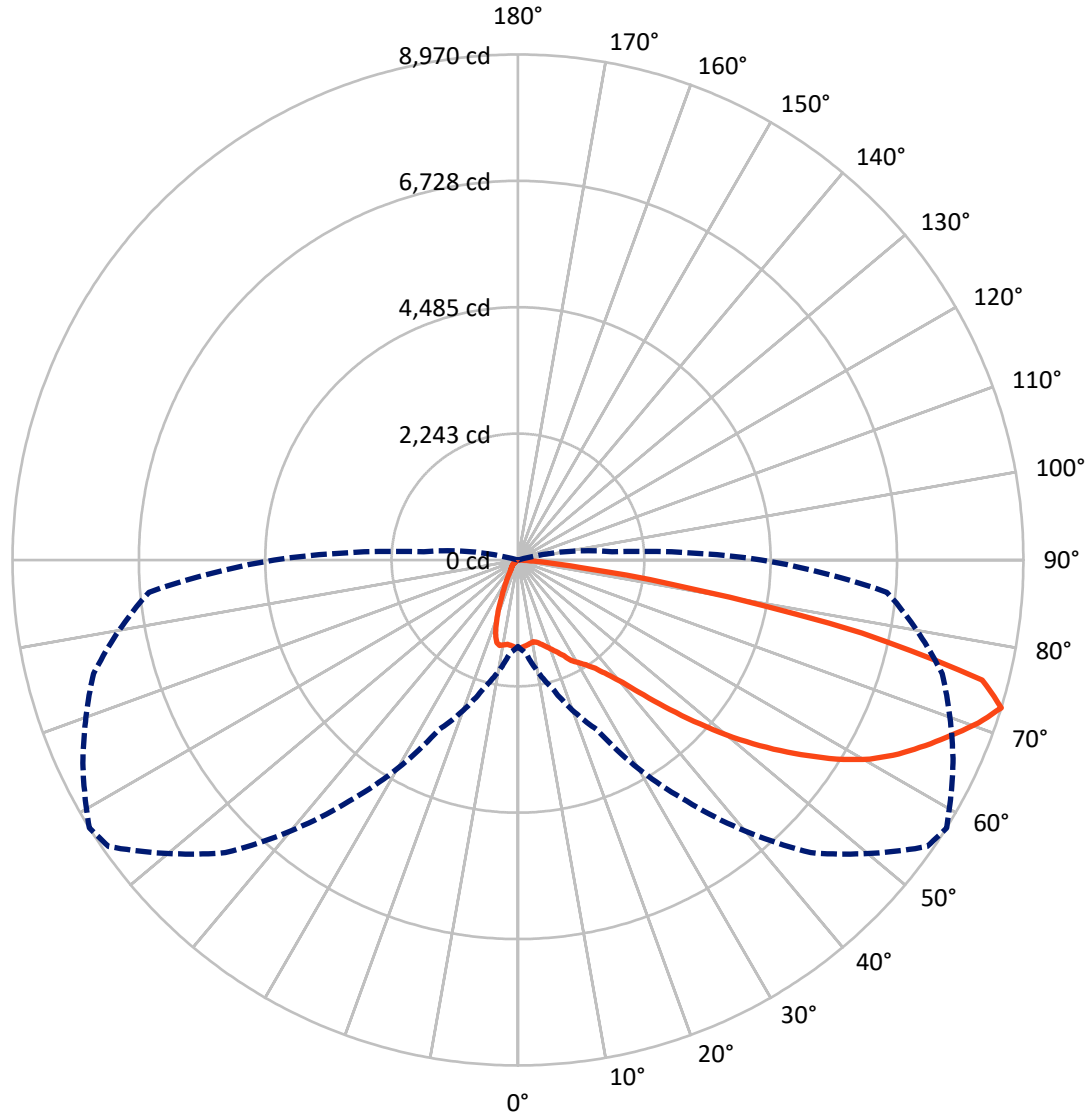
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 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	1268.2	0.0	1268.2
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	11773.8	0.0	11773.8
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	13042.0	0.0	13042.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.6	1.1
10°-20°	374.1	2.9
20°-30°	587.7	4.5
30°-40°	1013.5	7.8
40°-50°	1928.2	14.8
50°-60°	3053.6	23.4
60°-70°	3563.2	27.3
70°-80°	2231.7	17.1
80°-90°	146.5	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°	13042.0	100.0
0°-180°	13042.0	100.0

**Coefficient of Utilization**



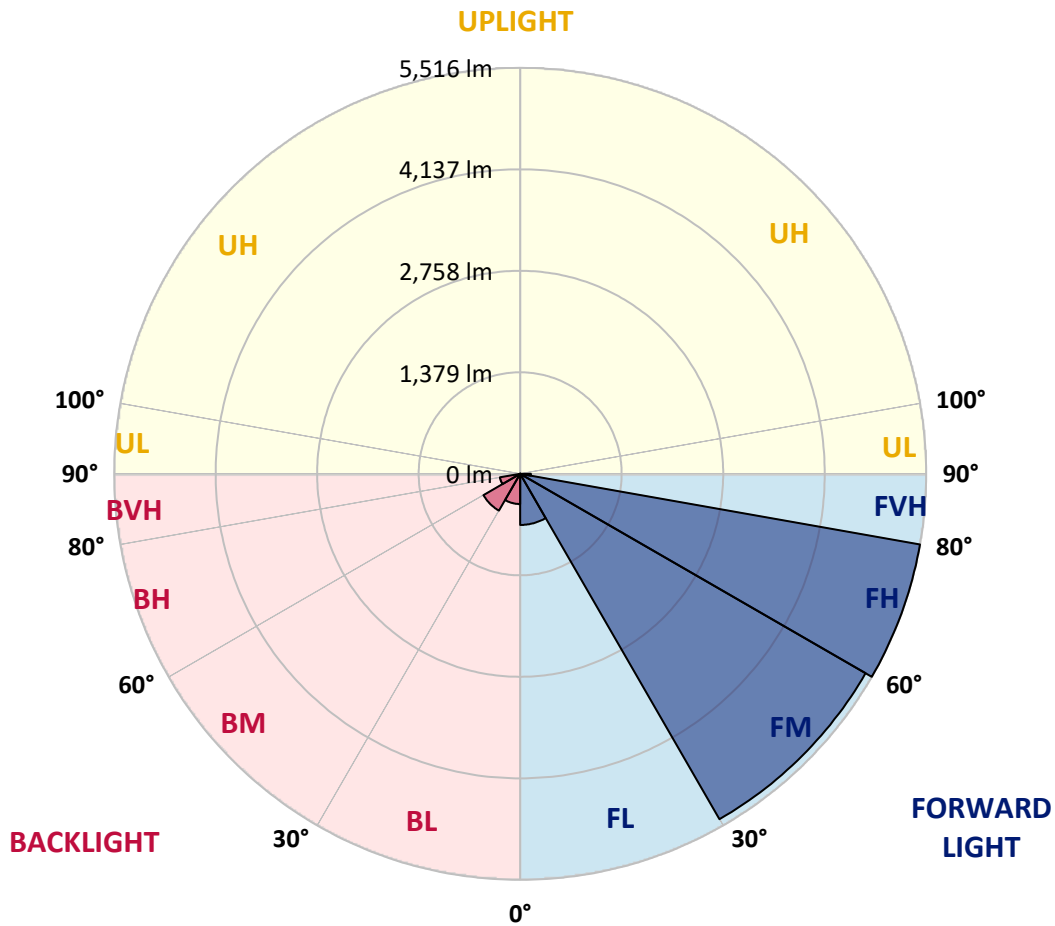
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	694.7	5.3			
FM (30°-60°)	5418.2	41.5			
FH (60°-80°)	5515.8	42.3			G3/7500
FVH (80°-90°)	145.1	1.1			G2/225
BL (0°-30°)	410.7	3.1	B1/500		
BM (30°-60°)	577.1	4.4	B1/1000		
BH (60°-80°)	279.1	2.1	B1/500		G1/500
BVH (80°-90°)	1.4	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-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0
2.5°	1558.0	1551.0	1548.6	1546.3	1548.6	1551.0	1544.0	1551.0	1546.3	1548.6	1553.3
5°	1502.0	1495.0	1492.7	1495.0	1502.0	1513.7	1518.3	1525.3	1525.3	1532.3	1534.6
7.5°	1439.0	1434.4	1432.0	1436.7	1450.7	1476.3	1490.3	1499.7	1509.0	1523.0	1537.0
10°	1404.0	1401.7	1399.4	1406.4	1420.4	1443.7	1462.3	1476.3	1511.3	1551.0	1576.6
12.5°	1380.7	1380.7	1385.4	1399.4	1418.0	1436.7	1481.0	1499.7	1553.3	1613.9	1648.9
15°	1362.1	1362.1	1369.0	1394.7	1420.4	1464.7	1530.0	1551.0	1613.9	1688.6	1735.2
17.5°	1348.1	1352.7	1357.4	1383.0	1432.0	1506.7	1583.6	1613.9	1690.9	1772.5	1823.8
20°	1350.4	1355.1	1357.4	1383.0	1453.0	1555.6	1653.6	1688.6	1777.2	1863.5	1914.8
22.5°	1364.4	1371.4	1373.7	1408.7	1490.3	1606.9	1732.9	1772.5	1868.2	1959.1	1998.8
25°	1422.7	1427.4	1413.4	1443.7	1544.0	1686.2	1835.5	1877.5	1973.1	2057.1	2089.7
27.5°	1620.9	1625.6	1548.6	1513.7	1586.0	1751.5	1961.4	2019.8	2138.7	2194.7	2199.3
30°	2050.1	2054.7	1903.1	1737.5	1686.2	1807.5	2031.4	2113.0	2267.0	2329.9	2302.0
32.5°	2602.8	2598.2	2390.6	2145.7	1924.1	1905.5	2131.7	2218.0	2385.9	2446.6	2425.6
35°	3157.9	3164.9	2987.7	2619.2	2302.0	2089.7	2260.0	2360.3	2563.2	2649.5	2612.2
37.5°	3538.1	3584.7	3507.8	3108.9	2766.1	2430.2	2467.6	2574.8	2829.1	2945.7	2866.4
40°	4074.5	4062.8	3876.3	3582.4	3279.2	2934.0	2803.4	2854.7	3146.2	3302.5	3178.9
42.5°	4795.2	4771.8	4454.7	4167.8	3829.6	3547.4	3281.5	3272.2	3510.1	3692.0	3512.4
45°	5448.2	5413.2	5196.3	4918.8	4547.9	4223.8	3864.6	3783.0	3948.6	4102.5	3892.6
47.5°	5968.3	5910.0	5756.1	5609.1	5518.2	5014.4	4475.6	4352.0	4436.0	4550.3	4254.1
50°	6584.0	6423.1	6199.2	6110.6	6299.5	5910.0	5063.4	4944.4	4939.8	5005.1	4627.2
52.5°	6863.9	6572.4	6446.4	6521.1	6854.6	6742.6	5697.8	5527.5	5459.9	5466.9	4974.8
55°	6525.7	6493.1	6560.7	6793.9	7230.1	7164.8	6306.5	6096.6	5996.3	5870.4	5308.3
57.5°	6140.9	6241.2	6509.4	6954.9	7705.9	7605.6	6905.9	6668.0	6483.7	6194.5	5679.1
60°	5786.4	5889.0	6332.1	6992.2	7967.1	8030.0	7405.0	7178.8	6905.9	6525.7	6087.3
62.5°	5247.6	5326.9	5949.6	6938.5	7852.8	8277.3	7752.5	7582.2	7328.0	6840.6	6556.0
65°	4641.2	4692.5	5308.3	6509.4	7628.9	8249.3	8039.4	7943.7	7696.5	7169.4	7020.2
67.5°	3976.5	4037.2	4550.3	5737.4	7190.4	8118.7	8309.9	8300.6	8018.4	7533.3	7356.0
70°	3211.6	3216.2	3640.7	4757.9	6425.4	7857.5	8645.8	8666.8	8326.2	7806.1	7370.0
72.5°	1537.0	1662.9	2360.3	3321.2	5222.0	7344.4	8865.0	8970.0	8519.8	7796.8	6574.7
75°	352.2	363.8	688.0	1579.0	3062.3	5637.1	8316.9	8512.8	8048.7	6742.6	4631.9
77.5°	128.3	135.3	193.6	461.8	1177.8	2913.0	5952.0	6238.9	5949.6	4359.0	2190.0
80°	86.3	84.0	100.3	205.2	541.1	825.6	3043.6	3213.9	2934.0	1488.0	524.8
82.5°	44.3	46.6	70.0	114.3	363.8	286.9	1016.9	1105.5	909.6	298.5	98.0
85°	21.0	21.0	39.6	72.3	153.9	100.3	226.2	272.9	244.9	130.6	32.7
87.5°	21.0	21.0	37.3	46.6	79.3	42.0	56.0	70.0	65.3	70.0	11.7
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°	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0	1565.0
2.5°	1553.3	1551.0	1548.6	1553.3	1551.0	1555.6	1555.6	1560.3	1560.3	1555.6	1553.3
5°	1532.3	1527.6	1523.0	1523.0	1520.6	1525.3	1539.3	1551.0	1553.3	1546.3	1544.0
7.5°	1534.6	1534.6	1530.0	1520.6	1504.3	1504.3	1504.3	1518.3	1525.3	1520.6	1518.3
10°	1576.6	1579.0	1567.3	1546.3	1518.3	1492.7	1443.7	1371.4	1303.7	1285.1	1278.1
12.5°	1648.9	1651.3	1627.9	1590.6	1532.3	1380.7	1194.1	1021.5	888.6	851.3	844.3
15°	1735.2	1737.5	1695.6	1634.9	1457.7	1105.5	828.0	632.0	515.4	487.4	485.1
17.5°	1823.8	1819.2	1756.2	1639.6	1236.1	783.6	503.8	403.5	373.2	366.2	368.5
20°	1910.1	1896.1	1809.9	1553.3	951.6	513.1	368.5	345.2	338.2	333.5	333.5
22.5°	1989.4	1961.4	1854.2	1383.0	667.0	368.5	328.9	324.2	314.9	307.9	305.5
25°	2068.7	2029.1	1882.2	1161.5	447.8	321.9	310.2	300.9	289.2	279.9	277.5
27.5°	2164.4	2108.4	1868.2	881.6	335.8	298.5	289.2	275.2	258.9	244.9	240.2
30°	2255.3	2192.3	1788.9	608.7	286.9	275.2	261.2	240.2	219.2	202.9	198.2
32.5°	2369.6	2297.3	1646.6	398.8	249.6	240.2	226.2	200.6	172.6	153.9	149.3
35°	2532.9	2451.2	1464.7	279.9	219.2	202.9	184.3	156.3	125.9	111.9	109.6
37.5°	2761.4	2651.8	1236.1	226.2	193.6	170.3	142.3	114.3	93.3	81.6	79.3
40°	3041.3	2873.4	981.9	200.6	172.6	142.3	107.3	81.6	67.6	58.3	58.3
42.5°	3344.5	3080.9	723.0	184.3	151.6	116.6	79.3	58.3	49.0	44.3	42.0
45°	3657.0	3265.2	487.4	170.3	132.9	88.6	56.0	39.6	32.7	32.7	30.3
47.5°	3981.2	3388.8	314.9	153.9	111.9	65.3	37.3	28.0	23.3	23.3	23.3
50°	4303.1	3454.1	223.9	139.9	91.0	44.3	28.0	21.0	18.7	18.7	18.7
52.5°	4536.3	3412.1	179.6	121.3	70.0	32.7	21.0	16.3	14.0	14.0	14.0
55°	4739.2	3339.8	156.3	105.0	51.3	23.3	16.3	14.0	11.7	11.7	11.7
57.5°	4946.8	3246.5	139.9	88.6	37.3	16.3	11.7	9.3	9.3	9.3	9.3
60°	5135.7	3087.9	121.3	70.0	25.7	11.7	9.3	7.0	7.0	7.0	7.0
62.5°	5319.9	2952.7	105.0	53.6	18.7	9.3	4.7	4.7	2.3	2.3	2.3
65°	5424.9	2770.7	84.0	35.0	11.7	7.0	2.3	2.3	0.0	0.0	0.0
67.5°	5392.2	2553.8	58.3	21.0	7.0	4.7	2.3	0.0	0.0	0.0	0.0
70°	5166.0	2262.3	35.0	11.7	7.0	4.7	2.3	0.0	0.0	0.0	0.0
72.5°	4326.4	1674.6	21.0	9.3	4.7	2.3	0.0	0.0	0.0	0.0	0.0
75°	2889.7	769.7	11.7	7.0	2.3	2.3	0.0	0.0	0.0	0.0	0.0
77.5°	1322.4	230.9	7.0	4.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	265.9	60.6	4.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	56.0	11.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.7	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.7	2.3	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)