

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: P399309

Luminaire Tested: **ARCH-L-PA3-120-827-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399309  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)  
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-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 530mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11563 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

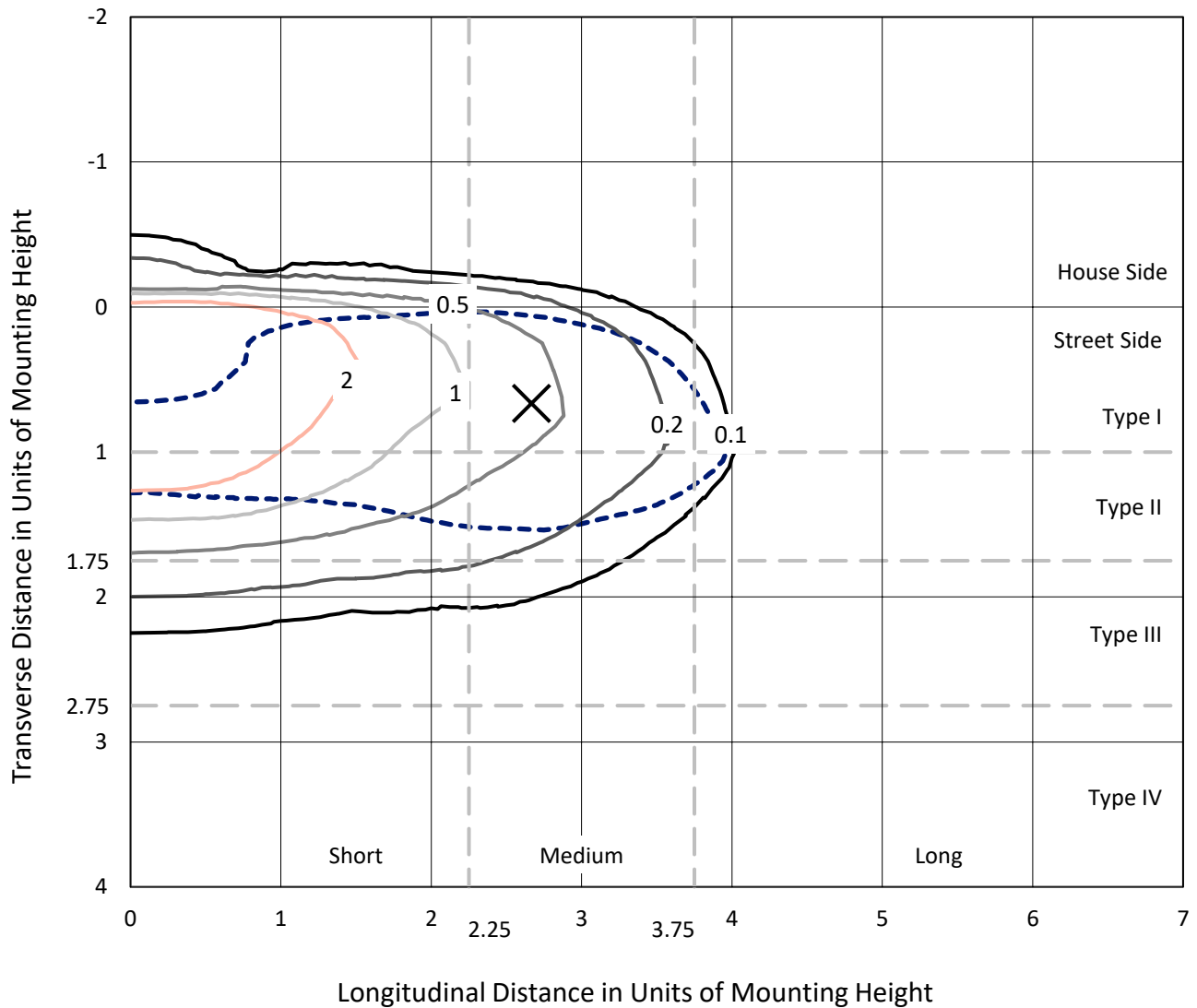
Input Watts (W): 123  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

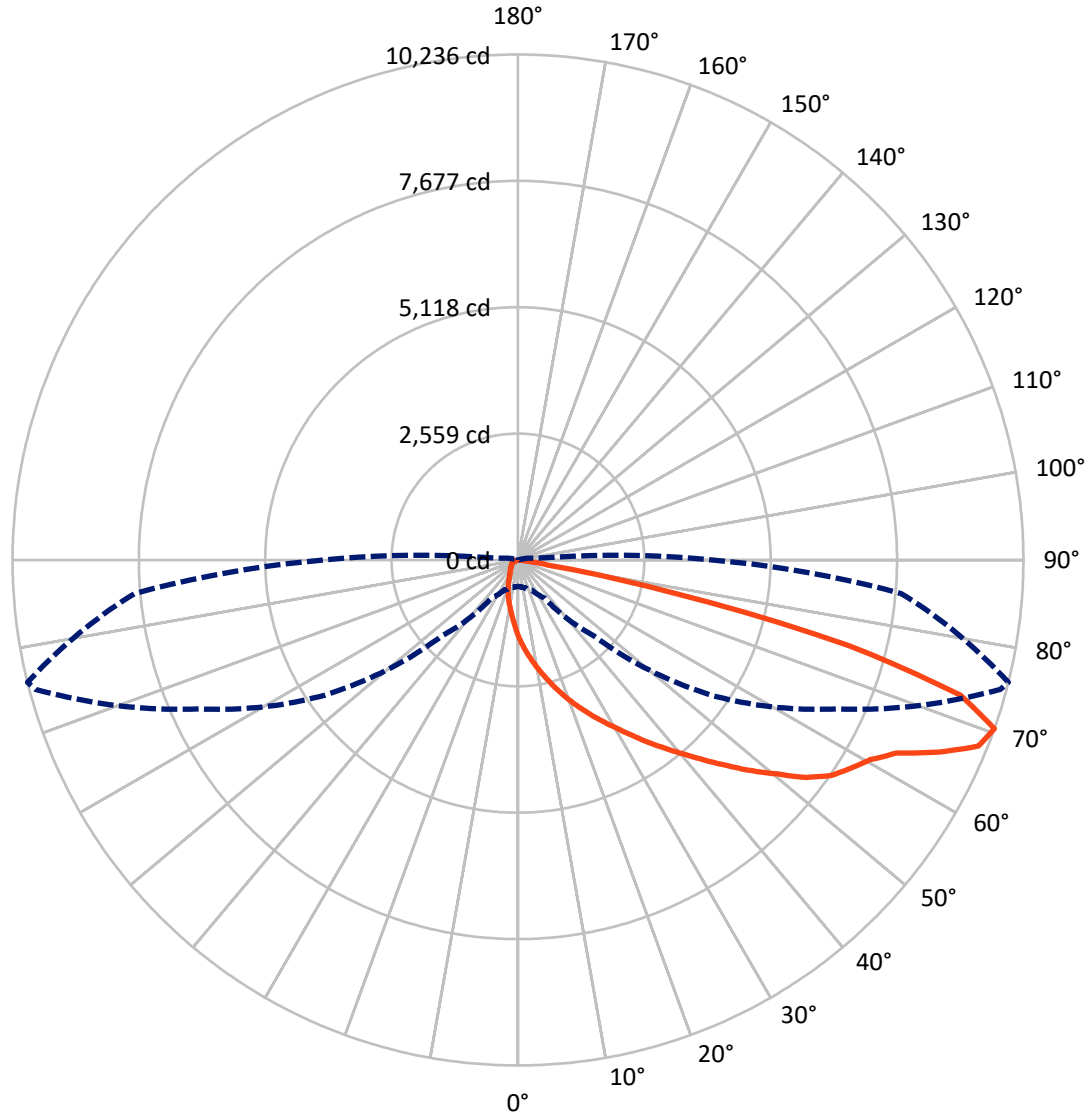
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type II - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	545.4	0.0	545.4
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	11017.7	0.0	11017.7
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	11563.0	0.0	11563.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.8	1.3
10°-20°	470.6	4.1
20°-30°	876.4	7.6
30°-40°	1550.2	13.4
40°-50°	2370.7	20.5
50°-60°	2687.8	23.2
60°-70°	2304.1	19.9
70°-80°	1116.0	9.7
80°-90°	41.4	0.4
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°	11563.0	100.0
0°-180°	11563.0	100.0

**Coefficient of Utilization**

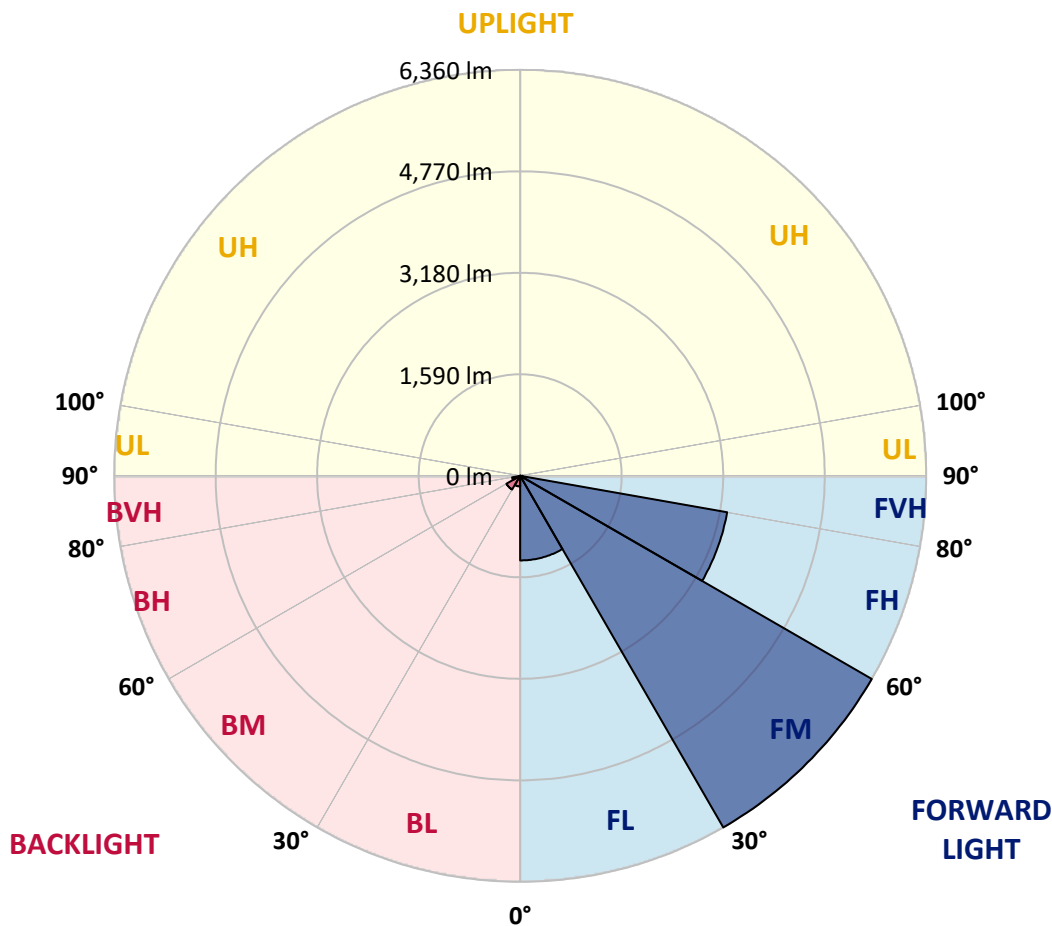


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1325.6	11.5			
FM (30°-60°)	6359.8	55.0			
FH (60°-80°)	3291.6	28.5			G2/5000
FVH (80°-90°)	40.7	0.4			G1/100
BL (0°-30°)	167.3	1.4	B1/500		
BM (30°-60°)	248.9	2.2	B1/1000		
BH (60°-80°)	128.4	1.1	B1/500		G1/500
BVH (80°-90°)	0.7	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8
2.5°	2115.7	2104.1	2092.6	2048.3	2007.9	1971.3	1902.0	1811.5	1730.7	1713.3	1619.0
5°	2485.3	2471.8	2454.5	2410.2	2358.2	2296.6	2194.6	2056.0	1913.6	1882.7	1707.6
7.5°	2735.6	2724.0	2699.0	2677.8	2625.8	2566.2	2452.6	2290.9	2094.5	2056.0	1809.6
10°	2906.9	2899.2	2895.4	2878.0	2839.5	2791.4	2677.8	2508.4	2277.4	2233.1	1917.4
12.5°	2968.5	2968.5	2987.8	3016.6	3022.4	3007.0	2903.1	2733.6	2469.9	2423.7	2044.5
15°	2885.7	2895.4	2937.7	3030.1	3126.4	3189.9	3124.4	2966.6	2681.7	2631.6	2194.6
17.5°	2862.6	2872.3	2901.1	2982.0	3111.0	3280.4	3313.1	3191.8	2881.9	2839.5	2348.6
20°	2928.1	2937.7	2962.7	3032.0	3130.2	3301.5	3438.2	3409.4	3093.6	3049.4	2504.6
22.5°	3084.0	3089.8	3089.8	3143.7	3230.3	3357.4	3517.2	3615.3	3311.2	3263.0	2658.6
25°	3419.0	3407.4	3361.2	3334.3	3390.1	3494.1	3617.3	3796.3	3553.7	3488.3	2824.1
27.5°	3857.9	3896.4	3784.8	3655.8	3613.4	3673.1	3757.8	3956.1	3788.6	3719.3	2974.3
30°	4452.8	4437.4	4291.1	4106.2	3923.4	3902.2	3931.1	4092.8	4023.5	3958.0	3141.8
32.5°	4941.7	4970.6	4816.6	4591.4	4318.0	4189.0	4158.2	4256.4	4273.7	4231.4	3340.1
35°	5444.2	5475.0	5324.8	5074.6	4749.2	4533.6	4445.1	4458.5	4583.7	4529.8	3548.0
37.5°	5894.7	5921.6	5773.4	5517.3	5192.0	4928.3	4801.2	4697.2	4884.0	4835.9	3767.4
40°	6237.3	6241.2	6141.1	5912.0	5604.0	5330.6	5186.2	4982.2	5201.6	5168.9	3996.5
42.5°	6479.9	6487.6	6414.4	6218.1	5933.2	5679.1	5561.6	5319.1	5567.4	5538.5	4262.2
45°	6593.5	6606.9	6599.2	6418.3	6181.5	5962.0	5923.5	5677.1	5967.8	5940.9	4568.3
47.5°	6485.7	6485.7	6583.8	6558.8	6341.3	6195.0	6239.3	6050.6	6402.9	6377.9	4880.1
50°	6037.1	6042.9	6243.1	6529.9	6402.9	6370.2	6508.8	6416.4	6797.5	6812.9	5253.6
52.5°	4859.0	4849.3	5525.0	6075.6	6360.5	6449.1	6757.1	6789.8	7271.1	7317.3	5625.1
55°	3630.7	3625.0	4271.8	5270.9	6064.1	6408.7	6895.7	7122.9	7675.4	7704.3	5902.4
57.5°	2874.2	2858.8	3214.9	4248.7	5394.1	6227.7	6901.5	7186.4	7900.6	7950.7	6171.9
60°	2210.0	2196.5	2462.2	3161.0	4445.1	5746.4	6735.9	7190.3	8118.2	8206.7	6533.8
62.5°	1580.5	1595.9	1800.0	2267.8	3419.0	5066.9	6520.3	7244.2	8505.1	8605.2	7047.8
65°	1066.5	1058.8	1228.2	1543.9	2431.4	4152.4	6189.2	7357.7	9202.0	9377.2	7663.8
67.5°	741.2	746.9	823.9	1004.9	1543.9	3188.0	5638.6	7421.3	9922.0	10058.7	8095.1
70°	535.2	542.9	585.2	675.7	943.3	2161.9	4766.6	7130.6	10116.4	10235.8	7794.7
72.5°	352.3	367.7	431.2	479.4	602.6	1353.3	3511.4	6143.0	9279.0	9367.5	6539.6
75°	190.6	194.4	277.2	358.1	429.3	843.2	2094.5	4142.8	6941.9	6913.0	4312.2
77.5°	148.2	154.0	171.3	256.0	288.8	463.9	827.8	1871.2	3288.1	3199.5	1470.8
80°	90.5	94.3	119.4	152.1	202.1	269.5	242.6	508.2	668.0	625.7	215.6
82.5°	53.9	57.8	71.2	127.1	159.8	127.1	84.7	123.2	125.1	123.2	53.9
85°	9.6	9.6	50.1	88.6	84.7	36.6	50.1	40.4	36.6	38.5	11.6
87.5°	0.0	0.0	19.3	27.0	38.5	13.5	19.3	9.6	9.6	9.6	5.8
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°	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8	1547.8
2.5°	1561.3	1495.8	1361.0	1243.6	1126.2	1039.6	974.1	906.7	883.6	854.7	839.3
5°	1588.2	1459.2	1191.6	978.0	797.0	658.4	569.8	515.9	481.3	456.2	450.5
7.5°	1628.6	1430.4	1055.0	766.2	567.9	429.3	356.1	319.6	300.3	288.8	284.9
10°	1676.8	1405.3	920.2	596.8	400.4	302.2	261.8	246.4	238.7	234.9	232.9
12.5°	1744.1	1395.7	806.6	460.1	302.2	248.3	227.2	217.5	211.8	206.0	204.1
15°	1832.7	1399.5	702.7	356.1	250.3	221.4	204.1	194.4	186.7	181.0	181.0
17.5°	1925.1	1405.3	600.6	288.8	227.2	202.1	182.9	169.4	163.6	157.9	155.9
20°	2011.7	1403.4	502.5	246.4	206.0	181.0	161.7	148.2	138.6	132.8	132.8
22.5°	2094.5	1391.8	410.0	221.4	188.7	159.8	138.6	125.1	117.4	111.7	111.7
25°	2183.1	1368.7	335.0	202.1	167.5	140.5	119.4	105.9	100.1	94.3	94.3
27.5°	2252.4	1330.2	273.4	184.8	148.2	121.3	102.0	90.5	84.7	80.9	80.9
30°	2327.4	1274.4	227.2	165.6	129.0	104.0	86.6	77.0	71.2	69.3	69.3
32.5°	2410.2	1212.8	194.4	146.3	109.7	88.6	73.2	67.4	61.6	59.7	59.7
35°	2506.5	1158.9	175.2	127.1	96.3	75.1	63.5	57.8	53.9	53.9	53.9
37.5°	2616.2	1103.1	157.9	111.7	82.8	63.5	53.9	52.0	50.1	48.1	48.1
40°	2735.6	1043.4	142.5	98.2	71.2	53.9	46.2	46.2	44.3	44.3	44.3
42.5°	2870.3	991.4	129.0	86.6	61.6	46.2	40.4	40.4	38.5	38.5	38.5
45°	3016.6	943.3	117.4	77.0	53.9	40.4	36.6	34.7	32.7	32.7	32.7
47.5°	3189.9	916.3	107.8	67.4	46.2	34.7	30.8	28.9	27.0	25.0	25.0
50°	3411.3	927.9	98.2	55.8	40.4	28.9	25.0	23.1	21.2	19.3	19.3
52.5°	3586.5	922.1	84.7	48.1	32.7	23.1	19.3	17.3	15.4	13.5	13.5
55°	3713.5	899.0	73.2	40.4	25.0	19.3	15.4	11.6	9.6	9.6	9.6
57.5°	3838.7	875.9	61.6	32.7	19.3	13.5	9.6	7.7	7.7	7.7	7.7
60°	4033.1	843.2	53.9	27.0	15.4	9.6	5.8	5.8	3.9	3.9	3.9
62.5°	4269.9	802.8	44.3	23.1	11.6	7.7	3.9	3.9	0.0	0.0	0.0
65°	4529.8	731.5	36.6	17.3	9.6	5.8	3.9	0.0	0.0	0.0	0.0
67.5°	4470.1	587.2	30.8	11.6	7.7	3.9	1.9	0.0	0.0	0.0	0.0
70°	3954.2	396.6	25.0	9.6	5.8	3.9	1.9	0.0	0.0	0.0	0.0
72.5°	3097.5	234.9	17.3	7.7	3.9	1.9	0.0	0.0	0.0	0.0	0.0
75°	1982.9	117.4	11.6	5.8	3.9	1.9	0.0	0.0	0.0	0.0	0.0
77.5°	664.2	57.8	7.7	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	94.3	19.3	3.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	21.2	7.7	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.7	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	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)