

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: P399138

Luminaire Tested: **ARCH-L-PA3-100-740-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399138  
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-PA3-100-740-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 440mA 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: 13352 lumens  
Efficiency: N/A  
Efficacy: 130.9 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

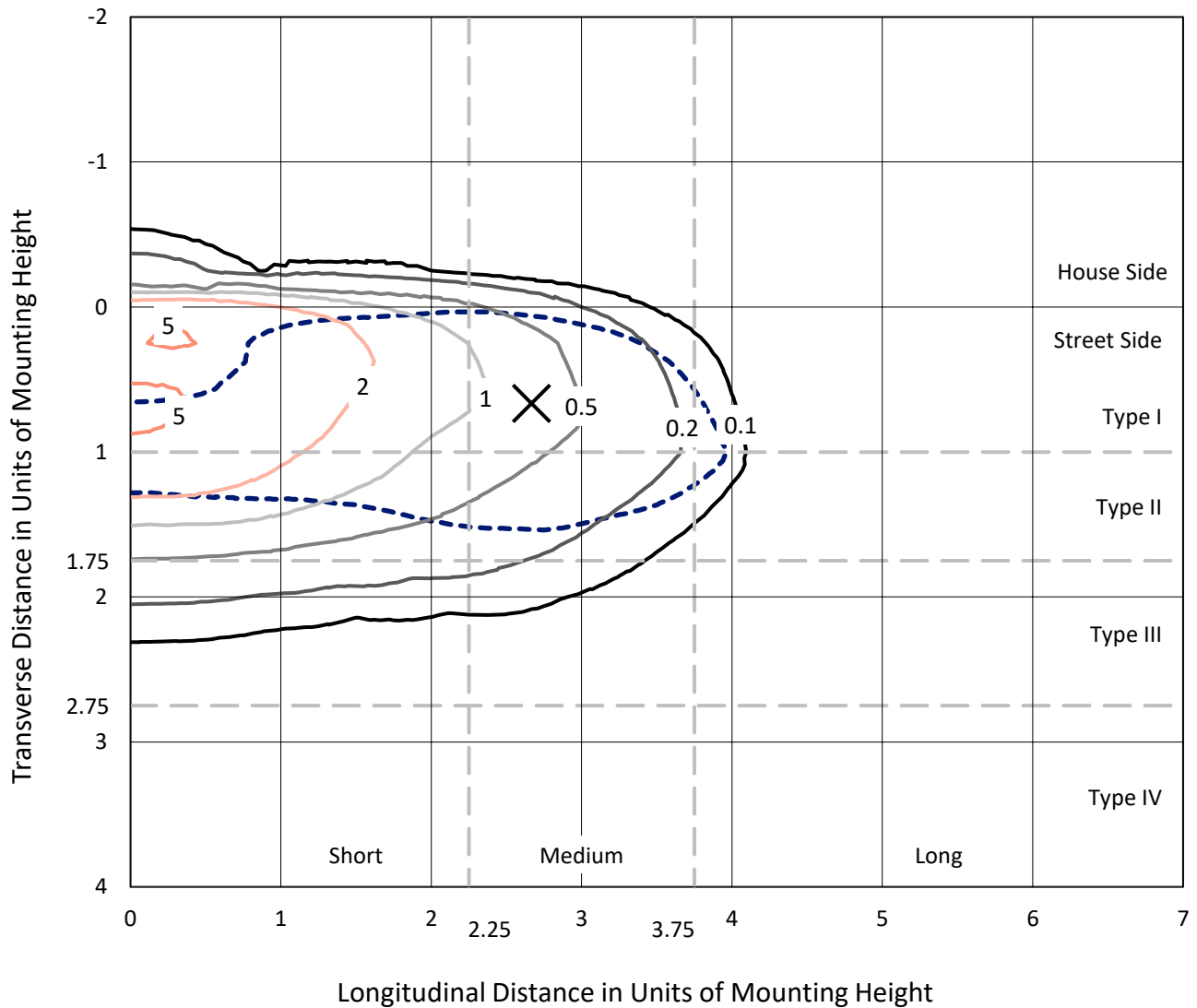
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

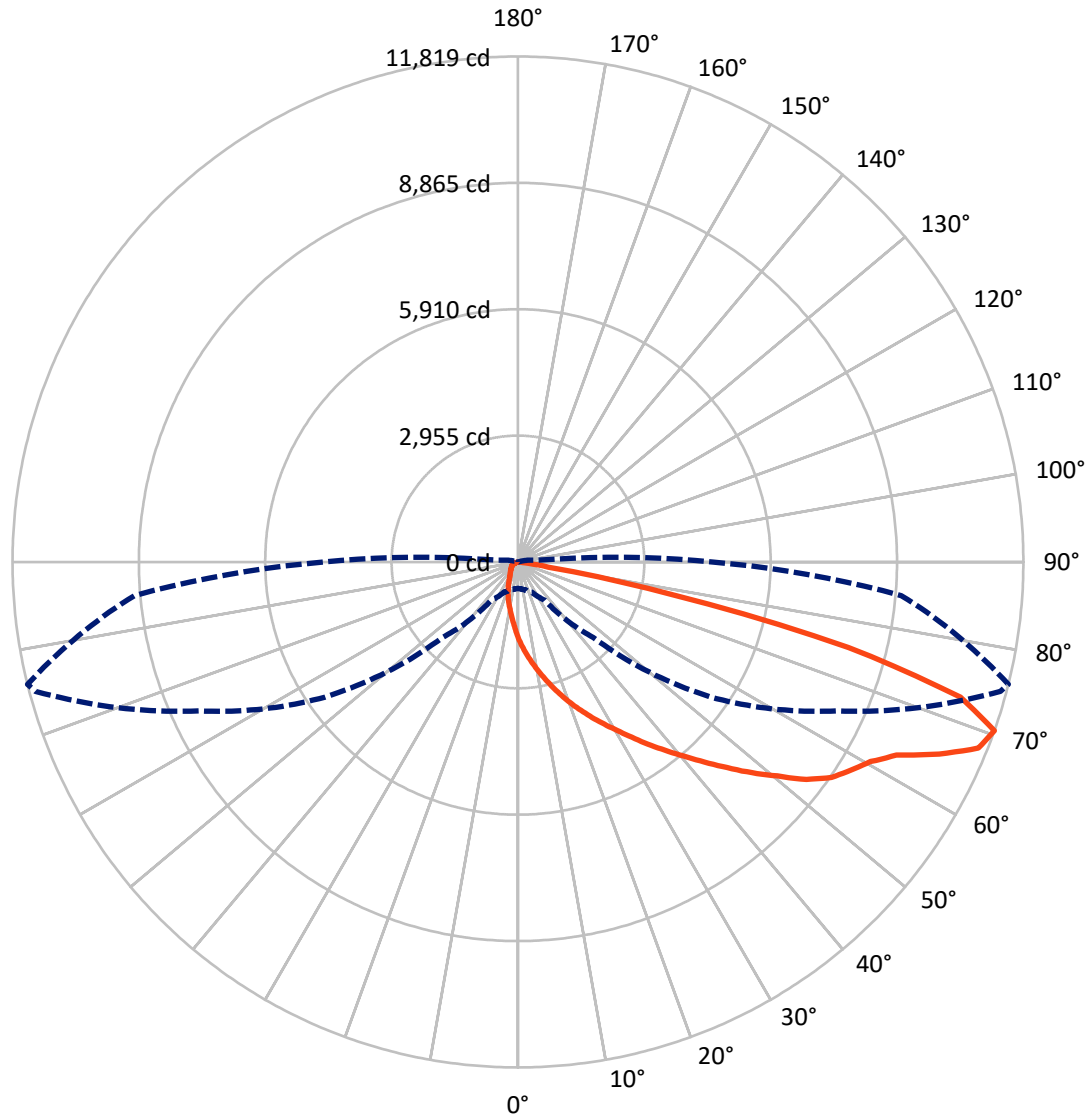
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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	629.7	0.0	629.7
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	12722.3	0.0	12722.3
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	13352.0	0.0	13352.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.4	1.3
10°-20°	543.4	4.1
20°-30°	1012.0	7.6
30°-40°	1790.1	13.4
40°-50°	2737.5	20.5
50°-60°	3103.6	23.2
60°-70°	2660.6	19.9
70°-80°	1288.6	9.7
80°-90°	47.8	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°	13352.0	100.0
0°-180°	13352.0	100.0

**Coefficient of Utilization**



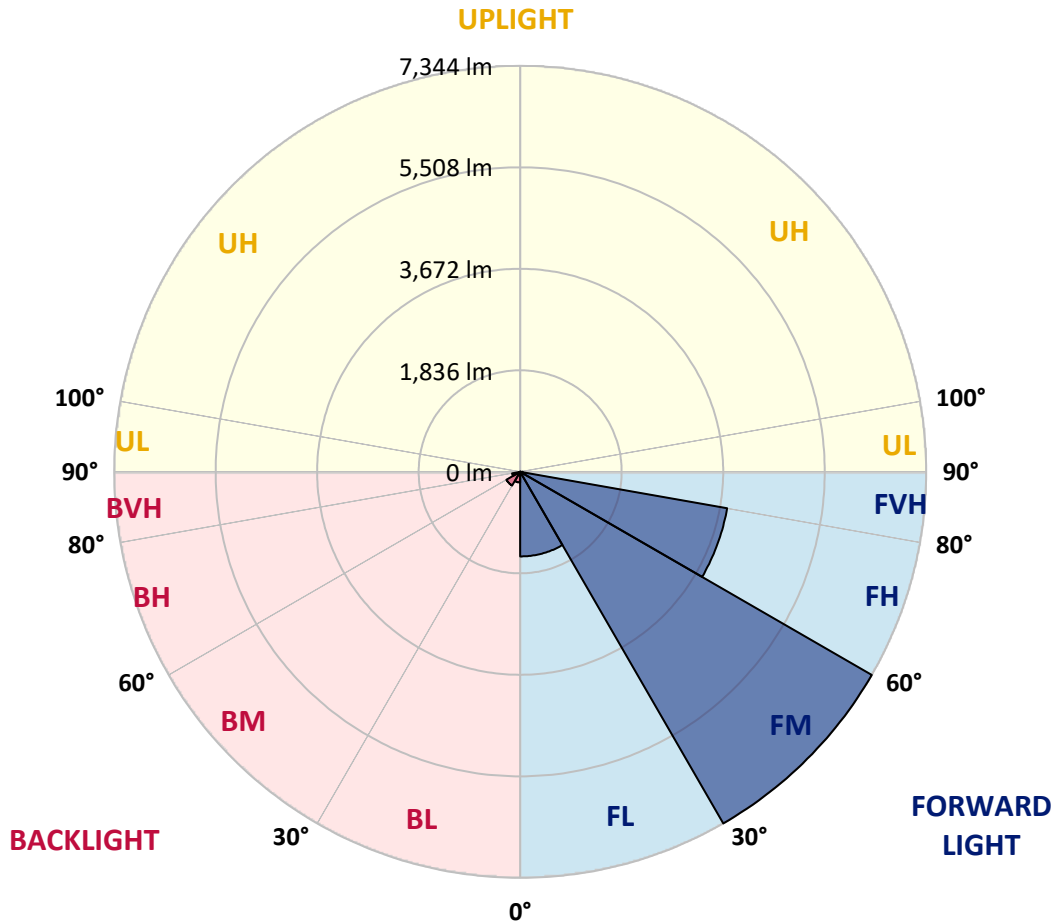
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1530.7	11.5			
FM (30°-60°)	7343.7	55.0			
FH (60°-80°)	3800.9	28.5			G2/5000
FVH (80°-90°)	47.0	0.4			G1/100
BL (0°-30°)	193.2	1.4	B1/500		
BM (30°-60°)	287.5	2.2	B1/1000		
BH (60°-80°)	148.3	1.1	B1/500		G1/500
BVH (80°-90°)	0.8	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°	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3
2.5°	2443.0	2429.7	2416.3	2365.2	2318.5	2276.3	2196.3	2091.8	1998.4	1978.4	1869.5
5°	2869.8	2854.3	2834.3	2783.1	2723.1	2652.0	2534.2	2374.1	2209.6	2174.0	1971.8
7.5°	3158.8	3145.5	3116.6	3092.1	3032.1	2963.2	2832.0	2645.3	2418.6	2374.1	2089.6
10°	3356.7	3347.8	3343.3	3323.3	3278.8	3223.3	3092.1	2896.5	2629.7	2578.6	2214.1
12.5°	3427.8	3427.8	3450.0	3483.4	3490.0	3472.2	3352.2	3156.6	2852.0	2798.7	2360.8
15°	3332.2	3343.3	3392.2	3498.9	3610.1	3683.4	3607.8	3425.6	3096.6	3038.8	2534.2
17.5°	3305.5	3316.6	3350.0	3443.3	3592.3	3787.9	3825.7	3685.6	3327.8	3278.8	2712.0
20°	3381.1	3392.2	3421.1	3501.1	3614.5	3812.4	3970.2	3936.8	3572.3	3521.2	2892.1
22.5°	3561.2	3567.8	3567.8	3630.1	3730.1	3876.8	4061.3	4174.7	3823.5	3767.9	3069.9
25°	3948.0	3934.6	3881.3	3850.1	3914.6	4034.7	4176.9	4383.7	4103.6	4028.0	3261.1
27.5°	4454.8	4499.2	4370.3	4221.4	4172.5	4241.4	4339.2	4568.2	4374.8	4294.7	3434.5
30°	5141.7	5123.9	4955.0	4741.6	4530.4	4505.9	4539.3	4726.0	4646.0	4570.4	3627.9
32.5°	5706.3	5739.7	5561.8	5301.7	4986.1	4837.1	4801.6	4914.9	4934.9	4886.0	3856.8
35°	6286.5	6322.1	6148.7	5859.7	5484.0	5235.0	5132.8	5148.3	5292.8	5230.6	4096.9
37.5°	6806.7	6837.8	6666.6	6371.0	5995.3	5690.7	5544.0	5424.0	5639.6	5584.0	4350.3
40°	7202.4	7206.8	7091.2	6826.7	6471.0	6155.3	5988.6	5753.0	6006.4	5968.6	4614.8
42.5°	7482.4	7491.3	7406.9	7180.1	6851.1	6557.7	6422.1	6142.0	6428.8	6395.4	4921.6
45°	7613.6	7629.2	7620.3	7411.3	7137.9	6884.5	6840.0	6555.5	6891.1	6860.0	5275.1
47.5°	7489.1	7489.1	7602.5	7573.6	7322.4	7153.4	7204.6	6986.7	7393.5	7364.6	5635.2
50°	6971.2	6977.8	7209.0	7540.2	7393.5	7355.7	7515.8	7409.1	7849.2	7867.0	6066.4
52.5°	5610.7	5599.6	6379.9	7015.6	7344.6	7446.9	7802.6	7840.3	8396.1	8449.4	6495.5
55°	4192.5	4185.8	4932.7	6086.4	7002.3	7400.2	7962.6	8224.9	8862.9	8896.2	6815.6
57.5°	3318.9	3301.1	3712.3	4906.0	6228.7	7191.2	7969.3	8298.3	9123.0	9180.8	7126.8
60°	2551.9	2536.4	2843.2	3650.1	5132.8	6635.5	7778.1	8302.7	9374.2	9476.4	7544.7
62.5°	1825.0	1842.8	2078.5	2618.6	3948.0	5850.8	7529.1	8365.0	9821.0	9936.6	8138.2
65°	1231.5	1222.6	1418.2	1782.8	2807.6	4794.9	7146.8	8496.1	10625.7	10828.0	8849.6
67.5°	855.8	862.5	951.4	1160.4	1782.8	3681.2	6511.0	8569.5	11457.1	11614.9	9347.5
70°	618.0	626.9	675.8	780.3	1089.2	2496.4	5504.0	8233.8	11681.6	11819.4	9000.7
72.5°	406.8	424.6	497.9	553.5	695.8	1562.7	4054.7	7093.4	10714.6	10816.9	7551.4
75°	220.1	224.5	320.1	413.5	495.7	973.7	2418.6	4783.8	8016.0	7982.6	4979.4
77.5°	171.2	177.8	197.8	295.7	333.4	535.7	955.9	2160.7	3796.8	3694.5	1698.3
80°	104.5	108.9	137.8	175.6	233.4	311.2	280.1	586.9	771.4	722.5	249.0
82.5°	62.2	66.7	82.2	146.7	184.5	146.7	97.8	142.3	144.5	142.3	62.2
85°	11.1	11.1	57.8	102.3	97.8	42.2	57.8	46.7	42.2	44.5	13.3
87.5°	0.0	0.0	22.2	31.1	44.5	15.6	22.2	11.1	11.1	11.1	6.7
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°	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3	1787.3
2.5°	1802.8	1727.2	1571.6	1436.0	1300.4	1200.4	1124.8	1047.0	1020.3	987.0	969.2
5°	1833.9	1685.0	1376.0	1129.3	920.3	760.2	658.0	595.8	555.7	526.8	520.2
7.5°	1880.6	1651.7	1218.2	884.7	655.8	495.7	411.2	369.0	346.8	333.4	329.0
10°	1936.2	1622.8	1062.6	689.1	462.4	349.0	302.3	284.5	275.6	271.2	269.0
12.5°	2014.0	1611.6	931.4	531.3	349.0	286.8	262.3	251.2	244.5	237.9	235.6
15°	2116.2	1616.1	811.4	411.2	289.0	255.6	235.6	224.5	215.6	209.0	209.0
17.5°	2222.9	1622.8	693.6	333.4	262.3	233.4	211.2	195.6	189.0	182.3	180.1
20°	2323.0	1620.5	580.2	284.5	237.9	209.0	186.7	171.2	160.1	153.4	153.4
22.5°	2418.6	1607.2	473.5	255.6	217.8	184.5	160.1	144.5	135.6	128.9	128.9
25°	2520.8	1580.5	386.8	233.4	193.4	162.3	137.8	122.3	115.6	108.9	108.9
27.5°	2600.9	1536.1	315.7	213.4	171.2	140.0	117.8	104.5	97.8	93.4	93.4
30°	2687.5	1471.6	262.3	191.2	148.9	120.0	100.0	88.9	82.2	80.0	80.0
32.5°	2783.1	1400.5	224.5	168.9	126.7	102.3	84.5	77.8	71.1	68.9	68.9
35°	2894.3	1338.2	202.3	146.7	111.1	86.7	73.4	66.7	62.2	62.2	62.2
37.5°	3021.0	1273.7	182.3	128.9	95.6	73.4	62.2	60.0	57.8	55.6	55.6
40°	3158.8	1204.8	164.5	113.4	82.2	62.2	53.4	53.4	51.1	51.1	51.1
42.5°	3314.4	1144.8	148.9	100.0	71.1	53.4	46.7	46.7	44.5	44.5	44.5
45°	3483.4	1089.2	135.6	88.9	62.2	46.7	42.2	40.0	37.8	37.8	37.8
47.5°	3683.4	1058.1	124.5	77.8	53.4	40.0	35.6	33.3	31.1	28.9	28.9
50°	3939.1	1071.5	113.4	64.5	46.7	33.3	28.9	26.7	24.5	22.2	22.2
52.5°	4141.4	1064.8	97.8	55.6	37.8	26.7	22.2	20.0	17.8	15.6	15.6
55°	4288.1	1038.1	84.5	46.7	28.9	22.2	17.8	13.3	11.1	11.1	11.1
57.5°	4432.6	1011.4	71.1	37.8	22.2	15.6	11.1	8.9	8.9	8.9	8.9
60°	4657.1	973.7	62.2	31.1	17.8	11.1	6.7	6.7	4.4	4.4	4.4
62.5°	4930.5	927.0	51.1	26.7	13.3	8.9	4.4	4.4	0.0	0.0	0.0
65°	5230.6	844.7	42.2	20.0	11.1	6.7	4.4	0.0	0.0	0.0	0.0
67.5°	5161.7	678.0	35.6	13.3	8.9	4.4	2.2	0.0	0.0	0.0	0.0
70°	4565.9	457.9	28.9	11.1	6.7	4.4	2.2	0.0	0.0	0.0	0.0
72.5°	3576.7	271.2	20.0	8.9	4.4	2.2	0.0	0.0	0.0	0.0	0.0
75°	2289.6	135.6	13.3	6.7	4.4	2.2	0.0	0.0	0.0	0.0	0.0
77.5°	766.9	66.7	8.9	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	108.9	22.2	4.4	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	24.5	8.9	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.9	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.4	2.2	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)