

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: P399570

Luminaire Tested: **ARCH-L-PA3-160-740-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399570  
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-PA3-160-740-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 705mA 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: 19890 lumens  
Efficiency: N/A  
Efficacy: 122.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

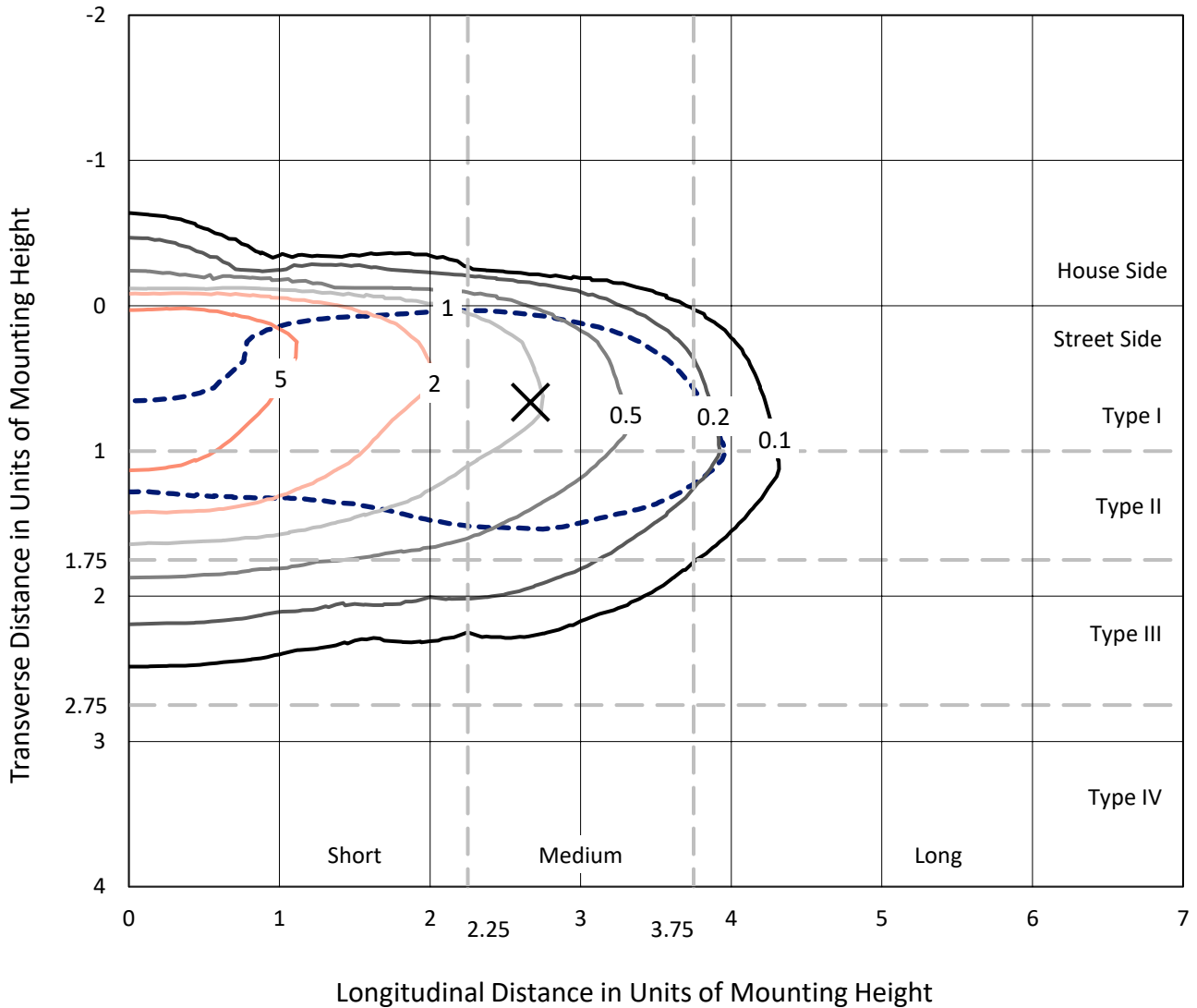
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

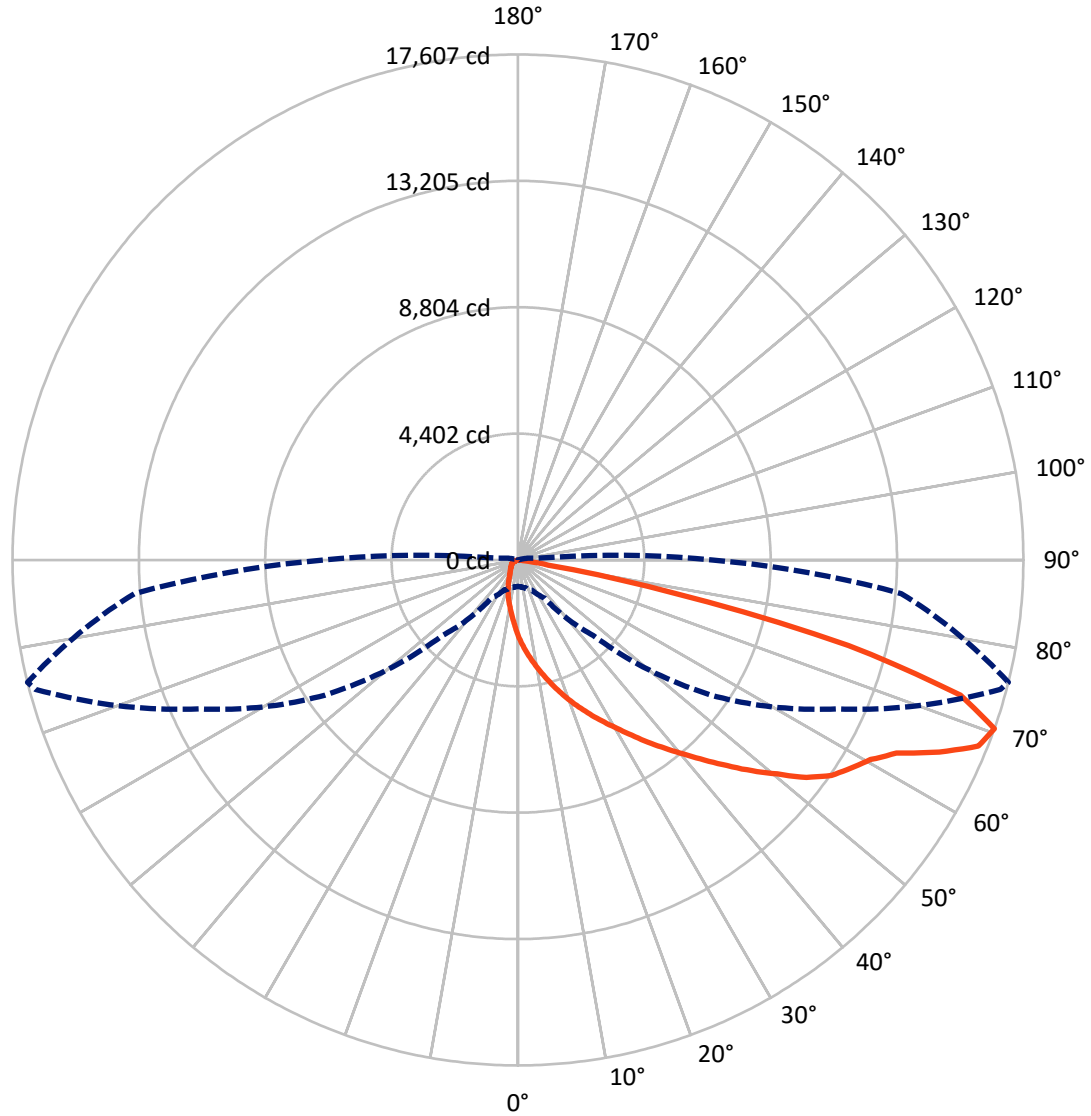
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 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	938.1	0.0	938.1
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	18951.9	0.0	18951.9
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	19890.0	0.0	19890.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	250.8	1.3
10°-20°	809.5	4.1
20°-30°	1507.6	7.6
30°-40°	2666.6	13.4
40°-50°	4077.9	20.5
50°-60°	4623.4	23.2
60°-70°	3963.4	19.9
70°-80°	1919.6	9.7
80°-90°	71.2	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°	19890.0	100.0
0°-180°	19890.0	100.0

**Coefficient of Utilization**

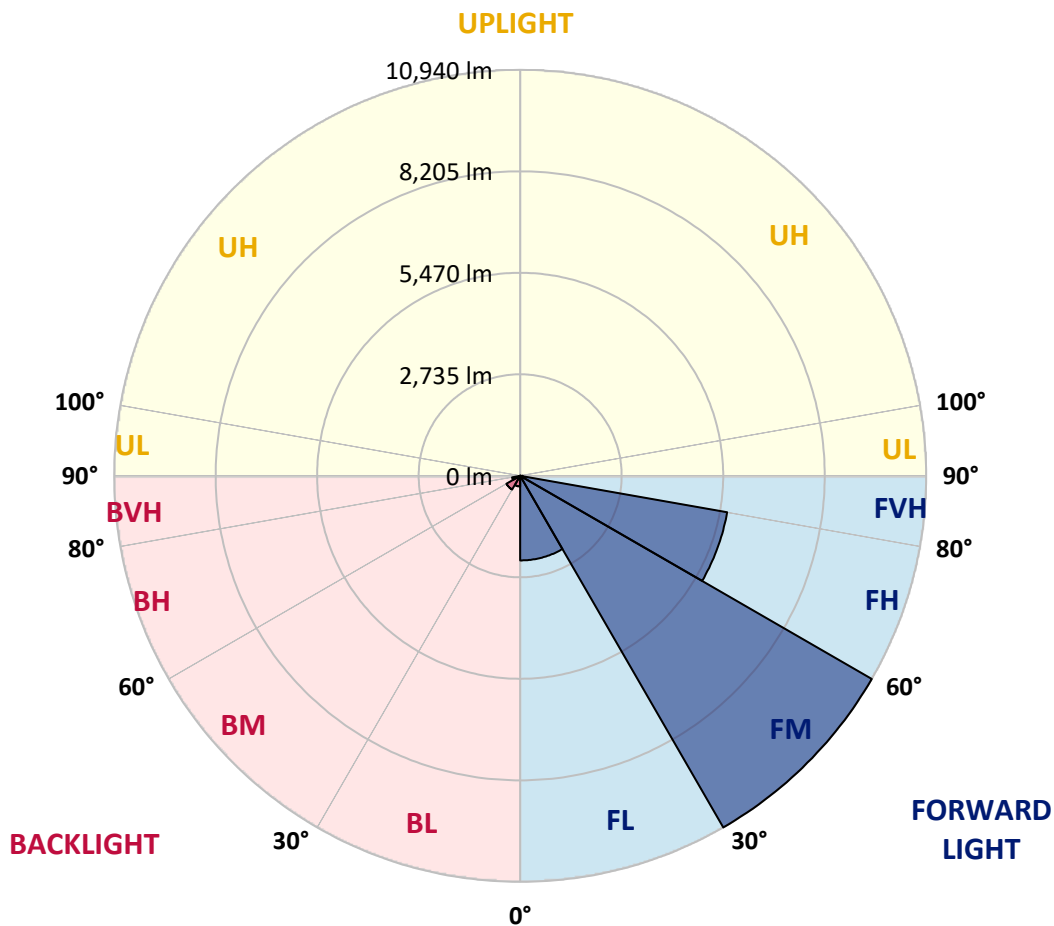


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2280.2	11.5			
FM (30°-60°)	10939.7	55.0			
FH (60°-80°)	5662.1	28.5			G3/7500
FVH (80°-90°)	70.0	0.4			G1/100
BL (0°-30°)	287.8	1.4	B1/500		
BM (30°-60°)	428.2	2.2	B1/1000		
BH (60°-80°)	220.9	1.1	B1/500		G1/500
BVH (80°-90°)	1.2	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 II Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4
2.5°	3639.3	3619.4	3599.5	3523.4	3453.8	3390.9	3271.7	3116.1	2977.0	2947.2	2784.9
5°	4275.1	4251.9	4222.1	4145.9	4056.5	3950.6	3775.1	3536.6	3291.6	3238.6	2937.3
7.5°	4705.6	4685.7	4642.7	4606.2	4516.8	4414.2	4218.8	3940.6	3602.9	3536.6	3112.8
10°	5000.3	4987.0	4980.4	4950.6	4884.4	4801.6	4606.2	4314.8	3917.4	3841.3	3298.2
12.5°	5106.3	5106.3	5139.4	5189.0	5199.0	5172.5	4993.7	4702.3	4248.6	4169.1	3516.8
15°	4963.9	4980.4	5053.3	5212.2	5377.8	5487.1	5374.5	5102.9	4612.8	4526.7	3775.1
17.5°	4924.1	4940.7	4990.4	5129.4	5351.3	5642.7	5699.0	5490.4	4957.2	4884.4	4040.0
20°	5036.7	5053.3	5096.3	5215.5	5384.4	5679.1	5914.2	5864.6	5321.5	5245.3	4308.2
22.5°	5304.9	5314.9	5314.9	5407.6	5556.6	5775.2	6050.0	6218.9	5695.7	5612.9	4573.1
25°	5881.1	5861.3	5781.8	5735.4	5831.5	6010.3	6222.2	6530.2	6112.9	6000.3	4857.9
27.5°	6636.1	6702.4	6510.3	6288.4	6215.6	6318.2	6463.9	6805.0	6516.9	6397.7	5116.2
30°	7659.4	7632.9	7381.2	7063.3	6748.7	6712.3	6762.0	7040.1	6920.9	6808.3	5404.3
32.5°	8500.5	8550.2	8285.2	7897.8	7427.6	7205.7	7152.7	7321.6	7351.4	7278.6	5745.4
35°	9364.8	9417.8	9159.5	8729.0	8169.3	7798.5	7646.1	7669.3	7884.6	7791.8	6103.0
37.5°	10139.7	10186.0	9931.0	9490.6	8931.0	8477.3	8258.8	8079.9	8401.1	8318.4	6480.5
40°	10729.1	10735.7	10563.5	10169.5	9639.6	9169.4	8921.0	8570.0	8947.5	8891.2	6874.6
42.5°	11146.3	11159.6	11033.7	10696.0	10205.9	9768.8	9566.8	9149.5	9576.7	9527.0	7331.5
45°	11341.7	11364.9	11351.6	11040.4	10633.1	10255.6	10189.3	9765.5	10265.5	10219.1	7858.1
47.5°	11156.3	11156.3	11325.2	11282.1	10907.9	10656.2	10732.4	10407.9	11013.9	10970.8	8394.5
50°	10384.7	10394.6	10739.0	11232.4	11013.9	10957.6	11196.0	11037.1	11692.7	11719.2	9036.9
52.5°	8358.1	8341.5	9503.9	10450.9	10941.0	11093.4	11623.2	11679.5	12507.3	12586.8	9676.1
55°	6245.4	6235.5	7348.1	9066.7	10431.1	11023.8	11861.6	12252.4	13202.7	13252.4	10152.9
57.5°	4944.0	4917.5	5530.1	7308.4	9278.7	10712.5	11871.5	12361.6	13590.2	13676.3	10616.5
60°	3801.5	3778.4	4235.3	5437.4	7646.1	9884.7	11586.8	12368.3	13964.4	14116.7	11239.1
62.5°	2718.7	2745.2	3096.2	3900.9	5881.1	8715.7	11215.9	12461.0	14630.0	14802.2	12123.2
65°	1834.5	1821.3	2112.7	2655.8	4182.4	7142.8	10646.3	12656.4	15828.7	16130.1	13182.9
67.5°	1274.9	1284.8	1417.3	1728.6	2655.8	5483.8	9699.2	12765.6	17067.2	17302.3	13924.6
70°	920.6	933.8	1006.7	1162.3	1622.6	3718.8	8199.1	12265.6	17401.7	17607.0	13408.1
72.5°	606.0	632.5	741.8	824.6	1036.5	2327.9	6040.1	10566.8	15961.2	16113.5	11249.0
75°	327.8	334.5	476.8	615.9	738.5	1450.4	3602.9	7126.2	11941.1	11891.4	7417.6
77.5°	255.0	264.9	294.7	440.4	496.7	798.1	1423.9	3218.7	5656.0	5503.6	2529.9
80°	155.6	162.3	205.3	261.6	347.7	463.6	417.2	874.2	1149.1	1076.2	370.9
82.5°	92.7	99.3	122.5	218.6	274.9	218.6	145.7	211.9	215.2	211.9	92.7
85°	16.6	16.6	86.1	152.3	145.7	62.9	86.1	69.5	62.9	66.2	19.9
87.5°	0.0	0.0	33.1	46.4	66.2	23.2	33.1	16.6	16.6	16.6	9.9
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°	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4	2662.4
2.5°	2685.6	2573.0	2341.2	2139.2	1937.2	1788.2	1675.6	1559.7	1520.0	1470.3	1443.8
5°	2731.9	2510.1	2049.8	1682.2	1370.9	1132.5	980.2	887.5	827.9	784.8	774.9
7.5°	2801.5	2460.4	1814.7	1318.0	976.9	738.5	612.6	549.7	516.6	496.7	490.1
10°	2884.3	2417.4	1582.9	1026.5	688.8	519.9	450.4	423.9	410.6	404.0	400.7
12.5°	3000.2	2400.8	1387.5	791.4	519.9	427.2	390.8	374.2	364.3	354.3	351.0
15°	3152.5	2407.4	1208.7	612.6	430.5	380.8	351.0	334.5	321.2	311.3	311.3
17.5°	3311.4	2417.4	1033.2	496.7	390.8	347.7	314.6	291.4	281.5	271.5	268.2
20°	3460.5	2414.0	864.3	423.9	354.3	311.3	278.2	255.0	238.4	228.5	228.5
22.5°	3602.9	2394.2	705.3	380.8	324.5	274.9	238.4	215.2	202.0	192.1	192.1
25°	3755.2	2354.4	576.2	347.7	288.1	241.7	205.3	182.1	172.2	162.3	162.3
27.5°	3874.4	2288.2	470.2	317.9	255.0	208.6	175.5	155.6	145.7	139.1	139.1
30°	4003.5	2192.2	390.8	284.8	221.9	178.8	149.0	132.5	122.5	119.2	119.2
32.5°	4145.9	2086.2	334.5	251.7	188.8	152.3	125.8	115.9	106.0	102.7	102.7
35°	4311.5	1993.5	301.3	218.6	165.6	129.1	109.3	99.3	92.7	92.7	92.7
37.5°	4500.3	1897.5	271.5	192.1	142.4	109.3	92.7	89.4	86.1	82.8	82.8
40°	4705.6	1794.8	245.0	168.9	122.5	92.7	79.5	79.5	76.2	76.2	76.2
42.5°	4937.4	1705.4	221.9	149.0	106.0	79.5	69.5	69.5	66.2	66.2	66.2
45°	5189.0	1622.6	202.0	132.5	92.7	69.5	62.9	59.6	56.3	56.3	56.3
47.5°	5487.1	1576.2	185.4	115.9	79.5	59.6	53.0	49.7	46.4	43.0	43.0
50°	5867.9	1596.1	168.9	96.0	69.5	49.7	43.0	39.7	36.4	33.1	33.1
52.5°	6169.2	1586.2	145.7	82.8	56.3	39.7	33.1	29.8	26.5	23.2	23.2
55°	6387.8	1546.4	125.8	69.5	43.0	33.1	26.5	19.9	16.6	16.6	16.6
57.5°	6603.0	1506.7	106.0	56.3	33.1	23.2	16.6	13.2	13.2	13.2	13.2
60°	6937.5	1450.4	92.7	46.4	26.5	16.6	9.9	9.9	6.6	6.6	6.6
62.5°	7344.8	1380.9	76.2	39.7	19.9	13.2	6.6	6.6	0.0	0.0	0.0
65°	7791.8	1258.4	62.9	29.8	16.6	9.9	6.6	0.0	0.0	0.0	0.0
67.5°	7689.2	1010.0	53.0	19.9	13.2	6.6	3.3	0.0	0.0	0.0	0.0
70°	6801.7	682.2	43.0	16.6	9.9	6.6	3.3	0.0	0.0	0.0	0.0
72.5°	5328.1	404.0	29.8	13.2	6.6	3.3	0.0	0.0	0.0	0.0	0.0
75°	3410.8	202.0	19.9	9.9	6.6	3.3	0.0	0.0	0.0	0.0	0.0
77.5°	1142.4	99.3	13.2	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0
80°	162.3	33.1	6.6	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	36.4	13.2	3.3	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.2	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	3.3	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)