

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: P399723

Luminaire Tested: **ARCH-L-PA3-180-750-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399723
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-PA3-180-750-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 775mA 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: 21342 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G3

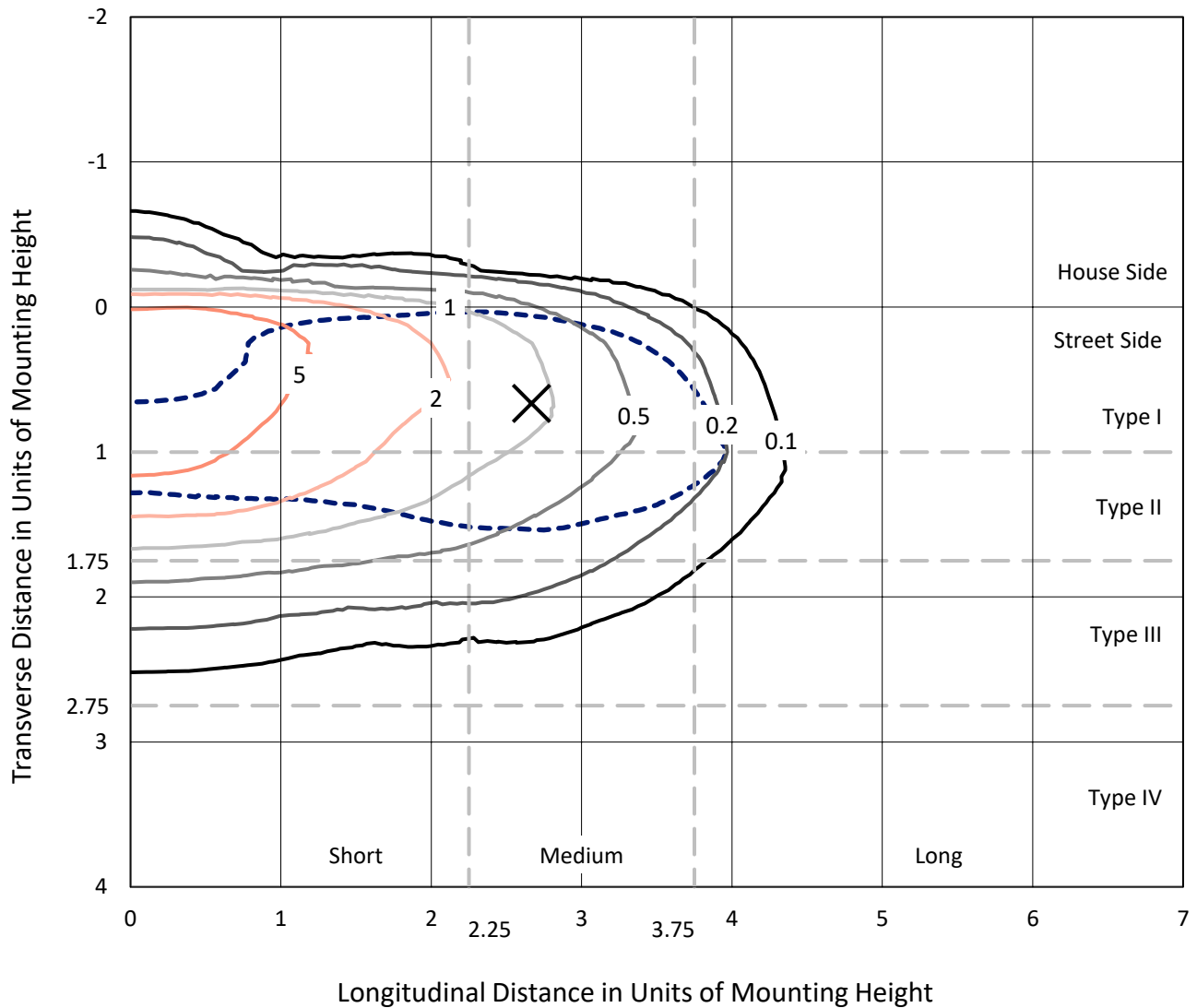
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

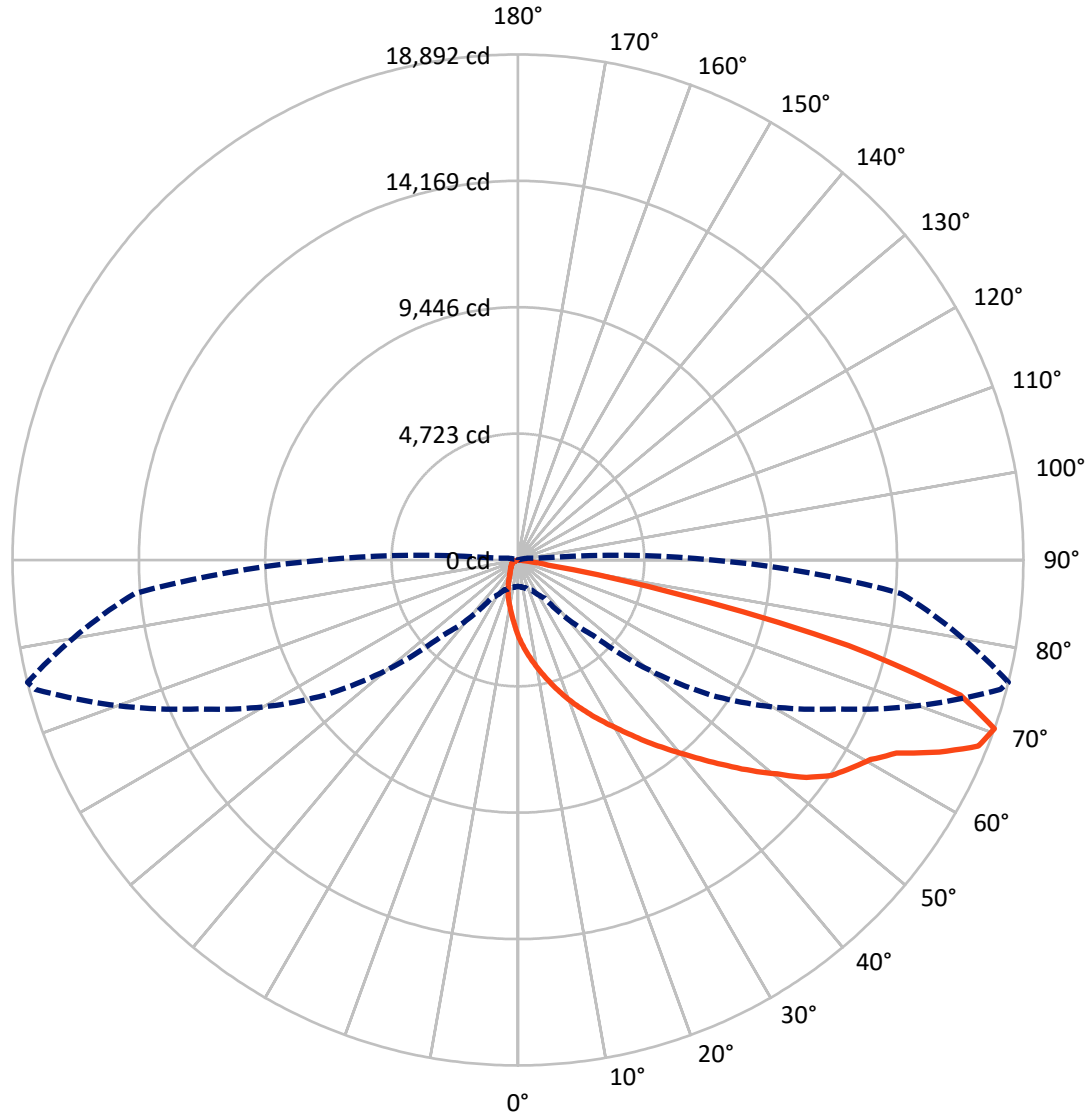
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.7 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
House Side	Lumens	1006.6	0.0	1006.6
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	20335.5	0.0	20335.5
	% Fixture	95.3	0.0	95.3
Total	Lumens	21342.0	0.0	21342.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.1	1.3
10°-20°	868.6	4.1
20°-30°	1617.7	7.6
30°-40°	2861.3	13.4
40°-50°	4375.6	20.5
50°-60°	4960.9	23.2
60°-70°	4252.7	19.9
70°-80°	2059.8	9.7
80°-90°	76.4	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°	21342.0	100.0
0°-180°	21342.0	100.0

Coefficient of Utilization



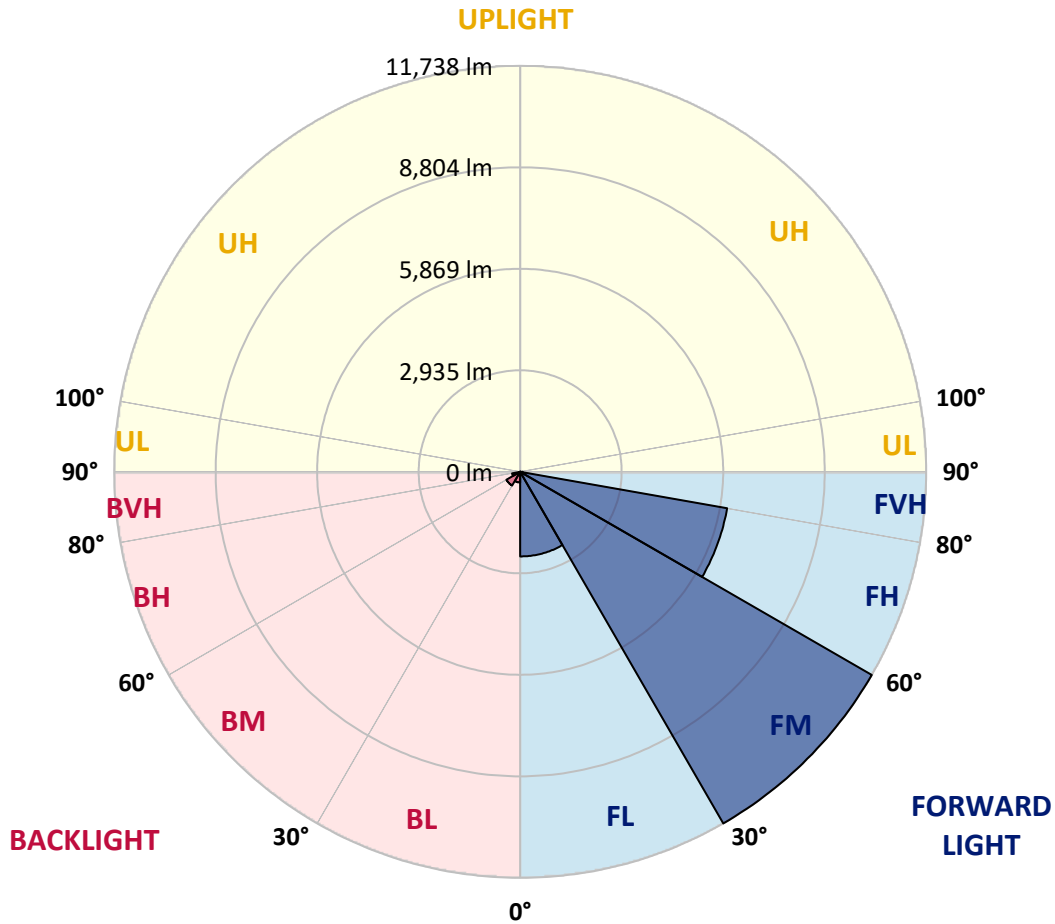
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2446.6	11.5			
FM (30°-60°)	11738.3	55.0			
FH (60°-80°)	6075.4	28.5			G3/7500
FVH (80°-90°)	75.1	0.4			G1/100
BL (0°-30°)	308.8	1.4	B1/500		
BM (30°-60°)	459.5	2.2	B1/1000		
BH (60°-80°)	237.0	1.1	B1/500		G1/500
BVH (80°-90°)	1.3	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°	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8
2.5°	3905.0	3883.6	3862.3	3780.6	3706.0	3638.5	3510.6	3343.6	3194.3	3162.3	2988.2
5°	4587.2	4562.3	4530.3	4448.6	4352.7	4239.0	4050.6	3794.8	3531.9	3475.0	3151.7
7.5°	5049.1	5027.8	4981.6	4942.5	4846.5	4736.4	4526.8	4228.3	3865.9	3794.8	3340.0
10°	5365.3	5351.1	5344.0	5312.0	5241.0	5152.1	4942.5	4629.8	4203.4	4121.7	3539.0
12.5°	5479.0	5479.0	5514.5	5567.8	5578.5	5550.1	5358.2	5045.5	4558.7	4473.5	3773.5
15°	5326.2	5344.0	5422.2	5592.7	5770.4	5887.6	5766.8	5475.5	4949.6	4857.2	4050.6
17.5°	5283.6	5301.4	5354.7	5503.9	5742.0	6054.6	6115.0	5891.2	5319.1	5241.0	4334.9
20°	5404.4	5422.2	5468.4	5596.3	5777.5	6093.7	6346.0	6292.7	5710.0	5628.3	4622.7
22.5°	5692.2	5702.9	5702.9	5802.4	5962.3	6196.8	6491.7	6672.9	6111.5	6022.7	4907.0
25°	6310.5	6289.1	6203.9	6154.1	6257.2	6449.0	6676.4	7006.9	6559.2	6438.4	5212.5
27.5°	7120.6	7191.7	6985.6	6747.5	6669.3	6779.5	6935.8	7301.8	6992.7	6864.8	5489.7
30°	8218.5	8190.1	7920.1	7579.0	7241.4	7202.3	7255.6	7554.1	7426.2	7305.4	5798.8
32.5°	9121.0	9174.3	8890.1	8474.4	7969.8	7731.7	7674.9	7856.1	7888.1	7809.9	6164.8
35°	10048.4	10105.3	9828.1	9366.2	8765.7	8367.8	8204.3	8229.2	8460.1	8360.7	6548.5
37.5°	10879.9	10929.6	10656.0	10183.4	9583.0	9096.2	8861.7	8669.8	9014.4	8925.6	6953.6
40°	11512.3	11519.4	11334.7	10911.8	10343.3	9838.8	9572.3	9195.7	9600.7	9540.3	7376.4
42.5°	11960.0	11974.2	11839.2	11476.8	10950.9	10481.9	10265.2	9817.5	10275.8	10222.5	7866.8
45°	12169.7	12194.5	12180.3	11846.3	11409.3	11004.2	10933.2	10478.4	11014.9	10965.1	8431.7
47.5°	11970.7	11970.7	12151.9	12105.7	11704.2	11434.2	11515.9	11167.7	11817.9	11771.7	9007.3
50°	11142.8	11153.5	11523.0	12052.4	11817.9	11757.5	12013.3	11842.8	12546.3	12574.7	9696.7
52.5°	8968.2	8950.5	10197.7	11213.9	11739.7	11903.2	12471.7	12532.1	13420.4	13505.7	10382.4
55°	6701.3	6690.7	7884.5	9728.6	11192.5	11828.6	12727.5	13146.8	14166.6	14219.9	10894.1
57.5°	5304.9	5276.5	5933.8	7841.9	9956.0	11494.6	12738.2	13264.1	14582.3	14674.7	11391.5
60°	4079.1	4054.2	4544.5	5834.3	8204.3	10606.3	12432.6	13271.2	14983.8	15147.2	12059.5
62.5°	2917.2	2945.6	3322.2	4185.7	6310.5	9352.0	12034.7	13370.6	15698.0	15882.8	13008.2
65°	1968.5	1954.3	2266.9	2849.7	4487.7	7664.2	11423.5	13580.3	16984.2	17307.6	14145.2
67.5°	1368.0	1378.6	1520.8	1854.8	2849.7	5884.1	10407.3	13697.5	18313.1	18565.4	14941.2
70°	987.8	1002.0	1080.2	1247.2	1741.1	3990.2	8797.7	13161.0	18672.0	18892.3	14386.9
72.5°	650.2	678.7	795.9	884.7	1112.1	2497.9	6481.0	11338.2	17126.4	17289.8	12070.2
75°	351.8	358.9	511.7	660.9	792.4	1556.3	3865.9	7646.5	12812.8	12759.5	7959.1
77.5°	273.6	284.3	316.2	472.6	533.0	856.3	1527.9	3453.7	6068.8	5905.4	2714.6
80°	167.0	174.1	220.3	280.7	373.1	497.4	447.7	938.0	1233.0	1154.8	398.0
82.5°	99.5	106.6	131.5	234.5	294.9	234.5	156.3	227.4	231.0	227.4	99.5
85°	17.8	17.8	92.4	163.4	156.3	67.5	92.4	74.6	67.5	71.1	21.3
87.5°	0.0	0.0	35.5	49.7	71.1	24.9	35.5	17.8	17.8	17.8	10.7
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°	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8	2856.8
2.5°	2881.6	2760.8	2512.1	2295.4	2078.6	1918.7	1797.9	1673.6	1630.9	1577.6	1549.2
5°	2931.4	2693.3	2199.4	1805.0	1471.0	1215.2	1051.7	952.3	888.3	842.1	831.4
7.5°	3006.0	2640.0	1947.1	1414.2	1048.2	792.4	657.3	589.8	554.3	533.0	525.9
10°	3094.8	2593.8	1698.4	1101.5	739.1	557.9	483.2	454.8	440.6	433.5	429.9
12.5°	3219.2	2576.1	1488.8	849.2	557.9	458.4	419.3	401.5	390.9	380.2	376.6
15°	3382.6	2583.2	1296.9	657.3	461.9	408.6	376.6	358.9	344.7	334.0	334.0
17.5°	3553.2	2593.8	1108.6	533.0	419.3	373.1	337.6	312.7	302.0	291.4	287.8
20°	3713.1	2590.3	927.4	454.8	380.2	334.0	298.5	273.6	255.8	245.2	245.2
22.5°	3865.9	2569.0	756.8	408.6	348.2	294.9	255.8	231.0	216.7	206.1	206.1
25°	4029.3	2526.3	618.3	373.1	309.1	259.4	220.3	195.4	184.8	174.1	174.1
27.5°	4157.2	2455.3	504.6	341.1	273.6	223.9	188.3	167.0	156.3	149.2	149.2
30°	4295.8	2352.2	419.3	305.6	238.1	191.9	159.9	142.1	131.5	127.9	127.9
32.5°	4448.6	2238.5	358.9	270.0	202.5	163.4	135.0	124.4	113.7	110.1	110.1
35°	4626.3	2139.0	323.3	234.5	177.7	138.6	117.3	106.6	99.5	99.5	99.5
37.5°	4828.8	2036.0	291.4	206.1	152.8	117.3	99.5	95.9	92.4	88.8	88.8
40°	5049.1	1925.8	262.9	181.2	131.5	99.5	85.3	85.3	81.7	81.7	81.7
42.5°	5297.8	1829.9	238.1	159.9	113.7	85.3	74.6	74.6	71.1	71.1	71.1
45°	5567.8	1741.1	216.7	142.1	99.5	74.6	67.5	64.0	60.4	60.4	60.4
47.5°	5887.6	1691.3	199.0	124.4	85.3	64.0	56.9	53.3	49.7	46.2	46.2
50°	6296.3	1712.6	181.2	103.0	74.6	53.3	46.2	42.6	39.1	35.5	35.5
52.5°	6619.6	1702.0	156.3	88.8	60.4	42.6	35.5	32.0	28.4	24.9	24.9
55°	6854.1	1659.3	135.0	74.6	46.2	35.5	28.4	21.3	17.8	17.8	17.8
57.5°	7085.1	1616.7	113.7	60.4	35.5	24.9	17.8	14.2	14.2	14.2	14.2
60°	7443.9	1556.3	99.5	49.7	28.4	17.8	10.7	10.7	7.1	7.1	7.1
62.5°	7881.0	1481.7	81.7	42.6	21.3	14.2	7.1	7.1	0.0	0.0	0.0
65°	8360.7	1350.2	67.5	32.0	17.8	10.7	7.1	0.0	0.0	0.0	0.0
67.5°	8250.5	1083.7	56.9	21.3	14.2	7.1	3.6	0.0	0.0	0.0	0.0
70°	7298.2	732.0	46.2	17.8	10.7	7.1	3.6	0.0	0.0	0.0	0.0
72.5°	5717.1	433.5	32.0	14.2	7.1	3.6	0.0	0.0	0.0	0.0	0.0
75°	3659.8	216.7	21.3	10.7	7.1	3.6	0.0	0.0	0.0	0.0	0.0
77.5°	1225.9	106.6	14.2	7.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	174.1	35.5	7.1	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	39.1	14.2	3.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.2	7.1	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.1	3.6	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)