

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: P399174

Luminaire Tested: **ARCH-L-PA3-100-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399174
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-PA3-100-830-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 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: 10610 lumens
Efficiency: N/A
Efficacy: 104.0 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

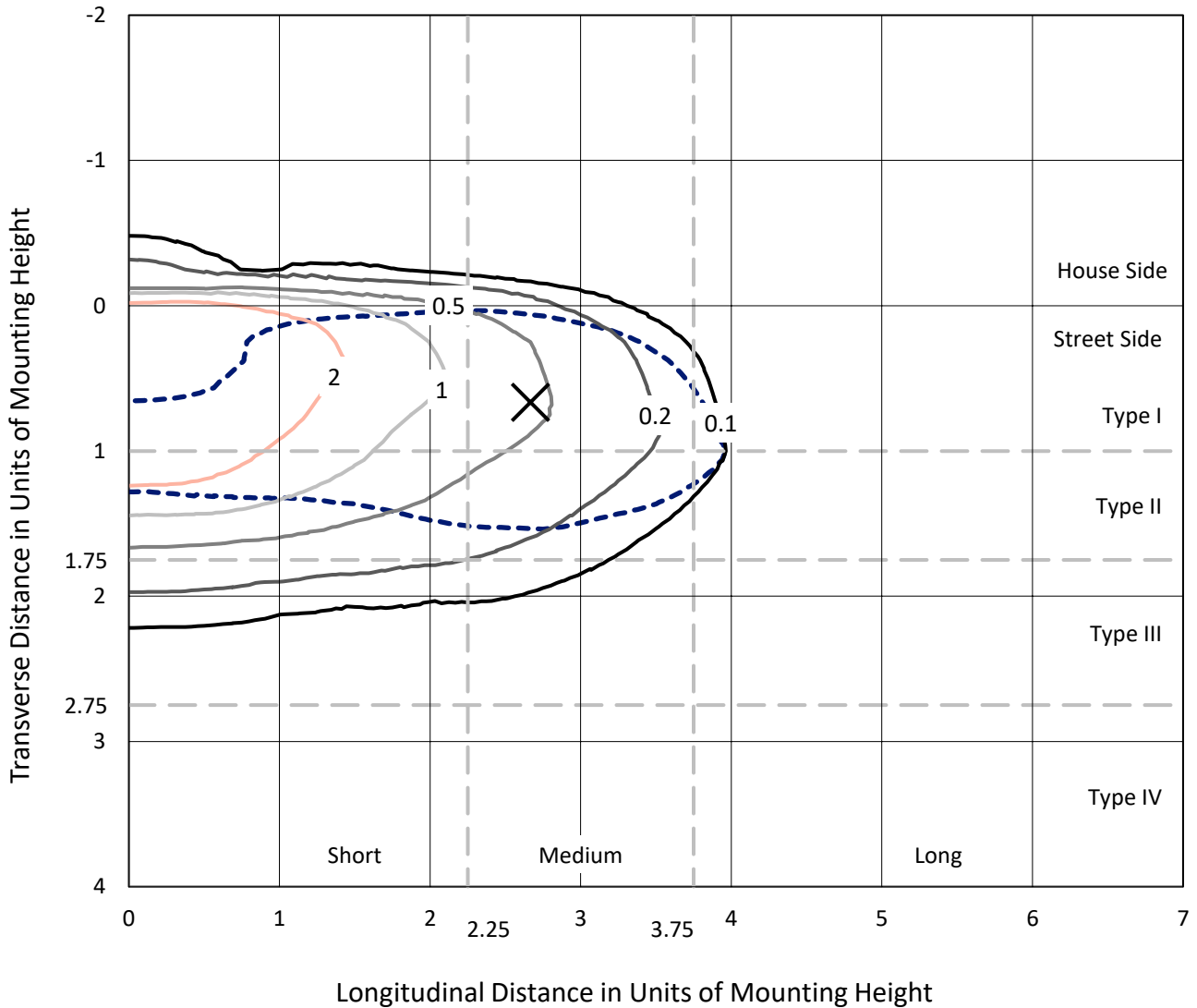
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399174
 CATALOG NUMBER: ARCH-L-PA3-100-830-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

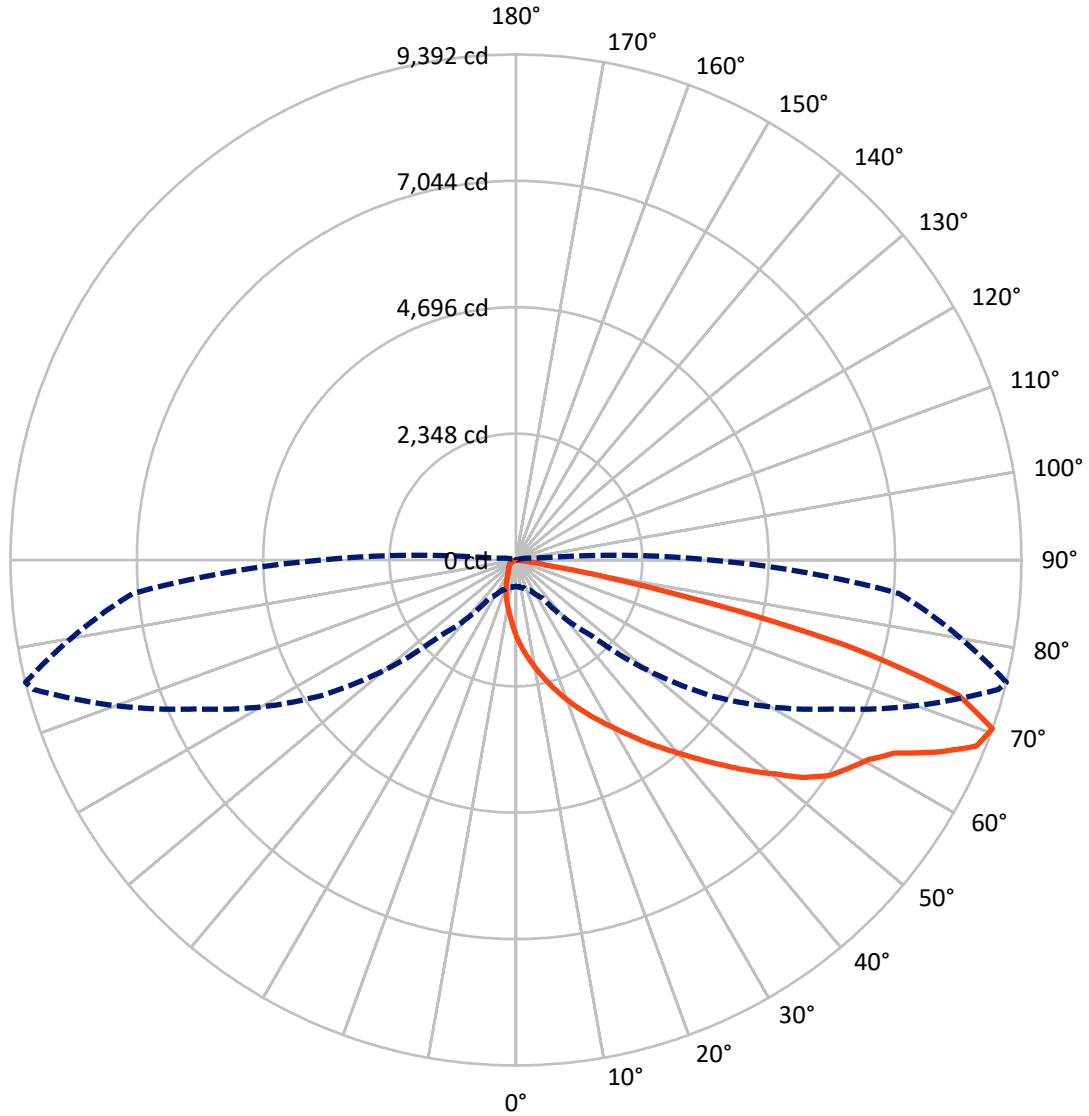
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 fc
 Type II - Medium - N/A

REPORT NUMBER: P399174
CATALOG NUMBER: ARCH-L-PA3-100-830-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P399174
 CATALOG NUMBER: ARCH-L-PA3-100-830-U-T2R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	500.4	0.0	500.4
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	10109.6	0.0	10109.6
	% Fixture	95.3	0.0	95.3
Total	Lumens	10610.0	0.0	10610.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.8	1.3
10°-20°	431.8	4.1
20°-30°	804.2	7.6
30°-40°	1422.5	13.4
40°-50°	2175.3	20.5
50°-60°	2466.3	23.2
60°-70°	2114.2	19.9
70°-80°	1024.0	9.7
80°-90°	38.0	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°	10610.0	100.0
0°-180°	10610.0	100.0

Coefficient of Utilization

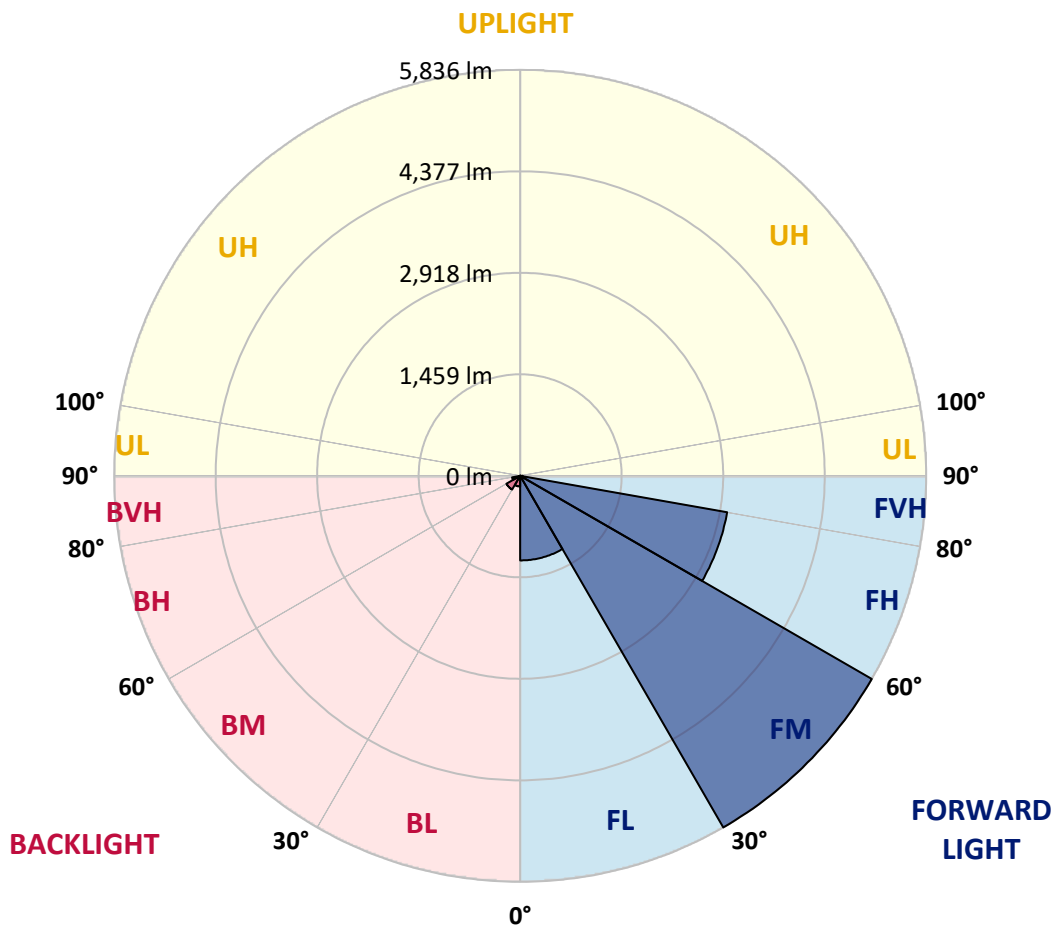


REPORT NUMBER: P399174
 CATALOG NUMBER: ARCH-L-PA3-100-830-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1216.3	11.5			
FM (30°-60°)	5835.6	55.0			
FH (60°-80°)	3020.4	28.5			G2/5000
FVH (80°-90°)	37.3	0.4			G1/100
BL (0°-30°)	153.5	1.4	B1/500		
BM (30°-60°)	228.4	2.2	B1/1000		
BH (60°-80°)	117.8	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





REPORT NUMBER: P399174

CATALOG NUMBER: ARCH-L-PA3-100-830-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2
2.5°	1941.3	1930.7	1920.1	1879.5	1842.4	1808.8	1745.2	1662.2	1588.0	1572.1	1485.6
5°	2280.5	2268.1	2252.2	2211.6	2163.9	2107.4	2013.7	1886.6	1755.8	1727.6	1566.8
7.5°	2510.1	2499.5	2476.5	2457.1	2409.4	2354.7	2250.4	2102.1	1921.9	1886.6	1660.5
10°	2667.3	2660.3	2656.7	2640.8	2605.5	2561.3	2457.1	2301.7	2089.7	2049.1	1759.4
12.5°	2723.8	2723.8	2741.5	2768.0	2773.3	2759.2	2663.8	2508.3	2266.3	2223.9	1876.0
15°	2647.9	2656.7	2695.6	2780.4	2868.7	2927.0	2866.9	2722.1	2460.6	2414.7	2013.7
17.5°	2626.7	2635.5	2662.0	2736.2	2854.6	3010.0	3040.0	2928.8	2644.4	2605.5	2155.1
20°	2686.8	2695.6	2718.5	2782.1	2872.2	3029.4	3154.9	3128.4	2838.7	2798.0	2298.1
22.5°	2829.8	2835.1	2835.1	2884.6	2964.1	3080.7	3227.3	3317.4	3038.3	2994.1	2439.5
25°	3137.2	3126.6	3084.2	3059.5	3110.7	3206.1	3319.1	3483.4	3260.8	3200.8	2591.4
27.5°	3539.9	3575.3	3472.8	3354.5	3315.6	3370.4	3448.1	3630.0	3476.4	3412.8	2729.1
30°	4085.8	4071.6	3937.4	3767.8	3600.0	3580.6	3607.1	3755.4	3691.9	3631.8	2882.8
32.5°	4534.4	4560.9	4419.6	4213.0	3962.1	3843.8	3815.5	3905.6	3921.5	3882.6	3064.8
35°	4995.5	5023.8	4886.0	4656.3	4357.8	4160.0	4078.7	4091.1	4205.9	4156.4	3255.5
37.5°	5408.8	5433.6	5297.5	5062.6	4764.1	4522.1	4405.5	4310.1	4481.5	4437.3	3456.9
40°	5723.3	5726.8	5634.9	5424.7	5142.1	4891.3	4758.8	4571.5	4772.9	4742.9	3667.1
42.5°	5945.8	5952.9	5885.8	5705.6	5444.2	5211.0	5103.2	4880.7	5108.5	5082.0	3910.9
45°	6050.1	6062.4	6055.4	5889.3	5672.0	5470.7	5435.3	5209.2	5476.0	5451.2	4191.8
47.5°	5951.1	5951.1	6041.2	6018.3	5818.6	5684.4	5725.0	5551.9	5875.2	5852.2	4477.9
50°	5539.6	5544.9	5728.6	5991.8	5875.2	5845.1	5972.3	5887.5	6237.3	6251.4	4820.6
52.5°	4458.5	4449.7	5069.7	5574.9	5836.3	5917.6	6200.2	6230.2	6671.8	6714.2	5161.5
55°	3331.5	3326.2	3919.7	4836.5	5564.3	5880.5	6327.4	6535.8	7042.8	7069.3	5415.9
57.5°	2637.3	2623.2	2950.0	3898.5	4949.6	5714.4	6332.7	6594.1	7249.5	7295.4	5663.2
60°	2027.9	2015.5	2259.3	2900.5	4078.7	5272.8	6180.8	6597.6	7449.1	7530.3	5995.3
62.5°	1450.2	1464.4	1651.6	2080.9	3137.2	4649.3	5982.9	6647.1	7804.1	7896.0	6466.9
65°	978.6	971.5	1127.0	1416.7	2231.0	3810.2	5679.1	6751.3	8443.6	8604.3	7032.2
67.5°	680.1	685.4	756.0	922.1	1416.7	2925.2	5173.9	6809.6	9104.2	9229.6	7427.9
70°	491.1	498.1	537.0	620.0	865.6	1983.7	4373.7	6542.9	9282.6	9392.2	7152.3
72.5°	323.3	337.4	395.7	439.8	552.9	1241.8	3222.0	5636.7	8514.2	8595.5	6000.6
75°	174.9	178.4	254.4	328.6	393.9	773.7	1921.9	3801.4	6369.8	6343.3	3956.8
77.5°	136.0	141.3	157.2	234.9	265.0	425.7	759.6	1717.0	3017.1	2935.8	1349.6
80°	83.0	86.6	109.5	139.5	185.5	247.3	222.6	466.3	613.0	574.1	197.8
82.5°	49.5	53.0	65.4	116.6	146.6	116.6	77.7	113.1	114.8	113.1	49.5
85°	8.8	8.8	45.9	81.3	77.7	33.6	45.9	37.1	33.6	35.3	10.6
87.5°	0.0	0.0	17.7	24.7	35.3	12.4	17.7	8.8	8.8	8.8	5.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399174

CATALOG NUMBER: ARCH-L-PA3-100-830-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2	1420.2
2.5°	1432.6	1372.5	1248.9	1141.1	1033.4	953.9	893.8	832.0	810.8	784.3	770.2
5°	1457.3	1339.0	1093.4	897.4	731.3	604.1	522.9	473.4	441.6	418.6	413.3
7.5°	1494.4	1312.5	968.0	703.0	521.1	393.9	326.8	293.2	275.6	265.0	261.4
10°	1538.6	1289.5	844.4	547.6	367.4	277.3	240.2	226.1	219.0	215.5	213.7
12.5°	1600.4	1280.7	740.1	422.2	277.3	227.9	208.4	199.6	194.3	189.0	187.2
15°	1681.6	1284.2	644.8	326.8	229.6	203.1	187.2	178.4	171.3	166.0	166.0
17.5°	1766.4	1289.5	551.1	265.0	208.4	185.5	167.8	155.4	150.1	144.8	143.1
20°	1845.9	1287.7	461.0	226.1	189.0	166.0	148.4	136.0	127.2	121.9	121.9
22.5°	1921.9	1277.1	376.3	203.1	173.1	146.6	127.2	114.8	107.8	102.5	102.5
25°	2003.1	1255.9	307.4	185.5	153.7	129.0	109.5	97.2	91.9	86.6	86.6
27.5°	2066.7	1220.6	250.8	169.6	136.0	111.3	93.6	83.0	77.7	74.2	74.2
30°	2135.6	1169.4	208.4	151.9	118.4	95.4	79.5	70.7	65.4	63.6	63.6
32.5°	2211.6	1112.9	178.4	134.2	100.7	81.3	67.1	61.8	56.5	54.8	54.8
35°	2299.9	1063.4	160.7	116.6	88.3	68.9	58.3	53.0	49.5	49.5	49.5
37.5°	2400.6	1012.2	144.8	102.5	76.0	58.3	49.5	47.7	45.9	44.2	44.2
40°	2510.1	957.4	130.7	90.1	65.4	49.5	42.4	42.4	40.6	40.6	40.6
42.5°	2633.8	909.7	118.4	79.5	56.5	42.4	37.1	37.1	35.3	35.3	35.3
45°	2768.0	865.6	107.8	70.7	49.5	37.1	33.6	31.8	30.0	30.0	30.0
47.5°	2927.0	840.8	98.9	61.8	42.4	31.8	28.3	26.5	24.7	23.0	23.0
50°	3130.1	851.4	90.1	51.2	37.1	26.5	23.0	21.2	19.4	17.7	17.7
52.5°	3290.9	846.1	77.7	44.2	30.0	21.2	17.7	15.9	14.1	12.4	12.4
55°	3407.5	824.9	67.1	37.1	23.0	17.7	14.1	10.6	8.8	8.8	8.8
57.5°	3522.3	803.7	56.5	30.0	17.7	12.4	8.8	7.1	7.1	7.1	7.1
60°	3700.7	773.7	49.5	24.7	14.1	8.8	5.3	5.3	3.5	3.5	3.5
62.5°	3918.0	736.6	40.6	21.2	10.6	7.1	3.5	3.5	0.0	0.0	0.0
65°	4156.4	671.2	33.6	15.9	8.8	5.3	3.5	0.0	0.0	0.0	0.0
67.5°	4101.7	538.8	28.3	10.6	7.1	3.5	1.8	0.0	0.0	0.0	0.0
70°	3628.3	363.9	23.0	8.8	5.3	3.5	1.8	0.0	0.0	0.0	0.0
72.5°	2842.2	215.5	15.9	7.1	3.5	1.8	0.0	0.0	0.0	0.0	0.0
75°	1819.4	107.8	10.6	5.3	3.5	1.8	0.0	0.0	0.0	0.0	0.0
77.5°	609.4	53.0	7.1	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	86.6	17.7	3.5	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	19.4	7.1	1.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.1	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	1.8	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)