

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: P399165

Luminaire Tested: **ARCH-L-PA3-100-827-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399165
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-PA3-100-827-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 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: 9815 lumens
Efficiency: N/A
Efficacy: 96.2 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

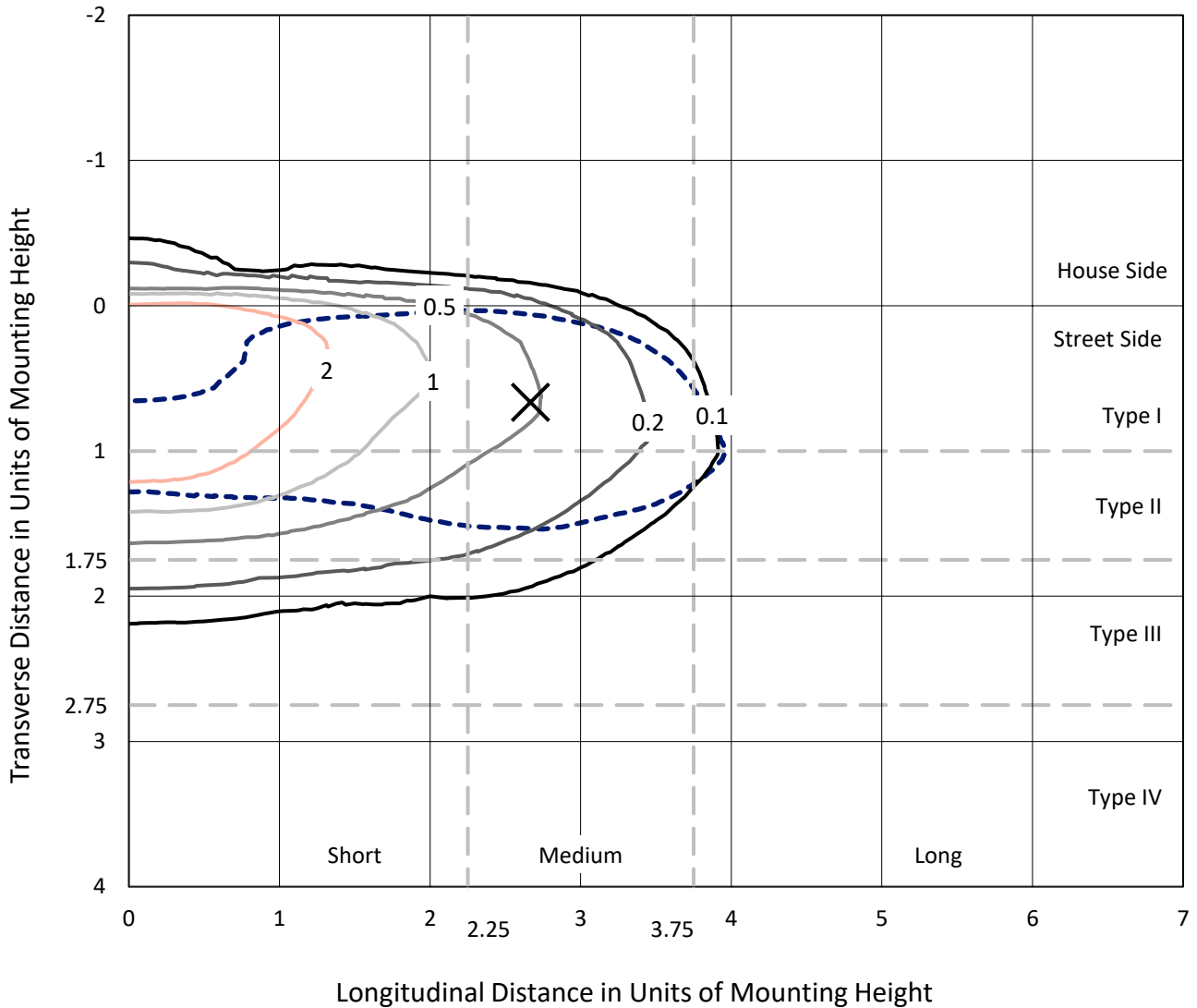
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399165
 CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2R-HSS

Iso-Footcandle Lines of Horizontal Illumination

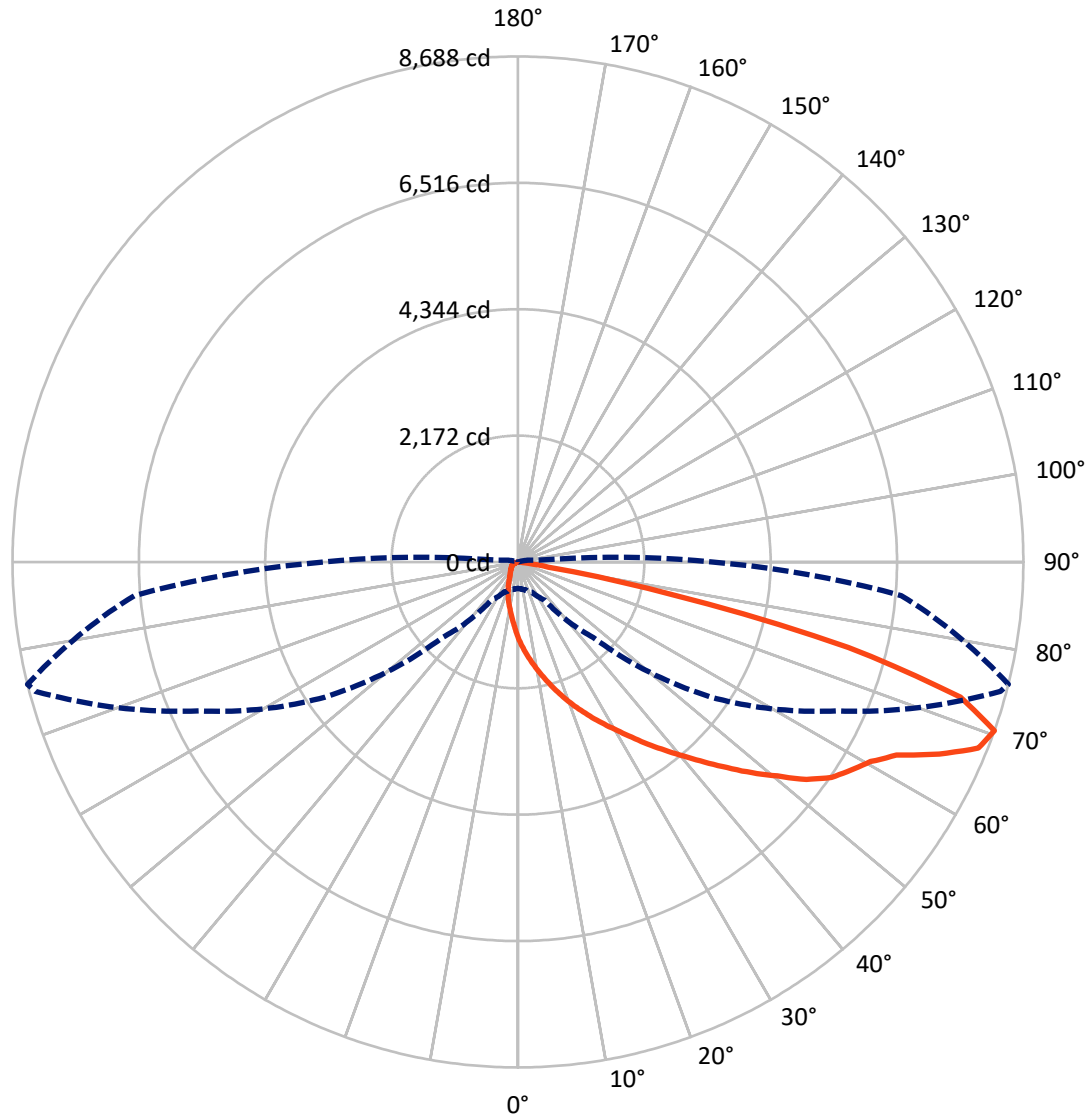
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type II - Medium - N/A

REPORT NUMBER: P399165
CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2R-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P399165
 CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2R-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	462.9	0.0	462.9
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	9352.1	0.0	9352.1
	% Fixture	95.3	0.0	95.3
Total	Lumens	9815.0	0.0	9815.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	1.3
10°-20°	399.5	4.1
20°-30°	744.0	7.6
30°-40°	1315.9	13.4
40°-50°	2012.3	20.5
50°-60°	2281.5	23.2
60°-70°	1955.8	19.9
70°-80°	947.3	9.7
80°-90°	35.1	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°	9815.0	100.0
0°-180°	9815.0	100.0

Coefficient of Utilization

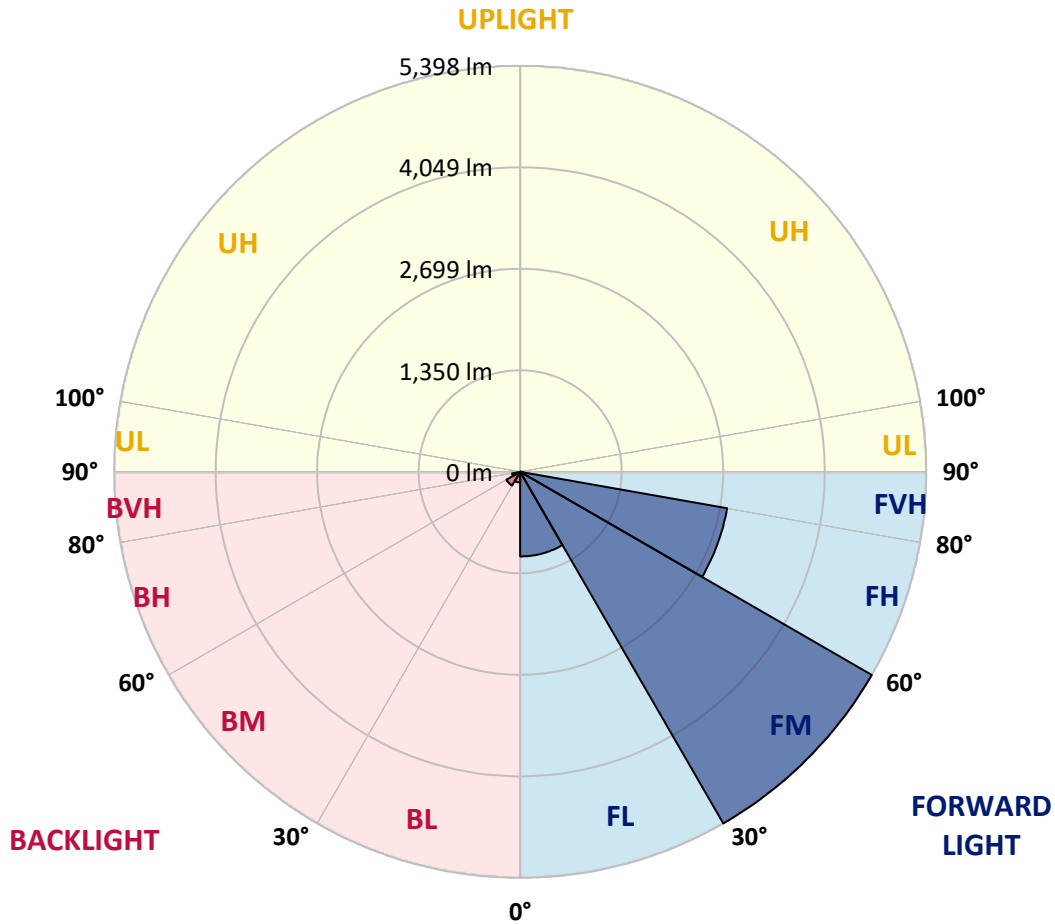


REPORT NUMBER: P399165
 CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1125.2	11.5			
FM (30°-60°)	5398.3	55.0			
FH (60°-80°)	2794.0	28.5			G2/5000
FVH (80°-90°)	34.5	0.4			G1/100
BL (0°-30°)	142.0	1.4	B1/500		
BM (30°-60°)	211.3	2.2	B0/220		
BH (60°-80°)	109.0	1.1	B0/110		G0/110
BVH (80°-90°)	0.6	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: P399165

CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2R-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8
2.5°	1795.9	1786.1	1776.2	1738.7	1704.3	1673.3	1614.5	1537.7	1469.0	1454.3	1374.3
5°	2109.6	2098.2	2083.5	2045.9	2001.7	1949.5	1862.9	1745.2	1624.3	1598.1	1449.4
7.5°	2322.0	2312.2	2291.0	2273.0	2228.9	2178.2	2081.8	1944.6	1777.9	1745.2	1536.0
10°	2467.5	2460.9	2457.7	2443.0	2410.3	2369.4	2273.0	2129.2	1933.1	1895.5	1627.5
12.5°	2519.8	2519.8	2536.1	2560.6	2565.5	2552.4	2464.2	2320.4	2096.5	2057.3	1735.4
15°	2449.5	2457.7	2493.6	2572.0	2653.7	2707.7	2652.1	2518.1	2276.3	2233.8	1862.9
17.5°	2429.9	2438.0	2462.6	2531.2	2640.7	2784.5	2812.3	2709.3	2446.2	2410.3	1993.6
20°	2485.4	2493.6	2514.9	2573.7	2657.0	2802.4	2918.5	2894.0	2626.0	2588.4	2125.9
22.5°	2617.8	2622.7	2622.7	2668.5	2742.0	2849.8	2985.5	3068.8	2810.6	2769.8	2256.7
25°	2902.1	2892.3	2853.1	2830.2	2877.6	2965.9	3070.4	3222.4	3016.5	2961.0	2397.2
27.5°	3274.7	3307.4	3212.6	3103.1	3067.2	3117.8	3189.7	3358.0	3215.9	3157.0	2524.7
30°	3779.6	3766.6	3642.4	3485.5	3330.3	3312.3	3336.8	3474.1	3415.2	3359.7	2666.8
32.5°	4194.7	4219.2	4088.5	3897.3	3665.2	3555.8	3529.6	3613.0	3627.7	3591.7	2835.1
35°	4621.2	4647.3	4519.9	4307.4	4031.3	3848.3	3773.1	3784.5	3890.7	3845.0	3011.6
37.5°	5003.6	5026.4	4900.6	4683.3	4407.1	4183.2	4075.4	3987.2	4145.7	4104.8	3197.9
40°	5294.4	5297.7	5212.7	5018.3	4756.8	4524.8	4402.2	4229.0	4415.3	4387.5	3392.4
42.5°	5500.3	5506.9	5444.8	5278.1	5036.2	4820.5	4720.9	4515.0	4725.8	4701.2	3617.9
45°	5596.7	5608.2	5601.6	5448.0	5247.0	5060.7	5028.1	4818.9	5065.6	5042.8	3877.7
47.5°	5505.2	5505.2	5588.6	5567.3	5382.7	5258.5	5296.1	5135.9	5435.0	5413.7	4142.4
50°	5124.5	5129.4	5299.3	5542.8	5435.0	5407.2	5524.8	5446.4	5769.9	5783.0	4459.4
52.5°	4124.4	4116.2	4689.8	5157.2	5399.0	5474.2	5735.6	5763.4	6171.9	6211.1	4774.8
55°	3081.9	3077.0	3626.0	4474.1	5147.4	5439.9	5853.3	6046.1	6515.1	6539.6	5010.1
57.5°	2439.7	2426.6	2728.9	3606.4	4578.7	5286.3	5858.2	6100.0	6706.3	6748.8	5238.9
60°	1875.9	1864.5	2090.0	2683.2	3773.1	4877.7	5717.6	6103.3	6890.9	6966.1	5546.1
62.5°	1341.6	1354.7	1527.9	1924.9	2902.1	4300.9	5534.6	6149.0	7219.4	7304.3	5982.4
65°	905.3	898.7	1042.5	1310.5	2063.8	3524.7	5253.6	6245.5	7810.9	7959.6	6505.3
67.5°	629.1	634.0	699.4	853.0	1310.5	2706.0	4786.2	6299.4	8422.1	8538.1	6871.3
70°	454.3	460.8	496.8	573.6	800.7	1835.1	4046.0	6052.6	8587.1	8688.4	6616.4
72.5°	299.0	312.1	366.0	406.9	511.5	1148.8	2980.6	5214.4	7876.3	7951.4	5551.0
75°	161.8	165.0	235.3	303.9	364.4	715.7	1777.9	3516.5	5892.5	5868.0	3660.3
77.5°	125.8	130.7	145.4	217.3	245.1	393.8	702.7	1588.3	2791.0	2715.8	1248.4
80°	76.8	80.1	101.3	129.1	171.6	228.8	205.9	431.4	567.0	531.1	183.0
82.5°	45.8	49.0	60.5	107.8	135.6	107.8	71.9	104.6	106.2	104.6	45.8
85°	8.2	8.2	42.5	75.2	71.9	31.0	42.5	34.3	31.0	32.7	9.8
87.5°	0.0	0.0	16.3	22.9	32.7	11.4	16.3	8.2	8.2	8.2	4.9
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: P399165

CATALOG NUMBER: ARCH-L-PA3-100-827-U-T2R-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8	1313.8
2.5°	1325.2	1269.7	1155.3	1055.6	955.9	882.4	826.8	769.7	750.0	725.5	712.5
5°	1348.1	1238.6	1011.5	830.1	676.5	558.9	483.7	437.9	408.5	387.3	382.4
7.5°	1382.4	1214.1	895.5	650.4	482.1	364.4	302.3	271.3	254.9	245.1	241.8
10°	1423.3	1192.9	781.1	506.6	339.9	256.6	222.2	209.2	202.6	199.4	197.7
12.5°	1480.5	1184.7	684.7	390.5	256.6	210.8	192.8	184.7	179.7	174.8	173.2
15°	1555.6	1188.0	596.4	302.3	212.4	187.9	173.2	165.0	158.5	153.6	153.6
17.5°	1634.1	1192.9	509.8	245.1	192.8	171.6	155.2	143.8	138.9	134.0	132.4
20°	1707.6	1191.2	426.5	209.2	174.8	153.6	137.3	125.8	117.7	112.8	112.8
22.5°	1777.9	1181.4	348.1	187.9	160.1	135.6	117.7	106.2	99.7	94.8	94.8
25°	1853.0	1161.8	284.3	171.6	142.2	119.3	101.3	89.9	85.0	80.1	80.1
27.5°	1911.9	1129.1	232.0	156.9	125.8	102.9	86.6	76.8	71.9	68.6	68.6
30°	1975.6	1081.8	192.8	140.5	109.5	88.2	73.5	65.4	60.5	58.8	58.8
32.5°	2045.9	1029.5	165.0	124.2	93.1	75.2	62.1	57.2	52.3	50.7	50.7
35°	2127.6	983.7	148.7	107.8	81.7	63.7	53.9	49.0	45.8	45.8	45.8
37.5°	2220.7	936.3	134.0	94.8	70.3	53.9	45.8	44.1	42.5	40.9	40.9
40°	2322.0	885.7	120.9	83.3	60.5	45.8	39.2	39.2	37.6	37.6	37.6
42.5°	2436.4	841.6	109.5	73.5	52.3	39.2	34.3	34.3	32.7	32.7	32.7
45°	2560.6	800.7	99.7	65.4	45.8	34.3	31.0	29.4	27.8	27.8	27.8
47.5°	2707.7	777.8	91.5	57.2	39.2	29.4	26.1	24.5	22.9	21.2	21.2
50°	2895.6	787.6	83.3	47.4	34.3	24.5	21.2	19.6	18.0	16.3	16.3
52.5°	3044.3	782.7	71.9	40.9	27.8	19.6	16.3	14.7	13.1	11.4	11.4
55°	3152.1	763.1	62.1	34.3	21.2	16.3	13.1	9.8	8.2	8.2	8.2
57.5°	3258.4	743.5	52.3	27.8	16.3	11.4	8.2	6.5	6.5	6.5	6.5
60°	3423.4	715.7	45.8	22.9	13.1	8.2	4.9	4.9	3.3	3.3	3.3
62.5°	3624.4	681.4	37.6	19.6	9.8	6.5	3.3	3.3	0.0	0.0	0.0
65°	3845.0	621.0	31.0	14.7	8.2	4.9	3.3	0.0	0.0	0.0	0.0
67.5°	3794.3	498.4	26.1	9.8	6.5	3.3	1.6	0.0	0.0	0.0	0.0
70°	3356.4	336.6	21.2	8.2	4.9	3.3	1.6	0.0	0.0	0.0	0.0
72.5°	2629.2	199.4	14.7	6.5	3.3	1.6	0.0	0.0	0.0	0.0	0.0
75°	1683.1	99.7	9.8	4.9	3.3	1.6	0.0	0.0	0.0	0.0	0.0
77.5°	563.8	49.0	6.5	3.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	80.1	16.3	3.3	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	18.0	6.5	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.5	3.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.3	1.6	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)