

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: P400506

Luminaire Tested: **ARCH-L-PA3-90-740-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400506  
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-PA3-90-740-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 400mA 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: 12399 lumens  
Efficiency: N/A  
Efficacy: 133.3 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

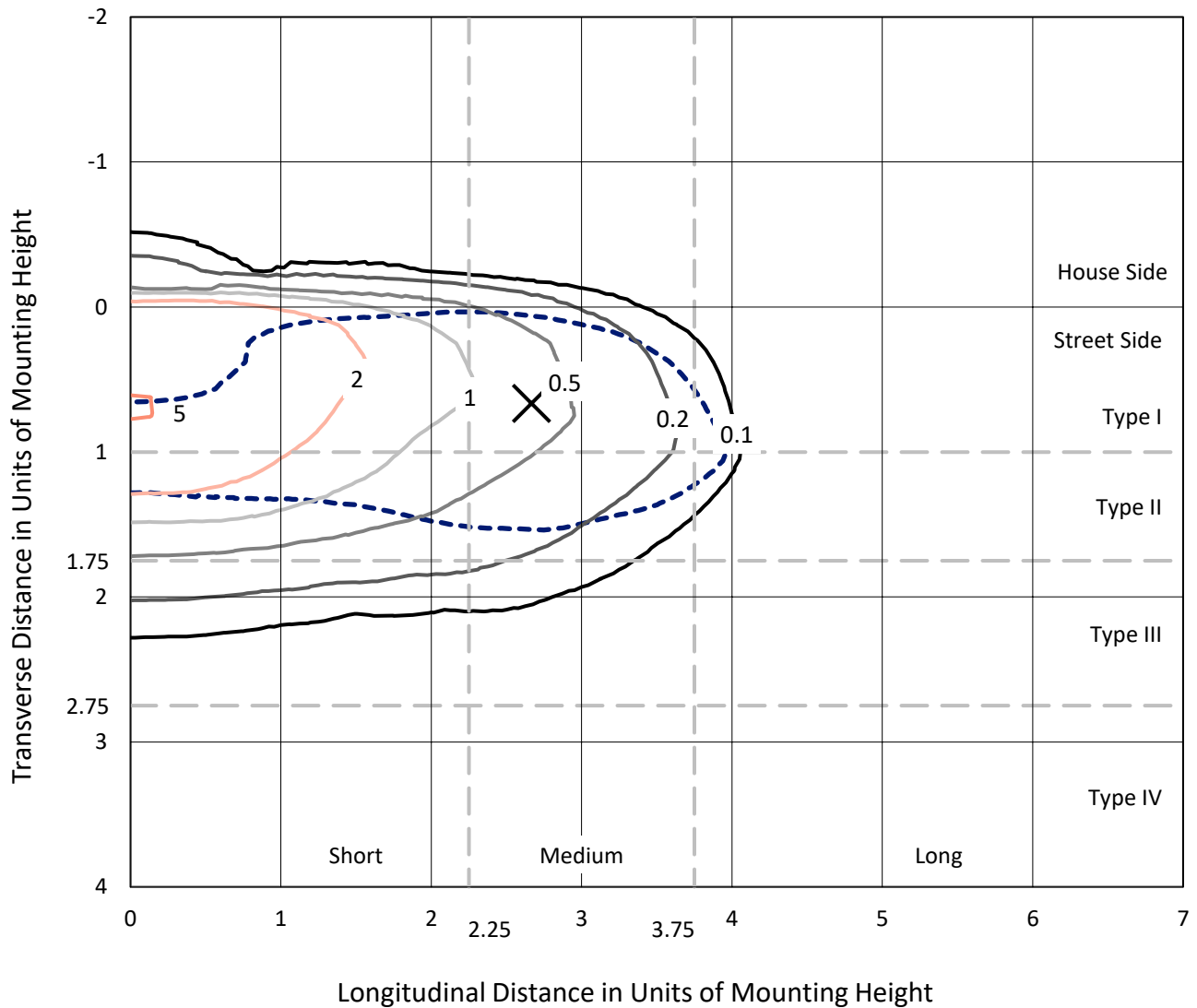
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

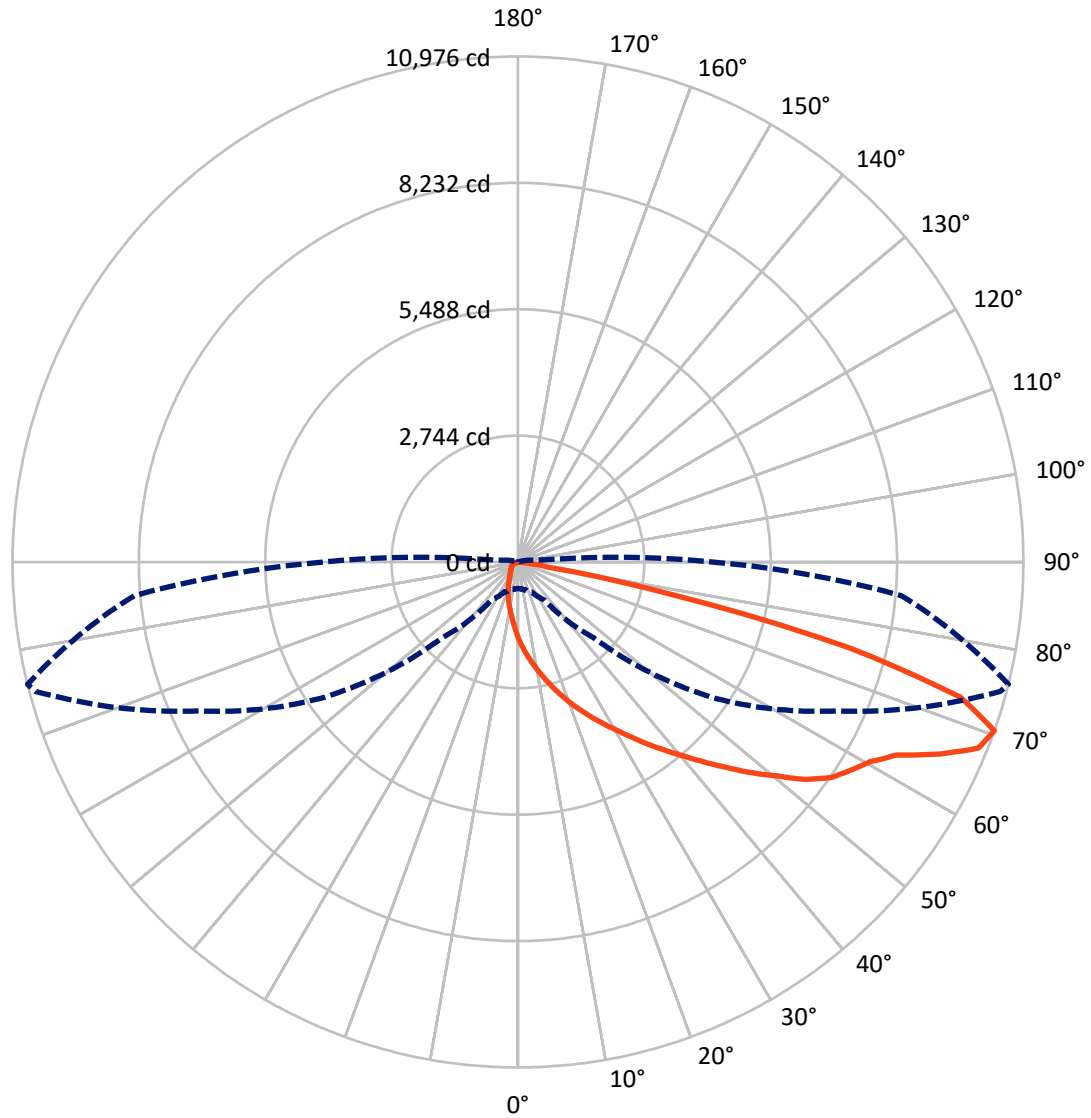
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 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	584.8	0.0	584.8
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	11814.2	0.0	11814.2
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	12399.0	0.0	12399.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.3	1.3
10°-20°	504.6	4.1
20°-30°	939.8	7.6
30°-40°	1662.3	13.4
40°-50°	2542.1	20.5
50°-60°	2882.1	23.2
60°-70°	2470.7	19.9
70°-80°	1196.6	9.7
80°-90°	44.4	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°	12399.0	100.0
0°-180°	12399.0	100.0

**Coefficient of Utilization**

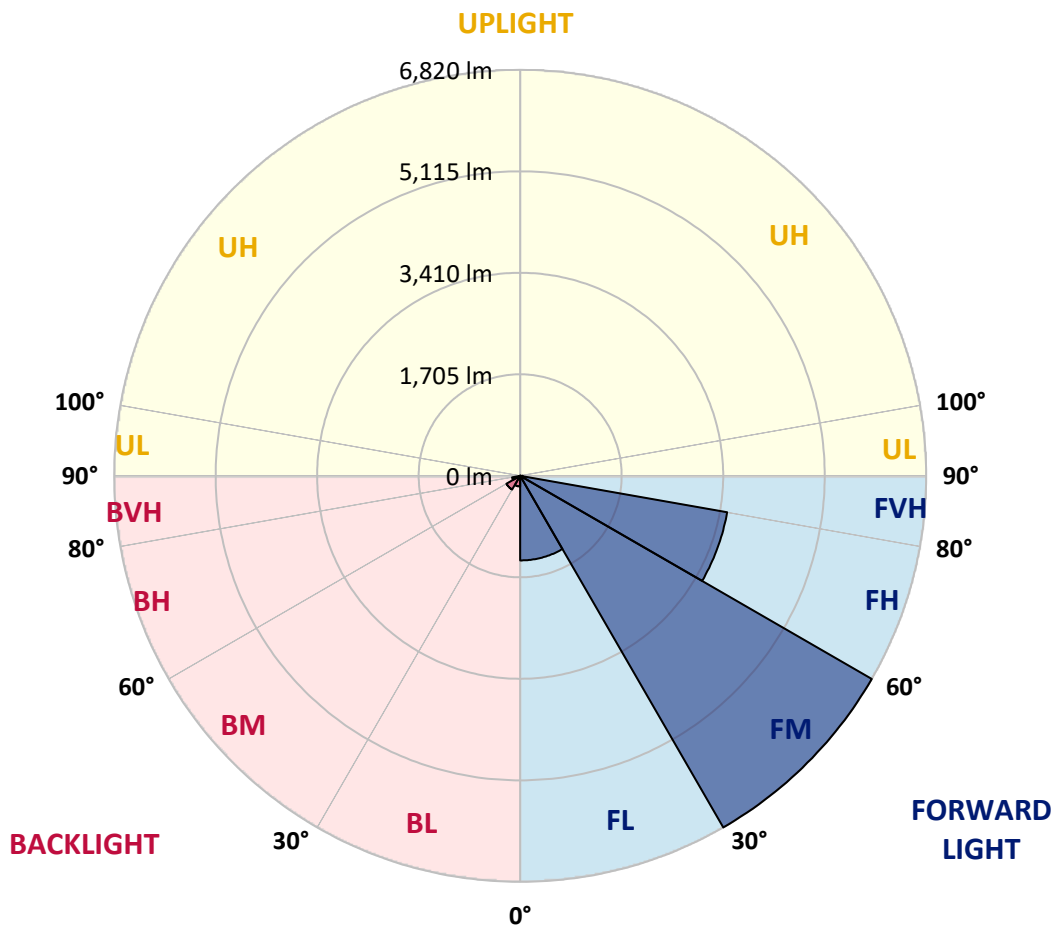


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1421.4	11.5			
FM (30°-60°)	6819.6	55.0			
FH (60°-80°)	3529.6	28.5			G2/5000
FVH (80°-90°)	43.6	0.4			G1/100
BL (0°-30°)	179.4	1.4	B1/500		
BM (30°-60°)	266.9	2.2	B1/1000		
BH (60°-80°)	137.7	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°	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7
2.5°	2268.7	2256.3	2243.9	2196.4	2153.1	2113.8	2039.5	1942.5	1855.8	1837.2	1736.1
5°	2665.0	2650.5	2632.0	2584.5	2528.8	2462.7	2353.3	2204.7	2051.9	2018.9	1831.0
7.5°	2933.4	2921.0	2894.1	2871.4	2815.7	2751.7	2629.9	2456.5	2245.9	2204.7	1940.4
10°	3117.1	3108.8	3104.7	3086.1	3044.8	2993.2	2871.4	2689.8	2442.1	2394.6	2056.0
12.5°	3183.1	3183.1	3203.8	3234.7	3240.9	3224.4	3112.9	2931.3	2648.5	2598.9	2192.3
15°	3094.4	3104.7	3150.1	3249.2	3352.4	3420.5	3350.3	3181.1	2875.6	2821.9	2353.3
17.5°	3069.6	3079.9	3110.9	3197.6	3335.9	3517.5	3552.6	3422.6	3090.2	3044.8	2518.4
20°	3139.8	3150.1	3176.9	3251.3	3356.5	3540.3	3686.8	3655.9	3317.3	3269.8	2685.6
22.5°	3307.0	3313.2	3313.2	3371.0	3463.9	3600.1	3771.5	3876.7	3550.6	3499.0	2850.8
25°	3666.2	3653.8	3604.2	3575.3	3635.2	3746.7	3878.8	4070.8	3810.7	3740.5	3028.3
27.5°	4136.8	4178.1	4058.4	3920.1	3874.7	3938.7	4029.5	4242.1	4062.5	3988.2	3189.3
30°	4774.7	4758.2	4601.3	4403.1	4207.0	4184.3	4215.3	4388.7	4314.4	4244.2	3368.9
32.5°	5299.0	5330.0	5164.8	4923.3	4630.2	4491.9	4458.9	4564.1	4582.7	4537.3	3581.5
35°	5837.8	5870.8	5709.8	5441.5	5092.6	4861.4	4766.4	4780.9	4915.1	4857.3	3804.5
37.5°	6320.8	6349.7	6190.8	5916.2	5567.4	5284.6	5148.3	5036.9	5237.1	5185.5	4039.8
40°	6688.3	6692.4	6585.1	6339.4	6009.1	5716.0	5561.2	5342.4	5577.7	5542.6	4285.5
42.5°	6948.4	6956.6	6878.2	6667.6	6362.1	6089.6	5963.7	5703.6	5969.9	5939.0	4570.3
45°	7070.2	7084.6	7076.4	6882.3	6628.4	6393.1	6351.8	6087.6	6399.3	6370.4	4898.6
47.5°	6954.6	6954.6	7059.9	7033.0	6799.8	6642.9	6690.4	6488.1	6865.8	6839.0	5233.0
50°	6473.6	6479.8	6694.5	7002.1	6865.8	6830.7	6979.4	6880.3	7289.0	7305.5	5633.4
52.5°	5210.3	5199.9	5924.5	6514.9	6820.4	6915.4	7245.6	7280.7	7796.8	7846.4	6031.8
55°	3893.2	3887.1	4580.7	5652.0	6502.5	6872.0	7394.3	7637.9	8230.3	8261.3	6329.1
57.5°	3082.0	3065.5	3447.4	4555.9	5784.1	6678.0	7400.5	7706.0	8471.8	8525.5	6618.1
60°	2369.8	2355.4	2640.2	3389.6	4766.4	6161.9	7222.9	7710.1	8705.1	8800.1	7006.2
62.5°	1694.8	1711.3	1930.1	2431.7	3666.2	5433.2	6991.7	7767.9	9120.0	9227.4	7557.4
65°	1143.6	1135.4	1317.0	1655.6	2607.2	4452.7	6636.7	7889.7	9867.3	10055.1	8217.9
67.5°	794.8	800.9	883.5	1077.6	1655.6	3418.5	6046.3	7957.8	10639.3	10785.9	8680.3
70°	573.9	582.1	627.5	724.6	1011.5	2318.2	5111.2	7646.1	10847.8	10975.8	8358.3
72.5°	377.8	394.3	462.4	514.0	646.1	1451.2	3765.3	6587.1	9949.9	10044.8	7012.4
75°	204.4	208.5	297.3	384.0	460.3	904.2	2245.9	4442.3	7443.8	7412.9	4624.0
77.5°	159.0	165.1	183.7	274.6	309.6	497.5	887.6	2006.5	3525.8	3430.8	1577.1
80°	97.0	101.2	128.0	163.1	216.8	289.0	260.1	545.0	716.3	670.9	231.2
82.5°	57.8	61.9	76.4	136.2	171.3	136.2	90.8	132.1	134.2	132.1	57.8
85°	10.3	10.3	53.7	95.0	90.8	39.2	53.7	43.4	39.2	41.3	12.4
87.5°	0.0	0.0	20.6	28.9	41.3	14.5	20.6	10.3	10.3	10.3	6.2
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°	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7	1659.7
2.5°	1674.1	1604.0	1459.5	1333.5	1207.6	1114.7	1044.5	972.3	947.5	916.5	900.0
5°	1703.0	1564.7	1277.8	1048.7	854.6	706.0	611.0	553.2	516.1	489.2	483.0
7.5°	1746.4	1533.8	1131.2	821.6	609.0	460.3	381.9	342.7	322.0	309.6	305.5
10°	1798.0	1506.9	986.7	639.9	429.4	324.1	280.7	264.2	256.0	251.8	249.8
12.5°	1870.2	1496.6	864.9	493.4	324.1	266.3	243.6	233.3	227.1	220.9	218.8
15°	1965.2	1500.7	753.5	381.9	268.4	237.4	218.8	208.5	200.2	194.0	194.0
17.5°	2064.3	1506.9	644.1	309.6	243.6	216.8	196.1	181.7	175.5	169.3	167.2
20°	2157.2	1504.9	538.8	264.2	220.9	194.0	173.4	159.0	148.6	142.4	142.4
22.5°	2245.9	1492.5	439.7	237.4	202.3	171.3	148.6	134.2	125.9	119.7	119.7
25°	2340.9	1467.7	359.2	216.8	179.6	150.7	128.0	113.5	107.3	101.2	101.2
27.5°	2415.2	1426.4	293.1	198.2	159.0	130.1	109.4	97.0	90.8	86.7	86.7
30°	2495.7	1366.6	243.6	177.5	138.3	111.5	92.9	82.6	76.4	74.3	74.3
32.5°	2584.5	1300.5	208.5	156.9	117.7	95.0	78.4	72.3	66.1	64.0	64.0
35°	2687.7	1242.7	187.9	136.2	103.2	80.5	68.1	61.9	57.8	57.8	57.8
37.5°	2805.4	1182.8	169.3	119.7	88.8	68.1	57.8	55.7	53.7	51.6	51.6
40°	2933.4	1118.8	152.8	105.3	76.4	57.8	49.5	49.5	47.5	47.5	47.5
42.5°	3077.9	1063.1	138.3	92.9	66.1	49.5	43.4	43.4	41.3	41.3	41.3
45°	3234.7	1011.5	125.9	82.6	57.8	43.4	39.2	37.2	35.1	35.1	35.1
47.5°	3420.5	982.6	115.6	72.3	49.5	37.2	33.0	31.0	28.9	26.8	26.8
50°	3657.9	995.0	105.3	59.9	43.4	31.0	26.8	24.8	22.7	20.6	20.6
52.5°	3845.8	988.8	90.8	51.6	35.1	24.8	20.6	18.6	16.5	14.5	14.5
55°	3982.0	964.0	78.4	43.4	26.8	20.6	16.5	12.4	10.3	10.3	10.3
57.5°	4116.2	939.3	66.1	35.1	20.6	14.5	10.3	8.3	8.3	8.3	8.3
60°	4324.7	904.2	57.8	28.9	16.5	10.3	6.2	6.2	4.1	4.1	4.1
62.5°	4578.6	860.8	47.5	24.8	12.4	8.3	4.1	4.1	0.0	0.0	0.0
65°	4857.3	784.4	39.2	18.6	10.3	6.2	4.1	0.0	0.0	0.0	0.0
67.5°	4793.3	629.6	33.0	12.4	8.3	4.1	2.1	0.0	0.0	0.0	0.0
70°	4240.0	425.2	26.8	10.3	6.2	4.1	2.1	0.0	0.0	0.0	0.0
72.5°	3321.4	251.8	18.6	8.3	4.1	2.1	0.0	0.0	0.0	0.0	0.0
75°	2126.2	125.9	12.4	6.2	4.1	2.1	0.0	0.0	0.0	0.0	0.0
77.5°	712.2	61.9	8.3	4.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	101.2	20.6	4.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	22.7	8.3	2.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	8.3	4.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	2.1	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)