

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: P399959

Luminaire Tested: **ARCH-L-PA3-210-827-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399959  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-210-827-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 15191 lumens  
Efficiency: N/A  
Efficacy: 72.0 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

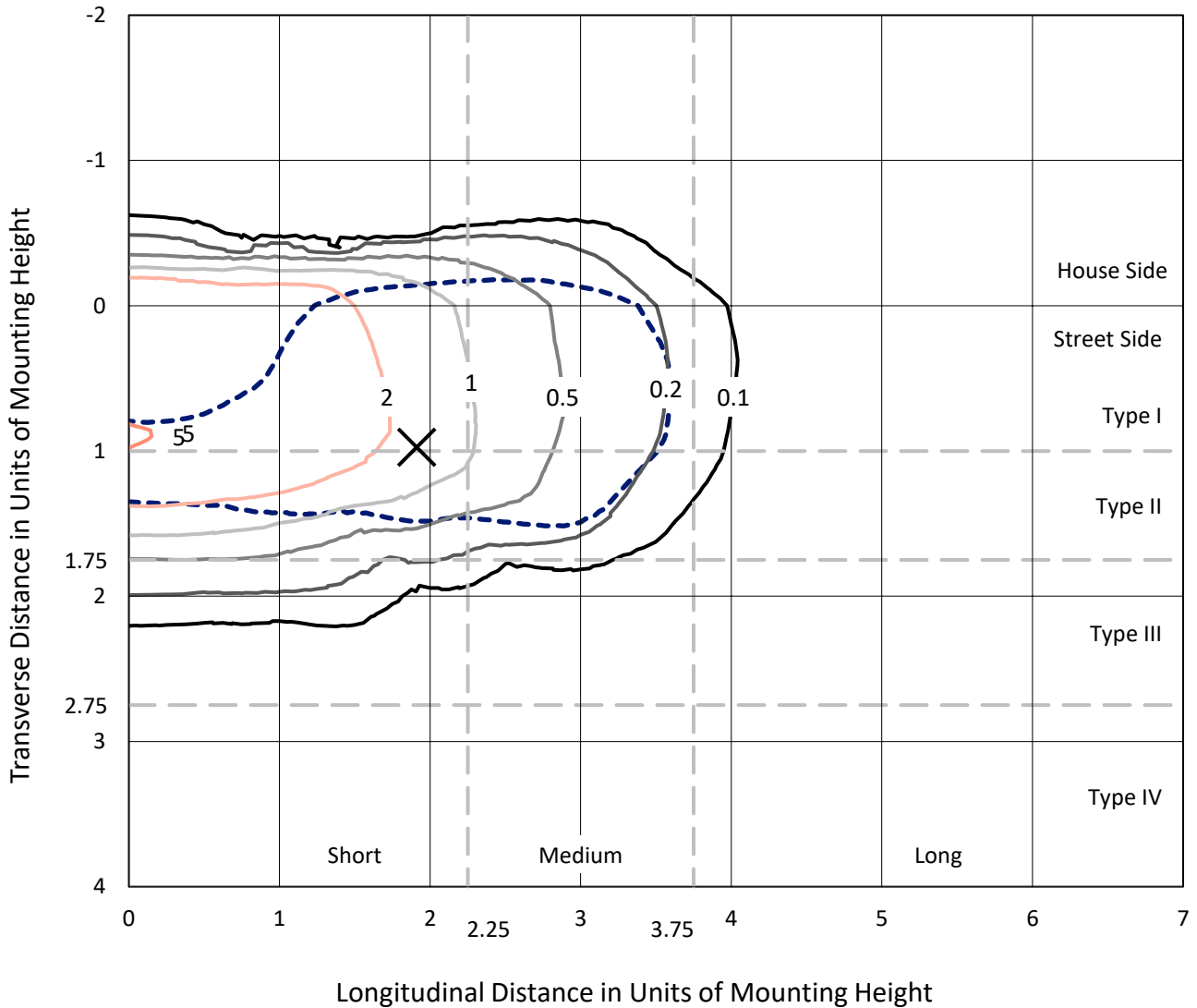
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399959  
 CATALOG NUMBER: ARCH-L-PA3-210-827-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

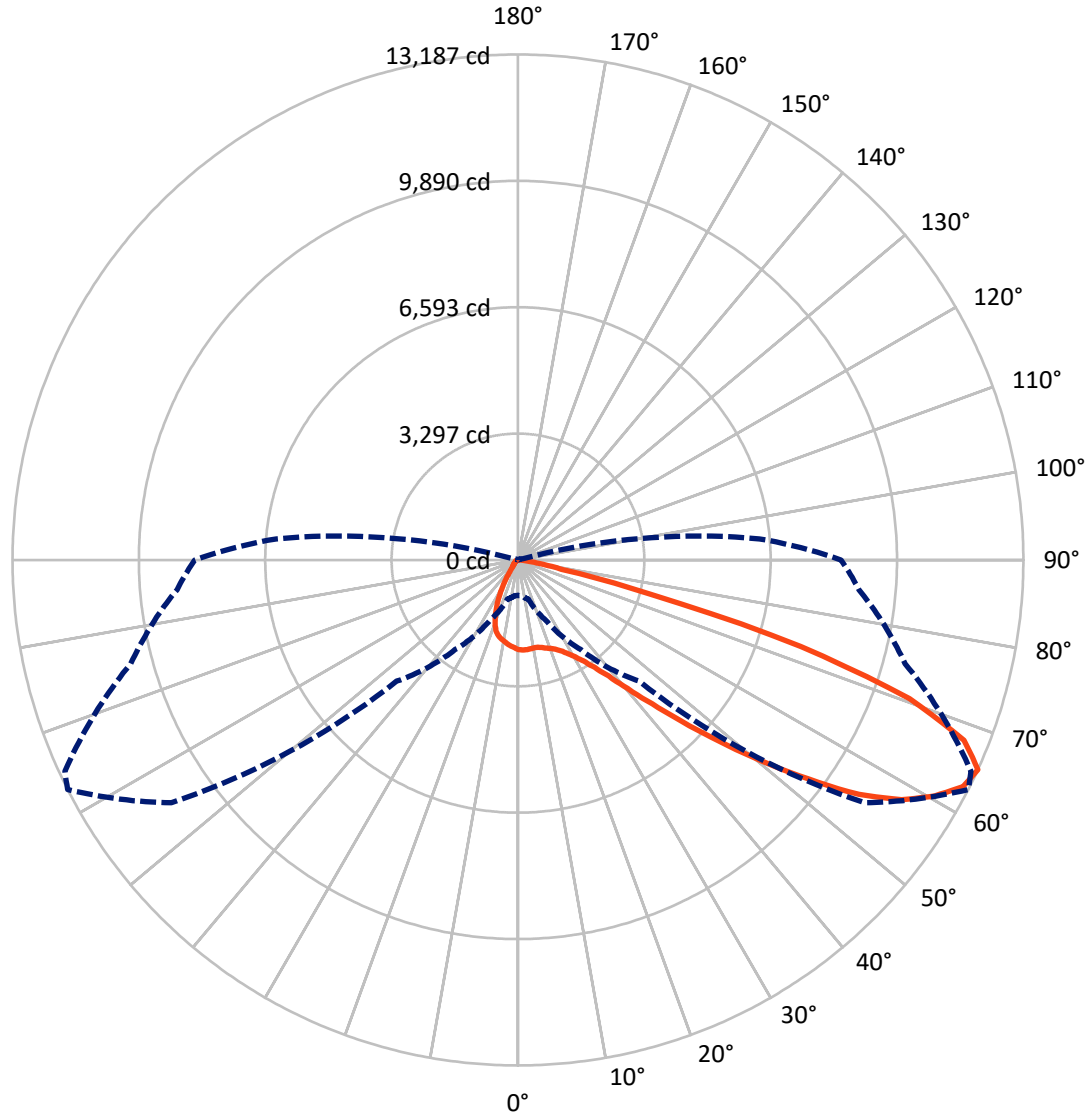
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P399959  
CATALOG NUMBER: ARCH-L-PA3-210-827-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P399959  
 CATALOG NUMBER: ARCH-L-PA3-210-827-U-T2U-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1955.1	0.0	1955.1
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	13235.9	0.0	13235.9
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	15191.0	0.0	15191.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.5	1.4
10°-20°	526.8	3.5
20°-30°	780.8	5.1
30°-40°	1449.7	9.5
40°-50°	3071.1	20.2
50°-60°	4246.5	28.0
60°-70°	3399.5	22.4
70°-80°	1412.4	9.3
80°-90°	90.7	0.6
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°	15191.0	100.0
0°-180°	15191.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P399959

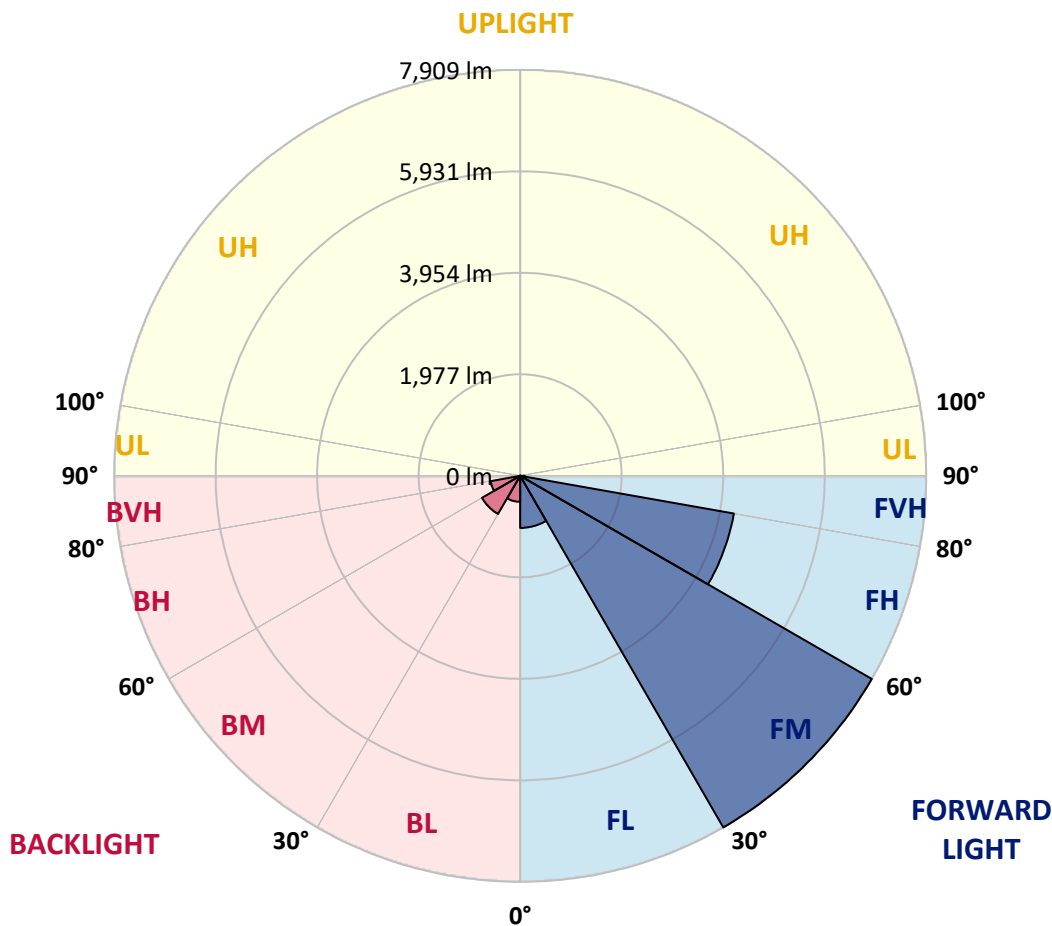
CATALOG NUMBER: ARCH-L-PA3-210-827-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1014.4	6.7			
FM (30°-60°)	7908.5	52.1			
FH (60°-80°)	4226.5	27.8			G2/5000
FVH (80°-90°)	86.6	0.6			G1/100
BL (0°-30°)	506.7	3.3	B2/1000		
BM (30°-60°)	858.8	5.7	B1/1000		
BH (60°-80°)	585.4	3.9	B2/1000		G2/1000
BVH (80°-90°)	4.1	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P399959

CATALOG NUMBER: ARCH-L-PA3-210-827-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2
2.5°	2380.3	2374.6	2368.9	2366.0	2366.0	2363.1	2351.7	2348.8	2343.0	2337.3	2331.6
5°	2357.4	2348.8	2345.9	2348.8	2351.7	2357.4	2351.7	2351.7	2345.9	2340.2	2328.7
7.5°	2300.0	2294.3	2297.2	2305.8	2308.6	2328.7	2331.6	2340.2	2340.2	2334.4	2325.8
10°	2231.2	2228.3	2228.3	2242.7	2257.0	2285.7	2305.8	2328.7	2331.6	2331.6	2317.2
12.5°	2179.6	2176.7	2185.3	2202.5	2231.2	2268.5	2302.9	2337.3	2343.0	2345.9	2323.0
15°	2148.0	2148.0	2159.5	2193.9	2234.1	2285.7	2325.8	2371.7	2377.5	2374.6	2343.0
17.5°	2119.4	2122.2	2145.2	2202.5	2248.4	2317.2	2366.0	2417.6	2420.5	2417.6	2366.0
20°	2107.9	2113.6	2148.0	2222.6	2274.2	2351.7	2414.7	2466.4	2469.2	2457.8	2388.9
22.5°	2139.4	2142.3	2185.3	2265.6	2314.4	2400.4	2480.7	2529.5	2532.3	2515.1	2423.3
25°	2248.4	2248.4	2285.7	2354.5	2397.5	2483.6	2569.6	2627.0	2627.0	2606.9	2500.8
27.5°	2503.7	2480.7	2472.1	2492.2	2506.5	2598.3	2690.1	2761.8	2758.9	2730.2	2601.2
30°	2996.9	2939.6	2847.8	2744.6	2692.9	2756.0	2842.1	2933.8	2931.0	2885.1	2724.5
32.5°	3825.7	3742.6	3524.6	3252.2	3031.3	2959.6	3039.9	3140.3	3143.2	3088.7	2922.4
35°	4987.2	4855.3	4465.3	4086.7	3582.0	3309.5	3332.5	3441.4	3475.9	3447.2	3255.0
37.5°	6105.7	5985.2	5612.4	5087.6	4402.2	3845.8	3748.3	3842.9	3883.1	3883.1	3679.5
40°	7232.8	7092.2	6762.4	6234.7	5512.0	4683.2	4333.4	4410.8	4453.8	4462.4	4195.7
42.5°	8136.1	8044.4	7792.0	7381.9	6705.1	6151.6	5176.5	5133.5	5173.6	5142.1	4795.1
45°	8761.3	8689.6	8514.7	8359.8	8030.0	7751.9	6303.6	6013.9	6039.7	5930.8	5469.0
47.5°	8890.4	8810.1	8772.8	8987.9	9223.1	9291.9	7688.8	7060.7	7034.9	6794.0	6168.8
50°	8328.3	8336.9	8474.6	9088.3	10069.1	10688.6	9294.8	8242.3	8147.6	7611.3	6819.8
52.5°	7115.2	7252.8	7599.9	8595.0	10327.2	11703.8	10900.8	9495.5	9349.3	8405.7	7307.3
55°	5566.5	5744.3	6315.0	7459.3	9788.0	12156.9	12254.4	10797.5	10464.9	9002.2	7685.9
57.5°	4138.3	4192.8	4858.2	5902.1	8511.8	11712.4	12948.4	11801.3	11374.0	9478.3	8061.6
60°	2578.2	2612.6	3315.3	4494.0	6447.0	10069.1	12948.4	12492.4	12085.2	9905.6	8405.7
62.5°	1603.1	1614.6	1878.5	3080.1	4382.1	7467.9	12412.1	13028.7	12701.8	10212.5	8701.1
65°	923.5	934.9	1058.2	1740.8	2850.7	4471.0	11041.3	13186.5	13040.2	10456.3	8930.5
67.5°	673.9	679.7	728.4	977.9	1864.1	2297.2	8293.9	12552.7	12736.2	10576.7	8924.8
70°	585.0	593.6	656.7	762.9	1345.0	1411.0	4221.5	10840.5	11353.9	10404.6	8658.1
72.5°	450.3	461.7	556.4	717.0	986.5	1015.2	1528.6	7714.6	8491.8	9329.2	7926.8
75°	309.7	321.2	415.8	590.8	814.5	760.0	840.3	3550.4	4479.6	6257.7	6034.0
77.5°	197.9	200.8	261.0	430.2	702.6	539.2	576.4	1158.6	1626.1	2830.6	2847.8
80°	131.9	134.8	160.6	278.2	481.8	499.0	355.6	536.3	587.9	825.9	573.6
82.5°	80.3	80.3	109.0	174.9	292.5	413.0	232.3	281.1	301.1	318.3	149.1
85°	31.5	31.5	66.0	114.7	183.5	192.1	146.3	163.5	172.1	186.4	68.8
87.5°	8.6	8.6	37.3	63.1	80.3	88.9	88.9	80.3	86.0	106.1	34.4
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: P399959

CATALOG NUMBER: ARCH-L-PA3-210-827-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2	2340.2
2.5°	2328.7	2320.1	2308.6	2297.2	2285.7	2277.1	2268.5	2268.5	2262.7	2254.1	2248.4
5°	2323.0	2308.6	2282.8	2262.7	2231.2	2208.3	2191.1	2176.7	2168.1	2148.0	2145.2
7.5°	2314.4	2297.2	2259.9	2219.7	2168.1	2128.0	2087.8	2059.1	2030.5	2007.5	2001.8
10°	2300.0	2280.0	2225.5	2168.1	2096.4	2021.8	1927.2	1818.2	1717.9	1660.5	1643.3
12.5°	2300.0	2274.2	2202.5	2125.1	2021.8	1838.3	1597.4	1356.5	1170.1	1086.9	1064.0
15°	2314.4	2280.0	2185.3	2079.2	1887.1	1514.2	1124.2	805.9	602.3	539.2	524.8
17.5°	2328.7	2280.0	2159.5	2016.1	1640.4	1098.4	639.5	424.4	358.5	344.1	344.1
20°	2334.4	2274.2	2125.1	1898.5	1310.6	682.6	381.4	318.3	292.5	283.9	283.9
22.5°	2357.4	2277.1	2099.3	1729.3	952.1	401.5	301.1	266.7	240.9	232.3	232.3
25°	2414.7	2311.5	2105.0	1514.2	610.9	304.0	255.2	220.8	195.0	183.5	183.5
27.5°	2506.5	2388.9	2136.6	1264.7	384.3	261.0	215.1	177.8	157.7	146.3	146.3
30°	2609.8	2475.0	2150.9	977.9	286.8	220.8	174.9	140.5	126.2	117.6	114.7
32.5°	2790.4	2624.1	2139.4	671.1	235.2	186.4	140.5	111.8	100.4	97.5	97.5
35°	3080.1	2885.1	2116.5	421.6	195.0	149.1	111.8	91.8	83.2	80.3	77.4
37.5°	3473.0	3266.5	2047.7	278.2	160.6	117.6	91.8	77.4	68.8	66.0	66.0
40°	3951.9	3702.4	1915.7	212.2	137.7	94.6	77.4	66.0	60.2	57.4	57.4
42.5°	4499.7	4187.1	1706.4	183.5	114.7	80.3	66.0	54.5	51.6	48.8	48.8
45°	5099.1	4694.7	1416.7	163.5	97.5	66.0	54.5	48.8	43.0	43.0	40.2
47.5°	5735.7	5205.2	1089.8	143.4	83.2	57.4	48.8	40.2	37.3	34.4	34.4
50°	6349.5	5661.2	765.7	123.3	68.8	48.8	40.2	34.4	31.5	28.7	28.7
52.5°	6782.5	5936.5	542.0	106.1	57.4	43.0	31.5	25.8	22.9	22.9	22.9
55°	7129.5	6108.6	378.6	88.9	48.8	37.3	25.8	20.1	20.1	17.2	17.2
57.5°	7456.5	6220.4	278.2	74.6	40.2	28.7	20.1	14.3	14.3	11.5	11.5
60°	7794.9	6280.6	212.2	60.2	34.4	22.9	14.3	11.5	8.6	8.6	8.6
62.5°	8136.1	6317.9	163.5	48.8	28.7	17.2	11.5	8.6	5.7	2.9	2.9
65°	8434.4	6329.4	126.2	37.3	22.9	11.5	8.6	2.9	0.0	0.0	0.0
67.5°	8523.3	6197.5	97.5	28.7	17.2	8.6	5.7	0.0	0.0	0.0	0.0
70°	8282.4	5847.6	74.6	22.9	14.3	5.7	2.9	0.0	0.0	0.0	0.0
72.5°	7350.4	4904.1	57.4	14.3	11.5	5.7	2.9	0.0	0.0	0.0	0.0
75°	5259.7	2615.5	40.2	11.5	8.6	2.9	0.0	0.0	0.0	0.0	0.0
77.5°	2420.5	1012.4	28.7	8.6	5.7	2.9	0.0	0.0	0.0	0.0	0.0
80°	473.2	252.4	11.5	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	109.0	43.0	5.7	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	37.3	14.3	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	14.3	5.7	2.9	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)