

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: P400020

Luminaire Tested: **ARCH-L-PA3-220-760-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400020  
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-PA3-220-760-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5700K, 945mA 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: 24701 lumens  
Efficiency: N/A  
Efficacy: 111.3 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G3

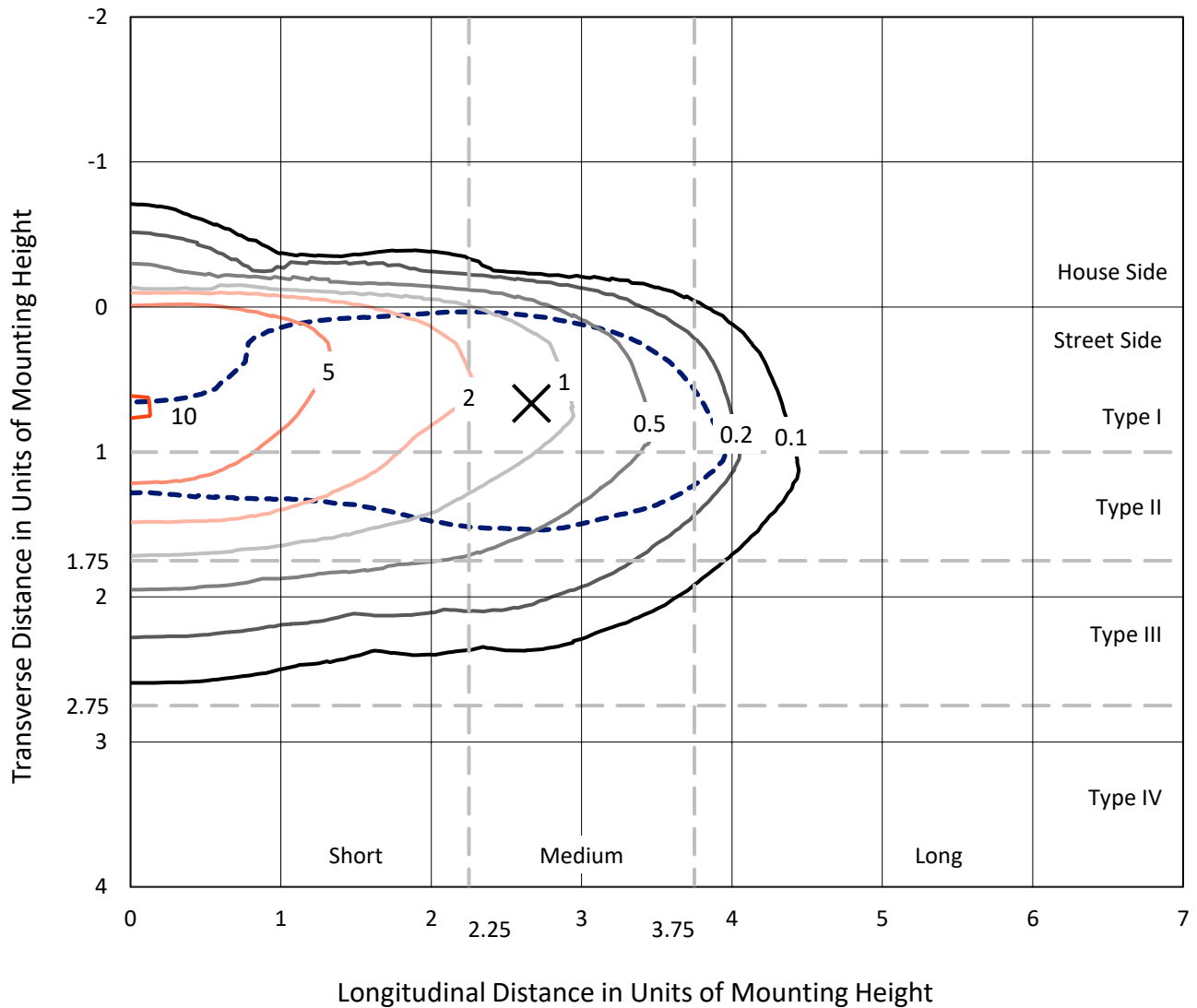
Input Watts (W): 222  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

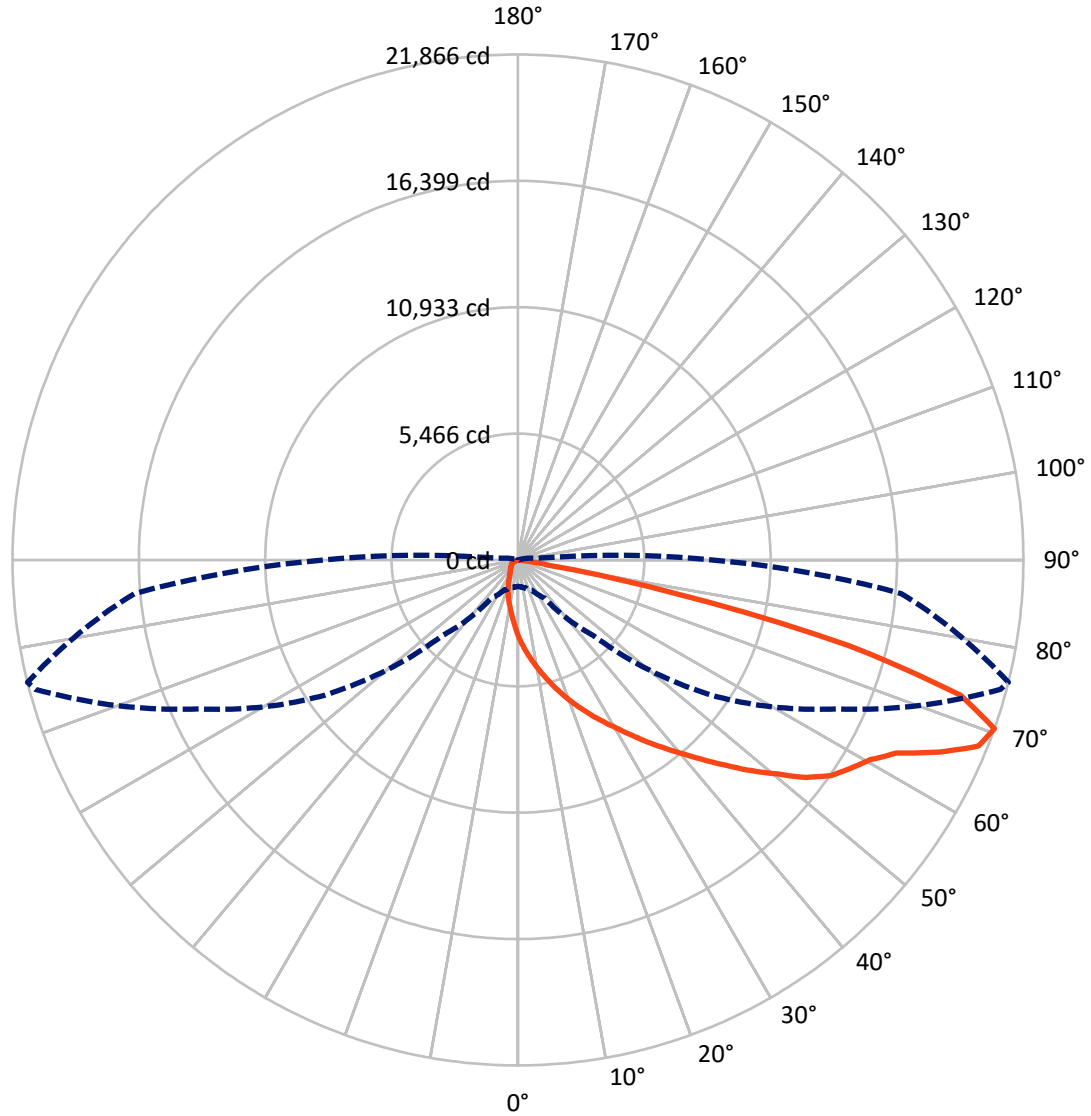
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.1 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	1165.0	0.0	1165.0
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	23536.0	0.0	23536.0
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	24701.0	0.0	24701.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	311.5	1.3
10°-20°	1005.3	4.1
20°-30°	1872.3	7.6
30°-40°	3311.6	13.4
40°-50°	5064.3	20.5
50°-60°	5741.7	23.2
60°-70°	4922.0	19.9
70°-80°	2383.9	9.7
80°-90°	88.4	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°	24701.0	100.0
0°-180°	24701.0	100.0

**Coefficient of Utilization**

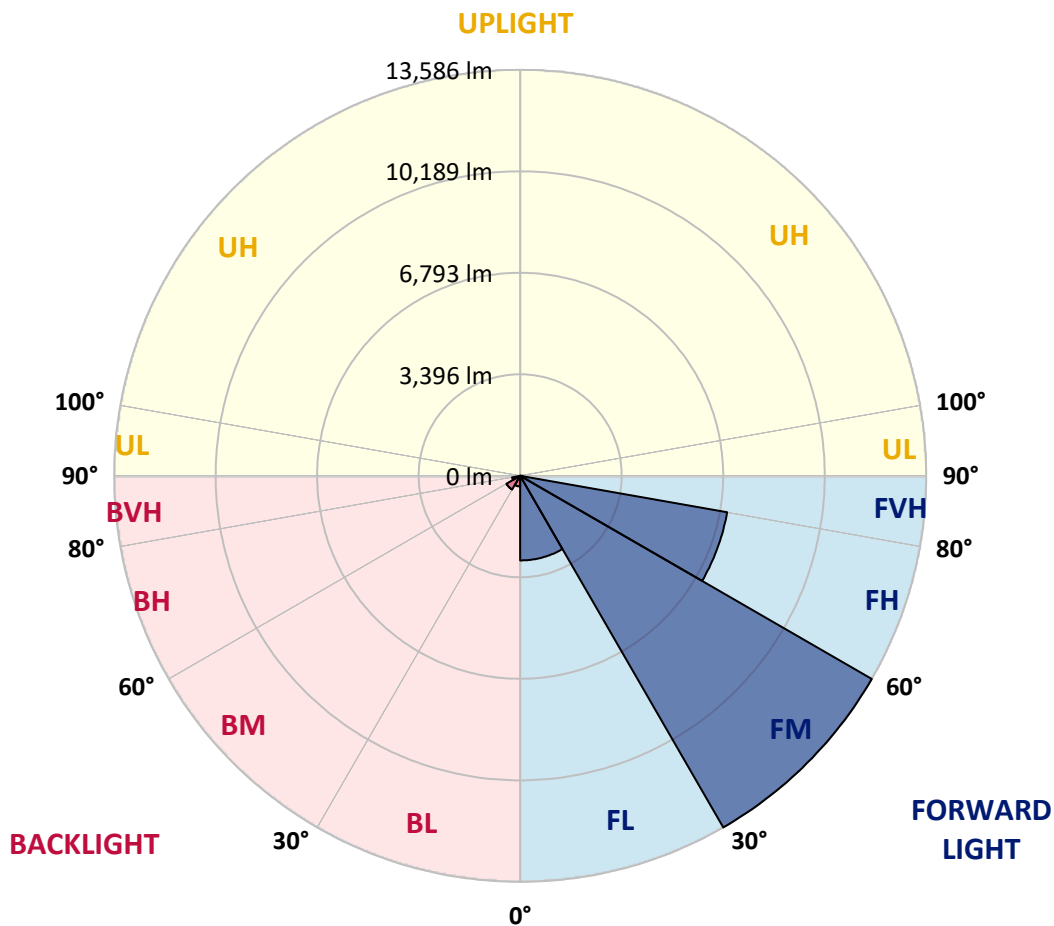


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2831.7	11.5			
FM (30°-60°)	13585.8	55.0			
FH (60°-80°)	7031.7	28.5			G3/7500
FVH (80°-90°)	86.9	0.4			G1/100
BL (0°-30°)	357.4	1.4	B1/500		
BM (30°-60°)	531.8	2.2	B1/1000		
BH (60°-80°)	274.3	1.1	B1/500		G1/500
BVH (80°-90°)	1.5	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°	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4
2.5°	4519.6	4494.9	4470.2	4375.6	4289.3	4211.1	4063.1	3869.8	3697.1	3660.1	3458.5
5°	5309.1	5280.4	5243.3	5148.8	5037.7	4906.1	4688.2	4392.1	4087.7	4021.9	3647.7
7.5°	5843.8	5819.1	5765.6	5720.4	5609.3	5481.9	5239.2	4893.8	4474.3	4392.1	3865.7
10°	6209.8	6193.3	6185.1	6148.1	6065.8	5963.0	5720.4	5358.5	4865.0	4770.4	4096.0
12.5°	6341.4	6341.4	6382.5	6444.2	6456.5	6423.6	6201.5	5839.6	5276.2	5177.5	4367.4
15°	6164.5	6185.1	6275.6	6473.0	6678.6	6814.3	6674.5	6337.2	5728.6	5621.7	4688.2
17.5°	6115.2	6135.7	6197.4	6370.1	6645.7	7007.6	7077.5	6818.4	6156.3	6065.8	5017.2
20°	6255.0	6275.6	6329.0	6477.1	6686.8	7052.8	7344.8	7283.1	6608.7	6514.1	5350.3
22.5°	6588.1	6600.4	6600.4	6715.6	6900.6	7172.1	7513.4	7723.1	7073.4	6970.6	5679.3
25°	7303.7	7279.0	7180.3	7122.7	7242.0	7464.0	7727.2	8109.7	7591.5	7451.7	6032.9
27.5°	8241.3	8323.5	8085.0	7809.5	7719.0	7846.5	8027.4	8451.0	8093.2	7945.2	6353.7
30°	9512.0	9479.1	9166.6	8771.8	8381.1	8335.9	8397.6	8743.0	8595.0	8455.1	6711.5
32.5°	10556.6	10618.3	10289.3	9808.1	9224.2	8948.6	8882.8	9092.6	9129.6	9039.1	7135.1
35°	11629.9	11695.7	11375.0	10840.3	10145.3	9684.8	9495.6	9524.4	9791.7	9676.5	7579.2
37.5°	12592.2	12649.8	12333.2	11786.2	11091.2	10527.8	10256.4	10034.3	10433.2	10330.4	8048.0
40°	13324.2	13332.5	13118.6	12629.2	11971.3	11387.3	11078.9	10642.9	11111.8	11041.9	8537.4
42.5°	13842.4	13858.9	13702.6	13283.1	12674.5	12131.6	11880.8	11362.6	11893.1	11831.4	9104.9
45°	14085.0	14113.8	14097.4	13710.8	13205.0	12736.2	12653.9	12127.5	12748.5	12690.9	9758.8
47.5°	13854.8	13854.8	14064.5	14011.0	13546.3	13233.8	13328.4	12925.3	13677.9	13624.5	10425.0
50°	12896.6	12908.9	13336.6	13949.3	13677.9	13608.0	13904.1	13706.7	14521.0	14553.9	11222.8
52.5°	10379.8	10359.2	11802.7	12978.8	13587.4	13776.6	14434.6	14504.5	15532.6	15631.3	12016.5
55°	7756.0	7743.7	9125.5	11259.8	12954.1	13690.3	14730.7	15216.0	16396.2	16457.9	12608.7
57.5°	6139.8	6106.9	6867.7	9076.1	11523.0	13303.7	14743.0	15351.7	16877.4	16984.3	13184.4
60°	4721.1	4692.3	5259.8	6752.6	9495.6	12275.6	14389.4	15359.9	17342.1	17531.3	13957.6
62.5°	3376.3	3409.2	3845.1	4844.4	7303.7	10823.9	13928.8	15475.0	18168.7	18382.5	15055.6
65°	2278.3	2261.8	2623.7	3298.2	5194.0	8870.5	13221.4	15717.7	19657.4	20031.6	16371.6
67.5°	1583.3	1595.6	1760.1	2146.7	3298.2	6810.2	12045.3	15853.4	21195.4	21487.4	17292.7
70°	1143.3	1159.7	1250.2	1443.5	2015.1	4618.3	10182.4	15232.4	21610.8	21865.7	16651.2
72.5°	752.6	785.5	921.2	1024.0	1287.2	2891.0	7501.1	13122.7	19821.9	20011.0	13969.9
75°	407.1	415.4	592.2	764.9	917.1	1801.2	4474.3	8849.9	14829.4	14767.7	9211.8
77.5°	316.7	329.0	366.0	547.0	616.9	991.1	1768.3	3997.3	7024.0	6834.8	3141.9
80°	193.3	201.5	255.0	324.9	431.8	575.7	518.2	1085.7	1427.0	1336.5	460.6
82.5°	115.1	123.4	152.2	271.4	341.3	271.4	180.9	263.2	267.3	263.2	115.1
85°	20.6	20.6	106.9	189.2	180.9	78.1	106.9	86.4	78.1	82.2	24.7
87.5°	0.0	0.0	41.1	57.6	82.2	28.8	41.1	20.6	20.6	20.6	12.3
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°	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4	3306.4
2.5°	3335.2	3195.4	2907.5	2656.6	2405.8	2220.7	2080.9	1937.0	1887.6	1825.9	1793.0
5°	3392.7	3117.2	2545.6	2089.1	1702.5	1406.4	1217.3	1102.1	1028.1	974.6	962.3
7.5°	3479.1	3055.5	2253.6	1636.7	1213.2	917.1	760.8	682.7	641.5	616.9	608.6
10°	3581.9	3002.1	1965.7	1274.9	855.4	645.7	559.3	526.4	509.9	501.7	497.6
12.5°	3725.9	2981.5	1723.1	982.9	645.7	530.5	485.3	464.7	452.4	440.0	435.9
15°	3915.0	2989.7	1501.0	760.8	534.6	472.9	435.9	415.4	398.9	386.6	386.6
17.5°	4112.4	3002.1	1283.1	616.9	485.3	431.8	390.7	361.9	349.6	337.2	333.1
20°	4297.5	2998.0	1073.3	526.4	440.0	386.6	345.4	316.7	296.1	283.8	283.8
22.5°	4474.3	2973.3	875.9	472.9	403.0	341.3	296.1	267.3	250.9	238.5	238.5
25°	4663.5	2923.9	715.6	431.8	357.8	300.2	255.0	226.2	213.8	201.5	201.5
27.5°	4811.5	2841.7	584.0	394.8	316.7	259.1	218.0	193.3	180.9	172.7	172.7
30°	4971.9	2722.4	485.3	353.7	275.5	222.1	185.1	164.5	152.2	148.0	148.0
32.5°	5148.8	2590.8	415.4	312.5	234.4	189.2	156.3	143.9	131.6	127.5	127.5
35°	5354.4	2475.7	374.2	271.4	205.6	160.4	135.7	123.4	115.1	115.1	115.1
37.5°	5588.8	2356.4	337.2	238.5	176.8	135.7	115.1	111.0	106.9	102.8	102.8
40°	5843.8	2228.9	304.3	209.7	152.2	115.1	98.7	98.7	94.6	94.6	94.6
42.5°	6131.6	2117.9	275.5	185.1	131.6	98.7	86.4	86.4	82.2	82.2	82.2
45°	6444.2	2015.1	250.9	164.5	115.1	86.4	78.1	74.0	69.9	69.9	69.9
47.5°	6814.3	1957.5	230.3	143.9	98.7	74.0	65.8	61.7	57.6	53.5	53.5
50°	7287.2	1982.2	209.7	119.3	86.4	61.7	53.5	49.3	45.2	41.1	41.1
52.5°	7661.4	1969.9	180.9	102.8	69.9	49.3	41.1	37.0	32.9	28.8	28.8
55°	7932.9	1920.5	156.3	86.4	53.5	41.1	32.9	24.7	20.6	20.6	20.6
57.5°	8200.2	1871.2	131.6	69.9	41.1	28.8	20.6	16.4	16.4	16.4	16.4
60°	8615.5	1801.2	115.1	57.6	32.9	20.6	12.3	12.3	8.2	8.2	8.2
62.5°	9121.4	1714.9	94.6	49.3	24.7	16.4	8.2	8.2	0.0	0.0	0.0
65°	9676.5	1562.7	78.1	37.0	20.6	12.3	8.2	0.0	0.0	0.0	0.0
67.5°	9549.0	1254.3	65.8	24.7	16.4	8.2	4.1	0.0	0.0	0.0	0.0
70°	8446.9	847.2	53.5	20.6	12.3	8.2	4.1	0.0	0.0	0.0	0.0
72.5°	6616.9	501.7	37.0	16.4	8.2	4.1	0.0	0.0	0.0	0.0	0.0
75°	4235.8	250.9	24.7	12.3	8.2	4.1	0.0	0.0	0.0	0.0	0.0
77.5°	1418.8	123.4	16.4	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0
80°	201.5	41.1	8.2	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	45.2	16.4	4.1	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.4	8.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.2	4.1	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)