

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: P400083

Luminaire Tested: **ARCH-L-PA3-230-750-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400083  
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-PA3-230-750-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 980mA 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: 25322 lumens  
Efficiency: N/A  
Efficacy: 110.6 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

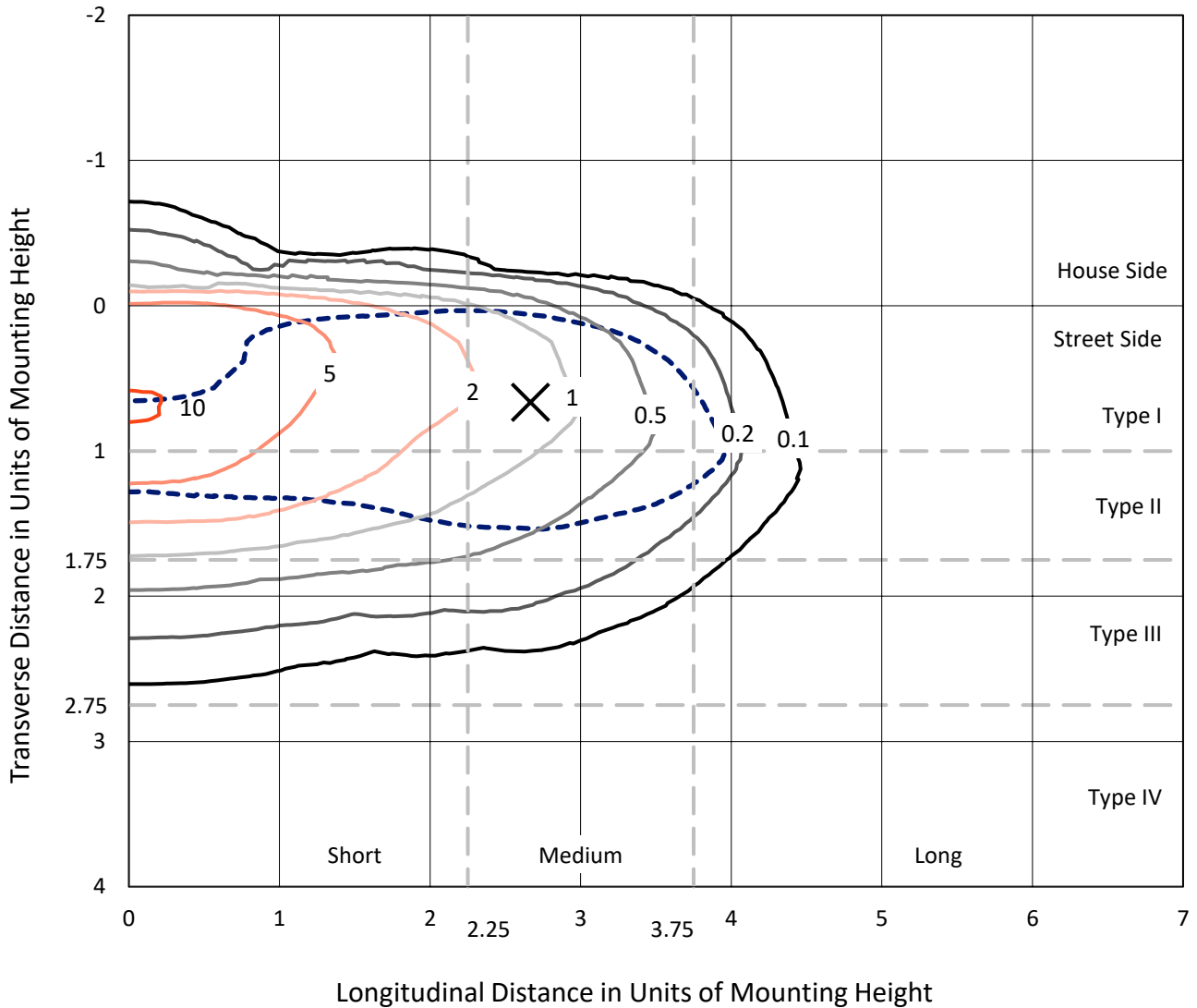
Input Watts (W): 229  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

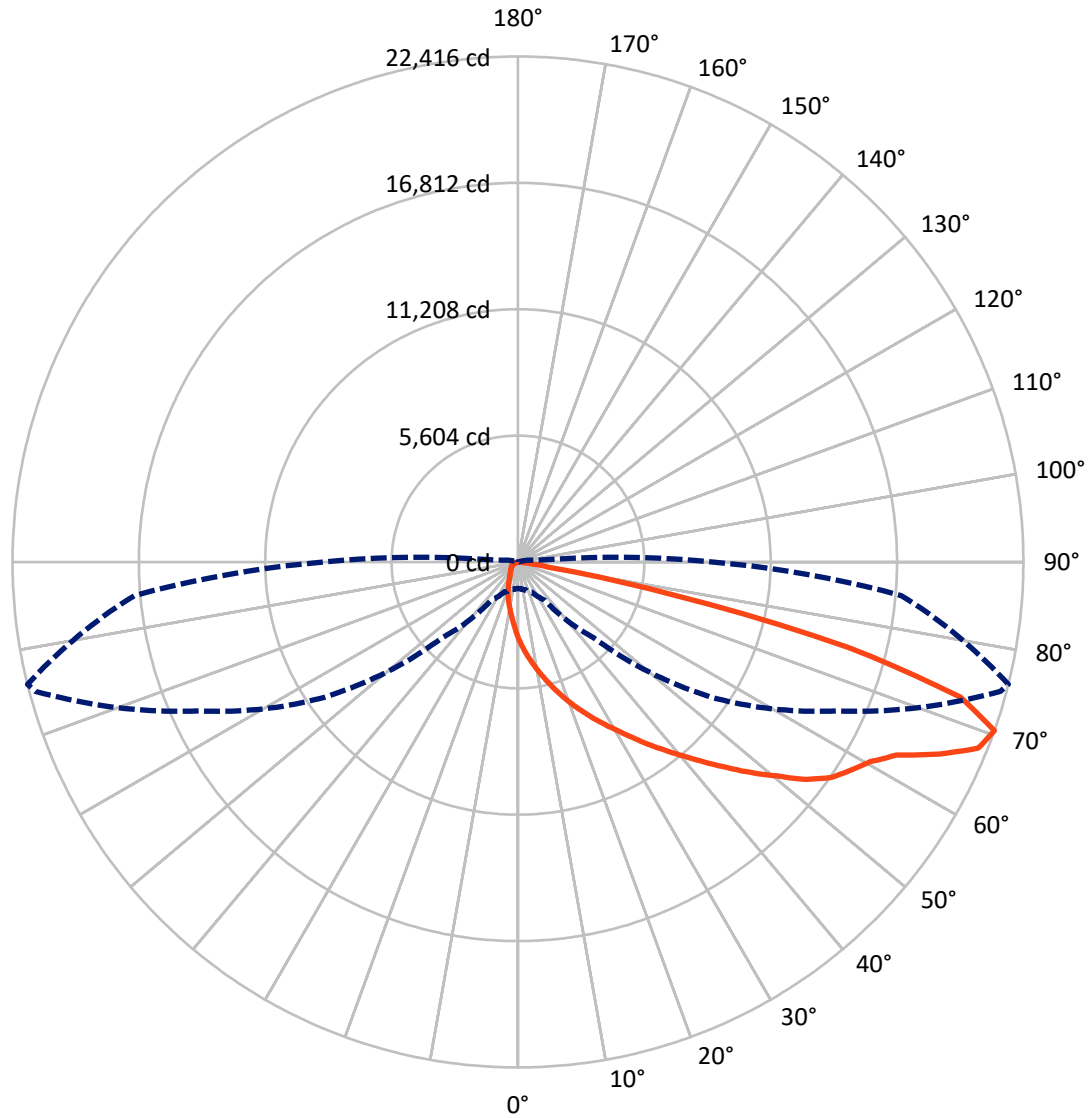
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.4 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	1194.3	0.0	1194.3
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	24127.7	0.0	24127.7
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	25322.0	0.0	25322.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	319.3	1.3
10°-20°	1030.6	4.1
20°-30°	1919.3	7.6
30°-40°	3394.9	13.4
40°-50°	5191.6	20.5
50°-60°	5886.0	23.2
60°-70°	5045.8	19.9
70°-80°	2443.9	9.7
80°-90°	90.7	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°	25322.0	100.0
0°-180°	25322.0	100.0

**Coefficient of Utilization**



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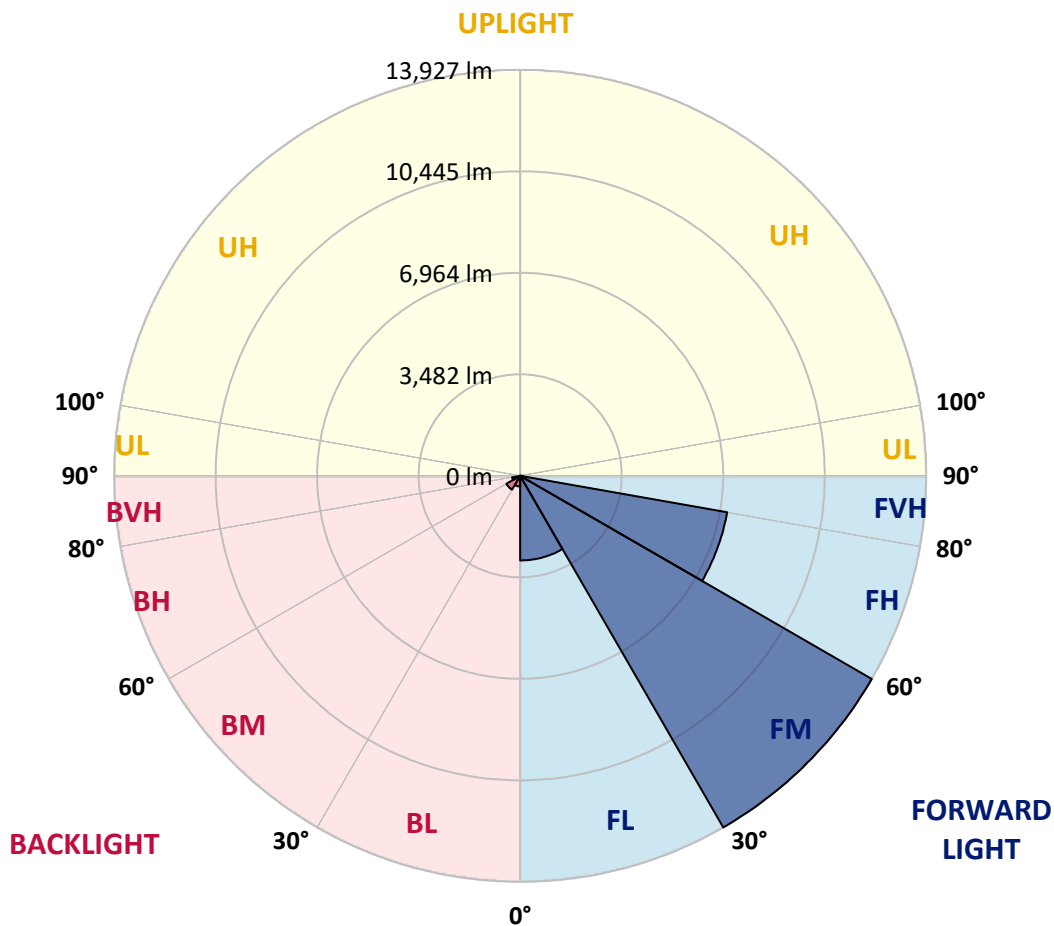
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2902.9	11.5			
FM (30°-60°)	13927.3	55.0			
FH (60°-80°)	7208.4	28.5			G3/7500
FVH (80°-90°)	89.1	0.4			G1/100
BL (0°-30°)	366.3	1.4	B1/500		
BM (30°-60°)	545.2	2.2	B1/1000		
BH (60°-80°)	281.2	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





REPORT NUMBER: P400083

CATALOG NUMBER: ARCH-L-PA3-230-750-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5
2.5°	4633.2	4607.9	4582.6	4485.6	4397.1	4317.0	4165.2	3967.1	3790.0	3752.1	3545.5
5°	5442.6	5413.1	5375.2	5278.2	5164.4	5029.5	4806.0	4502.5	4190.5	4123.1	3739.4
7.5°	5990.7	5965.4	5910.6	5864.2	5750.4	5619.7	5370.9	5016.8	4586.8	4502.5	3962.9
10°	6365.9	6349.0	6340.6	6302.6	6218.3	6112.9	5864.2	5493.2	4987.3	4890.3	4198.9
12.5°	6500.8	6500.8	6542.9	6606.2	6618.8	6585.1	6357.4	5986.5	5408.9	5307.7	4477.2
15°	6319.5	6340.6	6433.3	6635.7	6846.5	6985.6	6842.3	6496.6	5872.6	5763.0	4806.0
17.5°	6268.9	6290.0	6353.2	6530.3	6812.8	7183.7	7255.4	6989.8	6311.1	6218.3	5143.3
20°	6412.2	6433.3	6488.1	6639.9	6854.9	7230.1	7529.4	7466.2	6774.8	6677.8	5484.8
22.5°	6753.7	6766.4	6766.4	6884.4	7074.1	7352.4	7702.3	7917.3	7251.2	7145.8	5822.0
25°	7487.3	7462.0	7360.8	7301.8	7424.0	7651.7	7921.5	8313.6	7782.4	7639.1	6184.6
27.5°	8448.5	8532.8	8288.3	8005.8	7913.1	8043.8	8229.3	8663.5	8296.7	8144.9	6513.4
30°	9751.2	9717.4	9397.0	8992.3	8591.8	8545.4	8608.7	8962.8	8811.0	8667.7	6880.2
32.5°	10822.0	10885.2	10548.0	10054.7	9456.1	9173.6	9106.2	9321.2	9359.1	9266.4	7314.4
35°	11922.3	11989.8	11660.9	11112.9	10400.4	9928.2	9734.3	9763.8	10037.8	9919.8	7769.7
37.5°	12908.8	12967.8	12643.2	12082.5	11370.0	10792.5	10514.2	10286.6	10695.5	10590.1	8250.3
40°	13659.2	13667.7	13448.4	12946.8	12272.2	11673.6	11357.4	10910.5	11391.1	11319.5	8752.0
42.5°	14190.4	14207.3	14047.1	13617.1	12993.1	12436.6	12179.5	11648.3	12192.1	12128.9	9333.8
45°	14439.2	14468.7	14451.8	14055.5	13537.0	13056.4	12972.1	12432.4	13069.0	13010.0	10004.1
47.5°	14203.1	14203.1	14418.1	14363.3	13886.9	13566.5	13663.4	13250.3	14021.8	13967.0	10687.1
50°	13220.8	13233.4	13671.9	14300.0	14021.8	13950.1	14253.7	14051.3	14886.0	14919.8	11504.9
52.5°	10640.7	10619.6	12099.4	13305.1	13929.0	14123.0	14797.5	14869.2	15923.1	16024.3	12318.6
55°	7951.0	7938.4	9354.9	11542.9	13279.8	14034.4	15101.0	15598.5	16808.4	16871.7	12925.7
57.5°	6294.2	6260.5	7040.4	9304.3	11812.7	13638.1	15113.7	15737.6	17301.7	17411.3	13515.9
60°	4839.8	4810.2	5392.0	6922.4	9734.3	12584.2	14751.1	15746.1	17778.1	17972.0	14308.5
62.5°	3461.2	3494.9	3941.8	4966.2	7487.3	11096.0	14279.0	15864.1	18625.5	18844.7	15434.1
65°	2335.6	2318.7	2689.7	3381.1	5324.6	9093.5	13553.8	16112.8	20151.6	20535.2	16783.1
67.5°	1623.1	1635.7	1804.4	2200.7	3381.1	6981.4	12348.1	16252.0	21728.3	22027.6	17727.5
70°	1172.0	1188.9	1281.6	1479.7	2065.7	4734.4	10438.3	15615.4	22154.1	22415.5	17069.8
72.5°	771.5	805.2	944.3	1049.7	1319.5	2963.7	7689.6	13452.7	20320.2	20514.1	14321.1
75°	417.4	425.8	607.1	784.1	940.1	1846.5	4586.8	9072.4	15202.2	15139.0	9443.4
77.5°	324.6	337.3	375.2	560.7	632.4	1016.0	1812.8	4097.8	7200.6	7006.7	3220.9
80°	198.1	206.6	261.4	333.0	442.7	590.2	531.2	1113.0	1462.9	1370.1	472.2
82.5°	118.0	126.5	156.0	278.2	349.9	278.2	185.5	269.8	274.0	269.8	118.0
85°	21.1	21.1	109.6	193.9	185.5	80.1	109.6	88.5	80.1	84.3	25.3
87.5°	0.0	0.0	42.2	59.0	84.3	29.5	42.2	21.1	21.1	21.1	12.6
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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CATALOG NUMBER: ARCH-L-PA3-230-750-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5	3389.5
2.5°	3419.0	3275.7	2980.6	2723.4	2466.2	2276.5	2133.2	1985.6	1935.1	1871.8	1838.1
5°	3478.0	3195.6	2609.6	2141.6	1745.3	1441.8	1247.9	1129.8	1054.0	999.1	986.5
7.5°	3566.6	3132.3	2310.3	1677.9	1243.7	940.1	779.9	699.8	657.7	632.4	623.9
10°	3672.0	3077.5	2015.2	1306.9	876.9	661.9	573.4	539.6	522.8	514.3	510.1
12.5°	3819.5	3056.5	1766.4	1007.6	661.9	543.8	497.5	476.4	463.7	451.1	446.9
15°	4013.5	3064.9	1538.8	779.9	548.1	484.8	446.9	425.8	408.9	396.3	396.3
17.5°	4215.8	3077.5	1315.3	632.4	497.5	442.7	400.5	371.0	358.3	345.7	341.5
20°	4405.5	3073.3	1100.3	539.6	451.1	396.3	354.1	324.6	303.5	290.9	290.9
22.5°	4586.8	3048.0	898.0	484.8	413.1	349.9	303.5	274.0	257.2	244.5	244.5
25°	4780.7	2997.4	733.6	442.7	366.8	307.8	261.4	231.9	219.2	206.6	206.6
27.5°	4932.5	2913.1	598.6	404.7	324.6	265.6	223.4	198.1	185.5	177.1	177.1
30°	5096.9	2790.9	497.5	362.6	282.5	227.7	189.7	168.6	156.0	151.8	151.8
32.5°	5278.2	2656.0	425.8	320.4	240.3	193.9	160.2	147.6	134.9	130.7	130.7
35°	5489.0	2537.9	383.6	278.2	210.8	164.4	139.1	126.5	118.0	118.0	118.0
37.5°	5729.3	2415.7	345.7	244.5	181.3	139.1	118.0	113.8	109.6	105.4	105.4
40°	5990.7	2285.0	312.0	215.0	156.0	118.0	101.2	101.2	97.0	97.0	97.0
42.5°	6285.8	2171.1	282.5	189.7	134.9	101.2	88.5	88.5	84.3	84.3	84.3
45°	6606.2	2065.7	257.2	168.6	118.0	88.5	80.1	75.9	71.7	71.7	71.7
47.5°	6985.6	2006.7	236.1	147.6	101.2	75.9	67.5	63.2	59.0	54.8	54.8
50°	7470.4	2032.0	215.0	122.3	88.5	63.2	54.8	50.6	46.4	42.2	42.2
52.5°	7854.1	2019.4	185.5	105.4	71.7	50.6	42.2	37.9	33.7	29.5	29.5
55°	8132.3	1968.8	160.2	88.5	54.8	42.2	33.7	25.3	21.1	21.1	21.1
57.5°	8406.3	1918.2	134.9	71.7	42.2	29.5	21.1	16.9	16.9	16.9	16.9
60°	8832.1	1846.5	118.0	59.0	33.7	21.1	12.6	12.6	8.4	8.4	8.4
62.5°	9350.7	1758.0	97.0	50.6	25.3	16.9	8.4	8.4	0.0	0.0	0.0
65°	9919.8	1602.0	80.1	37.9	21.1	12.6	8.4	0.0	0.0	0.0	0.0
67.5°	9789.1	1285.8	67.5	25.3	16.9	8.4	4.2	0.0	0.0	0.0	0.0
70°	8659.3	868.5	54.8	21.1	12.6	8.4	4.2	0.0	0.0	0.0	0.0
72.5°	6783.2	514.3	37.9	16.9	8.4	4.2	0.0	0.0	0.0	0.0	0.0
75°	4342.3	257.2	25.3	12.6	8.4	4.2	0.0	0.0	0.0	0.0	0.0
77.5°	1454.5	126.5	16.9	8.4	4.2	0.0	0.0	0.0	0.0	0.0	0.0
80°	206.6	42.2	8.4	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	46.4	16.9	4.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	16.9	8.4	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.4	4.2	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)