

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: P399961

Luminaire Tested: **ARCH-L-PA3-210-827-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399961  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
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-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 16054 lumens  
Efficiency: N/A  
Efficacy: 76.1 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B2 - U0 - G3

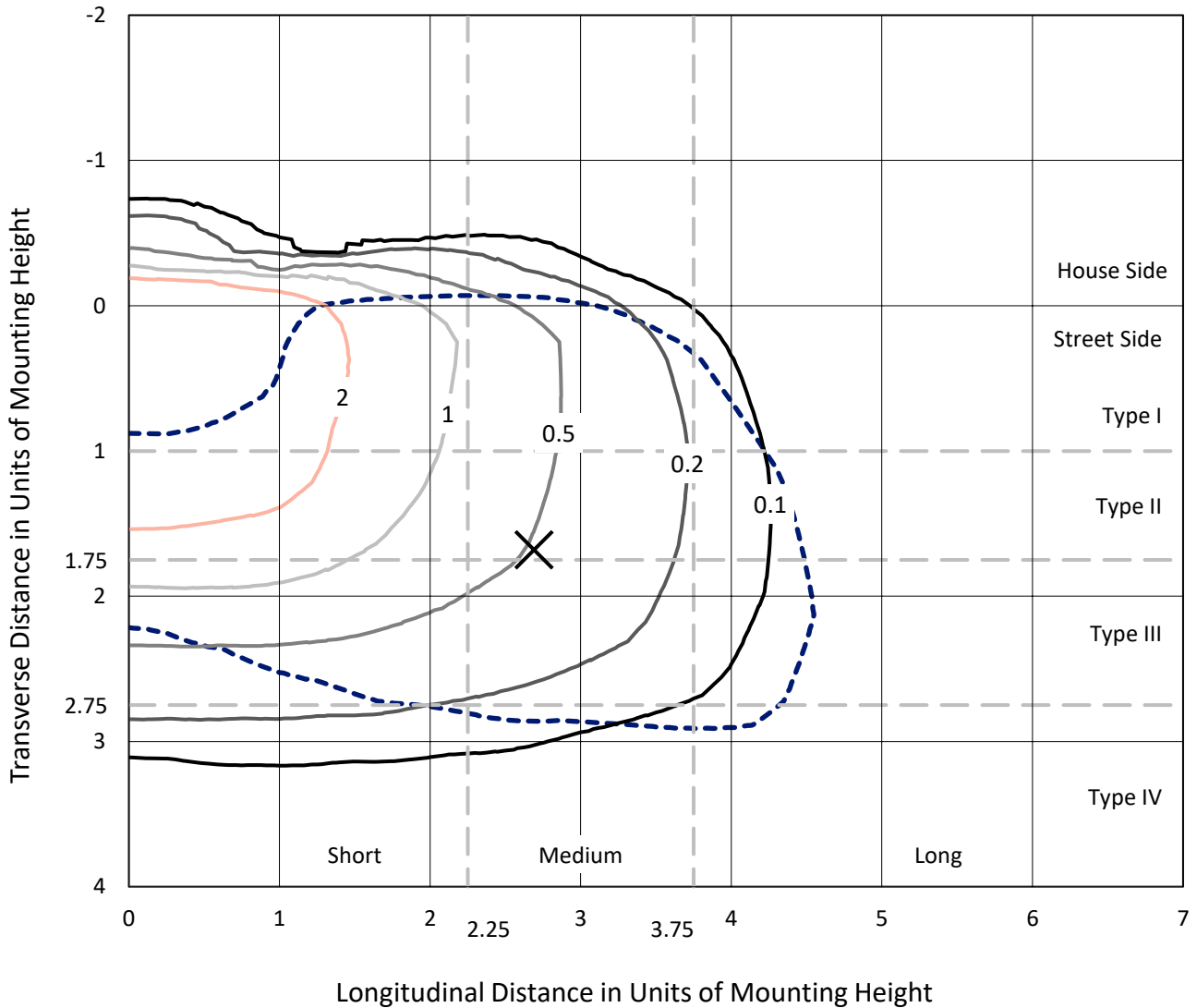
Input Watts (W): 211  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399961  
 CATALOG NUMBER: ARCH-L-PA3-210-827-U-T3-HSS

### Iso-Footcandle Lines of Horizontal Illumination

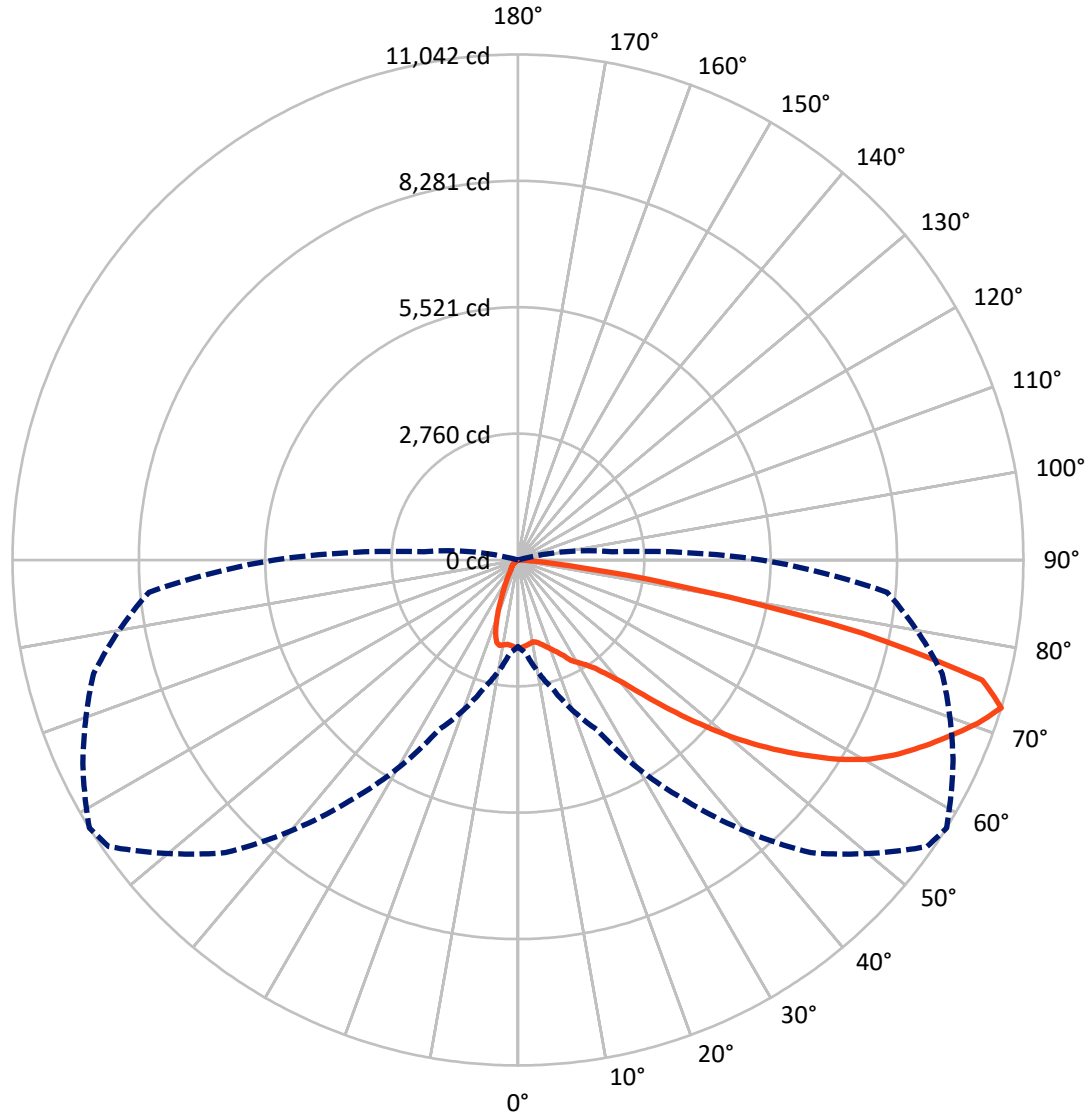
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P399961  
CATALOG NUMBER: ARCH-L-PA3-210-827-U-T3-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

REPORT NUMBER: P399961  
 CATALOG NUMBER: ARCH-L-PA3-210-827-U-T3-HSS

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1561.1	0.0	1561.1
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	14492.9	0.0	14492.9
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	16054.0	0.0	16054.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.8	1.1
10°-20°	460.5	2.9
20°-30°	723.4	4.5
30°-40°	1247.5	7.8
40°-50°	2373.5	14.8
50°-60°	3758.9	23.4
60°-70°	4386.1	27.3
70°-80°	2747.1	17.1
80°-90°	180.3	1.1
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°	16054.0	100.0
0°-180°	16054.0	100.0

**Coefficient of Utilization**

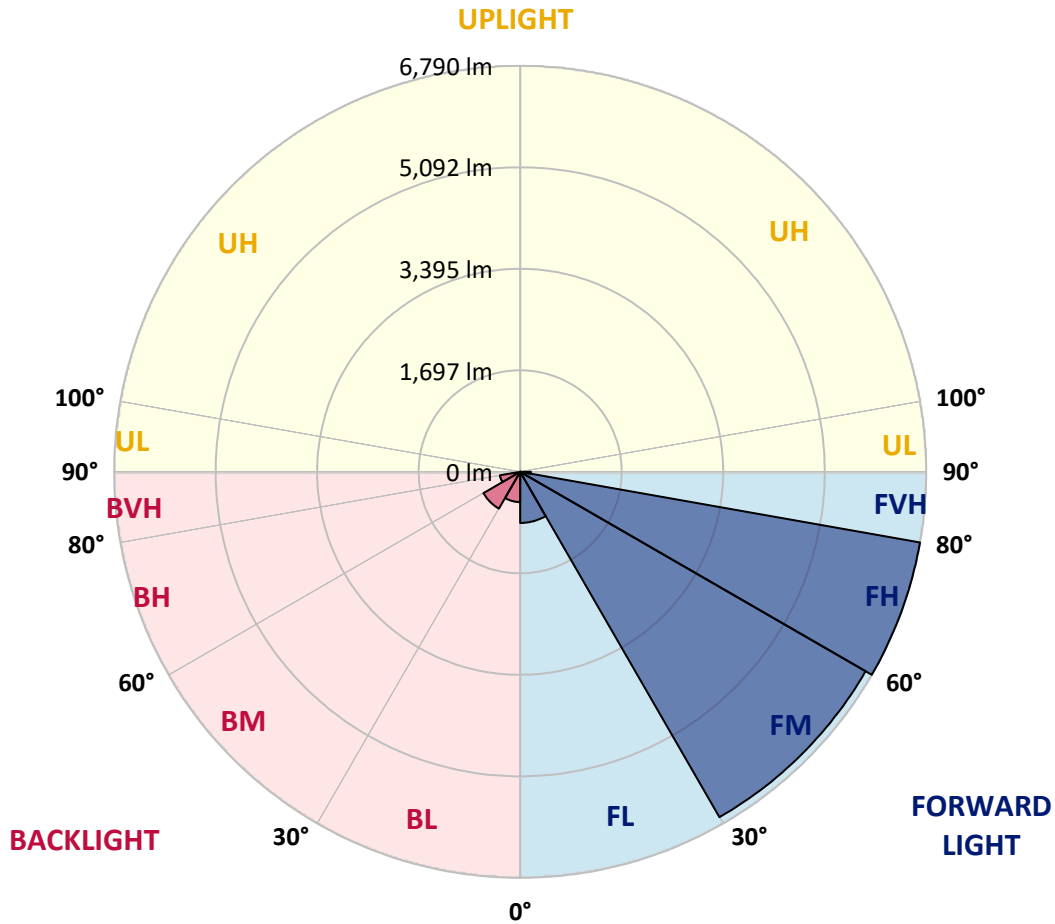


REPORT NUMBER: P399961  
 CATALOG NUMBER: ARCH-L-PA3-210-827-U-T3-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	855.1	5.3			
FM (30°-60°)	6669.5	41.5			
FH (60°-80°)	6789.7	42.3			G3/7500
FVH (80°-90°)	178.6	1.1			G2/225
BL (0°-30°)	505.5	3.1	B2/1000		
BM (30°-60°)	710.3	4.4	B1/1000		
BH (60°-80°)	343.5	2.1	B1/500		G1/500
BVH (80°-90°)	1.7	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-G3**  
 Type IV Medium





REPORT NUMBER: P399961

CATALOG NUMBER: ARCH-L-PA3-210-827-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4
2.5°	1917.8	1909.2	1906.3	1903.4	1906.3	1909.2	1900.5	1909.2	1903.4	1906.3	1912.0
5°	1848.9	1840.3	1837.4	1840.3	1848.9	1863.2	1869.0	1877.6	1877.6	1886.2	1889.1
7.5°	1771.4	1765.6	1762.7	1768.5	1785.7	1817.3	1834.5	1846.0	1857.5	1874.7	1891.9
10°	1728.3	1725.4	1722.5	1731.2	1748.4	1777.1	1800.1	1817.3	1860.4	1909.2	1940.7
12.5°	1699.6	1699.6	1705.3	1722.5	1745.5	1768.5	1823.0	1846.0	1912.0	1986.7	2029.7
15°	1676.6	1676.6	1685.2	1716.8	1748.4	1802.9	1883.3	1909.2	1986.7	2078.5	2136.0
17.5°	1659.4	1665.1	1670.9	1702.5	1762.7	1854.6	1949.3	1986.7	2081.4	2181.9	2245.1
20°	1662.3	1668.0	1670.9	1702.5	1788.6	1914.9	2035.5	2078.5	2187.6	2293.9	2357.0
22.5°	1679.5	1688.1	1691.0	1734.0	1834.5	1978.1	2133.1	2181.9	2299.6	2411.6	2460.4
25°	1751.3	1757.0	1739.8	1777.1	1900.5	2075.7	2259.4	2311.1	2428.8	2532.1	2572.3
27.5°	1995.3	2001.0	1906.3	1863.2	1952.2	2156.1	2414.4	2486.2	2632.6	2701.5	2707.3
30°	2523.5	2529.3	2342.7	2138.8	2075.7	2225.0	2500.6	2601.0	2790.5	2868.0	2833.6
32.5°	3203.9	3198.2	2942.7	2641.2	2368.5	2345.5	2624.0	2730.2	2936.9	3011.6	2985.7
35°	3887.2	3895.8	3677.6	3224.0	2833.6	2572.3	2781.9	2905.4	3155.1	3261.4	3215.4
37.5°	4355.2	4412.6	4317.9	3826.9	3404.9	2991.5	3037.4	3169.5	3482.4	3626.0	3528.4
40°	5015.5	5001.1	4771.5	4409.7	4036.5	3611.6	3450.8	3514.0	3872.9	4065.2	3913.1
42.5°	5902.6	5873.9	5483.4	5130.3	4714.0	4366.7	4039.4	4027.9	4320.7	4544.7	4323.6
45°	6706.5	6663.4	6396.4	6054.8	5598.3	5199.2	4757.1	4656.6	4860.5	5049.9	4791.6
47.5°	7346.7	7274.9	7085.4	6904.5	6792.6	6172.5	5509.3	5357.1	5460.5	5601.1	5236.5
50°	8104.6	7906.5	7630.9	7521.8	7754.3	7274.9	6232.8	6086.3	6080.6	6161.0	5695.9
52.5°	8449.1	8090.2	7935.2	8027.1	8437.6	8299.8	7013.6	6804.1	6720.8	6729.4	6123.7
55°	8032.8	7992.6	8075.9	8363.0	8899.8	8819.4	7762.9	7504.6	7381.1	7226.1	6534.2
57.5°	7559.1	7682.6	8012.7	8561.1	9485.5	9362.0	8500.8	8207.9	7981.1	7625.1	6990.7
60°	7122.7	7249.1	7794.5	8607.0	9807.0	9884.6	9115.1	8836.7	8500.8	8032.8	7493.1
62.5°	6459.6	6557.2	7323.7	8541.0	9666.4	10188.9	9542.9	9333.3	9020.4	8420.4	8070.1
65°	5713.1	5776.3	6534.2	8012.7	9390.8	10154.4	9896.0	9778.3	9474.0	8825.2	8641.4
67.5°	4894.9	4969.5	5601.1	7062.4	8851.0	9993.6	10229.1	10217.6	9870.2	9273.0	9054.9
70°	3953.2	3959.0	4481.5	5856.7	7909.4	9672.1	10642.5	10668.3	10249.2	9608.9	9072.1
72.5°	1891.9	2047.0	2905.4	4088.2	6428.0	9040.5	10912.3	11041.5	10487.4	9597.5	8093.1
75°	433.5	447.9	846.9	1943.6	3769.5	6939.0	10237.7	10478.8	9907.5	8299.8	5701.6
77.5°	157.9	166.5	238.3	568.4	1449.8	3585.8	7326.6	7679.7	7323.7	5365.7	2695.8
80°	106.2	103.4	123.4	252.6	666.1	1016.3	3746.5	3956.1	3611.6	1831.6	646.0
82.5°	54.5	57.4	86.1	140.7	447.9	353.1	1251.7	1360.8	1119.7	367.5	120.6
85°	25.8	25.8	48.8	89.0	189.5	123.4	278.5	335.9	301.4	160.8	40.2
87.5°	25.8	25.8	45.9	57.4	97.6	51.7	68.9	86.1	80.4	86.1	14.4
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: P399961  
 CATALOG NUMBER: ARCH-L-PA3-210-827-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4	1926.4
2.5°	1912.0	1909.2	1906.3	1912.0	1909.2	1914.9	1914.9	1920.6	1920.6	1914.9	1912.0
5°	1886.2	1880.4	1874.7	1874.7	1871.8	1877.6	1894.8	1909.2	1912.0	1903.4	1900.5
7.5°	1889.1	1889.1	1883.3	1871.8	1851.7	1851.7	1851.7	1869.0	1877.6	1871.8	1869.0
10°	1940.7	1943.6	1929.3	1903.4	1869.0	1837.4	1777.1	1688.1	1604.8	1581.9	1573.3
12.5°	2029.7	2032.6	2003.9	1958.0	1886.2	1699.6	1469.9	1257.5	1093.8	1047.9	1039.3
15°	2136.0	2138.8	2087.2	2012.5	1794.3	1360.8	1019.2	778.0	634.5	600.0	597.1
17.5°	2245.1	2239.3	2161.8	2018.3	1521.6	964.6	620.1	496.7	459.3	450.7	453.6
20°	2351.3	2334.1	2227.8	1912.0	1171.3	631.6	453.6	424.9	416.3	410.5	410.5
22.5°	2448.9	2414.4	2282.4	1702.5	821.1	453.6	404.8	399.1	387.6	379.0	376.1
25°	2546.5	2497.7	2316.8	1429.7	551.2	396.2	381.8	370.3	356.0	344.5	341.6
27.5°	2664.2	2595.3	2299.6	1085.2	413.4	367.5	356.0	338.8	318.7	301.4	295.7
30°	2776.2	2698.7	2202.0	749.3	353.1	338.8	321.5	295.7	269.9	249.8	244.0
32.5°	2916.8	2827.8	2026.9	490.9	307.2	295.7	278.5	246.9	212.4	189.5	183.7
35°	3117.8	3017.3	1802.9	344.5	269.9	249.8	226.8	192.4	155.0	137.8	134.9
37.5°	3399.2	3264.2	1521.6	278.5	238.3	209.6	175.1	140.7	114.8	100.5	97.6
40°	3743.7	3537.0	1208.7	246.9	212.4	175.1	132.1	100.5	83.3	71.8	71.8
42.5°	4116.9	3792.5	890.0	226.8	186.6	143.5	97.6	71.8	60.3	54.5	51.7
45°	4501.6	4019.3	600.0	209.6	163.6	109.1	68.9	48.8	40.2	40.2	37.3
47.5°	4900.6	4171.4	387.6	189.5	137.8	80.4	45.9	34.5	28.7	28.7	28.7
50°	5296.8	4251.8	275.6	172.3	112.0	54.5	34.5	25.8	23.0	23.0	23.0
52.5°	5583.9	4200.1	221.1	149.3	86.1	40.2	25.8	20.1	17.2	17.2	17.2
55°	5833.7	4111.1	192.4	129.2	63.2	28.7	20.1	17.2	14.4	14.4	14.4
57.5°	6089.2	3996.3	172.3	109.1	45.9	20.1	14.4	11.5	11.5	11.5	11.5
60°	6321.7	3801.1	149.3	86.1	31.6	14.4	11.5	8.6	8.6	8.6	8.6
62.5°	6548.6	3634.6	129.2	66.0	23.0	11.5	5.7	5.7	2.9	2.9	2.9
65°	6677.7	3410.6	103.4	43.1	14.4	8.6	2.9	2.9	0.0	0.0	0.0
67.5°	6637.5	3143.6	71.8	25.8	8.6	5.7	2.9	0.0	0.0	0.0	0.0
70°	6359.1	2784.8	43.1	14.4	8.6	5.7	2.9	0.0	0.0	0.0	0.0
72.5°	5325.5	2061.3	25.8	11.5	5.7	2.9	0.0	0.0	0.0	0.0	0.0
75°	3557.1	947.4	14.4	8.6	2.9	2.9	0.0	0.0	0.0	0.0	0.0
77.5°	1627.8	284.2	8.6	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
80°	327.3	74.6	5.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	68.9	14.4	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	14.4	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.7	2.9	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)