

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: P399464

Luminaire Tested: **ARCH-L-PA3-140-830-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399464
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-PA3-140-830-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 620mA 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: 12342 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

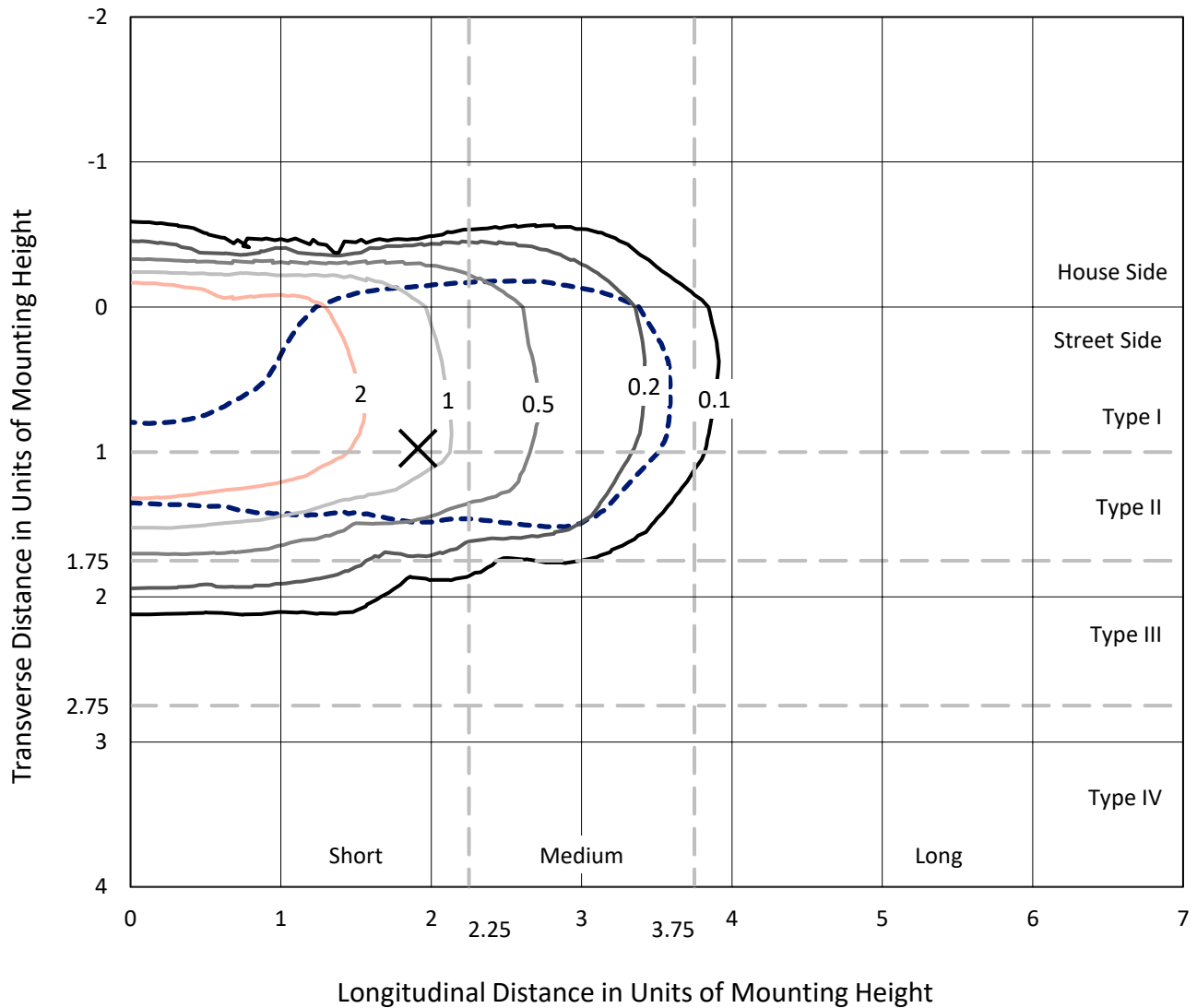
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

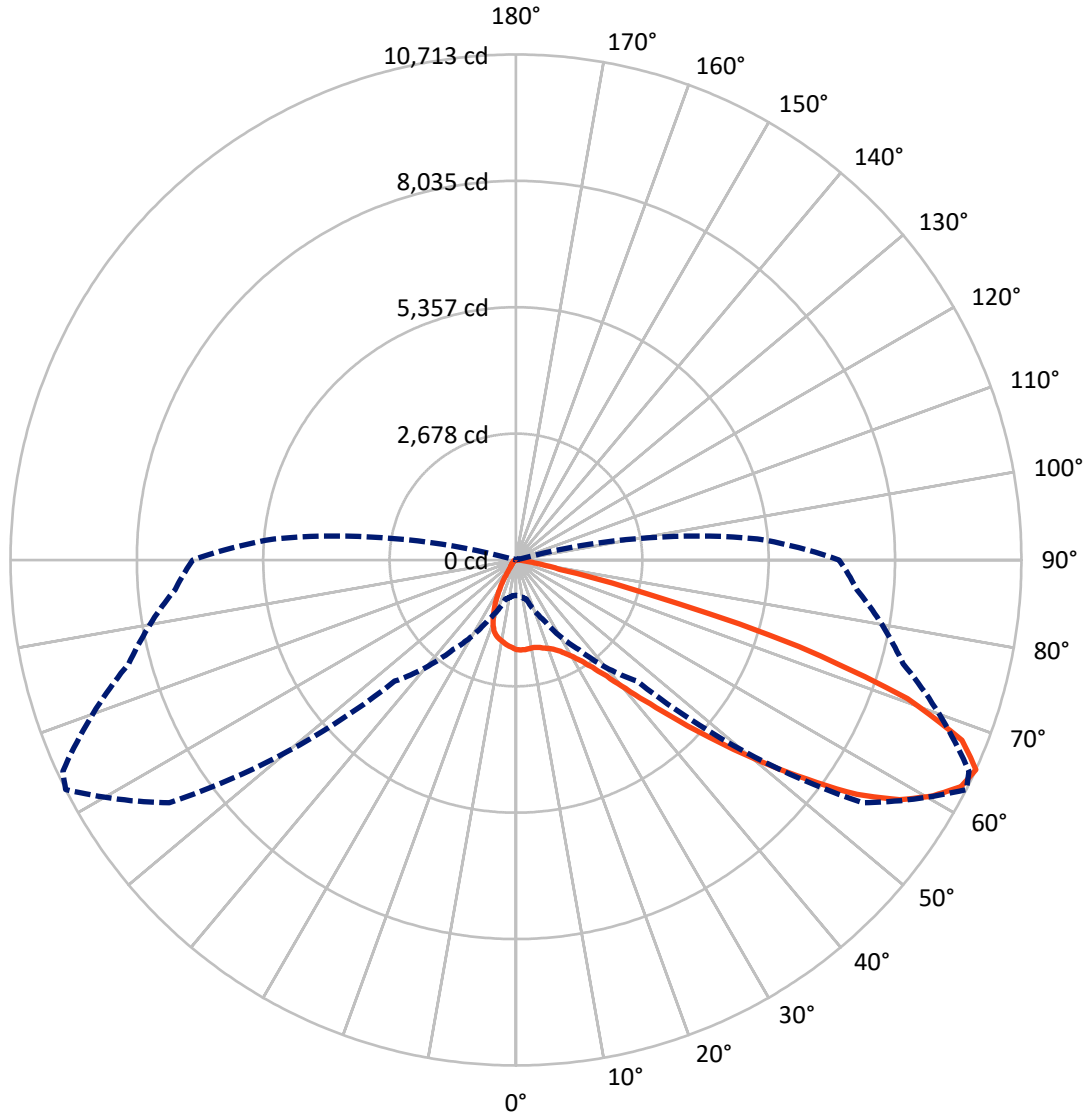
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1588.4	0.0	1588.4
	% Fixture	12.9	0.0	12.9
Street Side	Lumens	10753.6	0.0	10753.6
	% Fixture	87.1	0.0	87.1
Total	Lumens	12342.0	0.0	12342.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.5	1.4
10°-20°	428.0	3.5
20°-30°	634.3	5.1
30°-40°	1177.8	9.5
40°-50°	2495.1	20.2
50°-60°	3450.1	28.0
60°-70°	2761.9	22.4
70°-80°	1147.5	9.3
80°-90°	73.7	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°	12342.0	100.0
0°-180°	12342.0	100.0

Coefficient of Utilization



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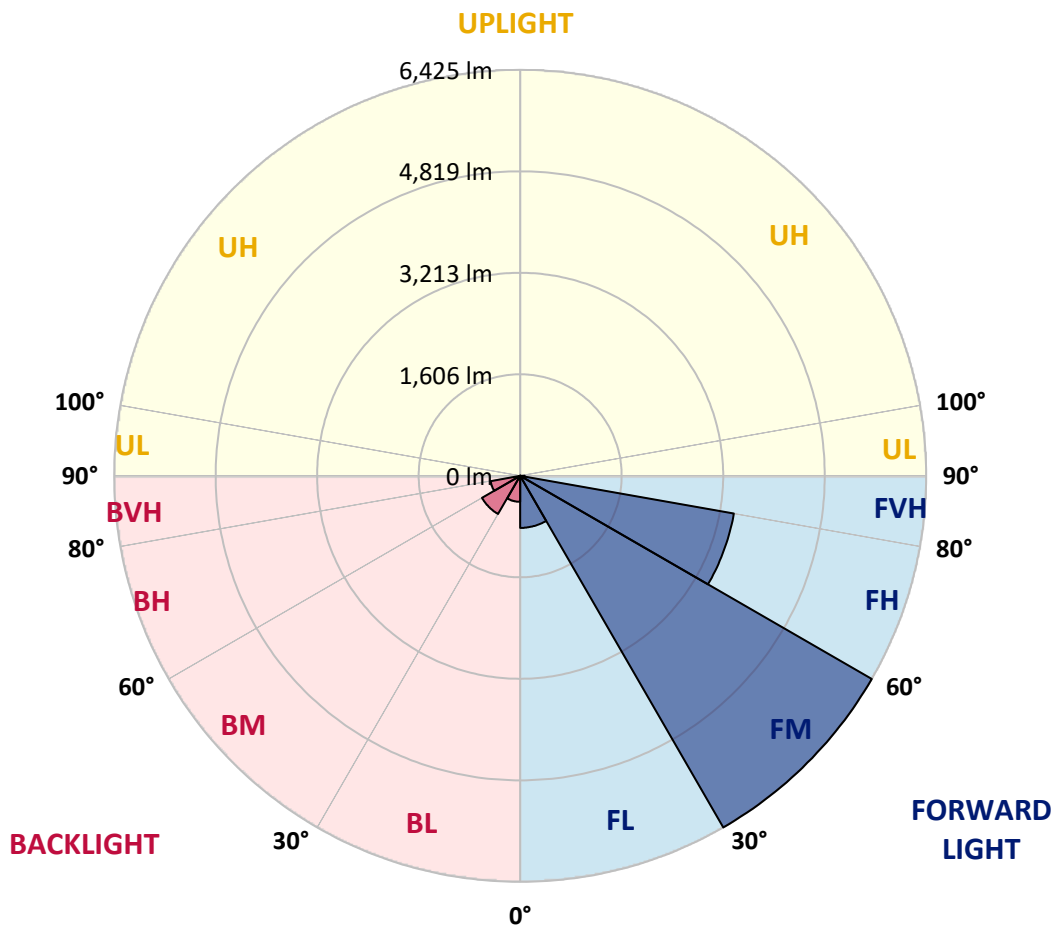
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	824.2	6.7			
FM (30°-60°)	6425.3	52.1			
FH (60°-80°)	3433.8	27.8			G2/5000
FVH (80°-90°)	70.3	0.6			G1/100
BL (0°-30°)	411.7	3.3	B1/500		
BM (30°-60°)	697.8	5.7	B1/1000		
BH (60°-80°)	475.6	3.9	B1/500		G1/500
BVH (80°-90°)	3.4	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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3
2.5°	1933.9	1929.3	1924.6	1922.3	1922.3	1919.9	1910.6	1908.3	1903.6	1899.0	1894.3
5°	1915.3	1908.3	1906.0	1908.3	1910.6	1915.3	1910.6	1910.6	1906.0	1901.3	1892.0
7.5°	1868.7	1864.0	1866.3	1873.3	1875.7	1892.0	1894.3	1901.3	1901.3	1896.6	1889.6
10°	1812.8	1810.4	1810.4	1822.1	1833.7	1857.0	1873.3	1892.0	1894.3	1894.3	1882.7
12.5°	1770.8	1768.5	1775.5	1789.5	1812.8	1843.0	1871.0	1899.0	1903.6	1906.0	1887.3
15°	1745.2	1745.2	1754.5	1782.5	1815.1	1857.0	1889.6	1926.9	1931.6	1929.3	1903.6
17.5°	1721.9	1724.2	1742.9	1789.5	1826.7	1882.7	1922.3	1964.2	1966.5	1964.2	1922.3
20°	1712.6	1717.2	1745.2	1805.8	1847.7	1910.6	1961.9	2003.8	2006.1	1996.8	1940.9
22.5°	1738.2	1740.5	1775.5	1840.7	1880.3	1950.2	2015.5	2055.1	2057.4	2043.4	1968.9
25°	1826.7	1826.7	1857.0	1912.9	1947.9	2017.8	2087.7	2134.3	2134.3	2118.0	2031.8
27.5°	2034.1	2015.5	2008.5	2024.8	2036.4	2111.0	2185.6	2243.8	2241.5	2218.2	2113.3
30°	2434.9	2388.3	2313.7	2229.8	2187.9	2239.1	2309.0	2383.6	2381.3	2344.0	2213.5
32.5°	3108.2	3040.7	2863.6	2642.2	2462.8	2404.6	2469.8	2551.4	2553.7	2509.4	2374.3
35°	4051.9	3944.7	3627.8	3320.3	2910.2	2688.8	2707.5	2796.0	2824.0	2800.7	2644.6
37.5°	4960.6	4862.7	4559.8	4133.4	3576.6	3124.5	3045.3	3122.2	3154.8	3154.8	2989.4
40°	5876.3	5762.1	5494.2	5065.5	4478.3	3804.9	3520.7	3583.6	3618.5	3625.5	3408.8
42.5°	6610.3	6535.7	6330.6	5997.5	5447.6	4997.9	4205.7	4170.7	4203.3	4177.7	3895.8
45°	7118.2	7059.9	6917.8	6792.0	6524.0	6298.0	5121.4	4886.0	4907.0	4818.5	4443.3
47.5°	7223.0	7157.8	7127.5	7302.3	7493.3	7549.2	6246.8	5736.5	5715.5	5519.8	5011.9
50°	6766.4	6773.4	6885.2	7383.8	8180.7	8684.0	7551.6	6696.5	6619.6	6183.9	5540.8
52.5°	5780.8	5892.6	6174.5	6983.1	8390.4	9508.8	8856.4	7714.7	7595.8	6829.3	5936.9
55°	4522.6	4667.0	5130.7	6060.4	7952.3	9876.9	9956.2	8772.5	8502.2	7313.9	6244.4
57.5°	3362.2	3406.5	3947.0	4795.2	6915.5	9515.8	10520.0	9588.0	9240.8	7700.7	6549.7
60°	2094.7	2122.6	2693.5	3651.1	5237.9	8180.7	10520.0	10149.5	9818.7	8047.9	6829.3
62.5°	1302.5	1311.8	1526.2	2502.4	3560.3	6067.4	10084.3	10585.3	10319.6	8297.2	7069.3
65°	750.3	759.6	859.8	1414.3	2316.0	3632.5	8970.6	10713.4	10594.6	8495.2	7255.7
67.5°	547.6	552.2	591.8	794.5	1514.5	1866.3	6738.4	10198.5	10347.6	8593.1	7251.0
70°	475.3	482.3	533.6	619.8	1092.8	1146.4	3429.8	8807.5	9224.5	8453.3	7034.3
72.5°	365.8	375.1	452.0	582.5	801.5	824.8	1241.9	6267.7	6899.2	7579.5	6440.2
75°	251.6	261.0	337.9	480.0	661.7	617.5	682.7	2884.6	3639.5	5084.1	4902.4
77.5°	160.8	163.1	212.0	349.5	570.9	438.0	468.3	941.3	1321.1	2299.7	2313.7
80°	107.2	109.5	130.5	226.0	391.4	405.4	288.9	435.7	477.7	671.0	466.0
82.5°	65.2	65.2	88.5	142.1	237.7	335.5	188.7	228.3	244.7	258.6	121.2
85°	25.6	25.6	53.6	93.2	149.1	156.1	118.8	132.8	139.8	151.5	55.9
87.5°	7.0	7.0	30.3	51.3	65.2	72.2	72.2	65.2	69.9	86.2	28.0
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°	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3	1901.3
2.5°	1892.0	1885.0	1875.7	1866.3	1857.0	1850.0	1843.0	1843.0	1838.4	1831.4	1826.7
5°	1887.3	1875.7	1854.7	1838.4	1812.8	1794.1	1780.1	1768.5	1761.5	1745.2	1742.9
7.5°	1880.3	1866.3	1836.1	1803.4	1761.5	1728.9	1696.3	1673.0	1649.7	1631.0	1626.4
10°	1868.7	1852.4	1808.1	1761.5	1703.2	1642.7	1565.8	1477.2	1395.7	1349.1	1335.1
12.5°	1868.7	1847.7	1789.5	1726.5	1642.7	1493.5	1297.8	1102.1	950.6	883.1	864.4
15°	1880.3	1852.4	1775.5	1689.3	1533.1	1230.2	913.4	654.7	489.3	438.0	426.4
17.5°	1892.0	1852.4	1754.5	1638.0	1332.8	892.4	519.6	344.8	291.3	279.6	279.6
20°	1896.6	1847.7	1726.5	1542.5	1064.8	554.5	309.9	258.6	237.7	230.7	230.7
22.5°	1915.3	1850.0	1705.6	1405.0	773.6	326.2	244.7	216.7	195.7	188.7	188.7
25°	1961.9	1878.0	1710.2	1230.2	496.3	247.0	207.4	179.4	158.4	149.1	149.1
27.5°	2036.4	1940.9	1735.9	1027.5	312.2	212.0	174.8	144.5	128.2	118.8	118.8
30°	2120.3	2010.8	1747.5	794.5	233.0	179.4	142.1	114.2	102.5	95.5	93.2
32.5°	2267.1	2132.0	1738.2	545.2	191.1	151.5	114.2	90.9	81.6	79.2	79.2
35°	2502.4	2344.0	1719.6	342.5	158.4	121.2	90.9	74.6	67.6	65.2	62.9
37.5°	2821.6	2653.9	1663.6	226.0	130.5	95.5	74.6	62.9	55.9	53.6	53.6
40°	3210.8	3008.0	1556.4	172.4	111.8	76.9	62.9	53.6	48.9	46.6	46.6
42.5°	3655.8	3401.8	1386.4	149.1	93.2	65.2	53.6	44.3	41.9	39.6	39.6
45°	4142.8	3814.2	1151.0	132.8	79.2	53.6	44.3	39.6	35.0	35.0	32.6
47.5°	4660.0	4229.0	885.4	116.5	67.6	46.6	39.6	32.6	30.3	28.0	28.0
50°	5158.7	4599.4	622.1	100.2	55.9	39.6	32.6	28.0	25.6	23.3	23.3
52.5°	5510.5	4823.1	440.4	86.2	46.6	35.0	25.6	21.0	18.6	18.6	18.6
55°	5792.4	4962.9	307.6	72.2	39.6	30.3	21.0	16.3	16.3	14.0	14.0
57.5°	6058.0	5053.8	226.0	60.6	32.6	23.3	16.3	11.7	11.7	9.3	9.3
60°	6333.0	5102.7	172.4	48.9	28.0	18.6	11.7	9.3	7.0	7.0	7.0
62.5°	6610.3	5133.0	132.8	39.6	23.3	14.0	9.3	7.0	4.7	2.3	2.3
65°	6852.6	5142.3	102.5	30.3	18.6	9.3	7.0	2.3	0.0	0.0	0.0
67.5°	6924.8	5035.2	79.2	23.3	14.0	7.0	4.7	0.0	0.0	0.0	0.0
70°	6729.1	4750.9	60.6	18.6	11.7	4.7	2.3	0.0	0.0	0.0	0.0
72.5°	5971.8	3984.3	46.6	11.7	9.3	4.7	2.3	0.0	0.0	0.0	0.0
75°	4273.2	2125.0	32.6	9.3	7.0	2.3	0.0	0.0	0.0	0.0	0.0
77.5°	1966.5	822.5	23.3	7.0	4.7	2.3	0.0	0.0	0.0	0.0	0.0
80°	384.5	205.0	9.3	4.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	88.5	35.0	4.7	4.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0
85°	30.3	11.7	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	11.7	4.7	2.3	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)