

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: P399754

Luminaire Tested: **ARCH-L-PA3-180-830-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399754
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-PA3-180-830-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 775mA 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: 15519 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G3

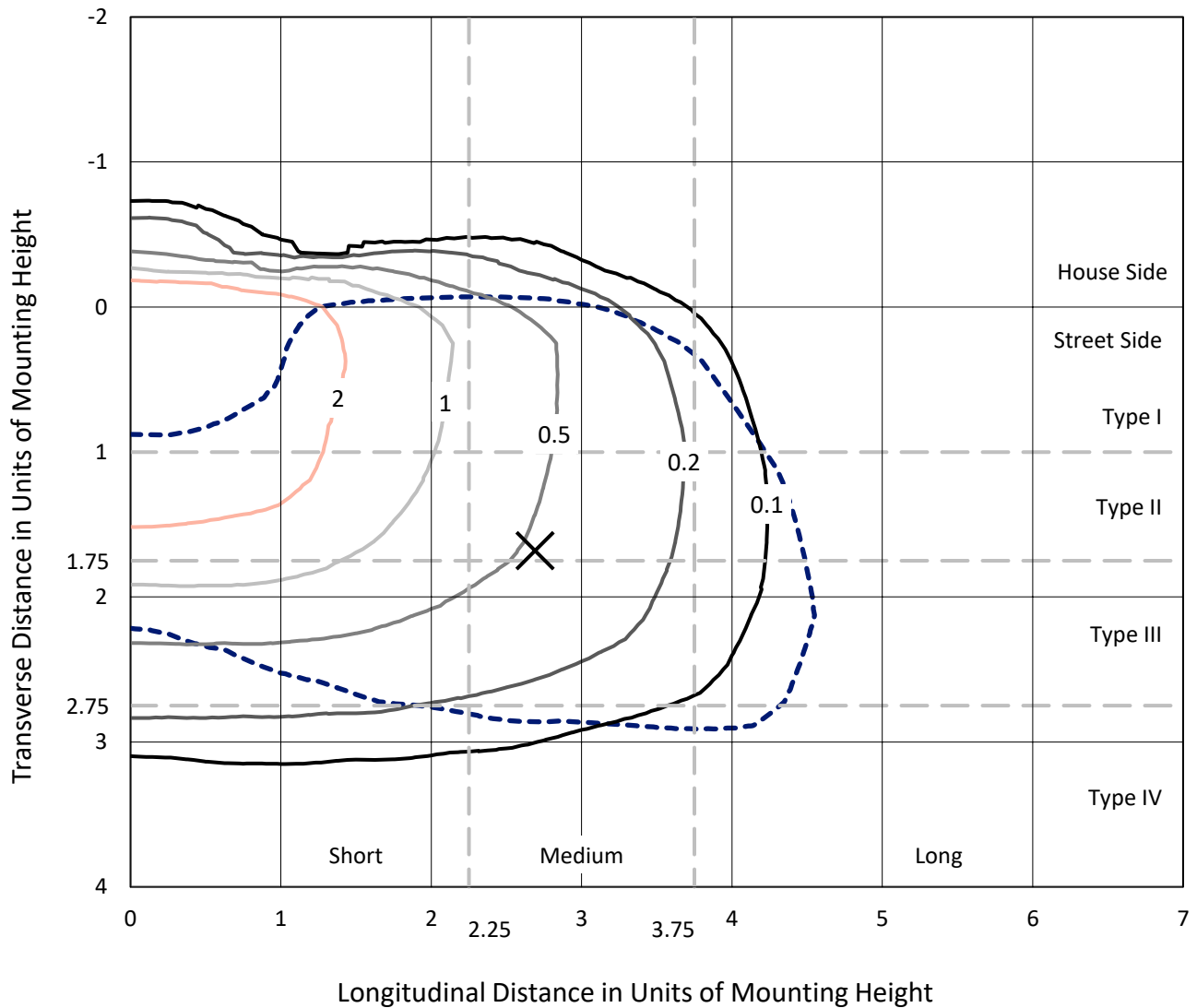
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

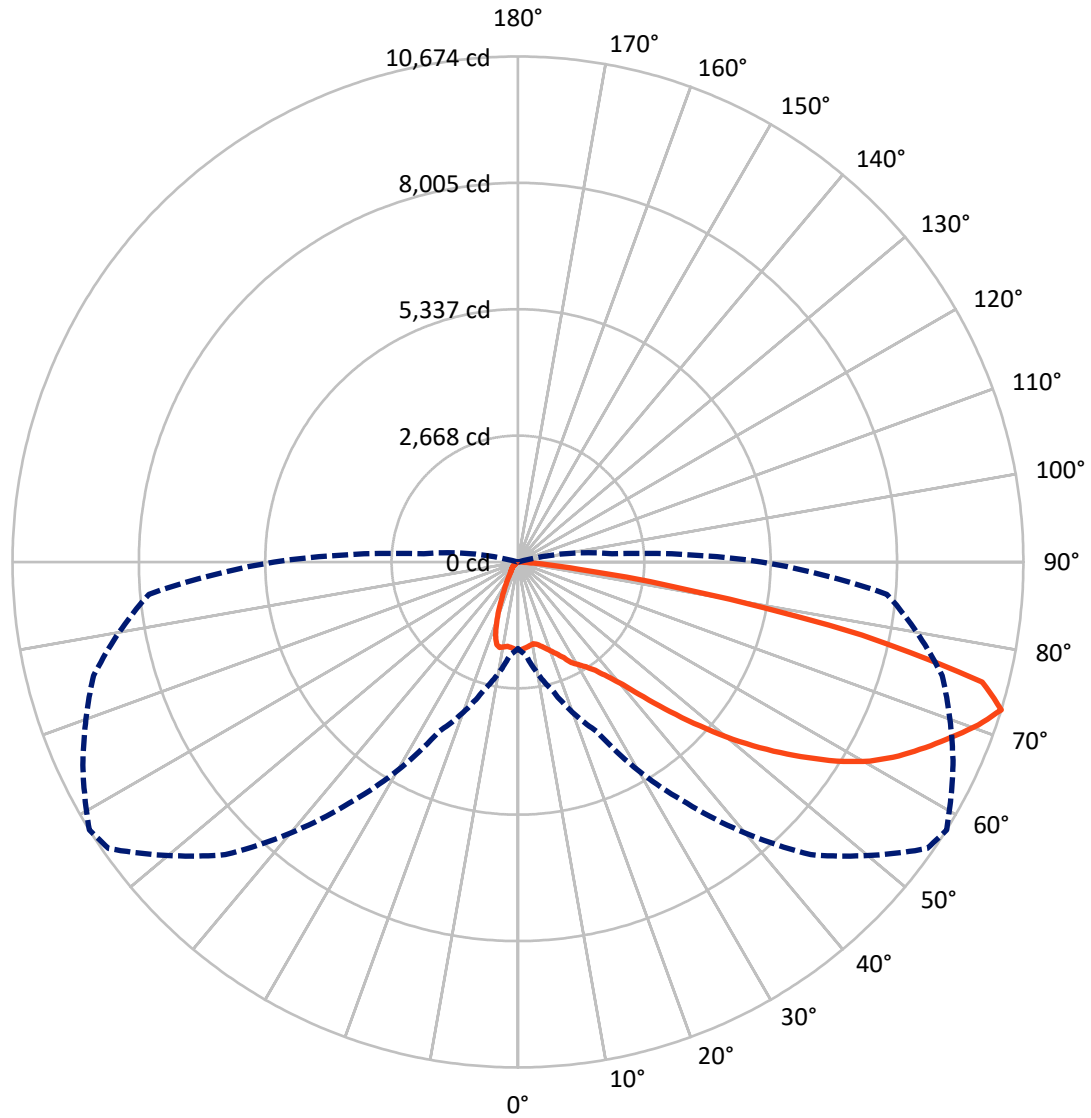
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1509.1	0.0	1509.1
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	14009.9	0.0	14009.9
	% Fixture	90.3	0.0	90.3
Total	Lumens	15519.0	0.0	15519.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.9	1.1
10°-20°	445.1	2.9
20°-30°	699.3	4.5
30°-40°	1205.9	7.8
40°-50°	2294.4	14.8
50°-60°	3633.6	23.4
60°-70°	4240.0	27.3
70°-80°	2655.5	17.1
80°-90°	174.3	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°	15519.0	100.0
0°-180°	15519.0	100.0

Coefficient of Utilization



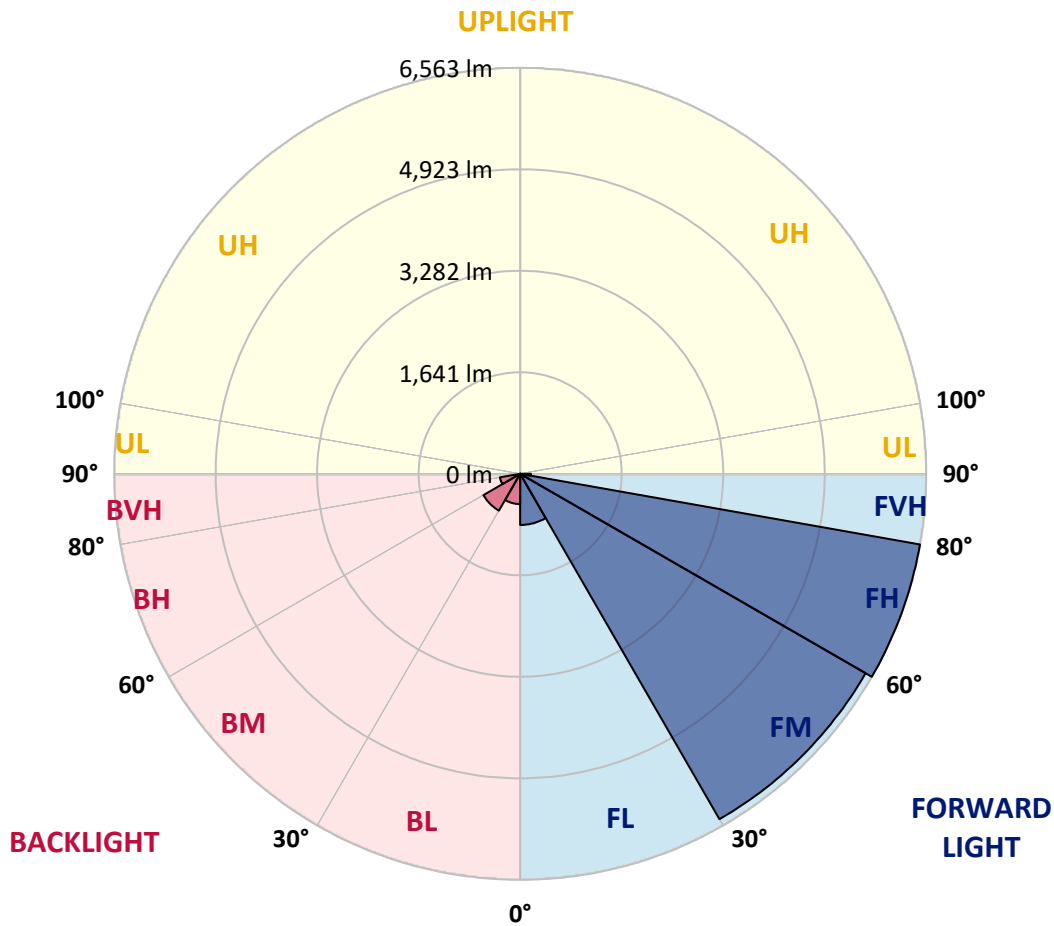
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	826.6	5.3			
FM (30°-60°)	6447.2	41.5			
FH (60°-80°)	6563.4	42.3			G3/7500
FVH (80°-90°)	172.6	1.1			G2/225
BL (0°-30°)	488.7	3.1	B1/500		
BM (30°-60°)	686.7	4.4	B1/1000		
BH (60°-80°)	332.1	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: B1-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2
2.5°	1853.9	1845.5	1842.8	1840.0	1842.8	1845.5	1837.2	1845.5	1840.0	1842.8	1848.3
5°	1787.3	1778.9	1776.2	1778.9	1787.3	1801.1	1806.7	1815.0	1815.0	1823.3	1826.1
7.5°	1712.3	1706.8	1704.0	1709.5	1726.2	1756.7	1773.4	1784.5	1795.6	1812.2	1828.9
10°	1670.7	1667.9	1665.1	1673.5	1690.1	1717.9	1740.1	1756.7	1798.4	1845.5	1876.1
12.5°	1642.9	1642.9	1648.5	1665.1	1687.3	1709.5	1762.3	1784.5	1848.3	1920.5	1962.1
15°	1620.7	1620.7	1629.1	1659.6	1690.1	1742.9	1820.6	1845.5	1920.5	2009.3	2064.8
17.5°	1604.1	1609.6	1615.2	1645.7	1704.0	1792.8	1884.4	1920.5	2012.0	2109.2	2170.2
20°	1606.9	1612.4	1615.2	1645.7	1729.0	1851.1	1967.6	2009.3	2114.7	2217.4	2278.5
22.5°	1623.5	1631.8	1634.6	1676.2	1773.4	1912.1	2062.0	2109.2	2223.0	2331.2	2378.4
25°	1692.9	1698.4	1681.8	1717.9	1837.2	2006.5	2184.1	2234.1	2347.9	2447.8	2486.6
27.5°	1928.8	1934.3	1842.8	1801.1	1887.2	2084.2	2334.0	2403.4	2544.9	2611.5	2617.1
30°	2439.4	2445.0	2264.6	2067.6	2006.5	2150.8	2417.2	2514.4	2697.5	2772.5	2739.2
32.5°	3097.2	3091.6	2844.6	2553.2	2289.6	2267.4	2536.6	2639.3	2839.1	2911.2	2886.2
35°	3757.7	3766.0	3555.1	3116.6	2739.2	2486.6	2689.2	2808.5	3050.0	3152.7	3108.3
37.5°	4210.0	4265.5	4174.0	3699.4	3291.4	2891.8	2936.2	3063.9	3366.4	3505.1	3410.8
40°	4848.3	4834.5	4612.4	4262.8	3902.0	3491.3	3335.8	3396.9	3743.8	3929.7	3782.7
42.5°	5705.9	5678.1	5300.7	4959.4	4556.9	4221.1	3904.8	3893.7	4176.7	4393.2	4179.5
45°	6483.0	6441.3	6183.2	5853.0	5411.7	5026.0	4598.6	4501.4	4698.5	4881.6	4631.9
47.5°	7101.8	7032.5	6849.3	6674.4	6566.2	5966.8	5325.7	5178.6	5278.5	5414.5	5062.0
50°	7834.5	7643.0	7376.6	7271.1	7495.9	7032.5	6025.0	5883.5	5878.0	5955.7	5506.1
52.5°	8167.5	7820.6	7670.8	7759.6	8156.4	8023.2	6779.9	6577.3	6496.8	6505.2	5919.6
55°	7765.1	7726.3	7806.7	8084.3	8603.2	8525.5	7504.2	7254.5	7135.1	6985.3	6316.4
57.5°	7307.2	7426.5	7745.7	8275.8	9169.4	9050.1	8217.5	7934.4	7715.2	7371.0	6757.7
60°	6885.4	7007.5	7534.8	8320.2	9480.2	9555.1	8811.4	8542.2	8217.5	7765.1	7243.4
62.5°	6244.3	6338.6	7079.6	8256.3	9344.2	9849.3	9224.9	9022.3	8719.8	8139.8	7801.2
65°	5522.7	5583.8	6316.4	7745.7	9077.8	9816.0	9566.2	9452.5	9158.3	8531.1	8353.5
67.5°	4731.8	4803.9	5414.5	6827.1	8556.1	9660.6	9888.2	9877.1	9541.3	8964.0	8753.1
70°	3821.5	3827.1	4332.1	5661.5	7645.8	9349.8	10287.8	10312.8	9907.6	9288.7	8769.8
72.5°	1828.9	1978.7	2808.5	3951.9	6213.8	8739.2	10548.7	10673.6	10137.9	9277.6	7823.4
75°	419.1	432.9	818.7	1878.8	3643.9	6707.8	9896.5	10129.6	9577.4	8023.2	5511.6
77.5°	152.6	161.0	230.3	549.5	1401.5	3466.3	7082.4	7423.8	7079.6	5186.9	2605.9
80°	102.7	99.9	119.3	244.2	643.9	982.4	3621.7	3824.3	3491.3	1770.6	624.4
82.5°	52.7	55.5	83.3	136.0	432.9	341.4	1210.0	1315.5	1082.3	355.2	116.6
85°	25.0	25.0	47.2	86.0	183.2	119.3	269.2	324.7	291.4	155.4	38.9
87.5°	25.0	25.0	44.4	55.5	94.4	50.0	66.6	83.3	77.7	83.3	13.9
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°	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2	1862.2
2.5°	1848.3	1845.5	1842.8	1848.3	1845.5	1851.1	1851.1	1856.6	1856.6	1851.1	1848.3
5°	1823.3	1817.8	1812.2	1812.2	1809.5	1815.0	1831.7	1845.5	1848.3	1840.0	1837.2
7.5°	1826.1	1826.1	1820.6	1809.5	1790.0	1790.0	1790.0	1806.7	1815.0	1809.5	1806.7
10°	1876.1	1878.8	1865.0	1840.0	1806.7	1776.2	1717.9	1631.8	1551.4	1529.2	1520.8
12.5°	1962.1	1964.9	1937.1	1892.7	1823.3	1642.9	1420.9	1215.6	1057.4	1013.0	1004.6
15°	2064.8	2067.6	2017.6	1945.4	1734.5	1315.5	985.2	752.1	613.3	580.0	577.2
17.5°	2170.2	2164.7	2089.8	1951.0	1470.9	932.5	599.5	480.1	444.0	435.7	438.5
20°	2272.9	2256.3	2153.6	1848.3	1132.3	610.6	438.5	410.7	402.4	396.9	396.9
22.5°	2367.3	2334.0	2206.3	1645.7	793.7	438.5	391.3	385.8	374.7	366.3	363.6
25°	2461.6	2414.5	2239.6	1382.1	532.8	383.0	369.1	358.0	344.1	333.0	330.3
27.5°	2575.4	2508.8	2223.0	1049.0	399.6	355.2	344.1	327.5	308.1	291.4	285.8
30°	2683.7	2608.7	2128.6	724.3	341.4	327.5	310.8	285.8	260.9	241.4	235.9
32.5°	2819.6	2733.6	1959.3	474.6	297.0	285.8	269.2	238.7	205.4	183.2	177.6
35°	3013.9	2916.8	1742.9	333.0	260.9	241.4	219.2	185.9	149.9	133.2	130.4
37.5°	3285.9	3155.4	1470.9	269.2	230.3	202.6	169.3	136.0	111.0	97.1	94.4
40°	3618.9	3419.1	1168.4	238.7	205.4	169.3	127.7	97.1	80.5	69.4	69.4
42.5°	3979.7	3666.1	860.3	219.2	180.4	138.8	94.4	69.4	58.3	52.7	50.0
45°	4351.6	3885.3	580.0	202.6	158.2	105.5	66.6	47.2	38.9	38.9	36.1
47.5°	4737.3	4032.4	374.7	183.2	133.2	77.7	44.4	33.3	27.8	27.8	27.8
50°	5120.3	4110.1	266.4	166.5	108.2	52.7	33.3	25.0	22.2	22.2	22.2
52.5°	5397.8	4060.2	213.7	144.3	83.3	38.9	25.0	19.4	16.7	16.7	16.7
55°	5639.3	3974.1	185.9	124.9	61.1	27.8	19.4	16.7	13.9	13.9	13.9
57.5°	5886.3	3863.1	166.5	105.5	44.4	19.4	13.9	11.1	11.1	11.1	11.1
60°	6111.1	3674.4	144.3	83.3	30.5	13.9	11.1	8.3	8.3	8.3	8.3
62.5°	6330.3	3513.5	124.9	63.8	22.2	11.1	5.6	5.6	2.8	2.8	2.8
65°	6455.2	3297.0	99.9	41.6	13.9	8.3	2.8	2.8	0.0	0.0	0.0
67.5°	6416.4	3038.9	69.4	25.0	8.3	5.6	2.8	0.0	0.0	0.0	0.0
70°	6147.2	2692.0	41.6	13.9	8.3	5.6	2.8	0.0	0.0	0.0	0.0
72.5°	5148.1	1992.6	25.0	11.1	5.6	2.8	0.0	0.0	0.0	0.0	0.0
75°	3438.5	915.8	13.9	8.3	2.8	2.8	0.0	0.0	0.0	0.0	0.0
77.5°	1573.6	274.7	8.3	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	316.4	72.2	5.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	66.6	13.9	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.9	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.6	2.8	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)