

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: P399745

Luminaire Tested: **ARCH-L-PA3-180-827-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399745
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-PA3-180-827-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 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: 14356 lumens
Efficiency: N/A
Efficacy: 79.3 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

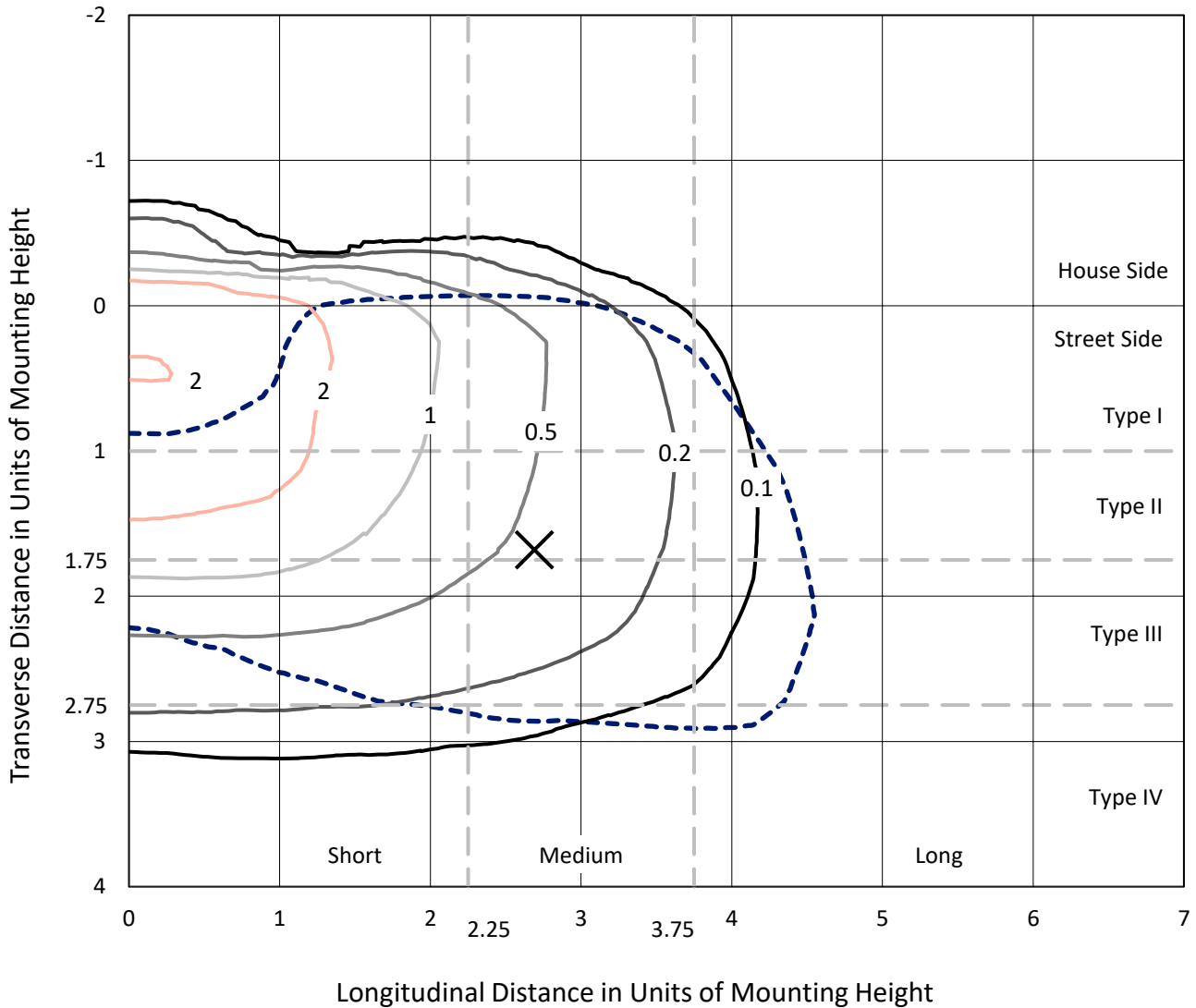
Input Watts (W): 181
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

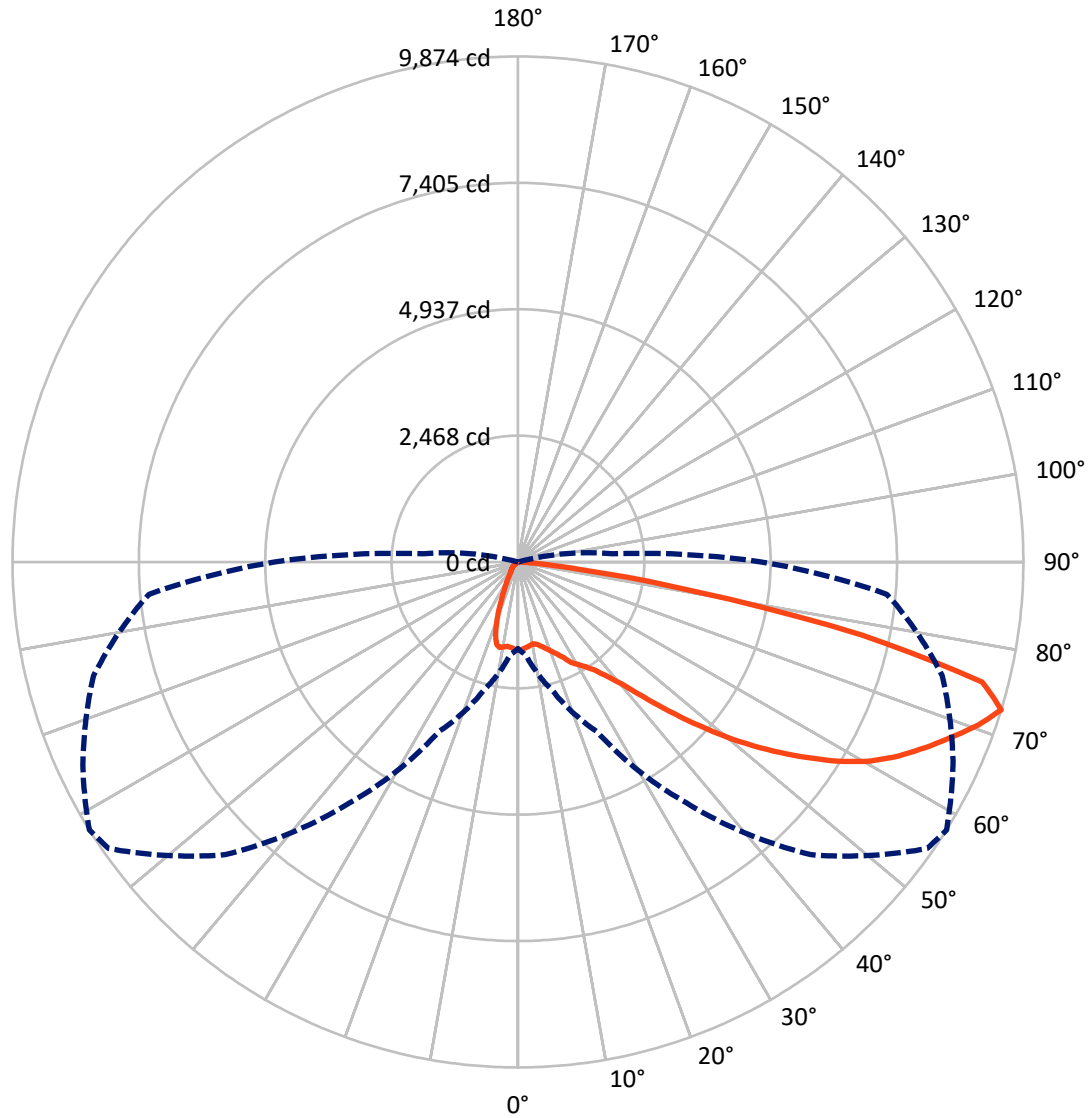
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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	1396.0	0.0	1396.0
	% Fixture	9.7	0.0	9.7
Street Side	Lumens	12960.0	0.0	12960.0
	% Fixture	90.3	0.0	90.3
Total	Lumens	14356.0	0.0	14356.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.1	1.1
10°-20°	411.8	2.9
20°-30°	646.9	4.5
30°-40°	1115.6	7.8
40°-50°	2122.4	14.8
50°-60°	3361.3	23.4
60°-70°	3922.2	27.3
70°-80°	2456.5	17.1
80°-90°	161.2	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°	14356.0	100.0
0°-180°	14356.0	100.0

Coefficient of Utilization



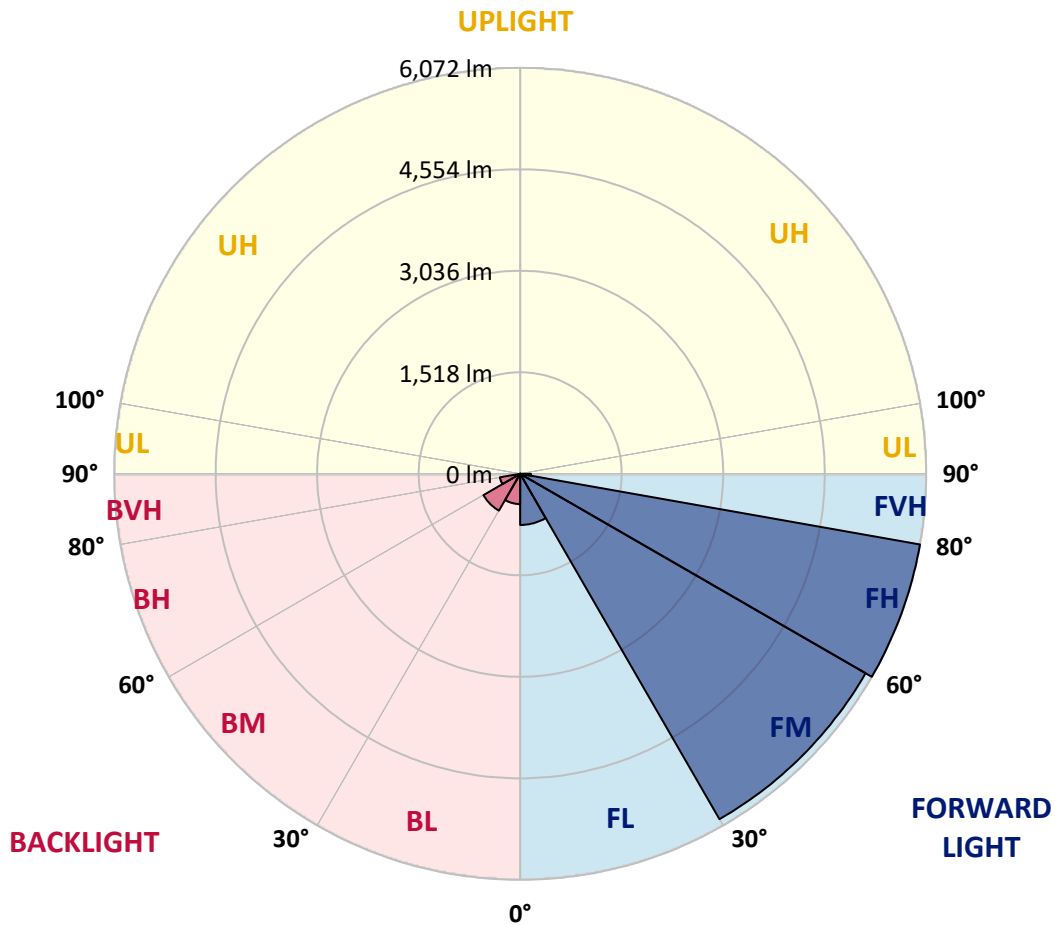
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	764.6	5.3			
FM (30°-60°)	5964.1	41.5			
FH (60°-80°)	6071.6	42.3			G3/7500
FVH (80°-90°)	159.7	1.1			G2/225
BL (0°-30°)	452.1	3.1	B1/500		
BM (30°-60°)	635.2	4.4	B1/1000		
BH (60°-80°)	307.2	2.1	B1/500		G1/500
BVH (80°-90°)	1.6	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°	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6
2.5°	1714.9	1707.2	1704.7	1702.1	1704.7	1707.2	1699.5	1707.2	1702.1	1704.7	1709.8
5°	1653.3	1645.6	1643.0	1645.6	1653.3	1666.2	1671.3	1679.0	1679.0	1686.7	1689.3
7.5°	1584.0	1578.9	1576.3	1581.4	1596.8	1625.1	1640.5	1650.7	1661.0	1676.4	1691.8
10°	1545.5	1542.9	1540.4	1548.1	1563.5	1589.1	1609.7	1625.1	1663.6	1707.2	1735.5
12.5°	1519.8	1519.8	1525.0	1540.4	1560.9	1581.4	1630.2	1650.7	1709.8	1776.5	1815.1
15°	1499.3	1499.3	1507.0	1535.2	1563.5	1612.2	1684.1	1707.2	1776.5	1858.7	1910.0
17.5°	1483.9	1489.0	1494.1	1522.4	1576.3	1658.5	1743.2	1776.5	1861.3	1951.1	2007.6
20°	1486.4	1491.6	1494.1	1522.4	1599.4	1712.4	1820.2	1858.7	1956.3	2051.2	2107.7
22.5°	1501.8	1509.5	1512.1	1550.6	1640.5	1768.8	1907.5	1951.1	2056.4	2156.5	2200.1
25°	1566.0	1571.2	1555.8	1589.1	1699.5	1856.1	2020.4	2066.6	2171.9	2264.3	2300.3
27.5°	1784.2	1789.4	1704.7	1666.2	1745.7	1928.0	2159.1	2223.2	2354.2	2415.8	2420.9
30°	2256.6	2261.8	2094.9	1912.6	1856.1	1989.6	2236.1	2325.9	2495.4	2564.7	2533.9
32.5°	2865.1	2859.9	2631.4	2361.9	2118.0	2097.5	2346.5	2441.5	2626.3	2693.1	2670.0
35°	3476.1	3483.8	3288.7	2883.0	2533.9	2300.3	2487.7	2598.1	2821.4	2916.4	2875.3
37.5°	3894.5	3945.9	3861.2	3422.2	3044.8	2675.1	2716.2	2834.3	3114.1	3242.5	3155.2
40°	4485.0	4472.2	4266.8	3943.3	3609.6	3229.6	3085.8	3142.3	3463.2	3635.2	3499.2
42.5°	5278.3	5252.6	4903.5	4587.7	4215.4	3904.8	3612.1	3601.9	3863.7	4064.0	3866.3
45°	5997.1	5958.6	5719.9	5414.4	5006.2	4649.3	4254.0	4164.1	4346.4	4515.8	4284.8
47.5°	6569.6	6505.4	6336.0	6174.3	6074.1	5519.6	4926.6	4790.5	4882.9	5008.7	4682.7
50°	7247.4	7070.2	6823.8	6726.2	6934.2	6505.4	5573.5	5442.6	5437.5	5509.3	5093.4
52.5°	7555.5	7234.5	7095.9	7178.1	7545.2	7422.0	6271.8	6084.4	6010.0	6017.7	5476.0
55°	7183.2	7147.3	7221.7	7478.4	7958.5	7886.6	6941.9	6710.8	6600.4	6461.8	5843.1
57.5°	6759.6	6870.0	7165.2	7655.6	8482.2	8371.8	7601.7	7339.8	7137.0	6818.6	6251.3
60°	6369.4	6482.3	6970.1	7696.7	8769.8	8839.1	8151.1	7902.0	7601.7	7183.2	6700.6
62.5°	5776.3	5863.6	6549.1	7637.6	8644.0	9111.2	8533.6	8346.2	8066.3	7529.8	7216.6
65°	5108.9	5165.3	5843.1	7165.2	8397.5	9080.4	8849.4	8744.1	8472.0	7891.8	7727.5
67.5°	4377.2	4443.9	5008.7	6315.5	7914.9	8936.6	9147.2	9136.9	8826.2	8292.3	8097.1
70°	3535.1	3540.3	4007.5	5237.2	7072.8	8649.1	9516.8	9539.9	9165.1	8592.6	8112.5
72.5°	1691.8	1830.5	2598.1	3655.8	5748.1	8084.3	9758.2	9873.7	9378.2	8582.4	7237.1
75°	387.7	400.5	757.3	1738.0	3370.8	6205.1	9154.9	9370.5	8859.6	7422.0	5098.6
77.5°	141.2	148.9	213.1	508.3	1296.5	3206.5	6551.7	6867.4	6549.1	4798.2	2410.7
80°	95.0	92.4	110.4	225.9	595.6	908.8	3350.3	3537.7	3229.6	1637.9	577.6
82.5°	48.8	51.3	77.0	125.8	400.5	315.8	1119.3	1216.9	1001.2	328.6	107.8
85°	23.1	23.1	43.6	79.6	169.4	110.4	249.0	300.4	269.6	143.8	35.9
87.5°	23.1	23.1	41.1	51.3	87.3	46.2	61.6	77.0	71.9	77.0	12.8
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°	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6	1722.6
2.5°	1709.8	1707.2	1704.7	1709.8	1707.2	1712.4	1712.4	1717.5	1717.5	1712.4	1709.8
5°	1686.7	1681.6	1676.4	1676.4	1673.9	1679.0	1694.4	1707.2	1709.8	1702.1	1699.5
7.5°	1689.3	1689.3	1684.1	1673.9	1655.9	1655.9	1655.9	1671.3	1679.0	1673.9	1671.3
10°	1735.5	1738.0	1725.2	1702.1	1671.3	1643.0	1589.1	1509.5	1435.1	1414.6	1406.9
12.5°	1815.1	1817.6	1791.9	1750.9	1686.7	1519.8	1314.4	1124.5	978.1	937.1	929.3
15°	1910.0	1912.6	1866.4	1799.7	1604.5	1216.9	911.4	695.7	567.4	536.6	534.0
17.5°	2007.6	2002.5	1933.1	1804.8	1360.6	862.6	554.5	444.1	410.8	403.1	405.6
20°	2102.6	2087.2	1992.2	1709.8	1047.4	564.8	405.6	380.0	372.3	367.1	367.1
22.5°	2189.9	2159.1	2041.0	1522.4	734.2	405.6	362.0	356.8	346.6	338.9	336.3
25°	2277.2	2233.5	2071.8	1278.5	492.9	354.3	341.4	331.2	318.3	308.1	305.5
27.5°	2382.4	2320.8	2056.4	970.4	369.7	328.6	318.3	302.9	285.0	269.6	264.4
30°	2482.5	2413.2	1969.1	670.1	315.8	302.9	287.5	264.4	241.3	223.4	218.2
32.5°	2608.3	2528.8	1812.5	439.0	274.7	264.4	249.0	220.8	190.0	169.4	164.3
35°	2788.0	2698.2	1612.2	308.1	241.3	223.4	202.8	172.0	138.6	123.2	120.7
37.5°	3039.6	2919.0	1360.6	249.0	213.1	187.4	156.6	125.8	102.7	89.9	87.3
40°	3347.7	3162.9	1080.8	220.8	190.0	156.6	118.1	89.9	74.5	64.2	64.2
42.5°	3681.5	3391.4	795.9	202.8	166.9	128.4	87.3	64.2	53.9	48.8	46.2
45°	4025.5	3594.2	536.6	187.4	146.3	97.6	61.6	43.6	35.9	35.9	33.4
47.5°	4382.3	3730.2	346.6	169.4	123.2	71.9	41.1	30.8	25.7	25.7	25.7
50°	4736.6	3802.1	246.5	154.0	100.1	48.8	30.8	23.1	20.5	20.5	20.5
52.5°	4993.3	3755.9	197.7	133.5	77.0	35.9	23.1	18.0	15.4	15.4	15.4
55°	5216.7	3676.3	172.0	115.5	56.5	25.7	18.0	15.4	12.8	12.8	12.8
57.5°	5445.2	3573.6	154.0	97.6	41.1	18.0	12.8	10.3	10.3	10.3	10.3
60°	5653.1	3399.1	133.5	77.0	28.2	12.8	10.3	7.7	7.7	7.7	7.7
62.5°	5855.9	3250.2	115.5	59.0	20.5	10.3	5.1	5.1	2.6	2.6	2.6
65°	5971.5	3049.9	92.4	38.5	12.8	7.7	2.6	2.6	0.0	0.0	0.0
67.5°	5935.5	2811.2	64.2	23.1	7.7	5.1	2.6	0.0	0.0	0.0	0.0
70°	5686.5	2490.2	38.5	12.8	7.7	5.1	2.6	0.0	0.0	0.0	0.0
72.5°	4762.3	1843.3	23.1	10.3	5.1	2.6	0.0	0.0	0.0	0.0	0.0
75°	3180.8	847.2	12.8	7.7	2.6	2.6	0.0	0.0	0.0	0.0	0.0
77.5°	1455.6	254.2	7.7	5.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	292.7	66.7	5.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	61.6	12.8	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.8	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.1	2.6	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)