

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: P400182

Luminaire Tested: **ARCH-L-PA3-240-830-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400182
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-PA3-240-830-U-T2R-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 1030mA 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: 20802 lumens
Efficiency: N/A
Efficacy: 86.0 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

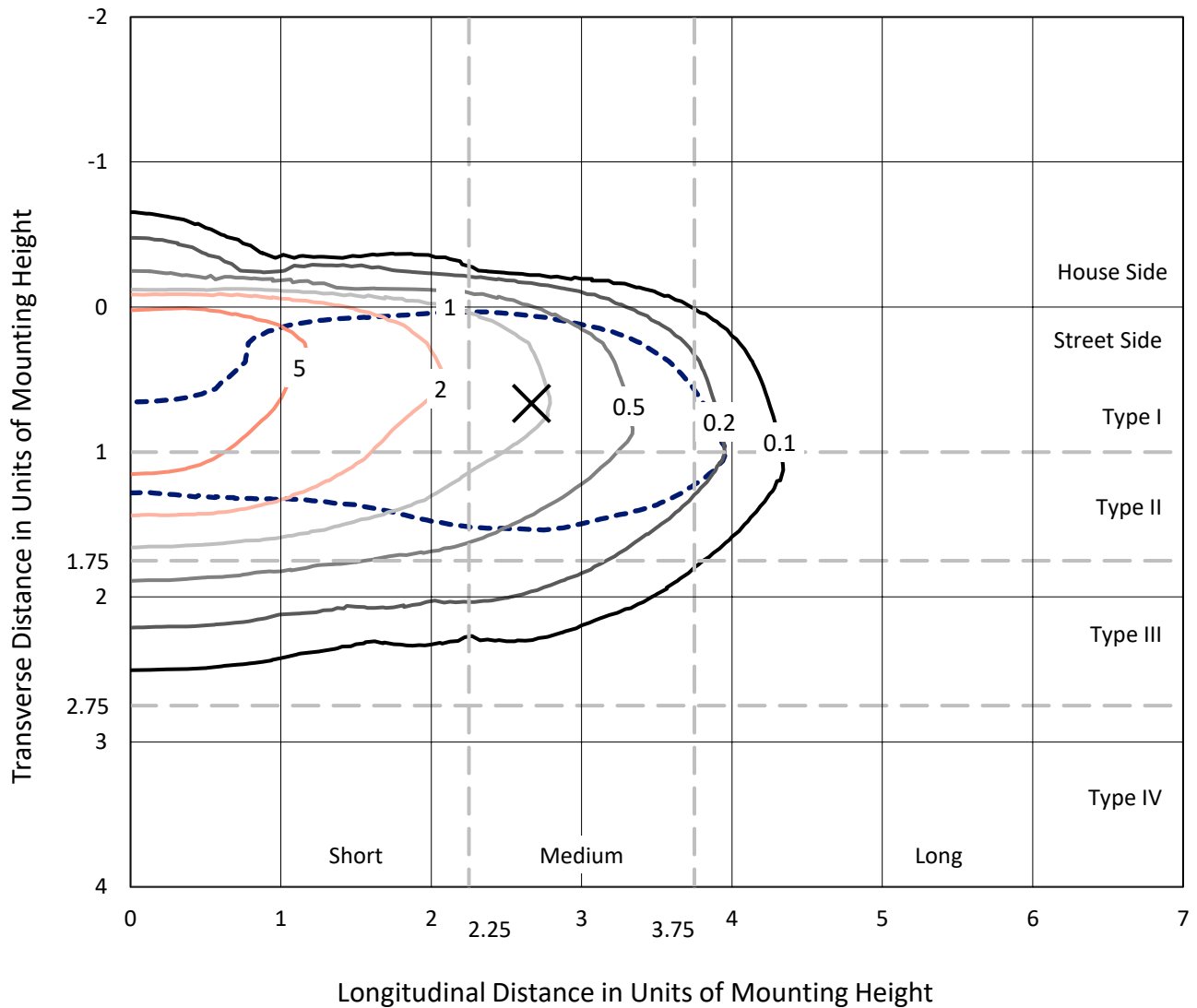
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

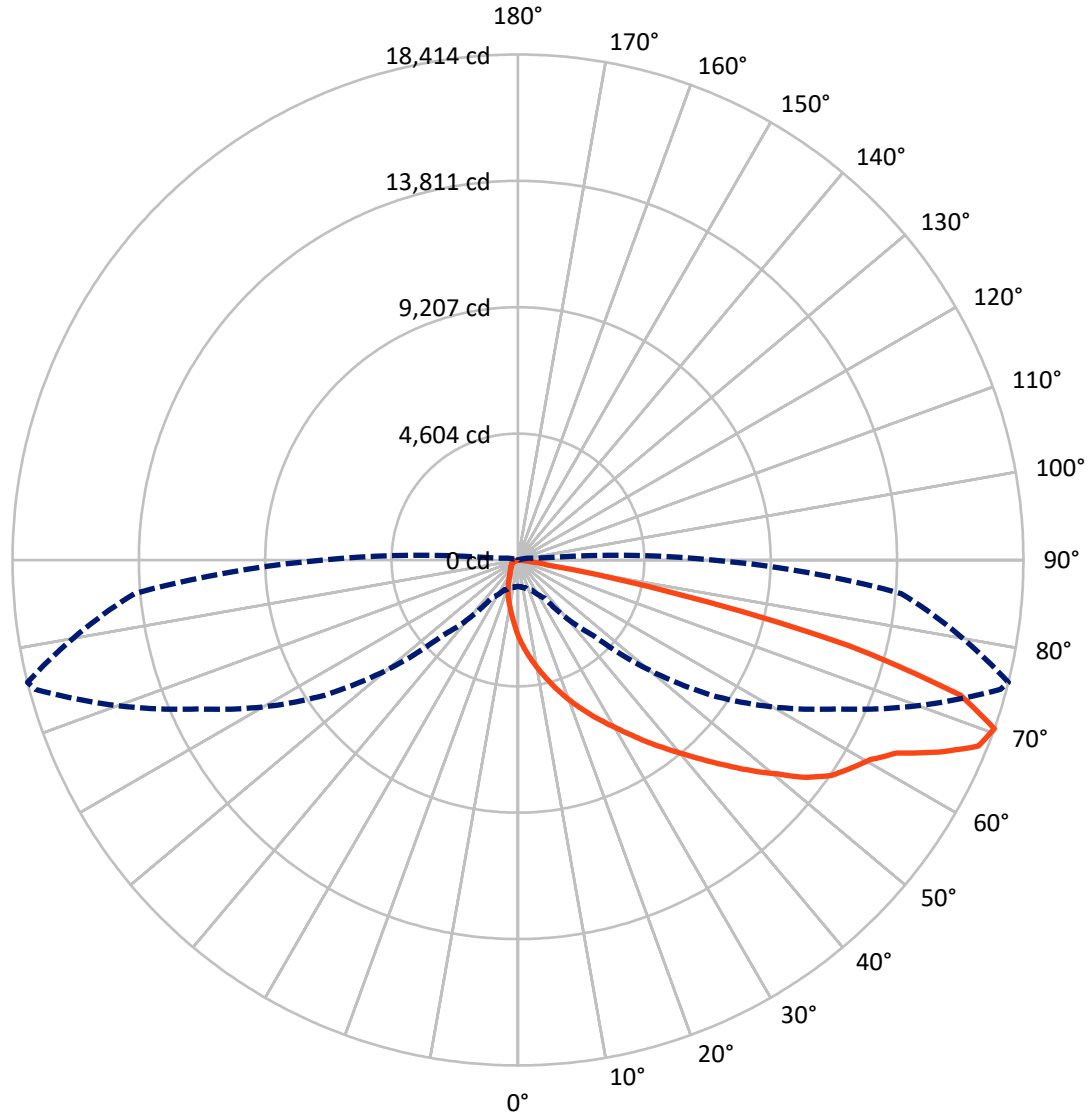
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 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
House Side	Lumens	981.1	0.0	981.1
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	19820.9	0.0	19820.9
	% Fixture	95.3	0.0	95.3
Total	Lumens	20802.0	0.0	20802.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.3	1.3
10°-20°	846.6	4.1
20°-30°	1576.7	7.6
30°-40°	2788.9	13.4
40°-50°	4264.9	20.5
50°-60°	4835.3	23.2
60°-70°	4145.1	19.9
70°-80°	2007.6	9.7
80°-90°	74.5	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°	20802.0	100.0
0°-180°	20802.0	100.0

Coefficient of Utilization



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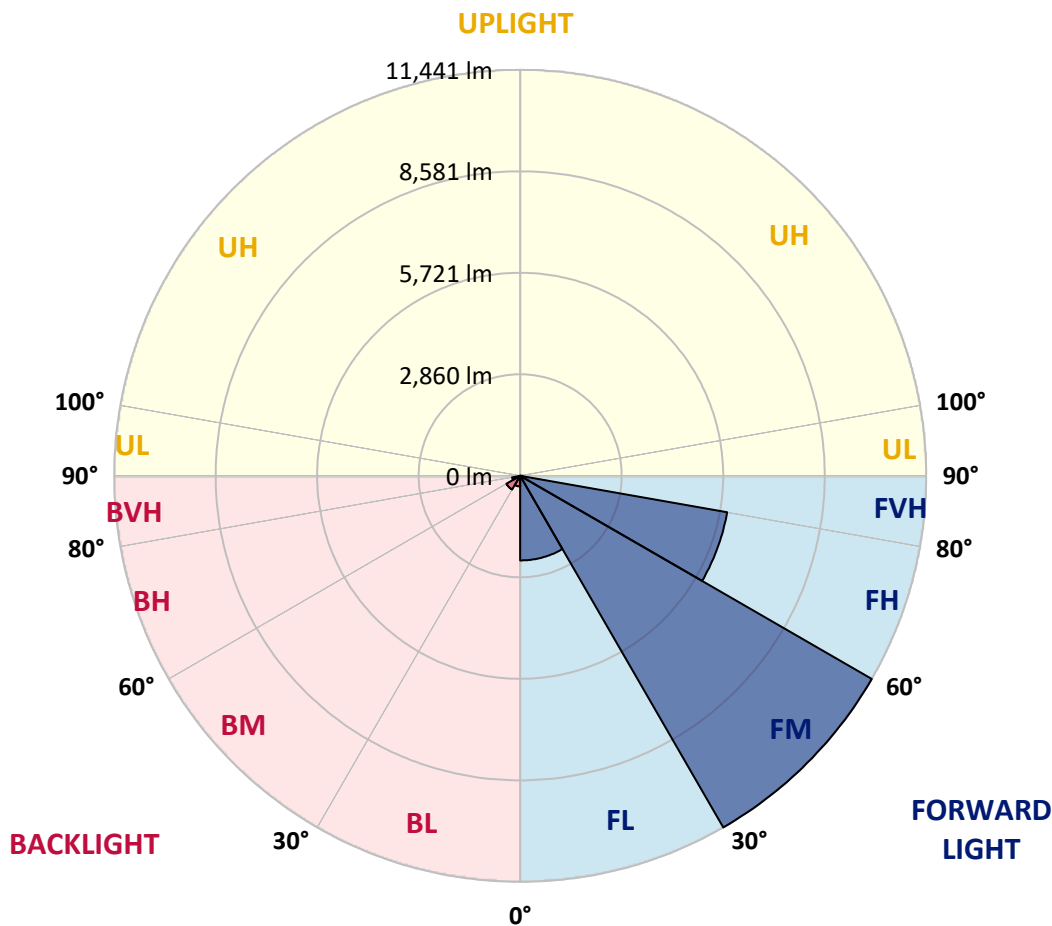
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2384.7	11.5			
FM (30°-60°)	11441.3	55.0			
FH (60°-80°)	5921.7	28.5			G3/7500
FVH (80°-90°)	73.2	0.4			G1/100
BL (0°-30°)	301.0	1.4	B1/500		
BM (30°-60°)	447.8	2.2	B1/1000		
BH (60°-80°)	231.0	1.1	B1/500		G1/500
BVH (80°-90°)	1.3	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5
2.5°	3806.2	3785.4	3764.6	3684.9	3612.2	3546.4	3421.7	3259.0	3113.5	3082.3	2912.6
5°	4471.1	4446.9	4415.7	4336.0	4242.5	4131.7	3948.1	3698.8	3442.5	3387.1	3071.9
7.5°	4921.3	4900.5	4855.5	4817.4	4723.9	4616.6	4412.2	4121.3	3768.1	3698.8	3255.5
10°	5229.6	5215.7	5208.8	5177.6	5108.3	5021.8	4817.4	4512.7	4097.1	4017.4	3449.4
12.5°	5340.4	5340.4	5375.0	5427.0	5437.4	5409.7	5222.6	4917.9	4443.4	4360.3	3678.0
15°	5191.5	5208.8	5285.0	5451.2	5624.4	5738.7	5620.9	5336.9	4824.4	4734.3	3948.1
17.5°	5149.9	5167.2	5219.2	5364.6	5596.7	5901.4	5960.3	5742.1	5184.5	5108.3	4225.2
20°	5267.7	5285.0	5330.0	5454.7	5631.3	5939.5	6185.4	6133.5	5565.5	5485.8	4505.7
22.5°	5548.2	5558.6	5558.6	5655.5	5811.4	6040.0	6327.4	6504.0	5956.9	5870.3	4782.8
25°	6150.8	6130.0	6046.9	5998.4	6098.8	6285.9	6507.5	6829.6	6393.2	6275.5	5080.6
27.5°	6940.4	7009.7	6808.8	6576.8	6500.6	6607.9	6760.3	7117.1	6815.7	6691.1	5350.8
30°	8010.6	7982.9	7719.7	7387.2	7058.2	7020.1	7072.0	7362.9	7238.3	7120.5	5652.1
32.5°	8890.3	8942.2	8665.1	8259.9	7768.1	7536.1	7480.7	7657.3	7688.5	7612.3	6008.8
35°	9794.2	9849.6	9579.4	9129.2	8543.9	8156.0	7996.7	8021.0	8246.1	8149.1	6382.8
37.5°	10604.6	10653.1	10386.4	9925.8	9340.5	8866.0	8637.4	8450.4	8786.4	8699.8	6777.6
40°	11221.0	11228.0	11047.9	10635.7	10081.6	9589.8	9330.1	8963.0	9357.8	9298.9	7189.8
42.5°	11657.4	11671.3	11539.7	11186.4	10673.8	10216.7	10005.4	9569.1	10015.8	9963.9	7667.7
45°	11861.8	11886.0	11872.1	11546.6	11120.6	10725.8	10656.5	10213.2	10736.2	10687.7	8218.4
47.5°	11667.8	11667.8	11844.4	11799.4	11408.1	11144.9	11224.5	10885.1	11518.9	11473.9	8779.4
50°	10860.9	10871.3	11231.4	11747.5	11518.9	11460.0	11709.4	11543.1	12228.9	12256.6	9451.3
52.5°	8741.3	8724.0	9939.6	10930.1	11442.7	11602.0	12156.1	12215.0	13080.8	13163.9	10119.7
55°	6531.8	6521.4	7685.0	9482.5	10909.3	11529.3	12405.5	12814.2	13808.1	13860.1	10618.4
57.5°	5170.7	5143.0	5783.7	7643.5	9704.1	11203.7	12415.9	12928.4	14213.3	14303.4	11103.3
60°	3975.9	3951.6	4429.5	5686.7	7996.7	10337.9	12118.0	12935.4	14604.7	14764.0	11754.4
62.5°	2843.4	2871.1	3238.2	4079.7	6150.8	9115.4	11730.1	13032.3	15300.8	15480.9	12679.1
65°	1918.7	1904.8	2209.6	2777.6	4374.1	7470.3	11134.5	13236.7	16554.5	16869.7	13787.3
67.5°	1333.4	1343.8	1482.3	1807.8	2777.6	5735.2	10144.0	13351.0	17849.8	18095.7	14563.1
70°	962.8	976.6	1052.8	1215.6	1697.0	3889.3	8575.1	12828.0	18199.6	18414.3	14022.8
72.5°	633.8	661.5	775.8	862.4	1084.0	2434.7	6317.0	11051.3	16693.0	16852.3	11764.8
75°	342.9	349.8	498.7	644.2	772.3	1516.9	3768.1	7453.0	12488.6	12436.7	7757.8
77.5°	266.7	277.1	308.2	460.6	519.5	834.7	1489.2	3366.3	5915.3	5756.0	2645.9
80°	162.8	169.7	214.7	273.6	363.6	484.9	436.4	914.3	1201.8	1125.6	387.9
82.5°	97.0	103.9	128.1	228.6	287.5	228.6	152.4	221.7	225.1	221.7	97.0
85°	17.3	17.3	90.0	159.3	152.4	65.8	90.0	72.7	65.8	69.3	20.8
87.5°	0.0	0.0	34.6	48.5	69.3	24.2	34.6	17.3	17.3	17.3	10.4
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°	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5	2784.5
2.5°	2808.7	2691.0	2448.5	2237.3	2026.0	1870.2	1752.4	1631.2	1589.6	1537.7	1510.0
5°	2857.2	2625.2	2143.8	1759.3	1433.8	1184.4	1025.1	928.2	865.8	820.8	810.4
7.5°	2929.9	2573.2	1897.9	1378.4	1021.7	772.3	640.7	574.9	540.3	519.5	512.6
10°	3016.5	2528.2	1655.5	1073.6	720.4	543.7	471.0	443.3	429.4	422.5	419.1
12.5°	3137.7	2510.9	1451.1	827.7	543.7	446.8	408.7	391.4	381.0	370.6	367.1
15°	3297.0	2517.8	1264.1	640.7	450.2	398.3	367.1	349.8	335.9	325.5	325.5
17.5°	3463.3	2528.2	1080.5	519.5	408.7	363.6	329.0	304.8	294.4	284.0	280.5
20°	3619.1	2524.7	903.9	443.3	370.6	325.5	290.9	266.7	249.4	239.0	239.0
22.5°	3768.1	2504.0	737.7	398.3	339.4	287.5	249.4	225.1	211.3	200.9	200.9
25°	3927.4	2462.4	602.6	363.6	301.3	252.8	214.7	190.5	180.1	169.7	169.7
27.5°	4052.0	2393.1	491.8	332.5	266.7	218.2	183.6	162.8	152.4	145.5	145.5
30°	4187.1	2292.7	408.7	297.8	232.0	187.0	155.8	138.5	128.1	124.7	124.7
32.5°	4336.0	2181.9	349.8	263.2	197.4	159.3	131.6	121.2	110.8	107.4	107.4
35°	4509.2	2084.9	315.2	228.6	173.2	135.1	114.3	103.9	97.0	97.0	97.0
37.5°	4706.6	1984.5	284.0	200.9	148.9	114.3	97.0	93.5	90.0	86.6	86.6
40°	4921.3	1877.1	256.3	176.6	128.1	97.0	83.1	83.1	79.7	79.7	79.7
42.5°	5163.8	1783.6	232.0	155.8	110.8	83.1	72.7	72.7	69.3	69.3	69.3
45°	5427.0	1697.0	211.3	138.5	97.0	72.7	65.8	62.3	58.9	58.9	58.9
47.5°	5738.7	1648.5	193.9	121.2	83.1	62.3	55.4	51.9	48.5	45.0	45.0
50°	6136.9	1669.3	176.6	100.4	72.7	51.9	45.0	41.6	38.1	34.6	34.6
52.5°	6452.1	1658.9	152.4	86.6	58.9	41.6	34.6	31.2	27.7	24.2	24.2
55°	6680.7	1617.4	131.6	72.7	45.0	34.6	27.7	20.8	17.3	17.3	17.3
57.5°	6905.8	1575.8	110.8	58.9	34.6	24.2	17.3	13.9	13.9	13.9	13.9
60°	7255.6	1516.9	97.0	48.5	27.7	17.3	10.4	10.4	6.9	6.9	6.9
62.5°	7681.6	1444.2	79.7	41.6	20.8	13.9	6.9	6.9	0.0	0.0	0.0
65°	8149.1	1316.0	65.8	31.2	17.3	10.4	6.9	0.0	0.0	0.0	0.0
67.5°	8041.7	1056.3	55.4	20.8	13.9	6.9	3.5	0.0	0.0	0.0	0.0
70°	7113.6	713.4	45.0	17.3	10.4	6.9	3.5	0.0	0.0	0.0	0.0
72.5°	5572.4	422.5	31.2	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0
75°	3567.2	211.3	20.8	10.4	6.9	3.5	0.0	0.0	0.0	0.0	0.0
77.5°	1194.8	103.9	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0
80°	169.7	34.6	6.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.1	13.9	3.5	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	13.9	6.9	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.9	3.5	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)