

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: P399741

Luminaire Tested: **ARCH-L-PA3-180-827-U-T2R-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399741  
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-PA3-180-827-U-T2R-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 775mA 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: 15689 lumens  
Efficiency: N/A  
Efficacy: 86.7 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G2

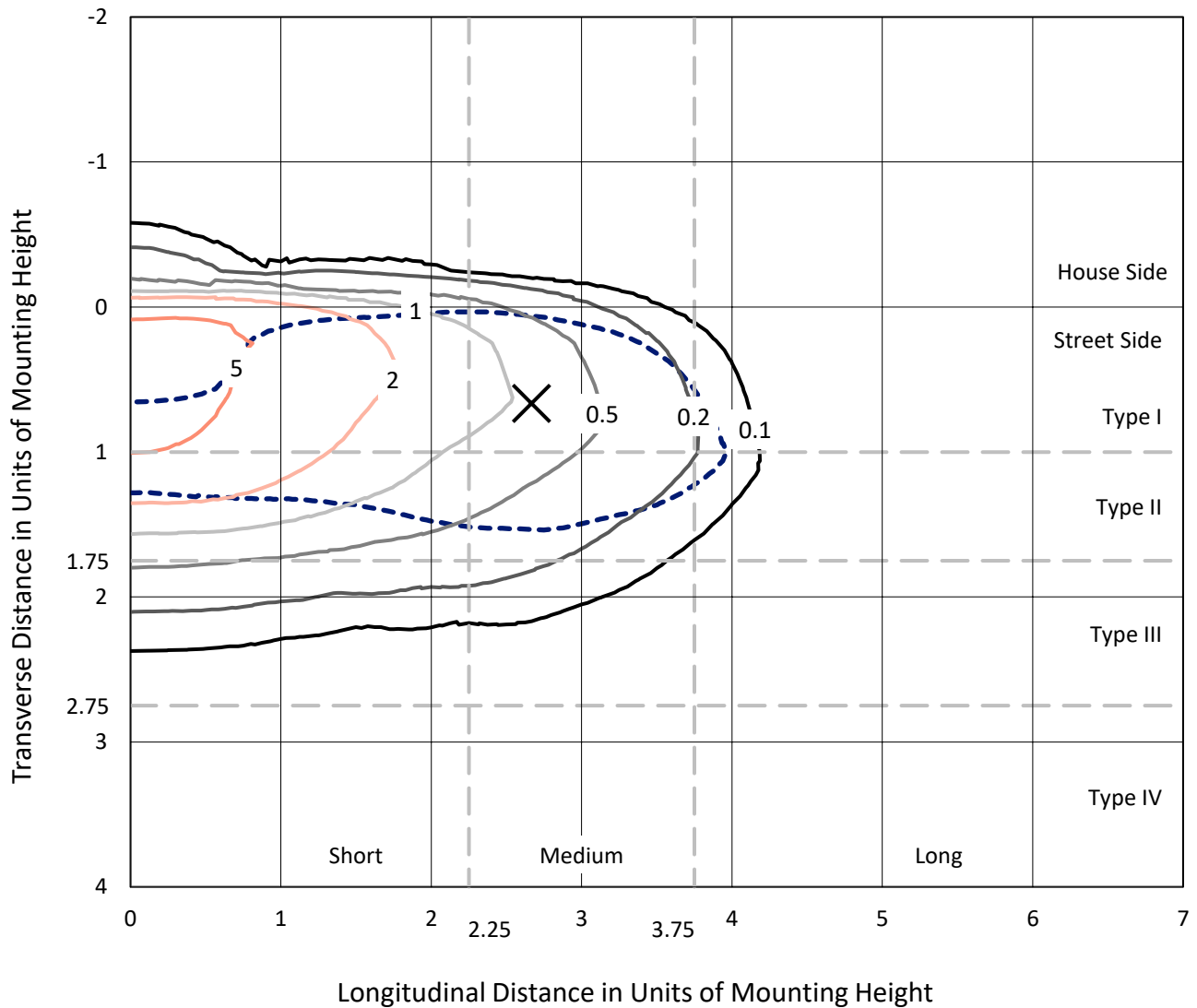
Input Watts (W): 181  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

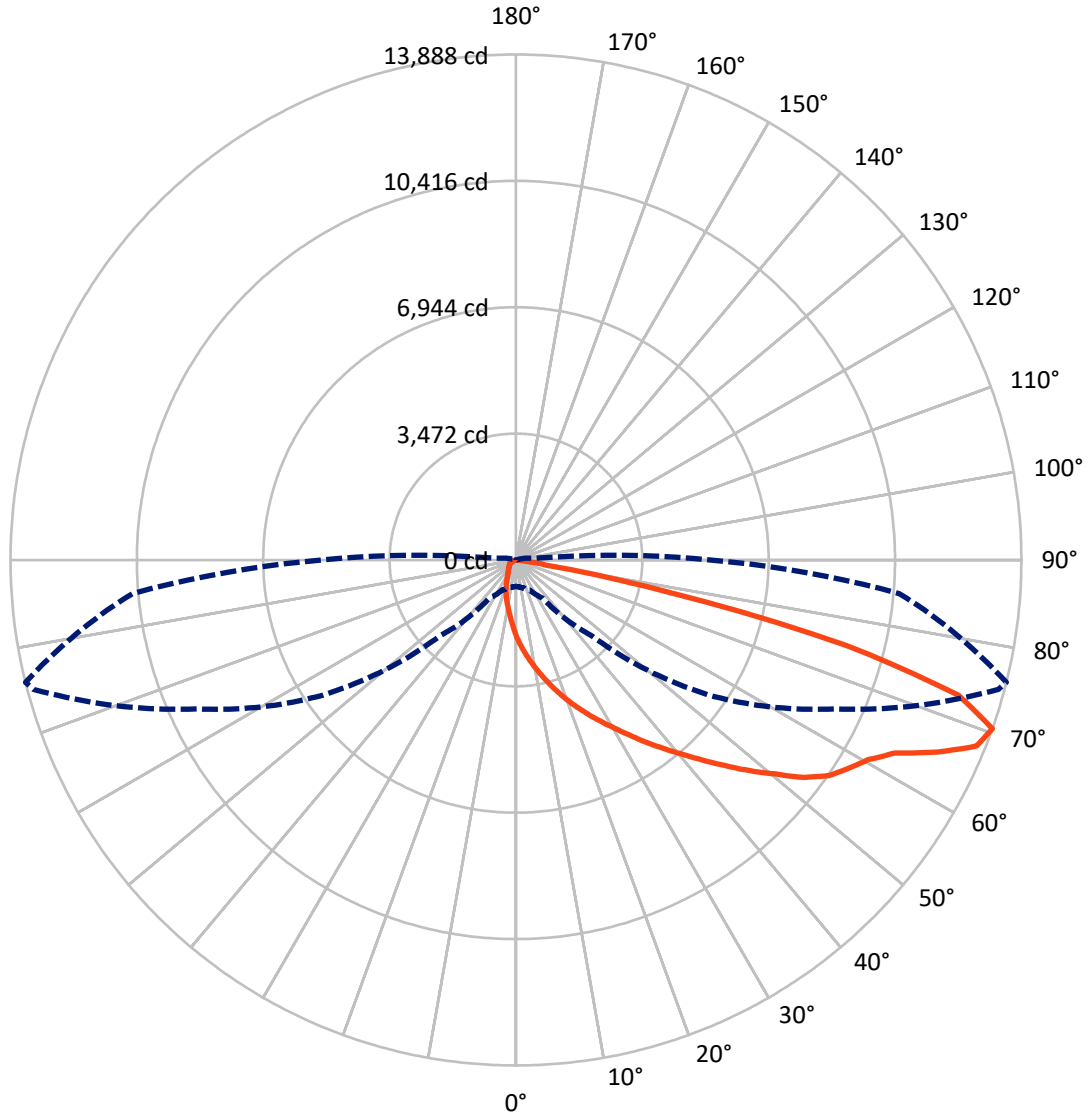
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 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
<b>House Side</b>	Lumens	739.9	0.0	739.9
	% Fixture	4.7	0.0	4.7
<b>Street Side</b>	Lumens	14949.1	0.0	14949.1
	% Fixture	95.3	0.0	95.3
<b>Total</b>	Lumens	15689.0	0.0	15689.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.8	1.3
10°-20°	638.5	4.1
20°-30°	1189.2	7.6
30°-40°	2103.4	13.4
40°-50°	3216.6	20.5
50°-60°	3646.9	23.2
60°-70°	3126.3	19.9
70°-80°	1514.2	9.7
80°-90°	56.2	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°	15689.0	100.0
0°-180°	15689.0	100.0

**Coefficient of Utilization**

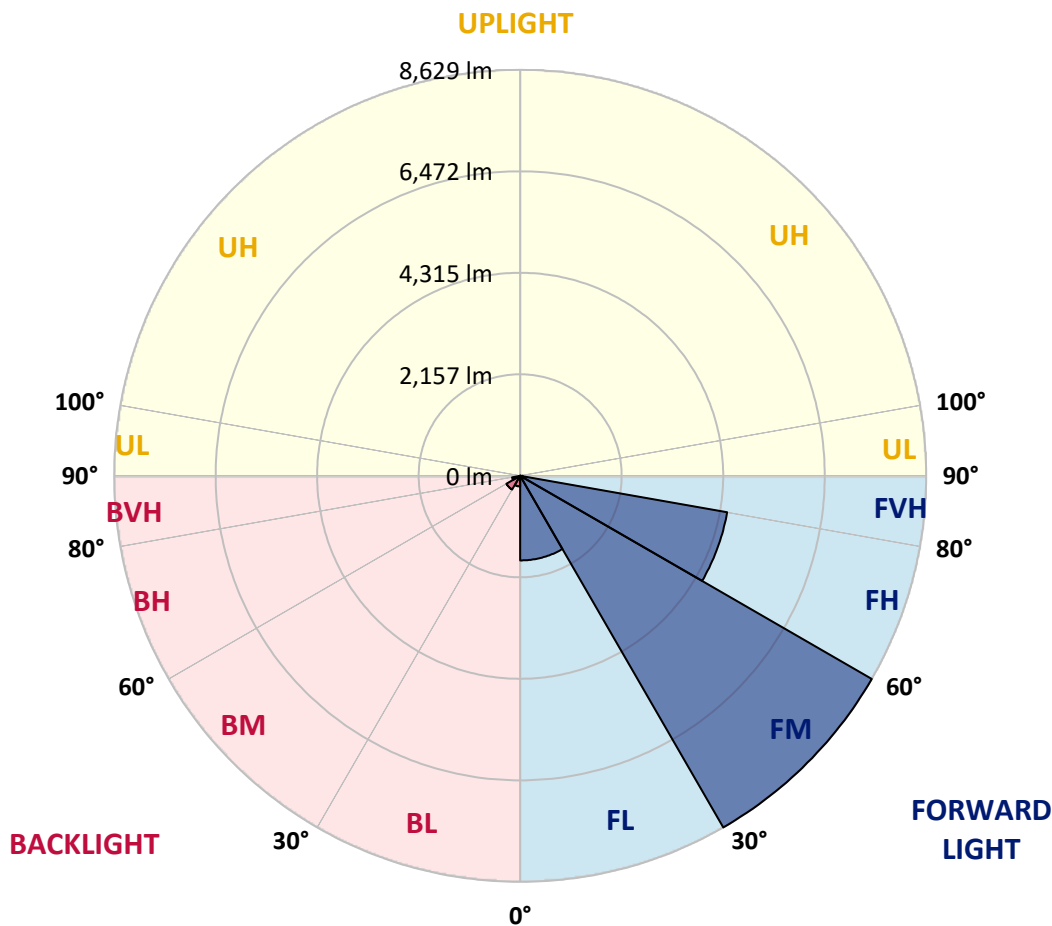


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1798.6	11.5			
FM (30°-60°)	8629.1	55.0			
FH (60°-80°)	4466.2	28.5			G2/5000
FVH (80°-90°)	55.2	0.4			G1/100
BL (0°-30°)	227.0	1.4	B1/500		
BM (30°-60°)	337.8	2.2	B1/1000		
BH (60°-80°)	174.2	1.1	B1/500		G1/500
BVH (80°-90°)	1.0	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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1
2.5°	2870.6	2855.0	2839.3	2779.2	2724.3	2674.7	2580.7	2457.9	2348.2	2324.7	2196.7
5°	3372.1	3353.8	3330.3	3270.3	3199.7	3116.2	2977.7	2789.6	2596.4	2554.6	2316.9
7.5°	3711.7	3696.0	3662.1	3633.3	3562.8	3481.8	3327.7	3108.3	2841.9	2789.6	2455.3
10°	3944.2	3933.7	3928.5	3905.0	3852.7	3787.4	3633.3	3403.5	3090.0	3030.0	2601.6
12.5°	4027.8	4027.8	4053.9	4093.1	4100.9	4080.0	3938.9	3709.1	3351.2	3288.5	2774.0
15°	3915.4	3928.5	3986.0	4111.3	4241.9	4328.1	4239.3	4025.1	3638.6	3570.6	2977.7
17.5°	3884.1	3897.2	3936.3	4046.0	4221.0	4450.9	4495.3	4330.7	3910.2	3852.7	3186.7
20°	3972.9	3986.0	4019.9	4113.9	4247.2	4479.6	4665.1	4625.9	4197.5	4137.5	3398.3
22.5°	4184.5	4192.3	4192.3	4265.4	4383.0	4555.4	4772.2	4905.4	4492.7	4427.4	3607.2
25°	4639.0	4623.3	4560.6	4524.0	4599.8	4740.8	4908.0	5150.9	4821.8	4733.0	3831.9
27.5°	5234.5	5286.8	5135.3	4960.2	4902.8	4983.8	5098.7	5367.7	5140.5	5046.4	4035.6
30°	6041.6	6020.7	5822.2	5571.5	5323.3	5294.6	5333.8	5553.2	5459.1	5370.3	4262.8
32.5°	6705.1	6744.3	6535.3	6229.7	5858.8	5683.8	5642.0	5775.2	5798.7	5741.2	4531.9
35°	7386.8	7428.6	7224.9	6885.3	6443.9	6151.3	6031.2	6049.5	6219.2	6146.1	4814.0
37.5°	7998.0	8034.6	7833.5	7486.1	7044.6	6686.8	6514.4	6373.4	6626.7	6561.4	5111.7
40°	8463.0	8468.2	8332.4	8021.5	7603.6	7232.7	7036.8	6759.9	7057.7	7013.3	5422.6
42.5°	8792.1	8802.5	8703.3	8436.9	8050.3	7705.5	7546.2	7217.0	7554.0	7514.8	5783.0
45°	8946.2	8964.5	8954.0	8708.5	8387.2	8089.5	8037.2	7702.9	8097.3	8060.7	6198.4
47.5°	8799.9	8799.9	8933.1	8899.2	8604.0	8405.5	8465.6	8209.6	8687.6	8653.7	6621.5
50°	8191.3	8199.2	8470.8	8860.0	8687.6	8643.2	8831.3	8705.9	9223.1	9244.0	7128.2
52.5°	6592.8	6579.7	7496.5	8243.6	8630.2	8750.3	9168.2	9212.6	9865.6	9928.3	7632.4
55°	4926.3	4918.5	5796.1	7151.7	8227.9	8695.5	9356.3	9664.5	10414.2	10453.4	8008.5
57.5°	3899.8	3878.9	4362.1	5764.8	7318.9	8449.9	9364.1	9750.7	10719.8	10787.7	8374.2
60°	2998.6	2980.3	3340.8	4289.0	6031.2	7796.9	9139.5	9755.9	11014.9	11135.1	8865.2
62.5°	2144.5	2165.4	2442.2	3077.0	4639.0	6874.9	8847.0	9829.1	11540.0	11675.8	9562.6
65°	1447.1	1436.6	1666.5	2094.8	3299.0	5634.2	8397.7	9983.2	12485.5	12723.2	10398.5
67.5°	1005.6	1013.5	1117.9	1363.5	2094.8	4325.5	7650.6	10069.4	13462.4	13647.9	10983.6
70°	726.1	736.6	794.1	916.8	1279.9	2933.3	6467.4	9675.0	13726.2	13888.2	10576.1
72.5°	478.0	498.9	585.1	650.4	817.6	1836.3	4764.3	8335.0	12590.0	12710.1	8873.1
75°	258.6	263.8	376.1	485.8	582.5	1144.1	2841.9	5621.1	9419.0	9379.8	5851.0
77.5°	201.1	209.0	232.5	347.4	391.8	629.5	1123.2	2538.9	4461.3	4341.2	1995.6
80°	122.8	128.0	161.9	206.4	274.3	365.7	329.1	689.6	906.4	848.9	292.5
82.5°	73.1	78.4	96.6	172.4	216.8	172.4	114.9	167.2	169.8	167.2	73.1
85°	13.1	13.1	67.9	120.2	114.9	49.6	67.9	54.9	49.6	52.2	15.7
87.5°	0.0	0.0	26.1	36.6	52.2	18.3	26.1	13.1	13.1	13.1	7.8
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°	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1	2100.1
2.5°	2118.4	2029.5	1846.7	1687.4	1528.0	1410.5	1321.7	1230.3	1198.9	1159.7	1138.8
5°	2154.9	1979.9	1616.8	1326.9	1081.4	893.3	773.2	700.0	653.0	619.1	611.2
7.5°	2209.8	1940.7	1431.4	1039.6	770.5	582.5	483.2	433.6	407.5	391.8	386.6
10°	2275.1	1906.8	1248.6	809.7	543.3	410.1	355.2	334.3	323.9	318.7	316.1
12.5°	2366.5	1893.7	1094.4	624.3	410.1	337.0	308.2	295.2	287.3	279.5	276.9
15°	2486.7	1898.9	953.4	483.2	339.6	300.4	276.9	263.8	253.4	245.5	245.5
17.5°	2612.0	1906.8	815.0	391.8	308.2	274.3	248.1	229.9	222.0	214.2	211.6
20°	2729.6	1904.2	681.7	334.3	279.5	245.5	219.4	201.1	188.1	180.2	180.2
22.5°	2841.9	1888.5	556.4	300.4	256.0	216.8	188.1	169.8	159.3	151.5	151.5
25°	2962.0	1857.2	454.5	274.3	227.2	190.7	161.9	143.7	135.8	128.0	128.0
27.5°	3056.1	1804.9	370.9	250.8	201.1	164.6	138.4	122.8	114.9	109.7	109.7
30°	3157.9	1729.2	308.2	224.6	175.0	141.0	117.5	104.5	96.6	94.0	94.0
32.5°	3270.3	1645.6	263.8	198.5	148.9	120.2	99.3	91.4	83.6	81.0	81.0
35°	3400.9	1572.4	237.7	172.4	130.6	101.9	86.2	78.4	73.1	73.1	73.1
37.5°	3549.8	1496.7	214.2	151.5	112.3	86.2	73.1	70.5	67.9	65.3	65.3
40°	3711.7	1415.7	193.3	133.2	96.6	73.1	62.7	62.7	60.1	60.1	60.1
42.5°	3894.5	1345.2	175.0	117.5	83.6	62.7	54.9	54.9	52.2	52.2	52.2
45°	4093.1	1279.9	159.3	104.5	73.1	54.9	49.6	47.0	44.4	44.4	44.4
47.5°	4328.1	1243.3	146.3	91.4	62.7	47.0	41.8	39.2	36.6	34.0	34.0
50°	4628.5	1259.0	133.2	75.7	54.9	39.2	34.0	31.3	28.7	26.1	26.1
52.5°	4866.2	1251.2	114.9	65.3	44.4	31.3	26.1	23.5	20.9	18.3	18.3
55°	5038.6	1219.8	99.3	54.9	34.0	26.1	20.9	15.7	13.1	13.1	13.1
57.5°	5208.4	1188.5	83.6	44.4	26.1	18.3	13.1	10.4	10.4	10.4	10.4
60°	5472.2	1144.1	73.1	36.6	20.9	13.1	7.8	7.8	5.2	5.2	5.2
62.5°	5793.5	1089.2	60.1	31.3	15.7	10.4	5.2	5.2	0.0	0.0	0.0
65°	6146.1	992.6	49.6	23.5	13.1	7.8	5.2	0.0	0.0	0.0	0.0
67.5°	6065.1	796.7	41.8	15.7	10.4	5.2	2.6	0.0	0.0	0.0	0.0
70°	5365.1	538.1	34.0	13.1	7.8	5.2	2.6	0.0	0.0	0.0	0.0
72.5°	4202.8	318.7	23.5	10.4	5.2	2.6	0.0	0.0	0.0	0.0	0.0
75°	2690.4	159.3	15.7	7.8	5.2	2.6	0.0	0.0	0.0	0.0	0.0
77.5°	901.2	78.4	10.4	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0
80°	128.0	26.1	5.2	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.7	10.4	2.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.4	5.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	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)