

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: P265918

Luminaire Tested: **ARCH-AF24-20-D-U-T3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265918  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF24-20-D-U-T3-7027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2470.4 lumens  
Efficiency: N/A  
Efficacy: 117.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

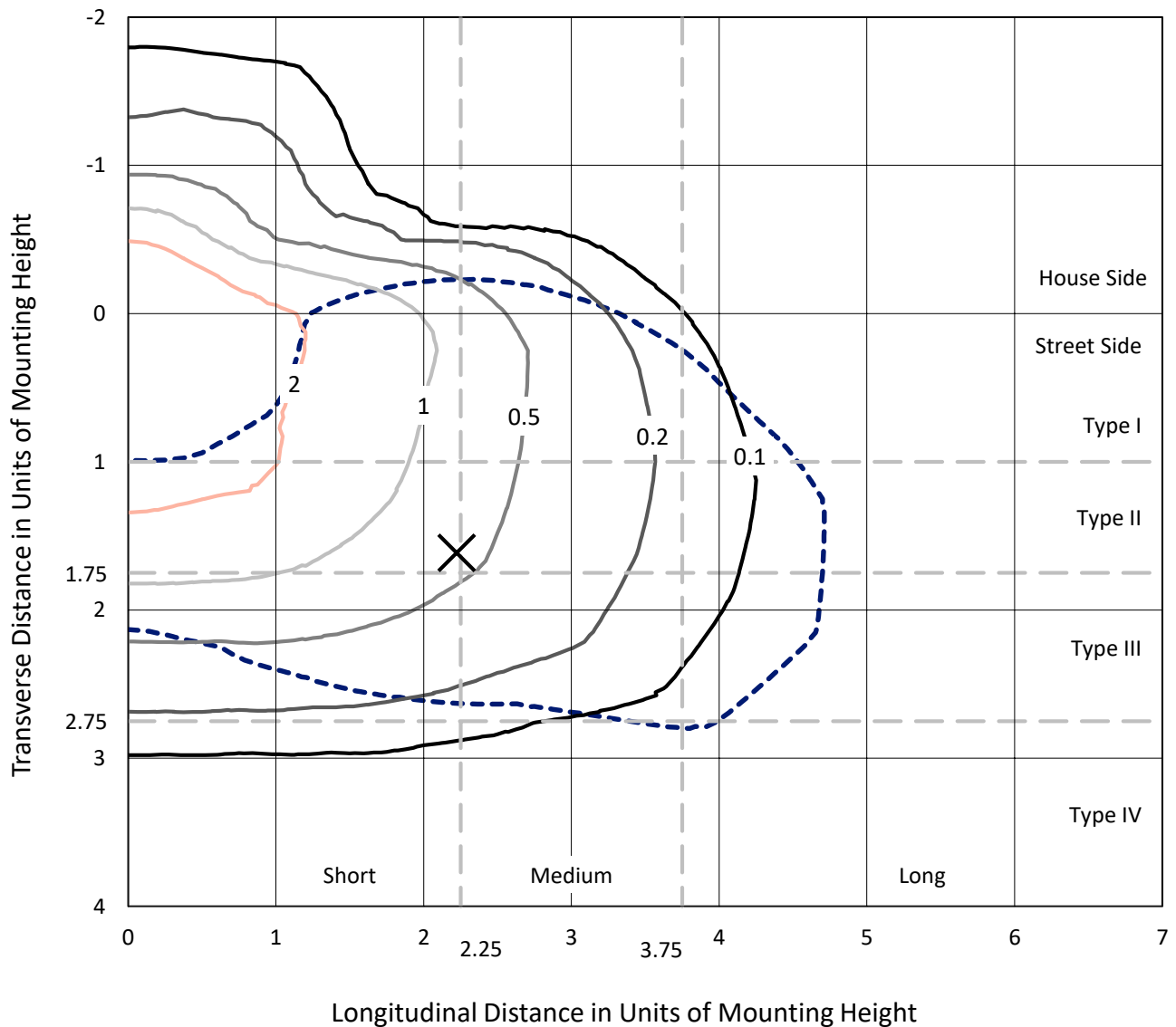
Input Watts (W): 21  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

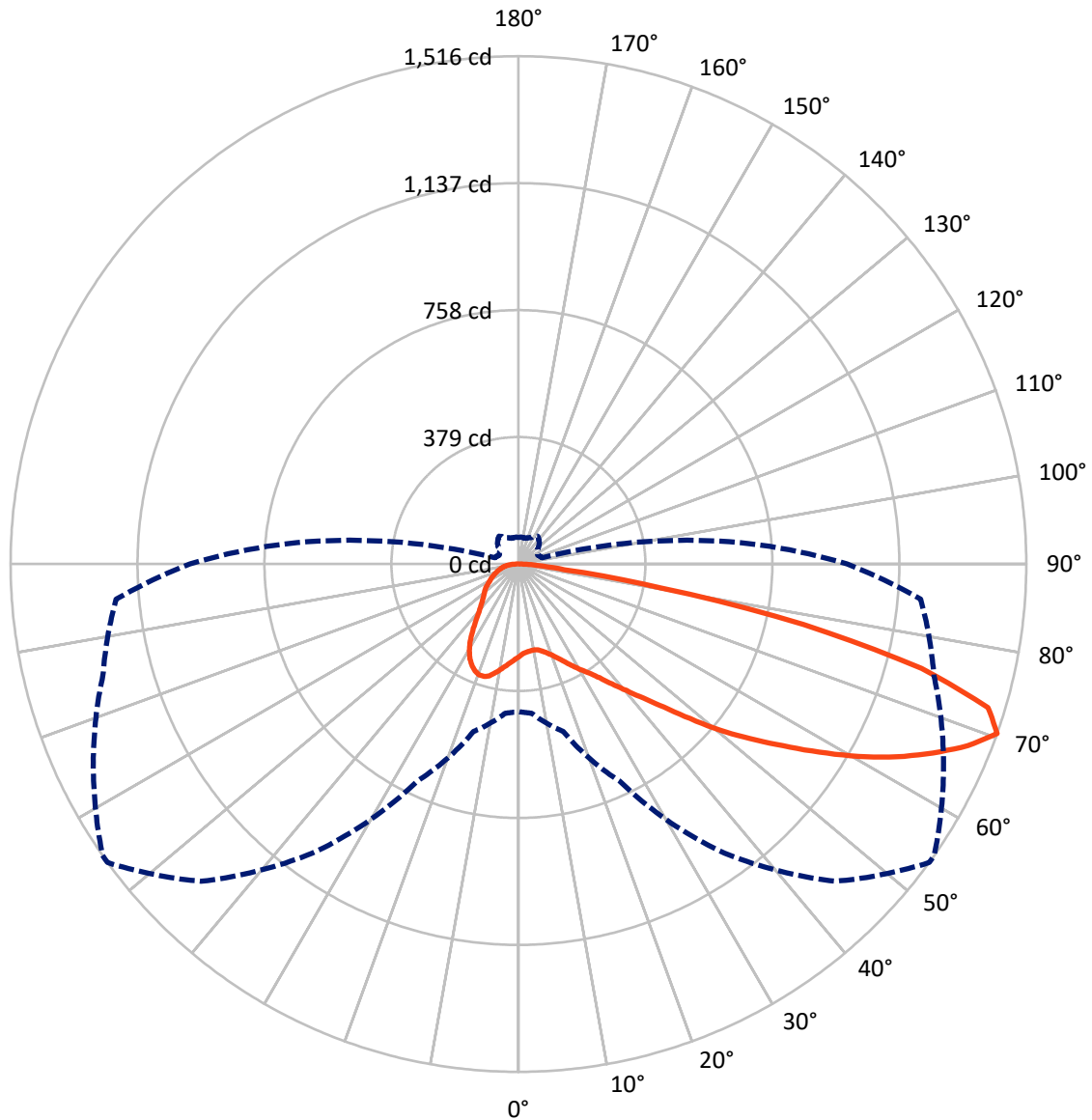


Based on 10 foot mounting height. Maximum calculated value = 3.2 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	560.3	0.0	560.3
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	1910.1	0.0	1910.1
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	2470.4	0.0	2470.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	27.1	1.1
10°-20°	86.7	3.5
20°-30°	150.6	6.1
30°-40°	220.0	8.9
40°-50°	345.3	14.0
50°-60°	531.1	21.5
60°-70°	648.8	26.3
70°-80°	402.3	16.3
80°-90°	58.4	2.4
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°	2470.4	100.0
0°-180°	2470.4	100.0



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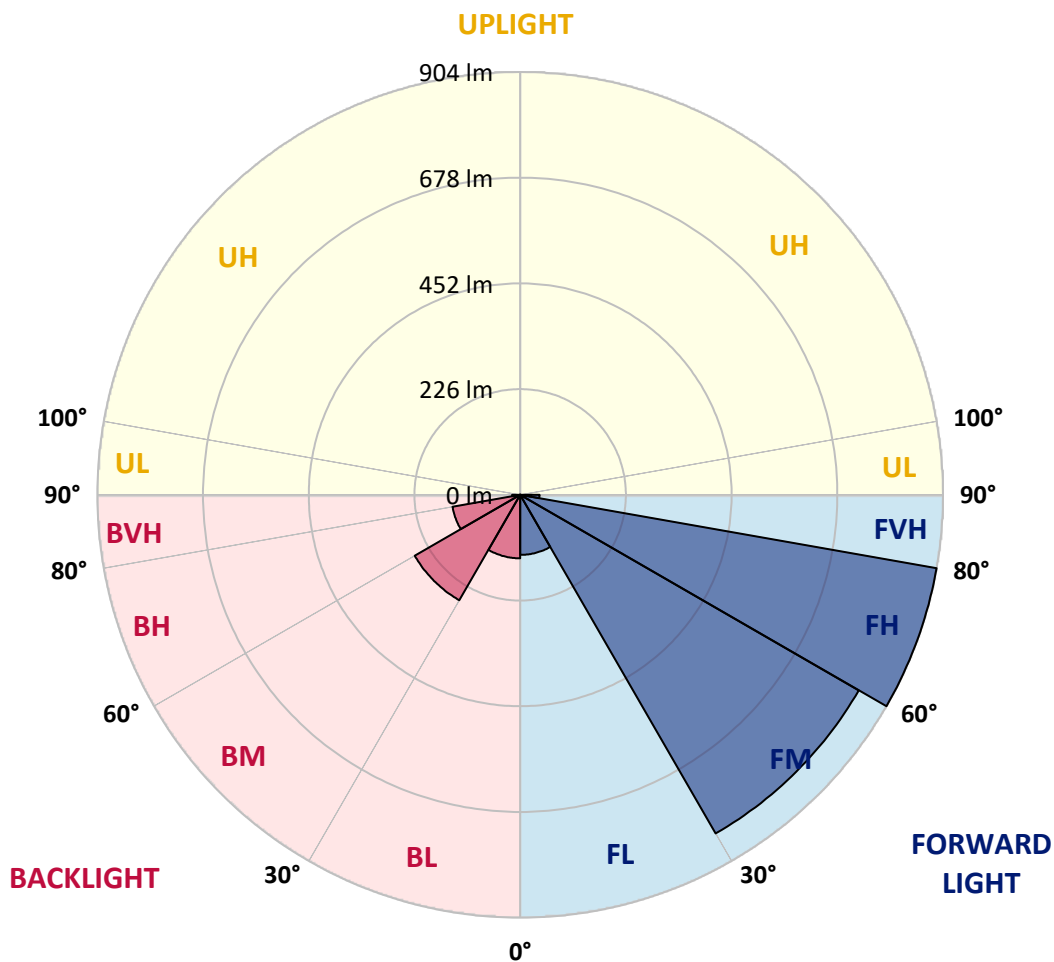
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	128.5	5.2			
FM	(30°-60°)	836.1	33.8			
FH	(60°-80°)	904.2	36.6			G1/1800
FVH	(80°-90°)	41.3	1.7			G1/100
BL	(0°-30°)	135.8	5.5	B1/500		
BM	(30°-60°)	260.4	10.5	B1/1000		
BH	(60°-80°)	146.9	5.9	B1/500		G1/500
BVH	(80°-90°)	17.2	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4
2.5°	265.4	264.6	264.6	266.0	266.4	267.8	267.8	268.2	269.6	271.8	274.6
5°	257.4	256.9	257.4	259.3	260.1	262.8	263.7	264.2	266.8	270.5	274.6
7.5°	249.2	248.8	249.6	252.5	255.1	259.3	261.4	261.9	266.0	271.0	276.4
10°	246.6	246.0	247.5	249.6	252.5	256.9	260.6	261.0	266.8	272.7	280.5
12.5°	250.2	249.6	251.0	253.3	256.0	259.3	263.3	263.7	271.4	279.2	287.3
15°	259.3	259.3	259.6	261.0	263.7	266.4	270.0	270.5	278.7	287.6	295.8
17.5°	273.3	272.4	272.4	271.8	273.7	275.1	279.6	280.0	288.5	296.7	304.9
20°	290.4	290.0	288.1	285.9	285.4	286.3	290.8	291.3	299.9	306.7	314.3
22.5°	311.3	311.7	307.6	302.5	300.4	301.7	305.9	306.2	312.6	318.4	325.2
25°	338.8	337.5	331.6	324.4	319.7	319.7	323.8	323.8	329.8	333.5	337.9
27.5°	365.0	362.3	356.8	346.4	339.3	340.5	344.7	344.7	350.1	351.4	353.8
30°	393.5	390.9	384.0	370.9	361.4	360.5	365.5	365.0	372.3	371.8	370.0
32.5°	428.4	427.1	415.7	398.9	386.4	383.1	387.7	388.1	392.6	391.3	385.5
35°	477.2	476.8	466.4	436.9	420.2	414.4	417.1	417.1	420.2	416.6	406.7
37.5°	538.8	539.6	530.5	487.2	463.6	453.7	454.2	453.7	454.6	450.5	440.1
40°	600.2	602.6	602.0	549.7	519.8	502.5	496.3	495.3	497.7	495.8	485.9
42.5°	681.3	686.7	674.0	626.5	593.1	564.0	546.9	544.6	549.7	551.9	542.3
45°	765.4	763.6	743.6	709.3	678.9	641.8	609.3	605.6	609.3	616.1	606.1
47.5°	809.3	807.8	802.9	785.7	781.3	738.6	689.4	686.2	679.5	688.9	677.1
50°	881.6	882.9	862.6	860.8	879.8	856.4	779.9	772.6	760.3	768.1	758.1
52.5°	934.1	928.2	915.6	931.5	990.7	978.0	864.9	861.7	850.4	848.5	844.0
55°	955.3	955.3	957.7	994.2	1078.9	1062.2	957.1	960.4	944.9	932.4	938.2
57.5°	961.6	964.4	983.9	1044.5	1182.4	1127.7	1058.9	1063.5	1041.3	1016.1	1034.5
60°	930.5	938.5	985.3	1072.9	1240.7	1197.4	1166.2	1167.4	1135.4	1098.3	1130.8
62.5°	850.4	860.3	943.6	1084.8	1231.2	1268.9	1267.5	1270.7	1226.7	1180.6	1221.3
65°	752.3	762.2	850.9	1051.7	1224.1	1320.0	1360.3	1368.7	1312.2	1250.4	1277.8
67.5°	608.0	621.1	705.2	940.4	1188.7	1362.0	1447.1	1456.2	1378.3	1286.6	1272.9
70°	440.6	446.9	517.6	714.7	1044.9	1339.0	1515.8	1515.4	1400.0	1283.8	1205.0
72.5°	212.2	217.1	278.1	443.8	747.3	1136.3	1466.0	1474.7	1370.2	1244.4	1049.8
75°	87.3	92.3	112.6	187.2	392.2	751.0	1242.6	1262.9	1244.4	1116.9	821.5
77.5°	54.3	56.1	66.0	96.7	179.1	350.6	869.9	897.4	986.1	894.7	542.3
80°	40.8	42.1	49.2	67.8	113.0	129.4	431.9	466.8	597.6	513.4	245.6
82.5°	34.0	34.3	39.3	49.2	77.0	74.2	138.3	154.2	278.7	195.9	84.6
85°	31.7	32.6	35.3	35.3	48.9	46.6	57.4	60.1	80.9	67.0	29.5
87.5°	16.3	15.5	31.3	27.6	25.3	22.5	24.4	26.2	30.4	32.1	13.1
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°	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4	276.4
2.5°	275.5	276.9	279.2	281.3	284.0	287.3	289.1	291.3	293.1	292.2	291.8
5°	276.9	279.2	284.0	288.5	294.0	300.4	304.4	308.9	312.6	313.5	312.2
7.5°	279.2	283.1	290.0	298.1	305.3	313.5	319.7	326.2	330.7	331.6	331.6
10°	284.6	289.1	298.1	308.9	317.6	326.2	333.5	338.3	342.4	344.2	344.2
12.5°	292.2	297.7	308.5	321.7	331.1	339.3	343.3	345.6	347.5	349.3	349.7
15°	301.3	307.1	320.2	334.3	344.2	348.4	348.4	347.9	347.9	348.7	349.7
17.5°	310.4	316.7	330.1	345.2	351.4	349.3	346.0	344.7	343.8	343.3	344.7
20°	319.7	326.2	339.6	353.8	352.0	342.4	337.9	334.8	332.1	330.7	332.6
22.5°	330.1	336.1	350.1	359.6	346.0	331.6	323.0	318.0	313.5	310.8	312.6
25°	342.4	348.4	361.8	361.4	335.6	315.2	301.7	293.6	288.5	285.9	285.9
27.5°	356.8	361.8	375.0	356.8	321.1	293.6	273.7	266.0	264.6	262.3	262.3
30°	371.8	375.9	387.2	346.4	301.3	265.1	243.4	239.8	240.1	238.0	238.4
32.5°	387.2	391.3	394.4	331.1	275.5	233.0	218.5	215.8	215.4	213.4	211.7
35°	408.9	414.7	395.3	310.4	244.2	206.3	195.9	193.1	190.4	184.2	184.2
37.5°	442.0	448.3	393.1	284.6	212.2	185.5	176.0	172.4	167.9	161.4	159.2
40°	487.2	487.2	388.1	255.6	186.4	168.7	159.7	155.1	150.1	143.9	142.6
42.5°	540.6	527.9	380.4	226.2	167.4	157.5	149.3	144.3	138.3	131.2	130.3
45°	603.0	568.5	369.6	200.0	153.3	150.6	145.6	137.0	127.1	119.5	118.0
47.5°	663.6	605.3	359.1	181.4	141.7	148.0	143.9	129.4	115.8	104.9	103.6
50°	730.1	637.7	346.9	165.9	132.5	146.2	141.7	118.0	103.1	95.4	94.5
52.5°	796.5	670.9	333.8	149.7	124.9	142.6	136.2	110.0	102.6	92.3	90.9
55°	866.8	709.3	318.4	131.6	115.8	135.3	128.9	109.5	105.8	92.3	89.1
57.5°	935.0	751.8	293.6	113.9	105.8	124.3	126.2	106.8	99.1	91.4	87.8
60°	1010.6	797.1	252.5	99.1	97.2	115.3	122.6	100.9	91.4	88.7	86.9
62.5°	1071.1	837.8	197.2	88.7	90.0	108.2	118.0	97.2	88.3	86.0	85.5
65°	1097.4	838.7	141.7	79.6	82.7	101.2	113.5	94.1	85.5	84.6	84.1
67.5°	1069.8	792.6	99.5	71.1	75.1	95.0	107.6	90.9	82.7	83.3	82.4
70°	980.7	695.3	72.9	62.9	67.8	88.3	101.2	86.9	79.6	80.5	79.2
72.5°	820.5	541.9	58.4	56.1	62.0	80.9	95.0	82.4	74.6	75.1	72.4
75°	606.1	359.1	48.9	50.2	55.2	74.2	86.9	76.4	69.2	67.5	65.5
77.5°	360.5	184.5	40.2	43.8	49.2	66.0	77.9	69.2	63.3	60.1	58.7
80°	148.8	74.6	33.0	37.1	42.9	58.7	68.8	60.6	56.6	53.4	51.6
82.5°	59.3	36.7	26.2	30.4	36.2	51.2	60.1	53.4	49.2	47.0	42.1
85°	22.5	18.1	17.6	21.3	27.2	39.3	49.8	44.7	41.6	35.8	34.3
87.5°	9.1	8.2	8.2	10.4	15.5	24.9	35.8	31.3	32.6	25.8	26.2
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)