

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: P348638

Luminaire Tested: **ARCH-N-PA1-10-727-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348638
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-18)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-N-PA1-10-727-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 270mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1878 lumens
Efficiency: N/A
Efficacy: 134.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

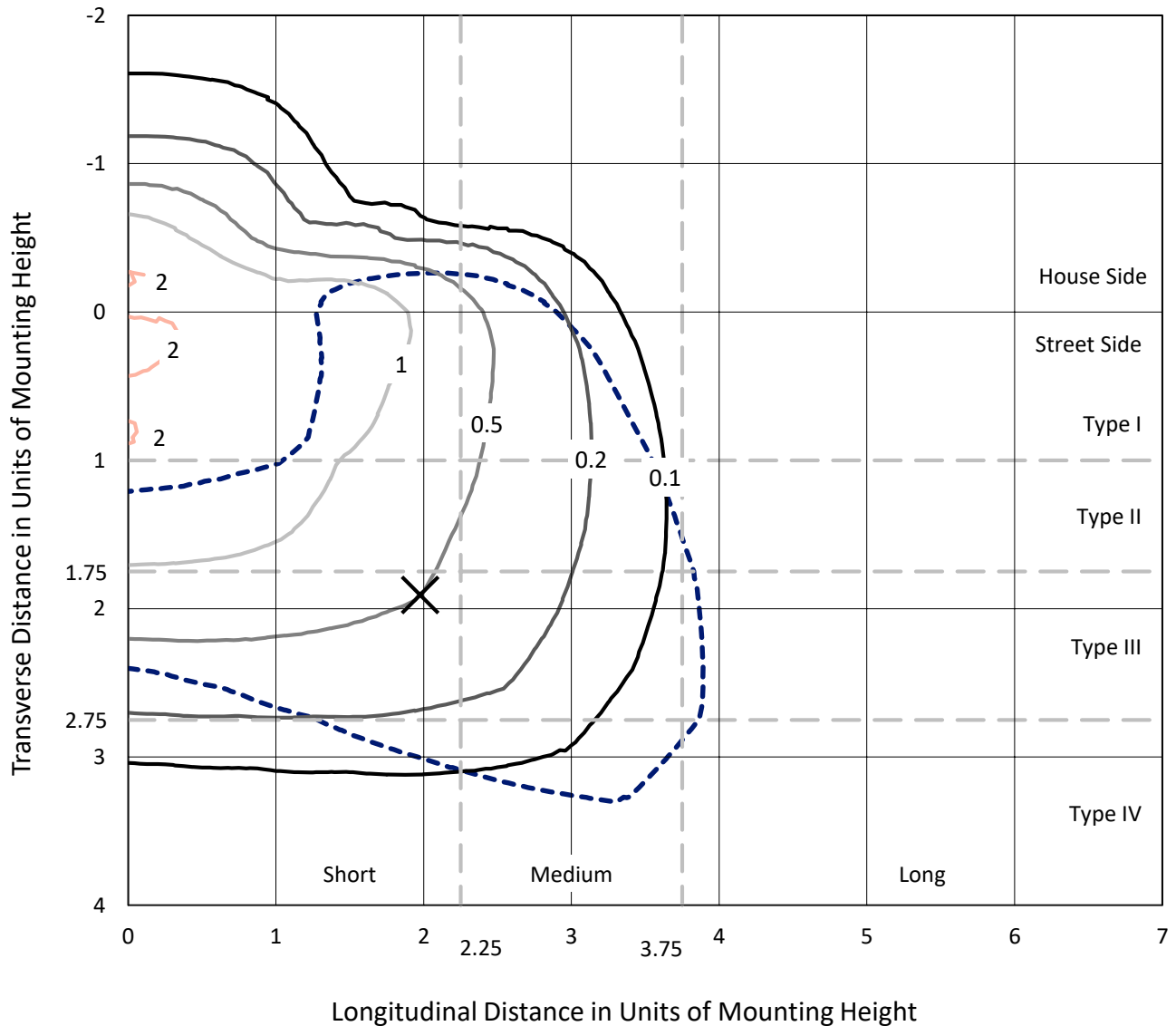
Input Watts (W): 14
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

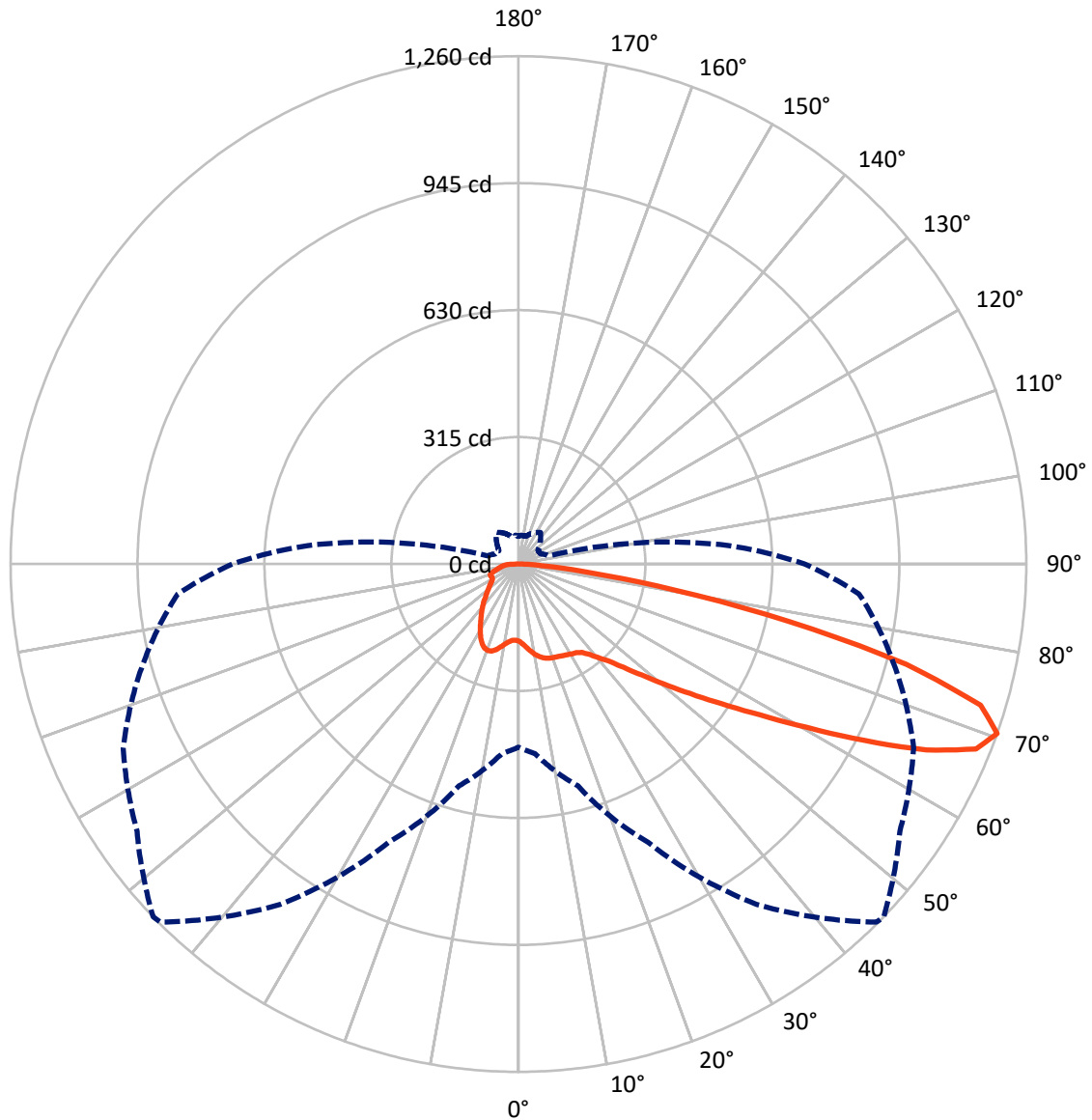
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	430.4	0.0	430.4
	% Fixture	22.9	0.0	22.9
Street Side	Lumens	1447.6	0.0	1447.6
	% Fixture	77.1	0.0	77.1
Total	Lumens	1878.0	0.0	1878.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.5	1.0
10°-20°	65.0	3.5
20°-30°	108.4	5.8
30°-40°	153.8	8.2
40°-50°	226.2	12.0
50°-60°	383.0	20.4
60°-70°	543.7	29.0
70°-80°	330.3	17.6
80°-90°	48.2	2.6
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°	1878.0	100.0
0°-180°	1878.0	100.0



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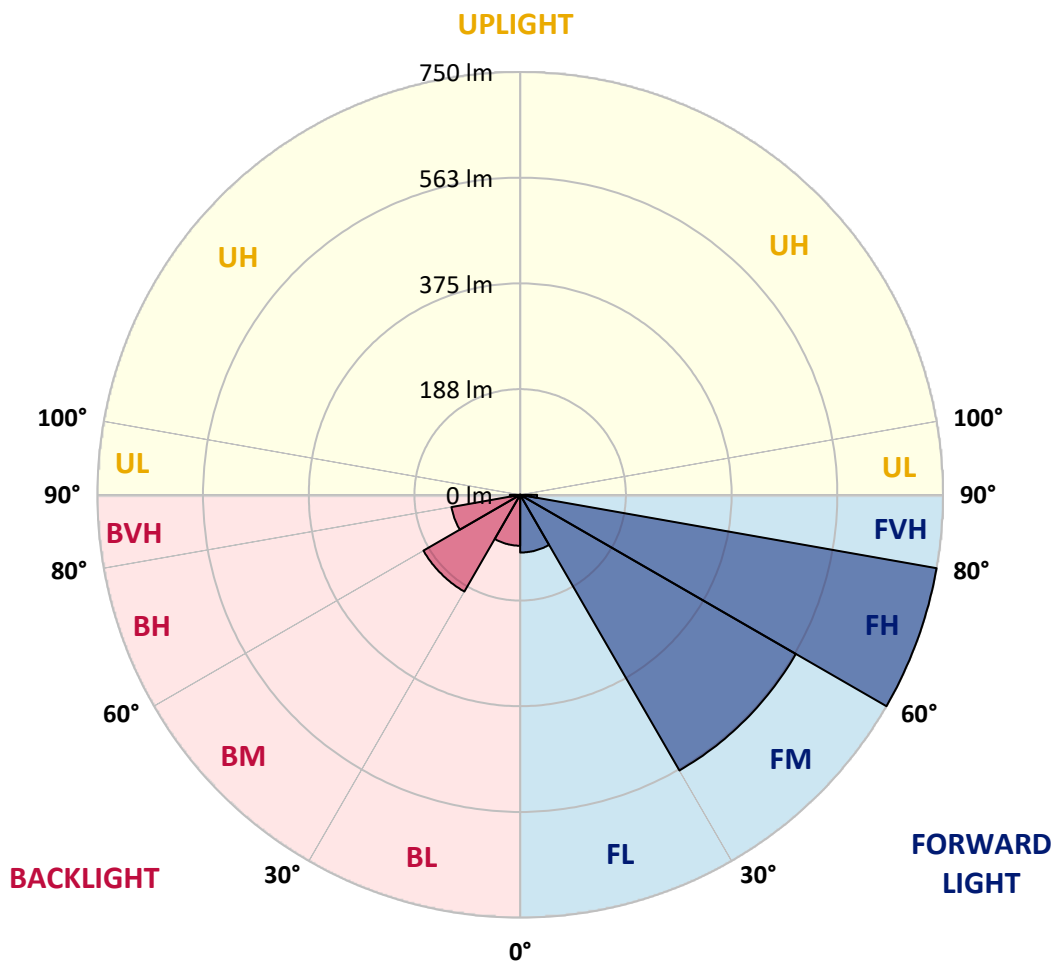
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	102.5	5.5			
FM	(30°-60°)	564.8	30.1			
FH	(60°-80°)	750.2	39.9			G1/1800
FVH	(80°-90°)	30.0	1.6			G1/100
BL	(0°-30°)	90.4	4.8	B0/110		
BM	(30°-60°)	198.1	10.6	B0/220		
BH	(60°-80°)	123.7	6.6	B1/500		G1/500
BVH	(80°-90°)	18.2	1.0			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3
2.5°	200.9	201.0	201.3	200.7	198.9	198.3	198.1	196.3	195.1	193.3	191.7
5°	217.0	217.1	216.7	214.9	210.9	208.0	207.7	203.5	199.6	195.5	192.4
7.5°	233.7	233.9	232.7	229.3	223.7	218.6	218.3	212.5	206.6	200.4	195.8
10°	248.6	247.8	245.8	241.1	234.5	228.2	227.9	221.9	215.1	207.6	201.4
12.5°	258.5	257.9	255.3	249.5	242.2	236.4	235.9	230.3	223.8	215.6	208.2
15°	264.0	264.4	260.9	254.4	247.3	242.4	242.0	238.0	232.1	223.9	215.4
17.5°	264.7	265.0	261.7	255.2	249.4	246.1	245.9	243.3	239.0	231.1	222.2
20°	260.6	260.8	258.0	252.7	248.9	247.9	247.8	246.7	243.5	236.4	227.8
22.5°	254.6	254.8	252.8	248.9	247.6	249.2	249.7	249.2	247.0	240.4	232.3
25°	253.1	253.0	250.9	247.0	248.1	251.5	252.1	252.3	250.7	244.9	237.9
27.5°	260.2	259.8	255.9	249.6	250.3	254.4	255.2	257.0	256.1	251.0	244.4
30°	280.9	280.1	272.1	259.3	255.9	258.0	258.9	261.9	262.1	257.9	252.9
32.5°	315.7	314.7	300.3	277.6	265.3	261.6	262.5	267.0	269.4	266.1	260.7
35°	359.7	358.6	339.7	308.6	281.1	268.6	269.3	272.8	277.6	273.0	265.9
37.5°	405.6	403.0	384.8	345.1	306.2	283.6	283.6	284.1	286.3	276.7	271.9
40°	451.2	448.6	432.2	388.1	338.8	307.2	305.7	295.8	294.0	285.7	284.1
42.5°	493.7	492.9	483.2	436.6	376.9	330.4	328.4	311.5	311.8	306.7	306.8
45°	538.8	538.8	530.9	485.6	421.4	367.7	365.6	340.8	344.6	342.2	348.0
47.5°	575.6	576.8	575.7	536.6	473.2	415.1	411.3	381.4	392.2	400.3	417.0
50°	613.2	615.0	615.2	592.6	535.7	471.4	467.1	435.3	459.4	482.8	515.5
52.5°	667.8	671.8	655.7	648.4	612.3	538.2	534.0	504.6	544.9	577.7	634.1
55°	718.3	714.8	703.3	707.8	694.3	614.3	611.1	585.4	640.1	682.8	756.0
57.5°	745.7	745.5	757.0	776.3	782.7	708.1	705.5	680.4	747.5	779.6	870.5
60°	777.9	778.3	807.0	850.7	877.2	825.0	823.8	804.8	851.8	870.0	960.3
62.5°	782.4	790.5	839.8	915.1	965.7	961.5	964.0	916.8	945.2	942.1	1027.3
65°	730.6	741.3	830.6	934.6	1053.6	1110.8	1113.2	1029.5	1018.7	1003.7	1051.3
67.5°	624.6	640.4	737.4	892.3	1082.6	1221.1	1224.5	1116.8	1079.8	1024.6	993.5
70°	454.5	472.1	569.8	762.0	1030.9	1256.4	1260.2	1155.4	1082.1	965.1	848.2
72.5°	274.6	288.3	368.8	561.0	870.1	1192.1	1198.9	1106.5	988.0	817.5	626.3
75°	120.6	129.6	178.3	323.3	622.9	986.3	994.8	947.1	802.7	594.1	370.2
77.5°	51.4	53.9	73.1	140.4	352.1	674.0	685.6	692.0	544.6	323.3	156.4
80°	32.0	33.0	41.4	63.6	164.8	378.5	391.0	407.1	270.4	118.8	54.6
82.5°	19.5	20.6	27.5	38.4	85.8	171.6	177.6	189.0	105.0	51.4	28.3
85°	11.7	12.5	16.8	24.3	48.8	67.5	67.4	74.6	49.4	33.0	14.9
87.5°	5.6	6.2	9.0	12.6	24.6	25.3	23.7	26.9	30.0	21.7	7.5
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°	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3	191.3
2.5°	191.2	190.9	190.1	189.5	189.3	189.0	188.6	188.8	189.1	189.1	189.1
5°	191.1	190.4	189.3	188.9	189.5	190.2	191.2	192.5	193.3	193.8	194.2
7.5°	194.2	192.9	191.7	191.4	192.6	194.6	196.8	199.5	201.4	202.6	202.9
10°	199.4	197.7	196.5	196.7	198.8	201.7	204.8	208.3	211.1	212.9	213.0
12.5°	205.3	203.7	202.5	203.6	207.0	210.6	213.8	216.8	219.4	221.2	221.2
15°	212.1	210.9	209.6	212.1	216.7	219.9	221.3	222.8	224.2	225.5	225.2
17.5°	218.6	217.6	216.8	219.8	224.6	226.1	225.2	224.1	224.1	224.8	224.9
20°	224.3	223.3	223.8	226.7	229.2	227.6	224.3	220.8	219.4	219.8	220.2
22.5°	229.3	228.8	230.2	231.5	229.7	224.3	218.1	213.4	211.7	211.6	211.7
25°	235.0	235.0	236.6	234.2	226.2	216.3	208.0	203.4	202.5	203.2	204.5
27.5°	242.2	242.9	243.8	234.8	219.2	204.1	195.7	192.6	193.5	195.4	196.6
30°	251.4	253.4	251.6	233.2	209.0	190.2	182.2	181.3	183.9	186.6	187.9
32.5°	260.4	263.4	259.0	229.1	195.9	175.5	169.3	169.0	172.2	174.8	176.6
35°	267.6	273.5	264.6	220.8	180.7	162.0	157.4	155.7	156.8	159.8	161.9
37.5°	276.9	286.9	268.5	208.1	164.3	150.8	145.4	141.5	140.4	141.7	142.7
40°	294.1	307.3	270.3	190.4	148.2	139.6	134.2	128.3	124.3	121.3	121.4
42.5°	322.1	333.8	269.1	169.0	133.4	128.7	122.6	115.8	109.3	102.6	102.1
45°	367.6	373.3	265.6	146.2	120.3	117.2	111.5	104.8	96.0	88.4	87.7
47.5°	440.4	427.9	260.2	126.4	108.8	107.5	102.3	94.5	85.2	79.1	78.6
50°	539.7	506.8	257.6	110.5	98.7	99.0	94.7	86.5	77.8	73.3	72.8
52.5°	658.5	598.6	262.7	98.3	90.5	91.8	88.6	80.9	73.6	70.1	69.5
55°	781.7	693.7	268.1	89.5	82.8	85.4	84.3	78.0	71.3	68.1	67.6
57.5°	887.2	764.7	257.2	82.3	75.9	80.0	81.0	76.1	70.2	67.2	66.7
60°	953.6	793.3	228.5	75.5	70.4	75.7	79.1	75.6	70.6	70.4	70.0
62.5°	985.1	790.8	185.5	70.2	67.0	73.8	80.5	78.5	75.8	78.1	78.3
65°	970.9	753.1	138.2	66.6	64.6	74.6	84.7	83.9	77.3	79.6	79.9
67.5°	877.9	662.9	102.3	63.6	61.9	76.5	92.4	85.7	74.4	76.0	75.0
70°	709.5	525.5	78.9	60.1	59.1	76.3	95.9	84.6	71.2	71.6	68.8
72.5°	489.3	358.4	64.2	56.9	55.1	69.5	93.4	81.9	68.6	65.6	62.0
75°	266.1	192.4	54.6	53.5	48.1	61.1	88.9	80.0	66.2	62.3	60.2
77.5°	104.7	79.8	47.4	49.0	42.1	53.9	83.9	76.4	62.9	57.8	56.8
80°	42.7	40.7	39.3	42.4	36.2	47.2	77.9	72.0	59.0	53.6	51.5
82.5°	24.2	25.3	30.5	33.4	29.4	43.4	75.0	68.6	54.3	48.0	45.6
85°	12.4	14.8	21.3	24.0	21.6	37.0	69.1	60.0	43.6	36.8	37.0
87.5°	6.0	8.3	13.4	15.0	14.0	26.7	51.6	43.5	33.9	26.9	26.0
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)