

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: P348640

Luminaire Tested: **ARCH-N-PA1-20-727-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348640  
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-PA1-20-727-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 420mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2852 lumens  
Efficiency: N/A  
Efficacy: 118.8 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

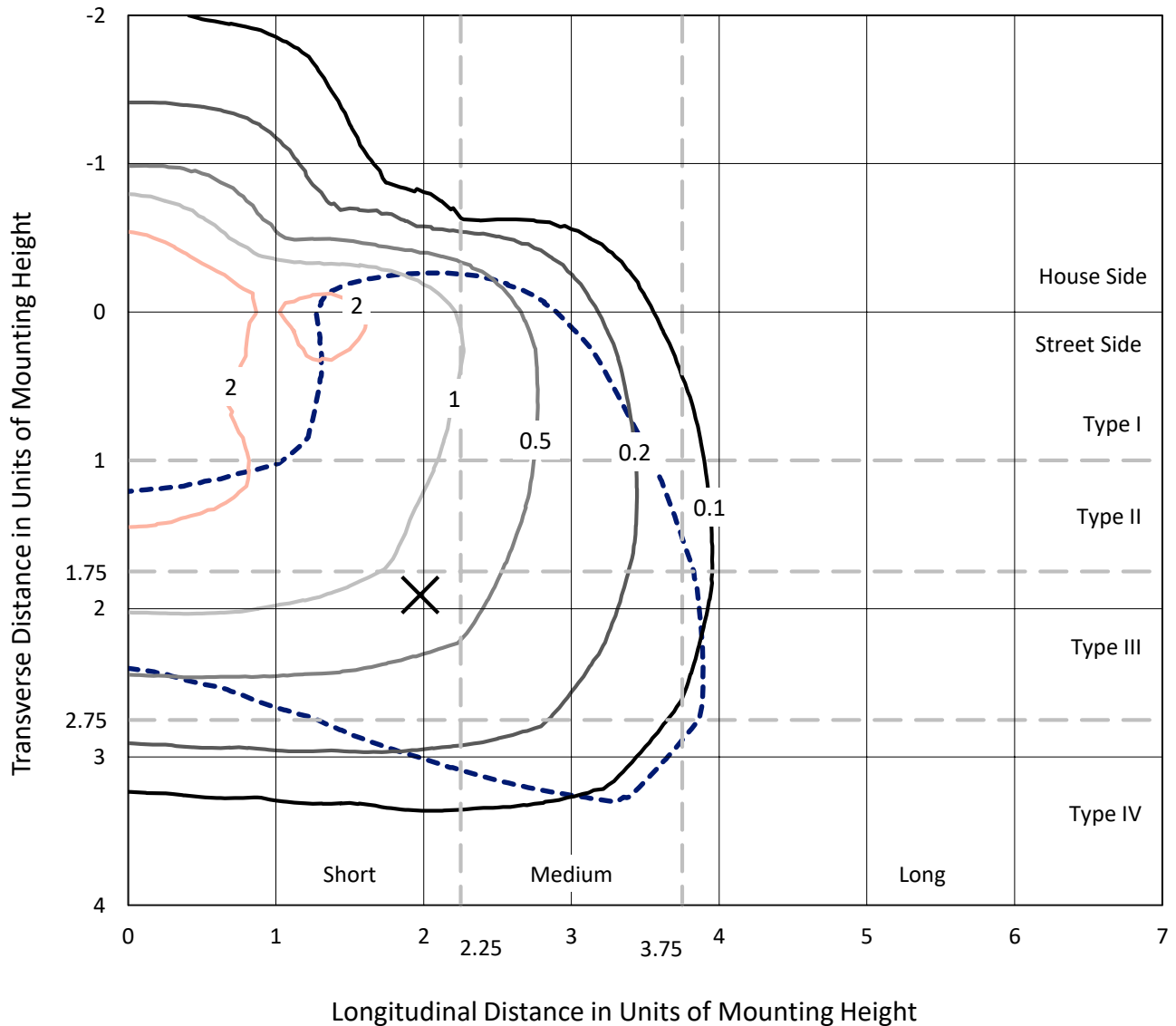
Input Watts (W): 24  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

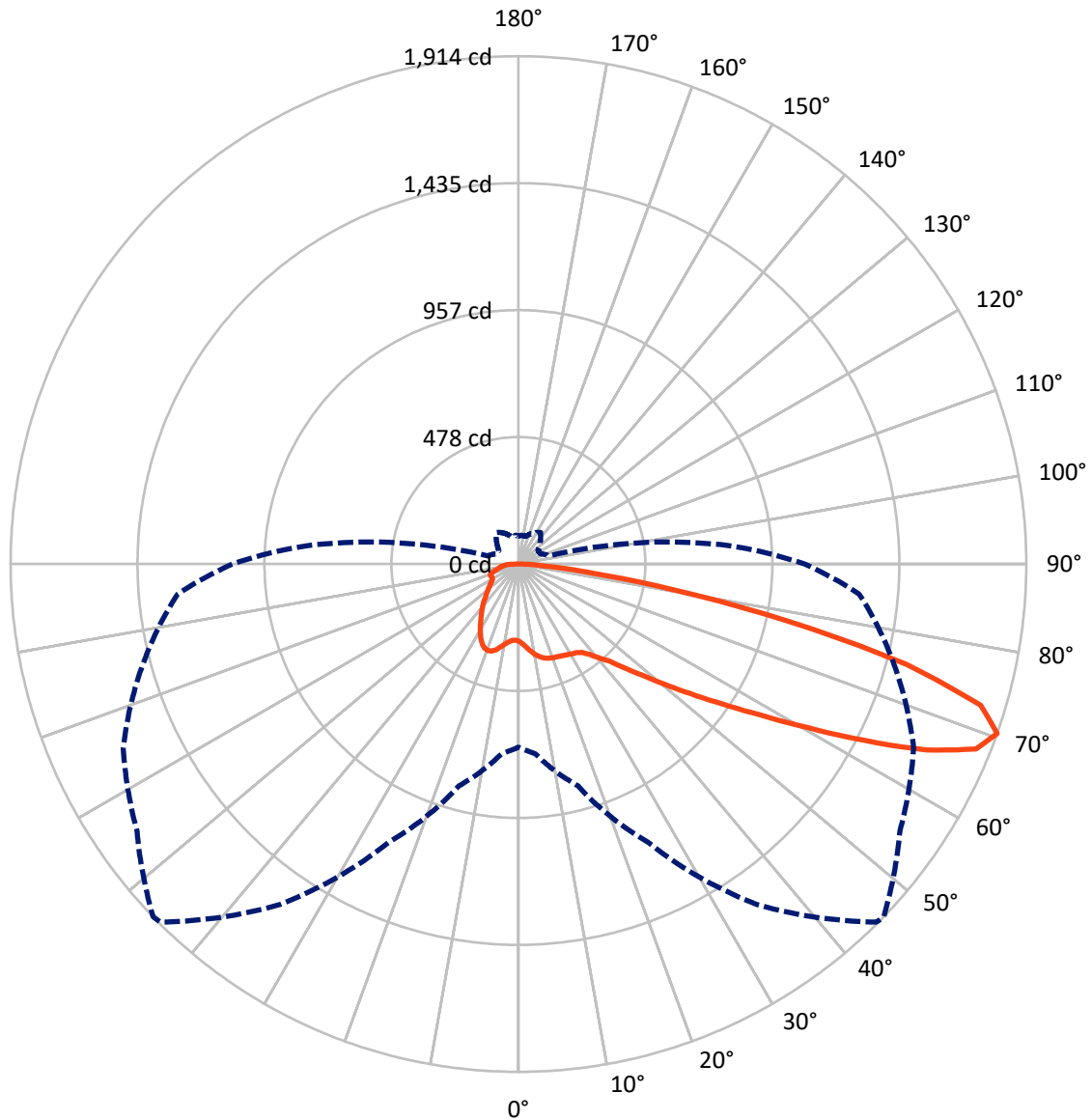
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.6 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
<b>House Side</b>	Lumens	653.7	0.0	653.7
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	2198.3	0.0	2198.3
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	2852.0	0.0	2852.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.6	1.0
10°-20°	98.7	3.5
20°-30°	164.5	5.8
30°-40°	233.5	8.2
40°-50°	343.5	12.0
50°-60°	581.7	20.4
60°-70°	825.7	29.0
70°-80°	501.6	17.6
80°-90°	73.2	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°	2852.0	100.0
0°-180°	2852.0	100.0

**Coefficient of Utilization**



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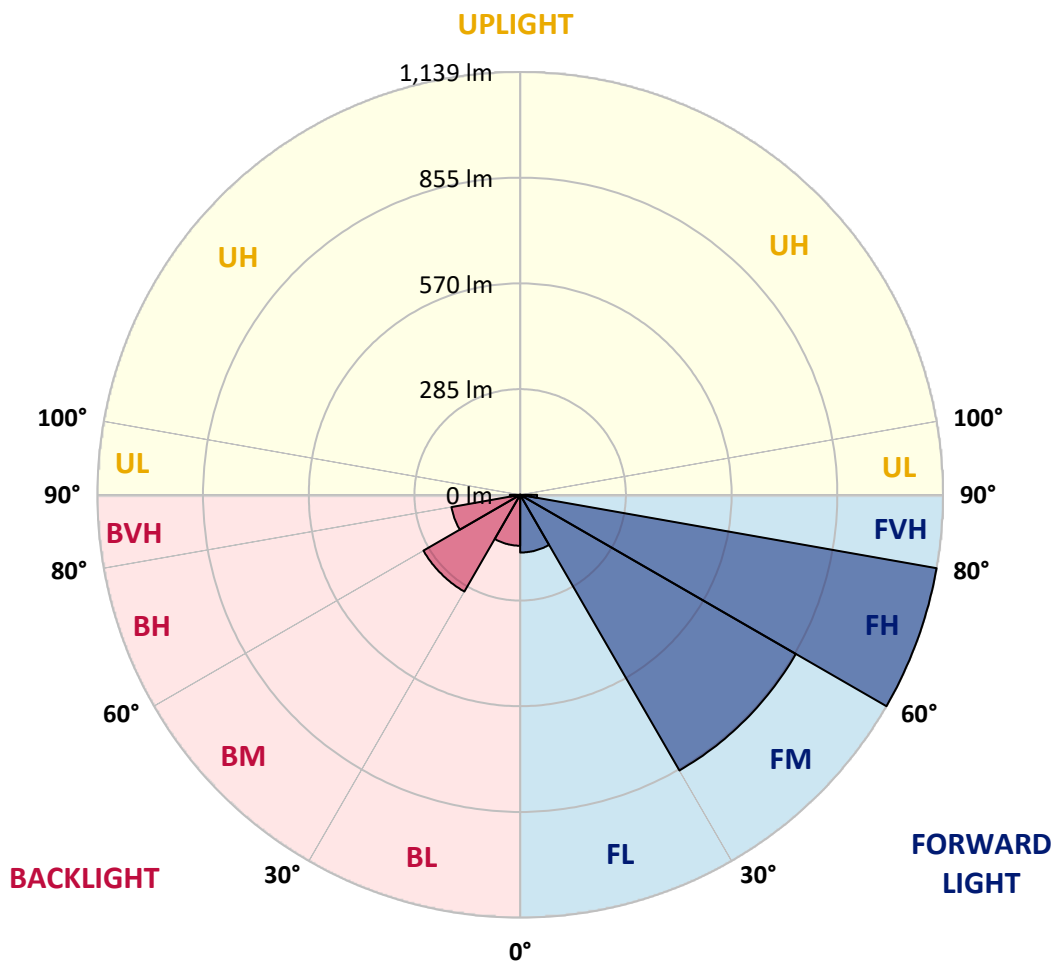
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	155.6	5.5			
FM	(30°-60°)	857.8	30.1			
FH	(60°-80°)	1139.4	39.9			G1/1800
FVH	(80°-90°)	45.6	1.6			G1/100
BL	(0°-30°)	137.2	4.8	B1/500		
BM	(30°-60°)	300.9	10.6	B1/1000		
BH	(60°-80°)	187.9	6.6	B1/500		G1/500
BVH	(80°-90°)	27.6	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°	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6
2.5°	305.1	305.3	305.7	304.7	302.0	301.2	300.9	298.1	296.2	293.5	291.1
5°	329.5	329.7	329.1	326.4	320.3	315.8	315.5	309.0	303.2	296.9	292.2
7.5°	355.0	355.3	353.4	348.2	339.8	331.9	331.5	322.7	313.8	304.3	297.3
10°	377.5	376.4	373.3	366.1	356.1	346.5	346.1	336.9	326.7	315.3	305.9
12.5°	392.6	391.6	387.7	378.9	367.9	359.1	358.3	349.8	339.9	327.4	316.1
15°	400.9	401.5	396.3	386.3	375.6	368.2	367.5	361.4	352.5	339.9	327.1
17.5°	401.9	402.5	397.4	387.6	378.8	373.7	373.4	369.4	363.0	350.9	337.4
20°	395.7	396.1	391.9	383.8	378.0	376.5	376.4	374.6	369.8	359.1	346.0
22.5°	386.6	386.9	383.9	378.0	376.1	378.5	379.2	378.5	375.1	365.0	352.7
25°	384.4	384.2	381.0	375.1	376.7	381.9	382.8	383.1	380.7	372.0	361.3
27.5°	395.2	394.5	388.6	379.0	380.1	386.3	387.5	390.3	388.8	381.1	371.1
30°	426.5	425.4	413.2	393.8	388.6	391.8	393.2	397.7	398.0	391.6	384.1
32.5°	479.4	478.0	456.1	421.5	402.9	397.3	398.7	405.4	409.1	404.1	396.0
35°	546.3	544.6	515.9	468.7	426.9	408.0	409.0	414.3	421.5	414.5	403.8
37.5°	616.0	612.0	584.3	524.1	465.1	430.7	430.7	431.4	434.8	420.2	413.0
40°	685.3	681.3	656.3	589.3	514.5	466.5	464.3	449.2	446.4	433.8	431.4
42.5°	749.7	748.5	733.8	663.0	572.4	501.8	498.7	473.0	473.6	465.8	465.9
45°	818.2	818.2	806.2	737.4	640.0	558.4	555.3	517.5	523.3	519.7	528.4
47.5°	874.1	875.9	874.2	814.9	718.6	630.3	624.7	579.2	595.6	608.0	633.2
50°	931.2	934.0	934.3	899.9	813.5	715.8	709.4	661.1	697.7	733.2	782.9
52.5°	1014.1	1020.2	995.7	984.7	929.9	817.3	811.0	766.4	827.5	877.3	962.9
55°	1090.9	1085.5	1068.1	1074.9	1054.4	932.9	928.1	889.0	972.1	1036.9	1148.1
57.5°	1132.5	1132.1	1149.7	1178.9	1188.7	1075.4	1071.4	1033.3	1135.2	1183.9	1321.9
60°	1181.3	1182.0	1225.5	1292.0	1332.2	1252.8	1251.1	1222.2	1293.6	1321.1	1458.3
62.5°	1188.1	1200.4	1275.4	1389.8	1466.5	1460.1	1464.0	1392.3	1435.3	1430.7	1560.1
65°	1109.5	1125.7	1261.4	1419.3	1600.0	1686.9	1690.5	1563.4	1547.1	1524.3	1596.5
67.5°	948.5	972.5	1119.9	1355.0	1644.0	1854.4	1859.5	1696.0	1639.8	1556.0	1508.8
70°	690.2	716.9	865.2	1157.3	1565.5	1908.0	1913.8	1754.7	1643.3	1465.7	1288.1
72.5°	417.0	437.8	560.1	852.0	1321.3	1810.4	1820.7	1680.3	1500.3	1241.5	951.1
75°	183.1	196.8	270.8	490.9	946.0	1497.9	1510.7	1438.3	1219.1	902.2	562.2
77.5°	78.0	81.9	111.1	213.3	534.8	1023.6	1041.1	1050.9	827.1	490.9	237.6
80°	48.6	50.2	62.9	96.5	250.3	574.9	593.8	618.3	410.7	180.5	83.0
82.5°	29.6	31.3	41.8	58.4	130.3	260.6	269.7	287.0	159.4	78.0	42.9
85°	17.8	19.0	25.6	36.9	74.2	102.5	102.4	113.2	75.1	50.2	22.6
87.5°	8.5	9.5	13.7	19.1	37.4	38.5	36.0	40.8	45.6	32.9	11.4
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°	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6	290.6
2.5°	290.4	290.0	288.7	287.7	287.5	287.0	286.5	286.8	287.1	287.2	287.2
5°	290.3	289.2	287.5	286.9	287.7	288.9	290.4	292.3	293.5	294.4	295.0
7.5°	295.0	292.9	291.1	290.7	292.4	295.5	298.9	303.0	305.8	307.7	308.1
10°	302.8	300.2	298.4	298.8	301.9	306.4	311.1	316.3	320.6	323.3	323.5
12.5°	311.7	309.3	307.5	309.2	314.4	319.8	324.7	329.3	333.2	335.9	335.9
15°	322.1	320.3	318.3	322.1	329.1	334.0	336.0	338.3	340.4	342.4	342.0
17.5°	332.0	330.4	329.3	333.8	341.1	343.4	342.0	340.3	340.3	341.4	341.6
20°	340.6	339.2	339.9	344.2	348.1	345.7	340.6	335.4	333.2	333.8	334.4
22.5°	348.1	347.5	349.5	351.6	348.8	340.6	331.3	324.1	321.5	321.3	321.5
25°	356.9	356.8	359.4	355.7	343.6	328.4	315.8	308.9	307.4	308.6	310.6
27.5°	367.9	368.9	370.2	356.6	332.8	310.0	297.2	292.4	293.9	296.7	298.6
30°	381.8	384.7	382.0	354.2	317.4	288.9	276.7	275.3	279.3	283.3	285.3
32.5°	395.4	400.0	393.3	347.9	297.5	266.6	257.1	256.7	261.6	265.5	268.2
35°	406.3	415.4	401.8	335.3	274.5	246.0	239.0	236.4	238.2	242.7	245.9
37.5°	420.6	435.7	407.7	316.0	249.5	229.0	220.9	214.8	213.3	215.1	216.7
40°	446.6	466.6	410.4	289.2	225.1	212.0	203.8	194.9	188.8	184.3	184.4
42.5°	489.2	506.9	408.7	256.6	202.5	195.4	186.1	175.9	165.9	155.8	155.0
45°	558.3	566.9	403.4	222.0	182.7	178.0	169.3	159.1	145.8	134.3	133.2
47.5°	668.9	649.8	395.2	191.9	165.2	163.3	155.3	143.5	129.4	120.1	119.4
50°	819.7	769.6	391.2	167.9	149.8	150.4	143.9	131.4	118.1	111.3	110.5
52.5°	1000.0	909.1	398.9	149.3	137.4	139.5	134.6	122.9	111.8	106.4	105.6
55°	1187.1	1053.5	407.2	135.9	125.7	129.7	128.1	118.4	108.3	103.4	102.7
57.5°	1347.3	1161.4	390.6	124.9	115.3	121.5	123.0	115.6	106.6	102.1	101.3
60°	1448.1	1204.8	347.1	114.7	107.0	115.0	120.1	114.8	107.3	106.9	106.3
62.5°	1496.0	1201.0	281.8	106.6	101.8	112.1	122.2	119.2	115.1	118.6	118.9
65°	1474.5	1143.6	209.8	101.2	98.1	113.2	128.6	127.5	117.3	120.8	121.3
67.5°	1333.2	1006.7	155.4	96.5	94.0	116.2	140.4	130.2	112.9	115.5	113.9
70°	1077.5	798.1	119.9	91.3	89.8	115.9	145.6	128.5	108.1	108.7	104.5
72.5°	743.0	544.2	97.5	86.4	83.7	105.6	141.9	124.4	104.1	99.7	94.1
75°	404.1	292.1	82.9	81.3	73.1	92.7	135.1	121.5	100.5	94.6	91.5
77.5°	159.0	121.2	71.9	74.4	63.9	81.9	127.5	116.0	95.6	87.7	86.2
80°	64.9	61.9	59.6	64.3	55.0	71.6	118.3	109.4	89.6	81.4	78.3
82.5°	36.8	38.5	46.4	50.8	44.6	66.0	113.9	104.1	82.5	72.9	69.2
85°	18.8	22.5	32.3	36.4	32.8	56.1	104.9	91.2	66.2	55.8	56.1
87.5°	9.1	12.6	20.4	22.8	21.3	40.6	78.4	66.1	51.5	40.8	39.5
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)