

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: P348653

Luminaire Tested: **ARCH-N-PA1-19-740-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348653  
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-PA1-19-740-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 370mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3012 lumens  
Efficiency: N/A  
Efficacy: 158.5 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

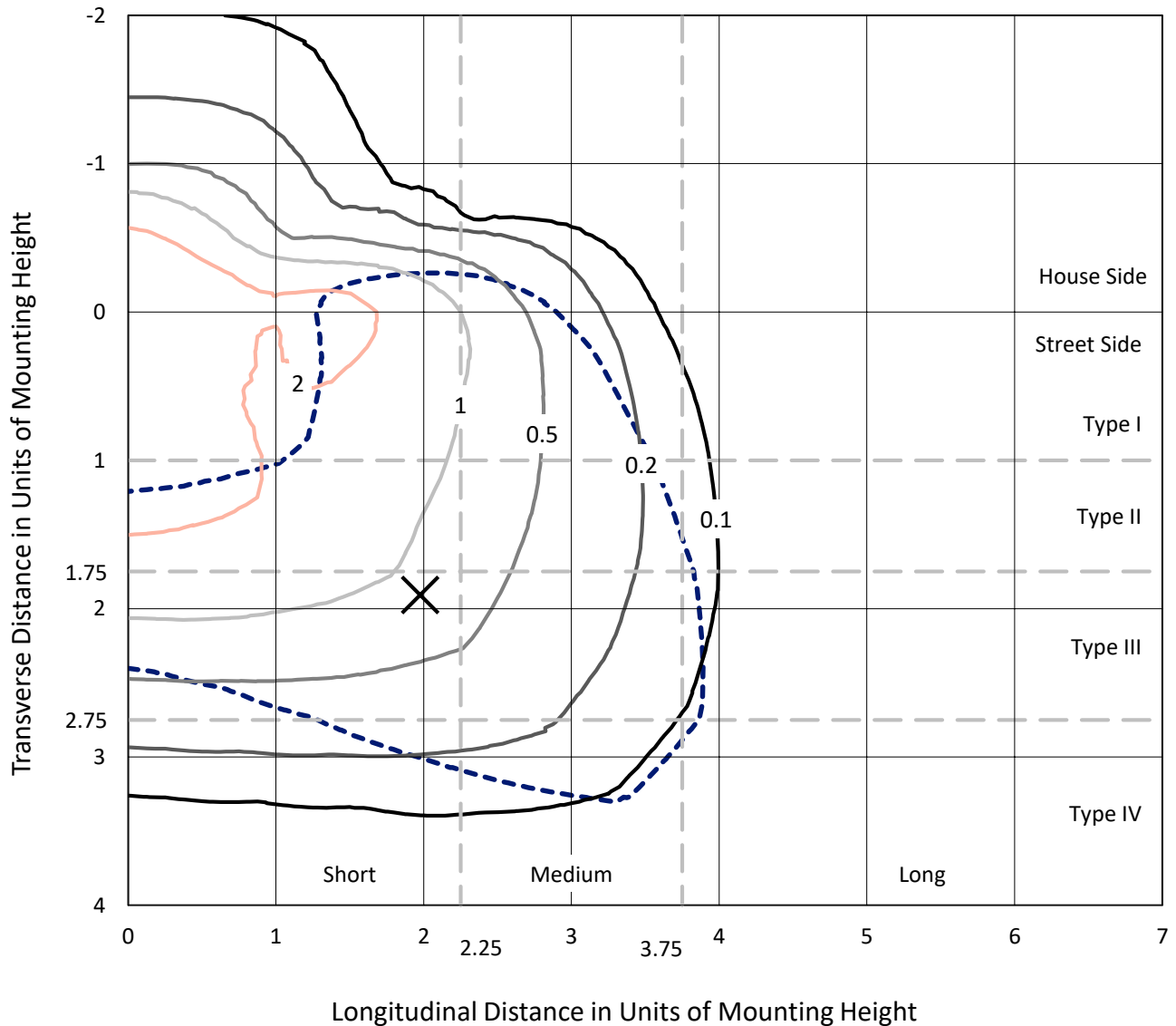
Input Watts (W): 19  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

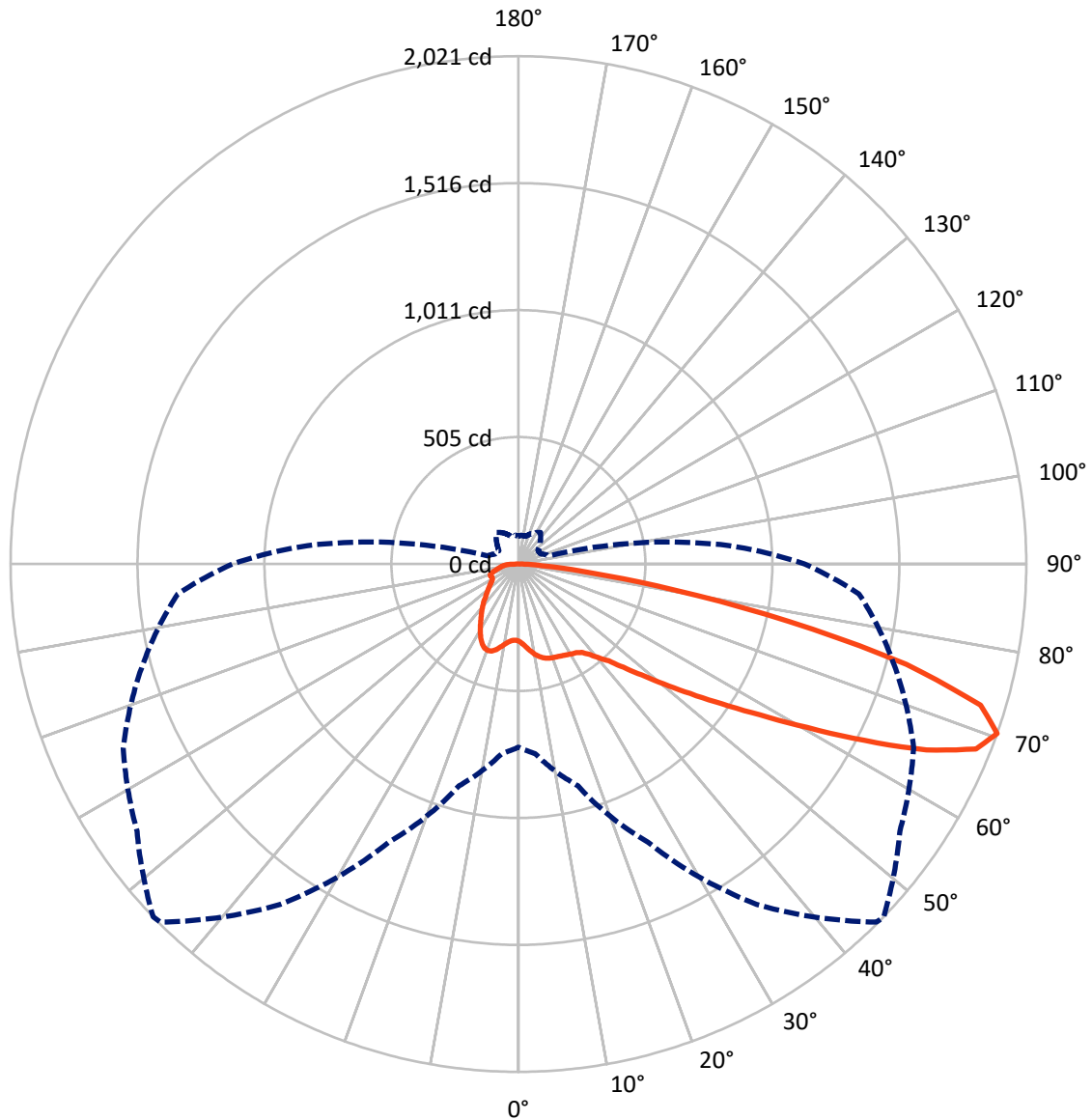
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.8 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	690.3	0.0	690.3
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	2321.7	0.0	2321.7
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	3012.0	0.0	3012.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	31.3	1.0
10°-20°	104.2	3.5
20°-30°	173.8	5.8
30°-40°	246.6	8.2
40°-50°	362.7	12.0
50°-60°	614.3	20.4
60°-70°	872.0	29.0
70°-80°	529.7	17.6
80°-90°	77.3	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°	3012.0	100.0
0°-180°	3012.0	100.0



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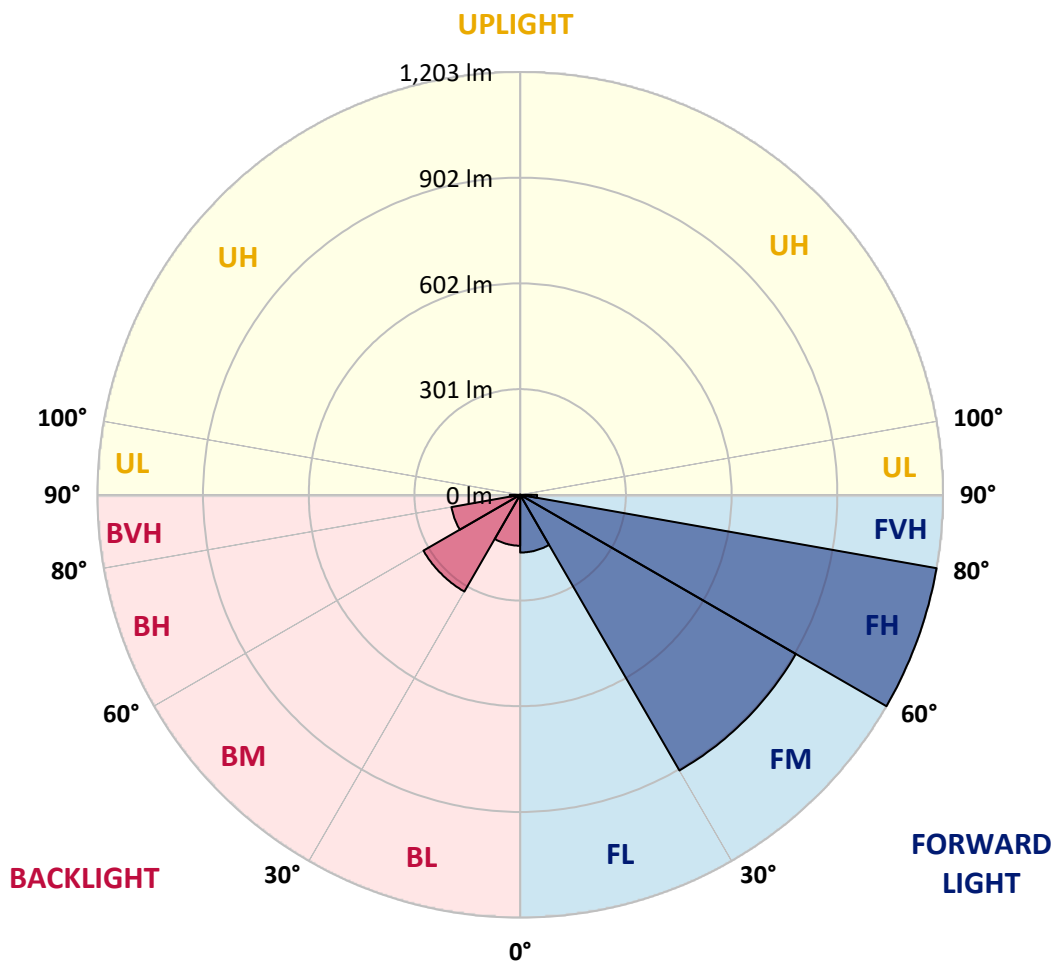
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	164.3	5.5			
FM	(30°-60°)	905.9	30.1			
FH	(60°-80°)	1203.3	39.9			G1/1800
FVH	(80°-90°)	48.2	1.6			G1/100
BL	(0°-30°)	144.9	4.8	B1/500		
BM	(30°-60°)	317.8	10.6	B1/1000		
BH	(60°-80°)	198.5	6.6	B1/500		G1/500
BVH	(80°-90°)	29.2	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°	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9
2.5°	322.2	322.4	322.8	321.8	318.9	318.1	317.8	314.8	312.8	310.0	307.5
5°	348.0	348.2	347.6	344.7	338.3	333.6	333.1	326.3	320.2	313.6	308.6
7.5°	374.9	375.2	373.2	367.8	358.8	350.6	350.1	340.8	331.4	321.4	314.0
10°	398.7	397.5	394.3	386.6	376.0	365.9	365.5	355.8	345.0	332.9	323.0
12.5°	414.6	413.5	409.4	400.1	388.5	379.2	378.4	369.4	358.9	345.7	333.9
15°	423.3	424.1	418.5	408.0	396.6	388.8	388.1	381.7	372.3	359.0	345.4
17.5°	424.5	425.1	419.7	409.3	400.0	394.7	394.4	390.2	383.3	370.6	356.3
20°	417.9	418.3	413.9	405.3	399.2	397.6	397.5	395.6	390.6	379.2	365.4
22.5°	408.3	408.6	405.4	399.2	397.2	399.7	400.5	399.7	396.1	385.5	372.5
25°	405.9	405.7	402.4	396.1	397.9	403.3	404.3	404.6	402.1	392.8	381.6
27.5°	417.4	416.6	410.4	400.3	401.4	408.0	409.2	412.2	410.7	402.5	391.9
30°	450.5	449.2	436.3	415.9	410.4	413.8	415.3	420.0	420.4	413.5	405.6
32.5°	506.3	504.8	481.7	445.2	425.5	419.6	421.1	428.2	432.0	426.7	418.2
35°	576.9	575.2	544.9	495.0	450.9	430.9	431.9	437.6	445.2	437.8	426.4
37.5°	650.5	646.3	617.1	553.5	491.2	454.9	454.9	455.6	459.2	443.8	436.1
40°	723.7	719.5	693.1	622.4	543.3	492.7	490.3	474.4	471.5	458.2	455.6
42.5°	791.7	790.5	774.9	700.2	604.6	529.9	526.6	499.5	500.1	491.9	492.0
45°	864.1	864.1	851.4	778.8	675.9	589.7	586.4	546.5	552.7	548.9	558.1
47.5°	923.2	925.0	923.3	860.6	758.9	665.7	659.7	611.7	629.0	642.1	668.8
50°	983.5	986.4	986.7	950.4	859.2	756.0	749.2	698.1	736.8	774.3	826.8
52.5°	1071.0	1077.5	1051.6	1040.0	982.0	863.2	856.5	809.4	873.9	926.6	1017.0
55°	1152.1	1146.4	1128.0	1135.2	1113.6	985.2	980.2	938.8	1026.7	1095.1	1212.5
57.5°	1196.0	1195.6	1214.2	1245.1	1255.4	1135.7	1131.5	1091.3	1198.9	1250.3	1396.1
60°	1247.6	1248.3	1294.3	1364.4	1406.9	1323.1	1321.3	1290.7	1366.2	1395.3	1540.1
62.5°	1254.8	1267.8	1346.9	1467.7	1548.8	1542.1	1546.2	1470.4	1515.9	1510.9	1647.6
65°	1171.8	1188.9	1332.2	1499.0	1689.8	1781.5	1785.3	1651.1	1633.9	1609.8	1686.1
67.5°	1001.7	1027.1	1182.7	1431.0	1736.2	1958.5	1963.8	1791.2	1731.8	1643.3	1593.5
70°	729.0	757.1	913.8	1222.2	1653.4	2015.1	2021.2	1853.1	1735.5	1547.9	1360.3
72.5°	440.4	462.4	591.6	899.8	1395.5	1912.0	1922.8	1774.6	1584.5	1311.2	1004.5
75°	193.4	207.8	286.0	518.5	999.0	1581.9	1595.4	1519.0	1287.4	952.9	593.7
77.5°	82.4	86.5	117.3	225.2	564.8	1081.0	1099.5	1109.8	873.5	518.5	250.9
80°	51.3	53.0	66.4	101.9	264.3	607.1	627.1	653.0	433.8	190.6	87.6
82.5°	31.2	33.1	44.1	61.6	137.6	275.2	284.8	303.0	168.3	82.4	45.4
85°	18.8	20.1	27.0	39.0	78.3	108.2	108.1	119.6	79.3	53.0	23.9
87.5°	9.0	10.0	14.4	20.2	39.5	40.6	38.0	43.1	48.1	34.7	12.1
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°	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9	306.9
2.5°	306.7	306.2	304.9	303.9	303.7	303.0	302.5	302.8	303.3	303.4	303.4
5°	306.6	305.4	303.7	302.9	303.9	305.1	306.7	308.7	310.0	310.9	311.5
7.5°	311.5	309.3	307.4	307.0	308.8	312.1	315.6	320.0	322.9	325.0	325.4
10°	319.7	317.1	315.1	315.5	318.8	323.6	328.5	334.1	338.6	341.4	341.6
12.5°	329.2	326.7	324.8	326.6	332.0	337.8	342.9	347.8	351.9	354.7	354.7
15°	340.2	338.3	336.1	340.2	347.6	352.7	354.9	357.3	359.5	361.6	361.2
17.5°	350.7	348.9	347.8	352.5	360.3	362.6	361.2	359.4	359.4	360.6	360.8
20°	359.7	358.2	358.9	363.6	367.6	365.1	359.7	354.2	351.9	352.5	353.1
22.5°	367.7	367.0	369.1	371.3	368.4	359.7	349.8	342.3	339.5	339.3	339.5
25°	377.0	376.9	379.5	375.6	362.8	346.9	333.6	326.2	324.7	325.9	328.0
27.5°	388.5	389.6	391.0	376.6	351.5	327.4	313.9	308.8	310.4	313.4	315.3
30°	403.2	406.3	403.4	374.1	335.2	305.1	292.2	290.8	295.0	299.2	301.3
32.5°	417.6	422.4	415.4	367.4	314.2	281.5	271.5	271.1	276.2	280.4	283.3
35°	429.1	438.7	424.4	354.1	289.9	259.8	252.4	249.7	251.5	256.4	259.7
37.5°	444.2	460.1	430.6	333.8	263.5	241.8	233.3	226.9	225.2	227.2	228.8
40°	471.7	492.8	433.4	305.4	237.7	223.9	215.2	205.8	199.4	194.6	194.7
42.5°	516.6	535.4	431.6	271.0	213.9	206.4	196.6	185.7	175.2	164.5	163.7
45°	589.6	598.7	426.0	234.5	193.0	188.0	178.8	168.0	154.0	141.8	140.7
47.5°	706.4	686.3	417.4	202.7	174.5	172.4	164.0	151.5	136.7	126.9	126.1
50°	865.7	812.8	413.1	177.3	158.2	158.8	151.9	138.7	124.7	117.5	116.7
52.5°	1056.1	960.1	421.3	157.7	145.1	147.3	142.1	129.8	118.0	112.4	111.5
55°	1253.7	1112.6	430.0	143.5	132.8	137.0	135.2	125.0	114.4	109.2	108.4
57.5°	1422.9	1226.5	412.5	131.9	121.7	128.3	129.9	122.0	112.6	107.8	107.0
60°	1529.4	1272.4	366.5	121.1	113.0	121.4	126.8	121.2	113.3	112.9	112.3
62.5°	1579.9	1268.4	297.6	112.6	107.5	118.4	129.1	125.9	121.5	125.2	125.5
65°	1557.2	1207.8	221.6	106.9	103.6	119.6	135.9	134.6	123.9	127.6	128.1
67.5°	1407.9	1063.1	164.1	101.9	99.3	122.8	148.2	137.5	119.3	121.9	120.3
70°	1138.0	842.9	126.6	96.4	94.8	122.4	153.8	135.8	114.2	114.8	110.4
72.5°	784.7	574.8	103.0	91.2	88.4	111.5	149.9	131.4	110.0	105.2	99.4
75°	426.7	308.5	87.5	85.9	77.2	97.9	142.7	128.3	106.2	99.9	96.6
77.5°	167.9	128.0	76.0	78.5	67.5	86.5	134.6	122.5	100.9	92.7	91.0
80°	68.5	65.4	63.0	67.9	58.0	75.7	124.9	115.6	94.6	86.0	82.7
82.5°	38.9	40.6	49.0	53.6	47.1	69.7	120.3	110.0	87.1	77.0	73.1
85°	19.9	23.8	34.1	38.4	34.6	59.3	110.8	96.3	69.9	59.0	59.3
87.5°	9.6	13.3	21.5	24.1	22.5	42.9	82.8	69.8	54.4	43.1	41.7
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)