

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: P348652

Luminaire Tested: **ARCH-N-PA1-10-740-U-T4W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348652  
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-PA1-10-740-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 270mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2245 lumens  
Efficiency: N/A  
Efficacy: 160.4 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

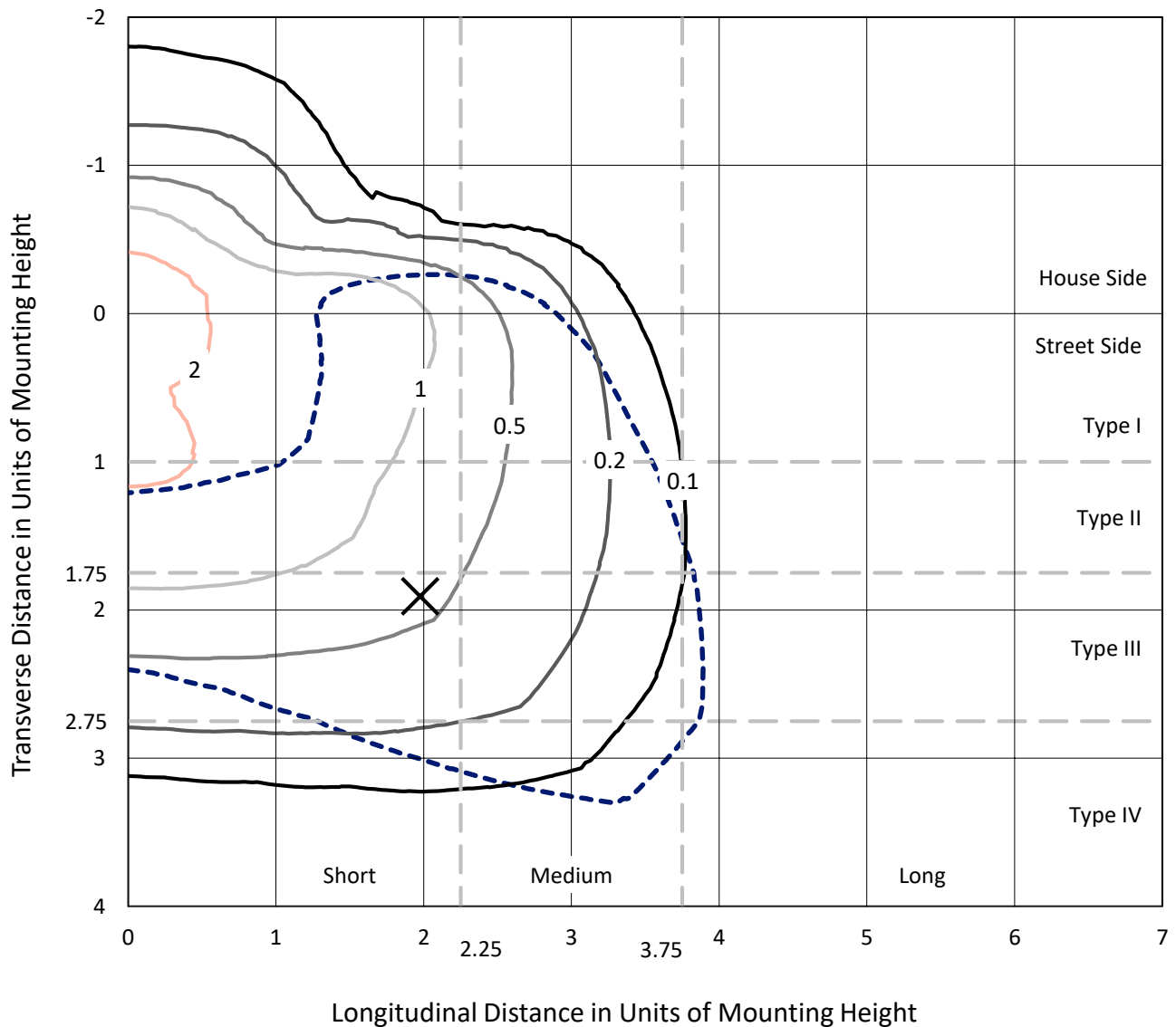


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### Iso-Footcandle Lines of Horizontal Illumination

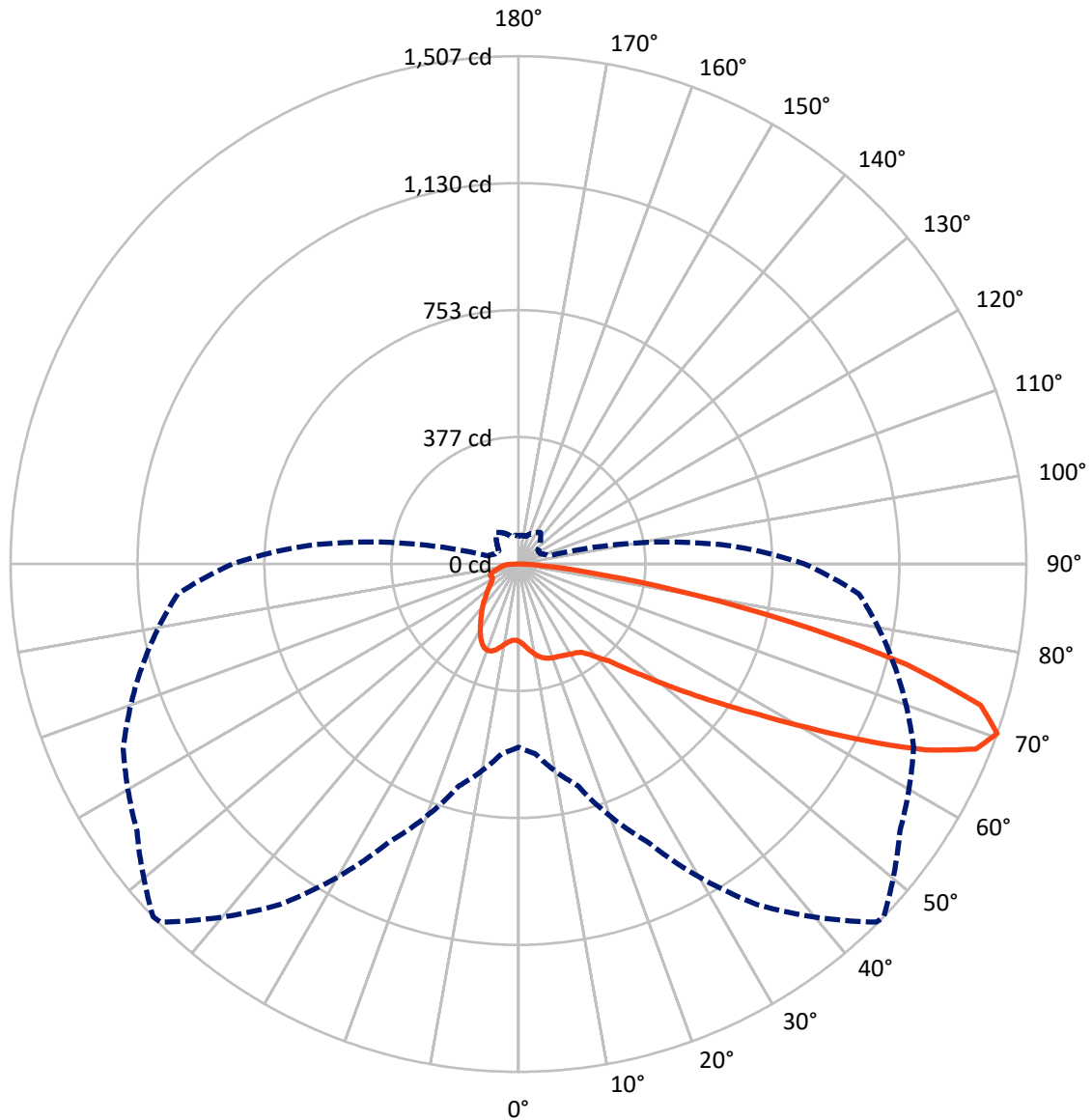
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.9 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	514.5	0.0	514.5
	% Fixture	22.9	0.0	22.9
<b>Street Side</b>	Lumens	1730.5	0.0	1730.5
	% Fixture	77.1	0.0	77.1
<b>Total</b>	Lumens	2245.0	0.0	2245.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	23.3	1.0
10°-20°	77.7	3.5
20°-30°	129.5	5.8
30°-40°	183.8	8.2
40°-50°	270.4	12.0
50°-60°	457.9	20.4
60°-70°	649.9	29.0
70°-80°	394.8	17.6
80°-90°	57.6	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°	2245.0	100.0
0°-180°	2245.0	100.0



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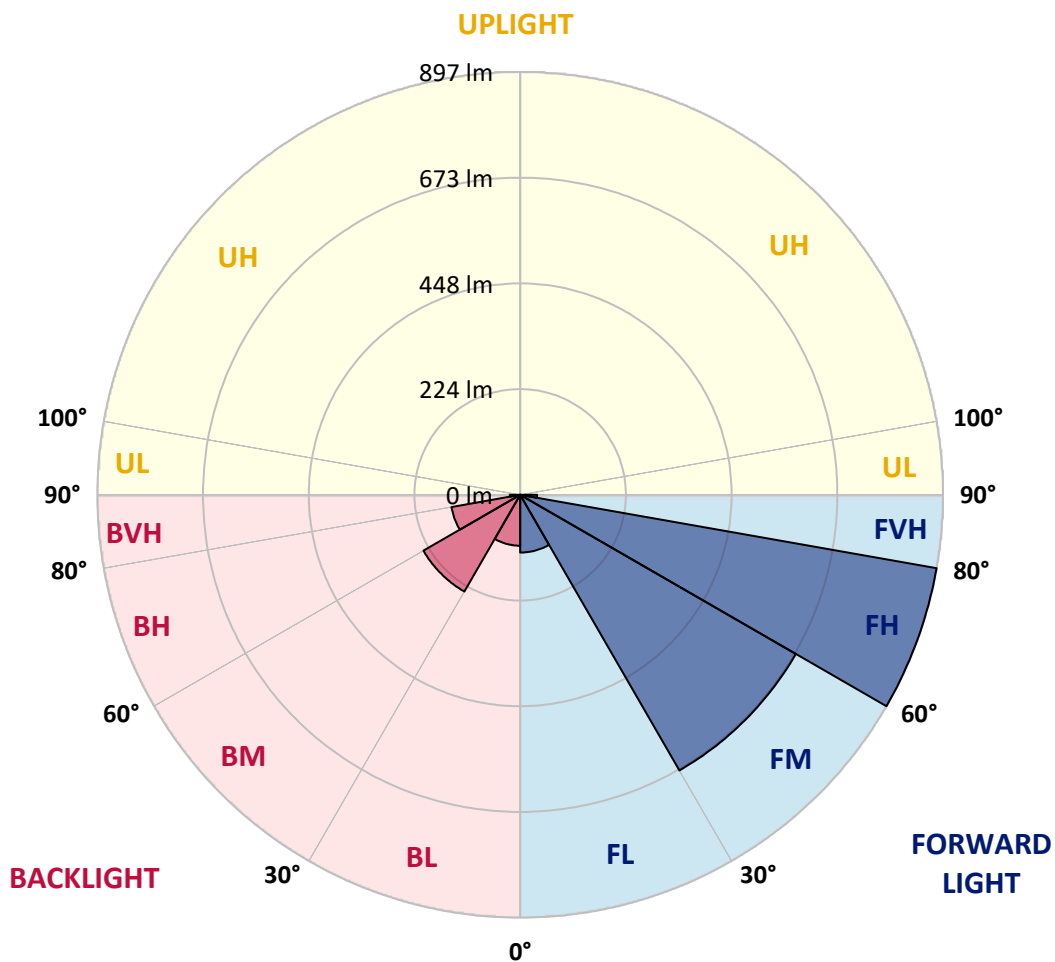
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	122.5	5.5			
FM	(30°-60°)	675.2	30.1			
FH	(60°-80°)	896.9	39.9			G1/1800
FVH	(80°-90°)	35.9	1.6			G1/100
BL	(0°-30°)	108.0	4.8	B0/110		
BM	(30°-60°)	236.9	10.6	B1/1000		
BH	(60°-80°)	147.9	6.6	B1/500		G1/500
BVH	(80°-90°)	21.7	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°	228.7	228.7	228.7	228.7	228.7	228.7	228.7	228.7	228.7	228.7	228.7
2.5°	240.2	240.3	240.6	239.9	237.7	237.1	236.9	234.6	233.2	231.0	229.2
5°	259.4	259.5	259.1	256.9	252.2	248.6	248.3	243.2	238.6	233.7	230.0
7.5°	279.4	279.7	278.2	274.1	267.4	261.3	260.9	254.0	247.0	239.6	234.0
10°	297.2	296.3	293.9	288.2	280.3	272.7	272.4	265.2	257.1	248.2	240.8
12.5°	309.0	308.2	305.2	298.3	289.6	282.7	282.0	275.4	267.5	257.7	248.9
15°	315.5	316.1	311.9	304.1	295.6	289.8	289.3	284.5	277.5	267.6	257.5
17.5°	316.4	316.8	312.8	305.1	298.2	294.2	293.9	290.8	285.7	276.2	265.6
20°	311.5	311.8	308.5	302.1	297.6	296.3	296.3	294.9	291.1	282.7	272.4
22.5°	304.3	304.6	302.2	297.6	296.0	297.9	298.5	297.9	295.3	287.3	277.7
25°	302.6	302.4	299.9	295.3	296.6	300.6	301.3	301.6	299.7	292.8	284.4
27.5°	311.1	310.5	305.9	298.3	299.2	304.1	305.0	307.2	306.1	300.0	292.1
30°	335.7	334.8	325.2	310.0	305.9	308.4	309.5	313.1	313.3	308.2	302.3
32.5°	377.4	376.2	359.0	331.8	317.2	312.8	313.8	319.1	322.0	318.1	311.7
35°	430.0	428.7	406.1	368.9	336.1	321.1	321.9	326.1	331.8	326.3	317.8
37.5°	484.9	481.7	460.0	412.6	366.1	339.0	339.0	339.6	342.3	330.8	325.1
40°	539.4	536.3	516.6	463.9	405.0	367.2	365.5	353.6	351.4	341.5	339.6
42.5°	590.1	589.2	577.6	521.9	450.6	395.0	392.5	372.3	372.8	366.6	366.7
45°	644.1	644.1	634.6	580.4	503.8	439.5	437.1	407.4	412.0	409.1	416.0
47.5°	688.1	689.5	688.2	641.4	565.6	496.2	491.7	455.9	468.8	478.6	498.5
50°	733.0	735.2	735.4	708.4	640.4	563.5	558.4	520.4	549.2	577.1	616.2
52.5°	798.3	803.1	783.8	775.1	732.0	643.4	638.4	603.3	651.4	690.6	758.0
55°	858.7	854.5	840.7	846.1	830.0	734.3	730.6	699.8	765.2	816.2	903.7
57.5°	891.5	891.1	905.0	928.0	935.7	846.5	843.4	813.4	893.6	931.9	1040.6
60°	929.9	930.4	964.7	1017.0	1048.6	986.2	984.8	962.1	1018.3	1040.0	1147.9
62.5°	935.2	944.9	1003.9	1094.0	1154.4	1149.4	1152.4	1096.0	1129.9	1126.2	1228.0
65°	873.4	886.2	992.9	1117.3	1259.5	1327.8	1330.7	1230.7	1217.8	1199.8	1256.7
67.5°	746.6	765.5	881.5	1066.6	1294.1	1459.8	1463.8	1335.1	1290.8	1224.8	1187.7
70°	543.3	564.3	681.1	911.0	1232.3	1501.9	1506.5	1381.2	1293.6	1153.7	1013.9
72.5°	328.2	344.7	440.9	670.6	1040.1	1425.1	1433.2	1322.7	1181.0	977.3	748.7
75°	144.1	154.9	213.2	386.5	744.6	1179.1	1189.2	1132.2	959.6	710.2	442.5
77.5°	61.4	64.5	87.4	167.9	420.9	805.7	819.5	827.2	651.1	386.5	187.0
80°	38.3	39.5	49.5	76.0	197.0	452.5	467.4	486.7	323.3	142.1	65.3
82.5°	23.3	24.7	32.9	45.9	102.6	205.1	212.3	225.9	125.5	61.4	33.8
85°	14.0	15.0	20.1	29.0	58.4	80.7	80.6	89.1	59.1	39.5	17.8
87.5°	6.7	7.5	10.8	15.1	29.4	30.3	28.4	32.1	35.9	25.9	9.0
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°	228.7	228.7	228.7	228.7	228.7	228.7	228.7	228.7	228.7	228.7	228.7
2.5°	228.6	228.3	227.3	226.5	226.3	225.9	225.5	225.7	226.0	226.1	226.1
5°	228.5	227.6	226.3	225.8	226.5	227.4	228.6	230.1	231.0	231.7	232.2
7.5°	232.2	230.6	229.1	228.8	230.2	232.6	235.3	238.5	240.7	242.2	242.6
10°	238.3	236.3	234.9	235.2	237.6	241.2	244.9	249.0	252.4	254.5	254.6
12.5°	245.4	243.5	242.1	243.4	247.5	251.8	255.6	259.2	262.3	264.4	264.4
15°	253.5	252.2	250.5	253.5	259.1	262.9	264.5	266.3	268.0	269.5	269.2
17.5°	261.4	260.1	259.2	262.8	268.5	270.3	269.2	267.9	267.9	268.7	268.9
20°	268.1	267.0	267.5	271.0	274.0	272.1	268.1	264.0	262.3	262.8	263.2
22.5°	274.1	273.5	275.1	276.7	274.6	268.1	260.8	255.2	253.1	252.9	253.1
25°	281.0	280.9	282.9	280.0	270.4	258.5	248.6	243.2	242.0	242.9	244.5
27.5°	289.6	290.4	291.4	280.7	262.0	244.0	233.9	230.2	231.3	233.6	235.0
30°	300.6	302.9	300.7	278.8	249.8	227.4	217.8	216.7	219.9	223.0	224.6
32.5°	311.2	314.8	309.6	273.8	234.2	209.8	202.4	202.1	205.9	209.0	211.1
35°	319.8	327.0	316.3	263.9	216.0	193.6	188.2	186.1	187.5	191.1	193.5
37.5°	331.1	343.0	320.9	248.8	196.4	180.2	173.9	169.1	167.9	169.3	170.6
40°	351.6	367.3	323.1	227.6	177.2	166.9	160.4	153.4	148.6	145.1	145.1
42.5°	385.1	399.1	321.7	202.0	159.4	153.8	146.5	138.4	130.6	122.6	122.0
45°	439.5	446.2	317.5	174.8	143.8	140.1	133.3	125.2	114.8	105.7	104.9
47.5°	526.5	511.5	311.1	151.0	130.1	128.5	122.2	112.9	101.9	94.6	94.0
50°	645.2	605.8	307.9	132.1	117.9	118.4	113.2	103.4	93.0	87.6	87.0
52.5°	787.2	715.6	314.0	117.5	108.2	109.8	105.9	96.7	88.0	83.7	83.1
55°	934.5	829.3	320.5	106.9	99.0	102.1	100.8	93.2	85.3	81.4	80.8
57.5°	1060.6	914.2	307.5	98.3	90.7	95.7	96.8	91.0	83.9	80.4	79.7
60°	1139.9	948.4	273.2	90.3	84.2	90.5	94.5	90.4	84.4	84.1	83.7
62.5°	1177.6	945.4	221.8	83.9	80.1	88.3	96.2	93.8	90.6	93.3	93.6
65°	1160.7	900.2	165.2	79.7	77.2	89.1	101.3	100.3	92.3	95.1	95.5
67.5°	1049.4	792.4	122.3	76.0	74.0	91.5	110.5	102.5	88.9	90.9	89.7
70°	848.2	628.2	94.3	71.8	70.7	91.2	114.6	101.2	85.1	85.6	82.3
72.5°	584.9	428.4	76.8	68.0	65.9	83.1	111.7	98.0	82.0	78.4	74.1
75°	318.1	230.0	65.2	64.0	57.5	73.0	106.3	95.7	79.1	74.4	72.0
77.5°	125.2	95.4	56.6	58.5	50.3	64.5	100.3	91.3	75.2	69.1	67.8
80°	51.1	48.7	46.9	50.6	43.3	56.4	93.1	86.1	70.5	64.1	61.6
82.5°	29.0	30.3	36.5	40.0	35.1	51.9	89.7	82.0	64.9	57.4	54.5
85°	14.8	17.7	25.4	28.7	25.8	44.2	82.6	71.8	52.1	43.9	44.2
87.5°	7.1	9.9	16.1	18.0	16.7	32.0	61.7	52.0	40.6	32.1	31.1
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)