

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: P234739

Luminaire Tested: **ARCH-AF16-30-D-U-T4W-8027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P234739  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-AF16-30-D-U-T4W-8027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 560mA LIGHT ENGINE WITH 16 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2932 lumens  
Efficiency: N/A  
Efficacy: 91.6 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 32  
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

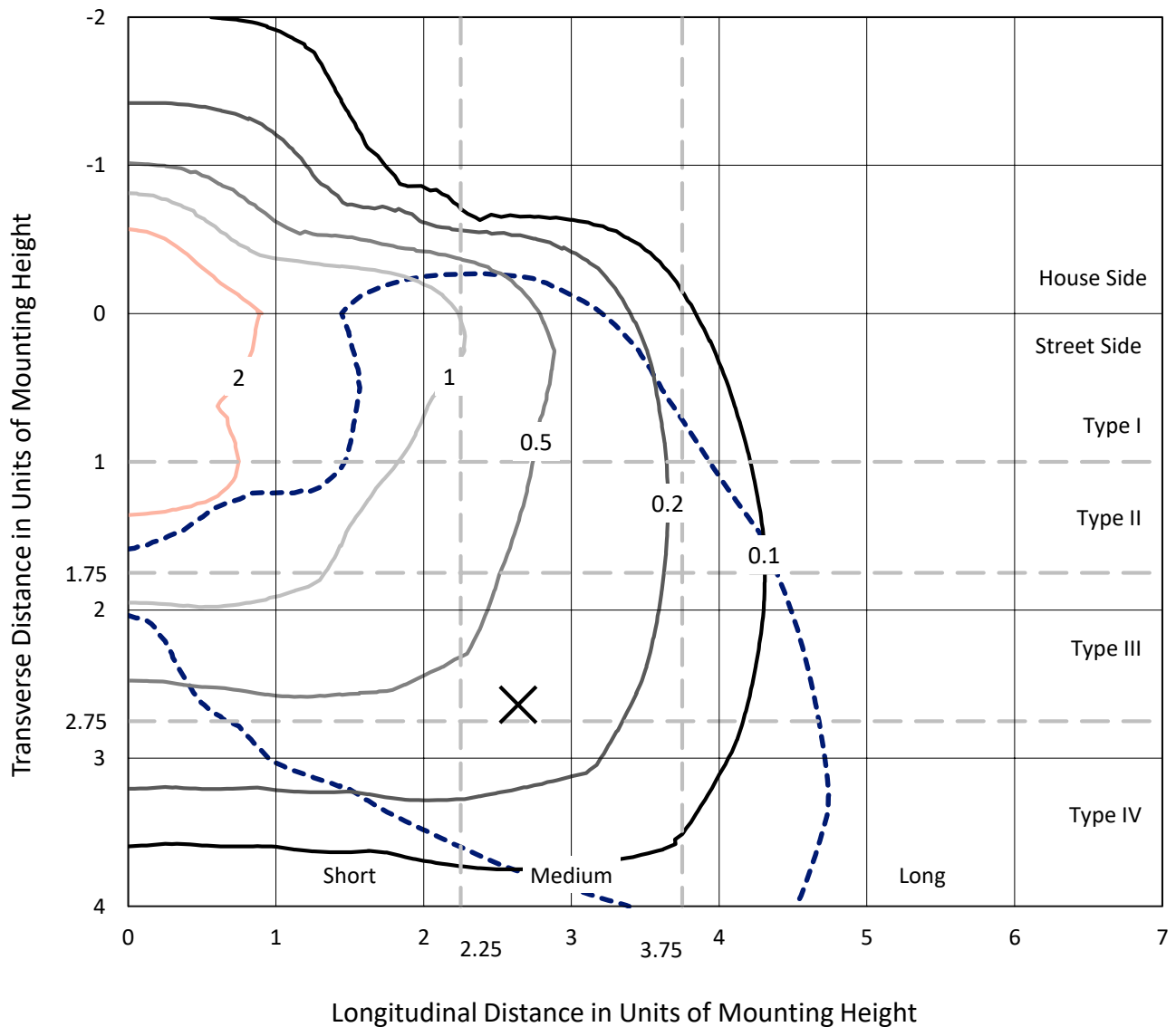


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

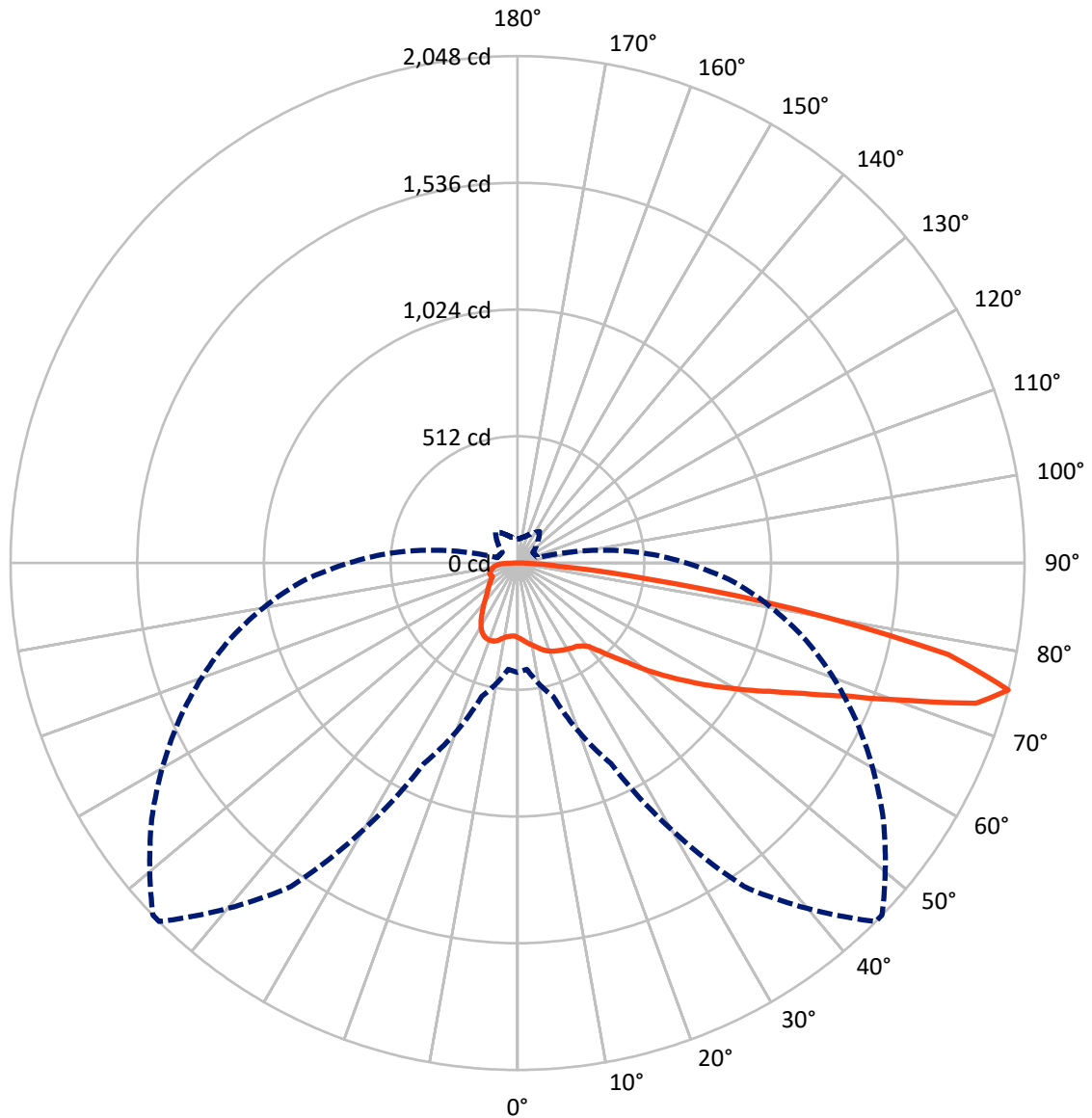


Based on 10 foot mounting height. Maximum calculated value = 3.5 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	679.2	0.0	679.2
	% Fixture	23.2	0.0	23.2
<b>Street Side</b>	Lumens	2252.8	0.0	2252.8
	% Fixture	76.8	0.0	76.8
<b>Total</b>	Lumens	2932.0	0.0	2932.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	29.8	1.0
10°-20°	96.5	3.3
20°-30°	165.6	5.6
30°-40°	231.7	7.9
40°-50°	339.8	11.6
50°-60°	529.4	18.1
60°-70°	761.7	26.0
70°-80°	663.5	22.6
80°-90°	113.9	3.9
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°	2932.0	100.0
0°-180°	2932.0	100.0



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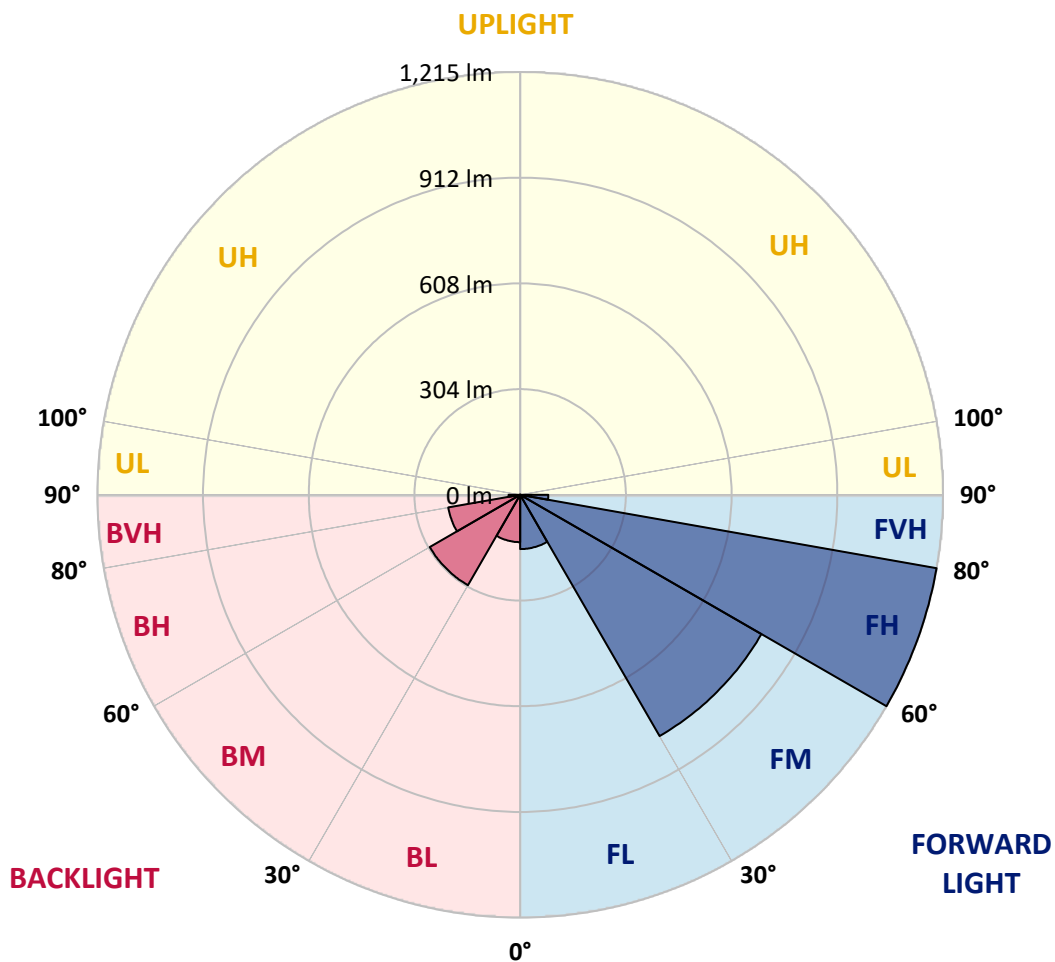
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	155.9	5.3			
FM	(30°-60°)	800.7	27.3			
FH	(60°-80°)	1215.3	41.5			G1/1800
FVH	(80°-90°)	80.9	2.8			G1/100
BL	(0°-30°)	136.0	4.6	B1/500		
BM	(30°-60°)	300.2	10.2	B1/1000		
BH	(60°-80°)	209.9	7.2	B1/500		G1/500
BVH	(80°-90°)	33.1	1.1			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 Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6
2.5°	315.4	313.1	313.1	311.4	311.4	308.6	307.4	306.8	304.0	302.3	300.6
5°	333.7	330.8	330.2	326.2	324.5	318.3	317.7	313.7	308.6	303.4	299.4
7.5°	350.2	348.5	345.6	341.6	336.5	328.5	327.9	321.7	313.1	306.3	300.6
10°	362.2	361.0	357.0	351.9	346.2	338.2	337.6	330.8	320.5	312.5	304.6
12.5°	376.4	374.7	369.6	362.7	356.5	349.1	348.5	342.8	331.4	321.1	310.8
15°	390.1	387.8	381.6	374.7	367.9	361.6	361.6	355.3	343.3	331.4	319.4
17.5°	397.0	395.8	389.5	382.1	376.4	371.9	371.3	365.6	353.6	341.1	327.9
20°	399.2	399.8	394.1	386.1	382.1	379.8	379.3	375.3	362.2	350.2	337.6
22.5°	398.7	400.4	395.8	387.3	386.1	386.1	386.1	381.6	371.3	359.3	346.8
25°	401.0	403.2	399.8	389.5	389.5	391.8	391.8	389.5	380.4	370.2	357.6
27.5°	408.9	410.6	407.8	393.5	394.1	397.5	397.0	397.5	391.8	382.1	369.6
30°	418.6	420.9	417.5	399.8	399.2	402.7	402.7	405.5	401.5	391.3	381.0
32.5°	444.9	444.3	433.5	406.7	404.9	408.4	408.4	411.2	408.9	401.0	391.3
35°	523.0	514.5	490.5	428.9	411.8	413.5	413.5	418.6	419.8	413.5	404.9
37.5°	602.9	600.0	581.8	488.2	436.9	424.3	423.8	431.2	436.3	431.2	425.5
40°	683.3	681.0	677.0	567.5	489.4	443.7	442.0	448.3	457.4	454.0	450.6
42.5°	758.0	756.8	760.8	645.6	556.1	485.4	480.2	472.8	485.9	484.8	484.8
45°	816.7	819.6	821.9	718.6	628.5	539.0	532.7	507.6	525.3	529.9	533.3
47.5°	849.8	852.1	860.1	789.9	701.0	601.1	596.6	555.5	578.9	592.6	602.3
50°	897.2	890.9	897.7	859.5	788.2	682.1	669.6	620.0	649.6	673.6	696.4
52.5°	942.8	932.5	938.2	939.9	887.5	761.4	748.3	695.8	732.9	770.5	811.0
55°	983.8	983.3	989.0	1018.1	983.3	846.4	831.6	779.7	833.3	873.8	942.2
57.5°	1016.9	1022.6	1047.7	1108.7	1093.9	938.8	922.2	877.2	940.5	981.0	1094.5
60°	1055.7	1064.8	1106.5	1185.7	1194.9	1035.7	1018.6	986.1	1050.6	1091.6	1270.7
62.5°	1068.8	1081.9	1167.5	1266.7	1300.4	1141.8	1126.4	1104.8	1166.4	1203.4	1446.4
65°	981.6	1006.7	1201.1	1308.4	1413.9	1269.6	1256.5	1237.6	1281.6	1306.1	1565.6
67.5°	957.6	969.0	1135.6	1368.3	1520.5	1433.8	1420.7	1388.2	1389.4	1379.1	1604.4
70°	924.0	936.5	1068.3	1413.3	1673.4	1658.6	1642.6	1546.8	1488.0	1425.9	1528.0
72.5°	787.1	783.1	920.5	1291.8	1747.0	1936.9	1918.1	1717.3	1561.0	1385.4	1289.5
75°	442.0	430.6	558.4	893.7	1595.3	2047.5	2047.0	1803.4	1509.7	1206.8	877.8
77.5°	128.3	124.9	184.2	374.7	1074.0	1778.9	1800.6	1626.6	1259.9	866.9	481.9
80°	60.5	61.6	79.3	123.8	458.6	1148.1	1210.3	1071.1	752.9	399.8	199.1
82.5°	38.2	38.8	54.2	79.8	193.9	521.3	572.6	481.9	298.3	172.8	87.8
85°	24.0	24.0	35.9	52.5	115.8	166.5	180.8	164.3	127.8	94.1	47.9
87.5°	13.1	13.1	21.7	30.2	63.3	53.6	55.3	65.6	79.8	57.6	24.0
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°	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6	300.6
2.5°	300.0	298.9	297.1	296.6	296.0	295.4	296.0	297.1	296.0	296.0	296.6
5°	298.3	297.1	294.9	294.9	295.4	296.0	298.9	300.6	301.1	301.1	301.1
7.5°	298.3	296.6	294.9	295.4	296.6	298.9	303.4	306.3	308.6	309.1	309.1
10°	301.1	298.9	297.7	298.9	302.3	304.0	308.6	313.1	316.0	317.1	317.1
12.5°	306.3	304.0	304.0	306.3	310.8	313.1	317.1	320.5	324.0	325.7	325.7
15°	314.8	312.0	312.5	316.5	321.7	324.0	326.8	327.9	330.8	333.1	333.1
17.5°	322.8	320.0	321.1	325.7	329.1	330.2	331.9	331.4	332.5	334.2	334.8
20°	331.9	329.1	329.7	332.5	333.1	331.9	331.9	330.2	329.7	332.5	333.7
22.5°	341.1	338.2	337.6	335.9	333.1	330.2	328.5	326.8	325.7	328.5	329.7
25°	351.9	347.9	345.1	337.6	330.2	325.1	322.8	321.7	321.1	324.0	325.1
27.5°	363.9	359.9	351.3	335.4	323.4	314.8	313.1	313.1	314.3	316.0	317.1
30°	375.3	371.3	355.9	330.2	311.4	298.9	297.1	298.9	301.7	303.4	305.1
32.5°	386.7	382.7	358.7	322.2	293.7	277.8	276.6	279.5	284.0	285.2	286.3
35°	402.1	398.1	362.2	310.8	271.5	254.4	253.2	254.9	258.9	260.6	262.4
37.5°	423.8	421.5	367.3	298.3	251.0	232.1	228.7	227.6	229.8	229.3	231.6
40°	452.3	454.0	376.4	281.8	231.0	211.6	204.2	200.8	198.5	193.9	196.2
42.5°	493.9	495.1	386.7	262.9	213.9	192.2	182.5	176.2	171.7	164.3	165.4
45°	554.9	545.2	398.7	243.0	198.5	176.8	165.4	158.0	151.7	145.4	146.0
47.5°	635.9	606.3	411.8	226.4	183.1	164.3	154.0	145.4	138.0	132.9	133.5
50°	735.7	682.1	424.9	211.0	167.7	154.6	145.4	136.3	128.9	123.8	123.2
52.5°	867.5	773.4	433.5	193.9	152.3	146.0	138.0	129.5	120.3	114.1	113.5
55°	1004.4	879.5	440.9	173.4	137.5	136.3	132.3	122.6	111.8	103.8	102.7
57.5°	1154.9	993.0	446.6	153.4	126.0	128.3	127.2	115.8	103.8	96.4	95.8
60°	1291.8	1110.5	428.3	135.7	115.8	120.3	121.5	111.8	105.5	107.2	107.8
62.5°	1429.9	1201.1	358.7	122.6	108.9	115.2	124.9	124.3	121.5	124.3	124.9
65°	1479.5	1220.0	254.4	111.8	102.1	117.5	135.7	134.6	121.5	116.4	115.2
67.5°	1451.5	1164.1	171.1	103.2	97.0	120.3	147.1	134.6	116.9	110.1	107.8
70°	1318.6	1026.6	125.5	94.7	92.4	119.8	153.4	134.0	114.6	107.2	104.4
72.5°	1051.7	792.2	101.0	86.7	85.6	116.9	156.8	132.9	112.4	104.4	101.0
75°	681.0	492.8	85.0	78.7	75.3	112.4	155.1	129.5	109.5	99.2	97.0
77.5°	316.0	212.2	72.4	69.6	65.6	105.5	150.0	122.6	103.2	93.5	90.7
80°	147.1	100.4	61.0	60.5	58.7	99.8	143.2	114.6	95.8	87.8	83.3
82.5°	78.7	60.5	49.6	49.6	51.3	93.0	134.6	104.9	86.1	82.1	70.2
85°	41.6	34.8	35.9	38.8	43.9	82.1	123.2	94.7	75.3	62.7	61.0
87.5°	21.1	22.2	22.2	26.2	33.7	66.7	101.5	78.1	63.9	51.3	50.2
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)