

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: P397732

Luminaire Tested: **ARCH-S-PA1-30-827-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397732  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-30-827-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3455 lumens  
Efficiency: N/A  
Efficacy: 111.5 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): 31  
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

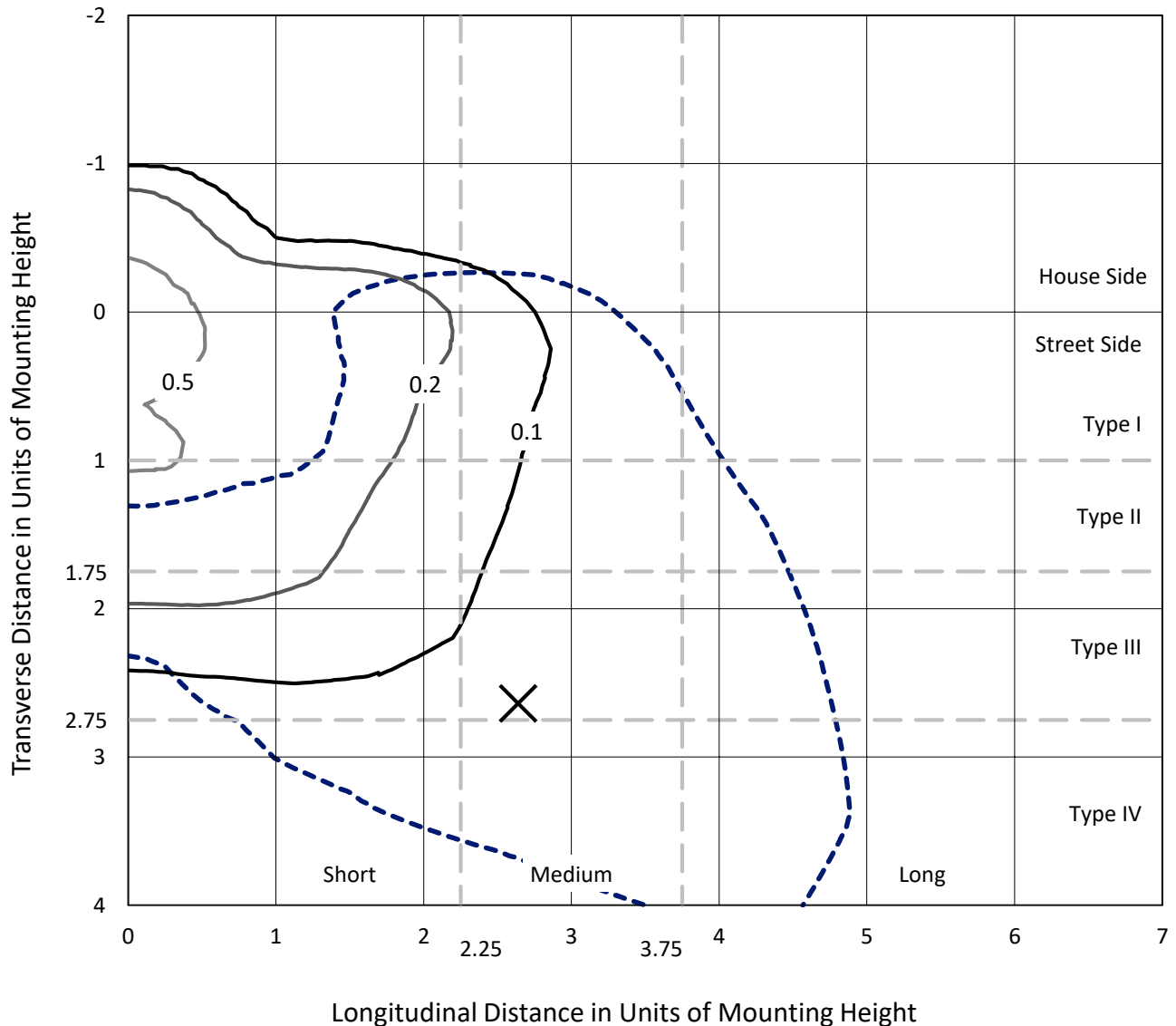


REPORT NUMBER: P397732

CATALOG NUMBER: ARCH-S-PA1-30-827-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

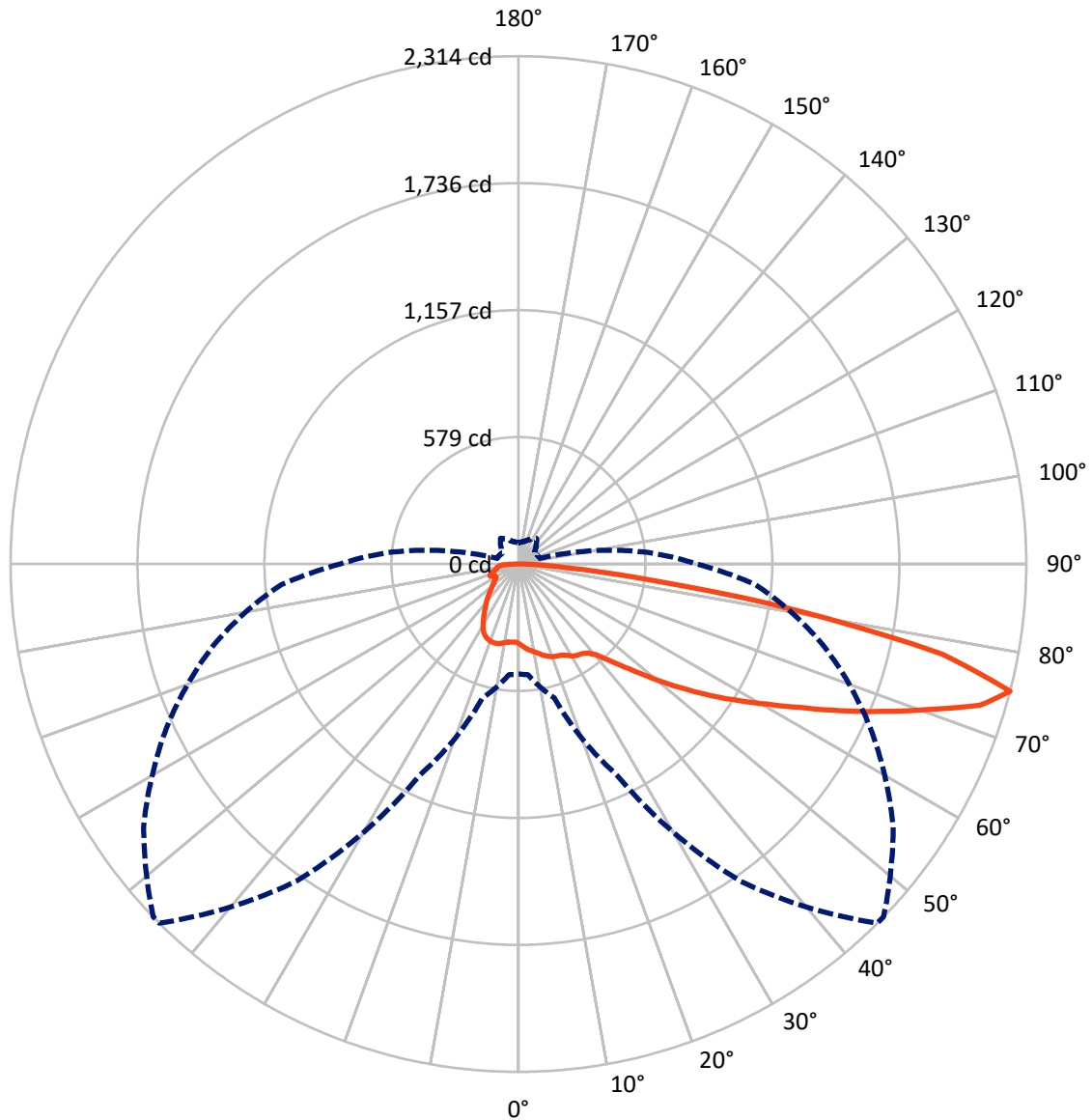


Based on 25 foot mounting height. Maximum calculated value = 0.7 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397732

CATALOG NUMBER: ARCH-S-PA1-30-827-U-T4W

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397732

CATALOG NUMBER: ARCH-S-PA1-30-827-U-T4W

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	763.5	0.0	763.5
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	2691.5	0.0	2691.5
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	3455.0	0.0	3455.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.9	1.0
10°-20°	114.2	3.3
20°-30°	194.7	5.6
30°-40°	272.8	7.9
40°-50°	400.8	11.6
50°-60°	637.8	18.5
60°-70°	907.3	26.3
70°-80°	759.7	22.0
80°-90°	131.8	3.8
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°	3455.0	100.0
0°-180°	3455.0	100.0



REPORT NUMBER: P397732

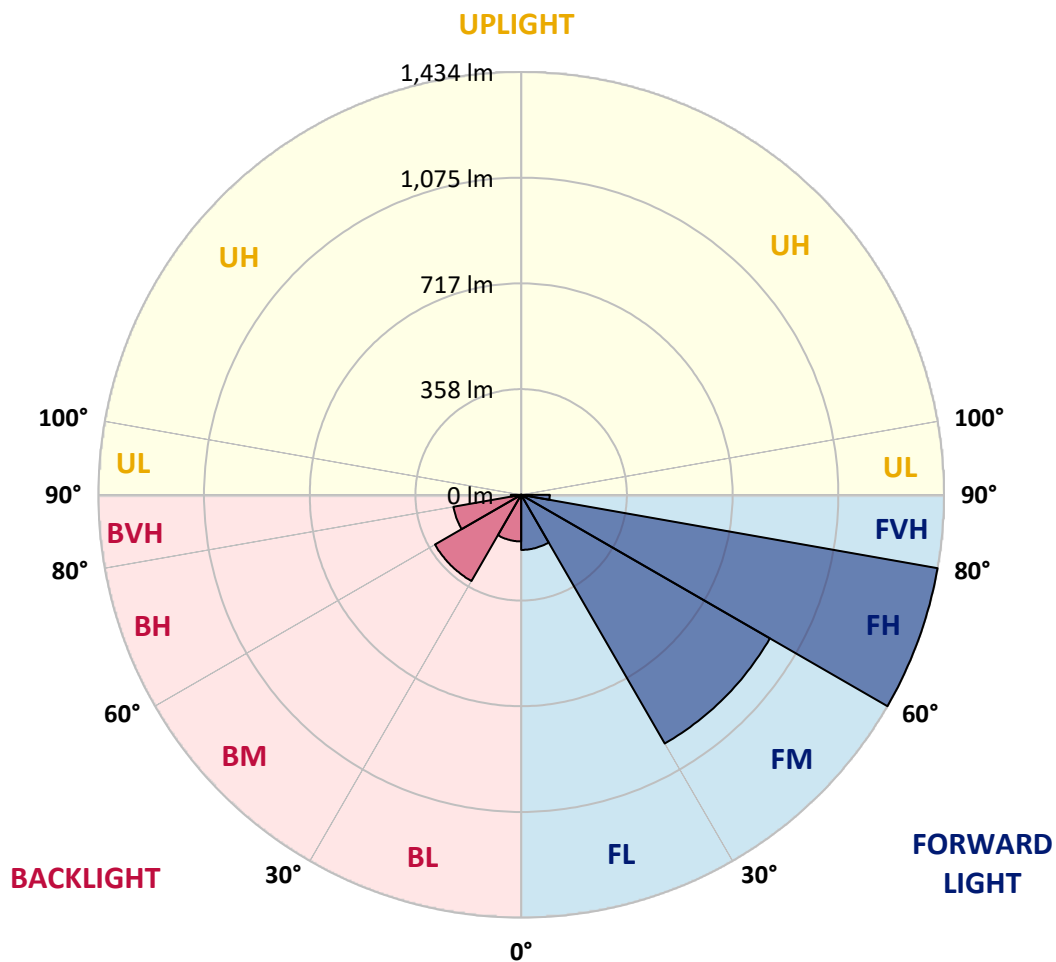
CATALOG NUMBER: ARCH-S-PA1-30-827-U-T4W

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	186.8	5.4			
FM (30°-60°)	973.9	28.2			
FH (60°-80°)	1433.9	41.5			G1/1800
FVH (80°-90°)	96.9	2.8			G1/100
BL (0°-30°)	158.0	4.6	B1/500		
BM (30°-60°)	337.5	9.8	B1/1000		
BH (60°-80°)	233.1	6.7	B1/500		G1/500
BVH (80°-90°)	34.9	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 Medium





REPORT NUMBER: P397732

CATALOG NUMBER: ARCH-S-PA1-30-827-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	362.9	362.9	362.9	362.9	362.9	362.9	362.9	362.9	362.9	362.9	362.9
2.5°	383.6	381.8	380.9	380.9	377.2	374.9	374.4	371.2	368.4	365.6	363.3
5°	405.8	404.4	401.6	399.3	394.2	387.8	386.9	379.9	373.0	366.5	361.0
7.5°	426.1	423.3	420.1	415.5	407.2	398.4	397.0	387.3	377.6	367.9	360.5
10°	443.2	440.4	435.8	429.3	418.7	408.1	406.7	396.6	386.4	374.9	364.2
12.5°	459.3	457.0	450.1	441.3	428.9	419.2	417.8	409.0	398.4	385.5	371.6
15°	473.2	470.9	463.5	453.3	439.0	431.6	429.8	421.5	410.9	397.0	382.7
17.5°	480.1	480.1	472.3	461.2	447.8	442.3	440.9	430.7	421.0	407.6	393.3
20°	482.4	483.3	477.8	464.4	452.9	450.6	449.2	440.9	429.8	416.9	403.5
22.5°	483.8	485.6	481.0	465.8	456.1	454.7	453.8	448.3	439.5	427.0	413.6
25°	488.4	488.4	485.2	468.1	460.3	459.8	459.8	456.6	450.6	439.9	426.6
27.5°	495.3	494.9	490.7	473.2	469.5	470.9	470.4	470.0	465.8	455.2	440.9
30°	506.9	506.9	502.3	483.3	481.0	487.0	487.5	488.4	482.0	465.3	453.8
32.5°	524.4	522.6	518.0	493.5	489.8	495.3	496.3	495.8	490.3	474.6	469.0
35°	578.4	574.3	557.7	516.1	497.7	500.9	501.3	503.7	504.6	492.1	489.3
37.5°	673.1	667.5	642.1	569.7	522.6	514.7	514.3	520.3	525.3	514.3	514.3
40°	776.0	771.4	756.6	662.0	568.7	542.9	541.0	546.6	553.0	545.2	547.5
42.5°	864.7	868.3	869.7	759.9	638.0	595.5	590.4	582.6	592.7	585.8	595.1
45°	931.1	929.3	954.7	860.0	727.5	661.5	654.6	633.4	646.3	645.8	666.1
47.5°	1001.8	998.5	1009.1	954.2	829.6	742.3	731.7	700.3	719.7	733.1	766.8
50°	1068.7	1069.6	1073.3	1028.5	940.4	840.7	827.3	785.3	813.0	841.1	888.7
52.5°	1156.0	1149.5	1144.9	1115.3	1064.5	943.1	934.4	886.4	925.1	958.4	1021.6
55°	1232.1	1228.0	1225.2	1223.8	1168.4	1056.2	1047.0	997.1	1053.0	1076.5	1169.8
57.5°	1313.4	1311.1	1325.8	1349.4	1327.2	1171.2	1161.5	1113.5	1175.8	1192.4	1330.5
60°	1372.9	1374.3	1414.9	1474.9	1459.7	1295.8	1284.3	1241.8	1295.4	1310.1	1491.1
62.5°	1373.4	1387.2	1481.4	1589.0	1606.5	1439.4	1426.0	1379.8	1418.2	1418.2	1635.1
65°	1242.3	1258.0	1469.4	1617.1	1755.2	1610.2	1597.3	1524.8	1539.1	1519.7	1770.4
67.5°	1111.6	1130.1	1329.1	1619.4	1859.5	1793.0	1777.8	1669.8	1645.3	1596.4	1865.0
70°	1024.8	1037.8	1204.0	1589.4	1922.3	1984.1	1972.6	1807.3	1728.8	1660.5	1845.2
72.5°	862.8	858.2	1017.0	1446.8	1957.4	2201.1	2191.4	1956.9	1801.3	1630.1	1573.7
75°	500.9	506.4	631.1	1059.9	1764.4	2314.2	2313.3	2084.8	1769.5	1439.9	1084.4
77.5°	144.5	148.6	207.3	465.8	1115.8	1974.0	2037.2	1906.6	1495.7	1026.2	562.3
80°	63.2	66.5	90.0	155.1	480.6	1289.4	1344.8	1289.4	902.0	470.9	220.7
82.5°	37.4	39.7	58.6	96.0	230.4	613.5	688.3	601.1	389.2	199.9	91.4
85°	21.2	22.2	33.7	60.9	145.0	214.7	241.0	225.7	189.7	113.6	48.0
87.5°	9.7	10.2	16.6	28.6	81.2	72.5	75.2	99.7	109.9	69.2	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



REPORT NUMBER: P397732

CATALOG NUMBER: ARCH-S-PA1-30-827-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	362.9	362.9	362.9	362.9	362.9	362.9	362.9	362.9	362.9	362.9	362.9
2.5°	362.4	361.0	358.2	357.3	355.9	356.4	356.8	356.8	357.3	355.9	355.9
5°	358.7	356.4	353.6	353.6	353.6	357.3	360.5	362.4	363.3	363.3	362.4
7.5°	357.3	354.5	351.3	352.2	353.2	357.8	363.8	369.8	371.6	371.6	370.7
10°	360.1	357.3	355.0	356.4	358.7	362.4	367.0	372.5	377.2	377.6	377.2
12.5°	366.5	363.3	361.0	363.8	366.5	368.9	371.2	373.5	379.5	380.4	380.4
15°	377.2	373.9	371.2	373.5	374.4	374.4	374.4	374.4	380.4	381.3	381.3
17.5°	387.8	385.0	382.2	382.7	379.9	376.2	374.9	374.4	377.6	380.4	380.9
20°	397.9	395.6	392.9	388.2	381.3	374.4	372.1	372.1	373.9	378.1	378.1
22.5°	409.0	406.2	401.6	391.0	379.5	369.8	367.5	368.9	371.2	376.7	376.2
25°	421.5	417.8	409.9	390.1	373.5	361.9	362.4	366.5	370.7	376.7	376.7
27.5°	435.3	430.3	414.6	382.7	360.1	349.0	353.2	362.9	368.9	375.3	376.2
30°	450.6	445.9	418.2	369.8	338.4	328.2	338.4	354.1	363.3	369.3	370.7
32.5°	469.0	465.3	421.5	353.2	310.2	301.5	316.2	335.6	350.4	357.3	358.7
35°	492.1	488.4	425.6	334.2	283.9	274.7	288.1	307.9	327.3	336.1	338.8
37.5°	522.1	516.6	429.3	313.9	261.8	251.1	257.6	275.6	293.1	305.1	308.4
40°	560.4	551.7	432.6	290.8	242.4	230.4	232.7	241.4	251.6	262.2	266.4
42.5°	614.4	596.9	433.0	266.4	222.5	211.4	210.5	213.3	213.3	213.3	214.7
45°	689.7	656.5	433.9	243.3	202.2	190.7	187.9	187.0	180.0	166.7	165.7
47.5°	784.8	734.5	438.1	223.9	181.0	170.8	167.1	163.4	150.5	136.6	133.9
50°	906.7	825.0	446.4	205.4	163.0	156.0	151.4	142.6	128.3	117.7	114.9
52.5°	1047.0	932.5	454.3	186.0	149.6	145.0	139.4	128.8	113.6	107.1	106.2
55°	1208.1	1052.5	470.0	169.0	138.0	134.8	129.7	119.6	108.0	103.4	102.9
57.5°	1372.9	1186.9	492.1	153.7	127.0	125.1	125.1	116.3	108.9	107.1	107.1
60°	1531.7	1302.3	475.0	139.4	116.8	117.7	126.5	124.2	118.6	121.0	122.3
62.5°	1655.0	1370.2	385.5	127.9	109.4	117.7	140.3	140.3	133.9	133.0	133.0
65°	1707.6	1369.2	271.0	119.1	106.6	129.3	156.5	149.1	132.0	125.6	124.2
67.5°	1694.2	1309.2	187.0	113.1	105.7	141.3	163.9	143.1	123.7	118.2	114.0
70°	1576.5	1182.3	144.0	107.6	104.3	136.2	161.6	136.2	117.3	112.2	108.5
72.5°	1271.8	948.2	119.6	102.0	98.8	126.0	153.7	129.7	112.2	106.6	102.9
75°	811.1	596.4	101.1	94.6	88.2	113.1	143.1	123.3	106.6	99.3	96.5
77.5°	390.1	257.1	88.2	85.9	79.4	104.8	132.5	114.9	99.3	93.3	91.4
80°	157.9	117.7	76.6	77.1	72.9	99.7	125.1	107.1	91.9	85.4	82.2
82.5°	82.2	68.3	64.6	66.5	66.5	95.1	119.6	100.6	85.4	82.6	72.0
85°	44.3	42.5	49.9	53.6	57.7	85.9	111.3	93.7	78.0	66.9	64.6
87.5°	21.7	27.7	28.2	32.3	40.2	68.8	93.7	78.5	65.1	54.0	53.1
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)