

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: P397683

Luminaire Tested: **ARCH-S-PA1-30-727-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397683  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-S-PA1-30-727-U-T2U  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 375mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3963 lumens  
Efficiency: N/A  
Efficacy: 127.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G1

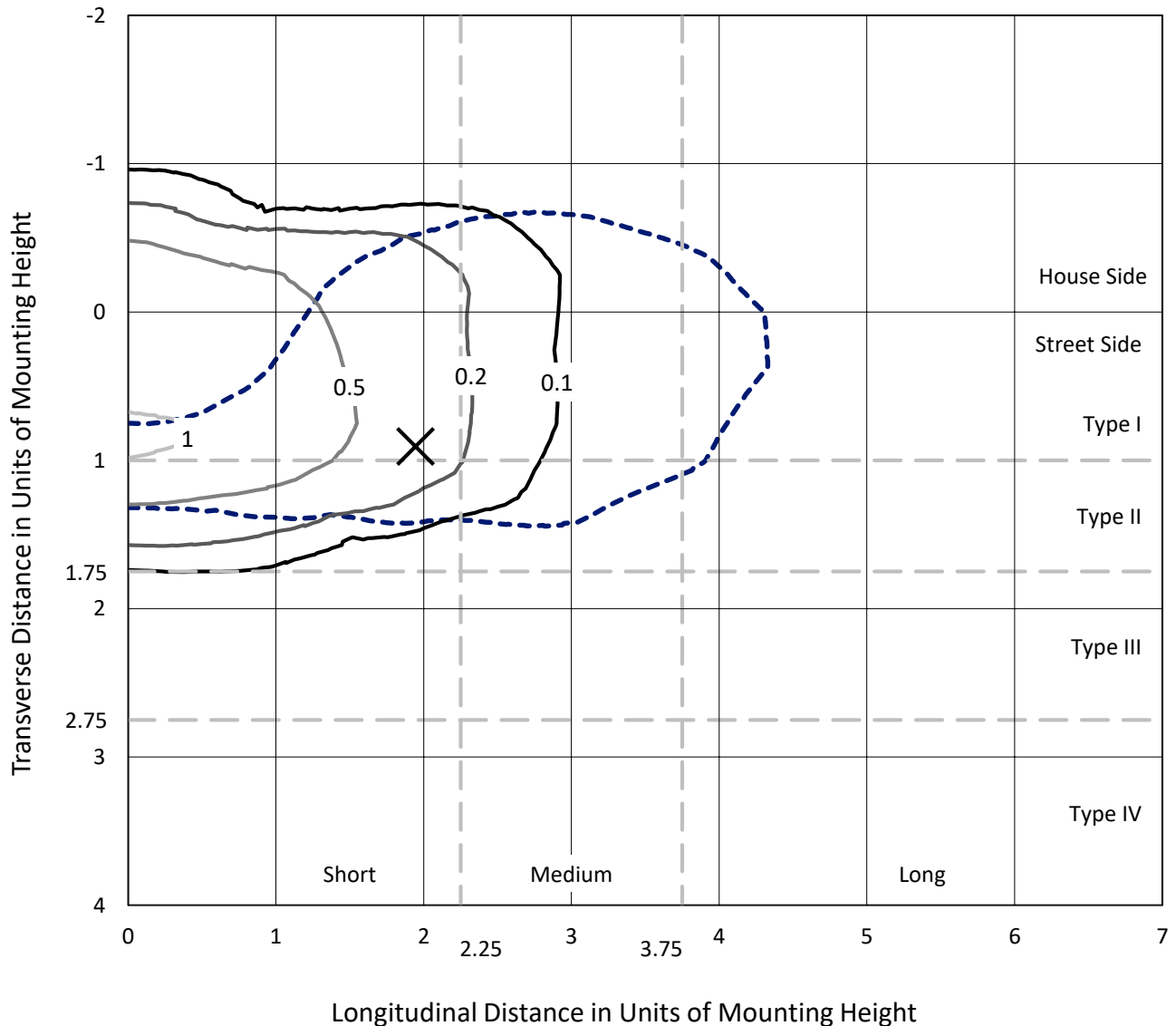
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397683  
 CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

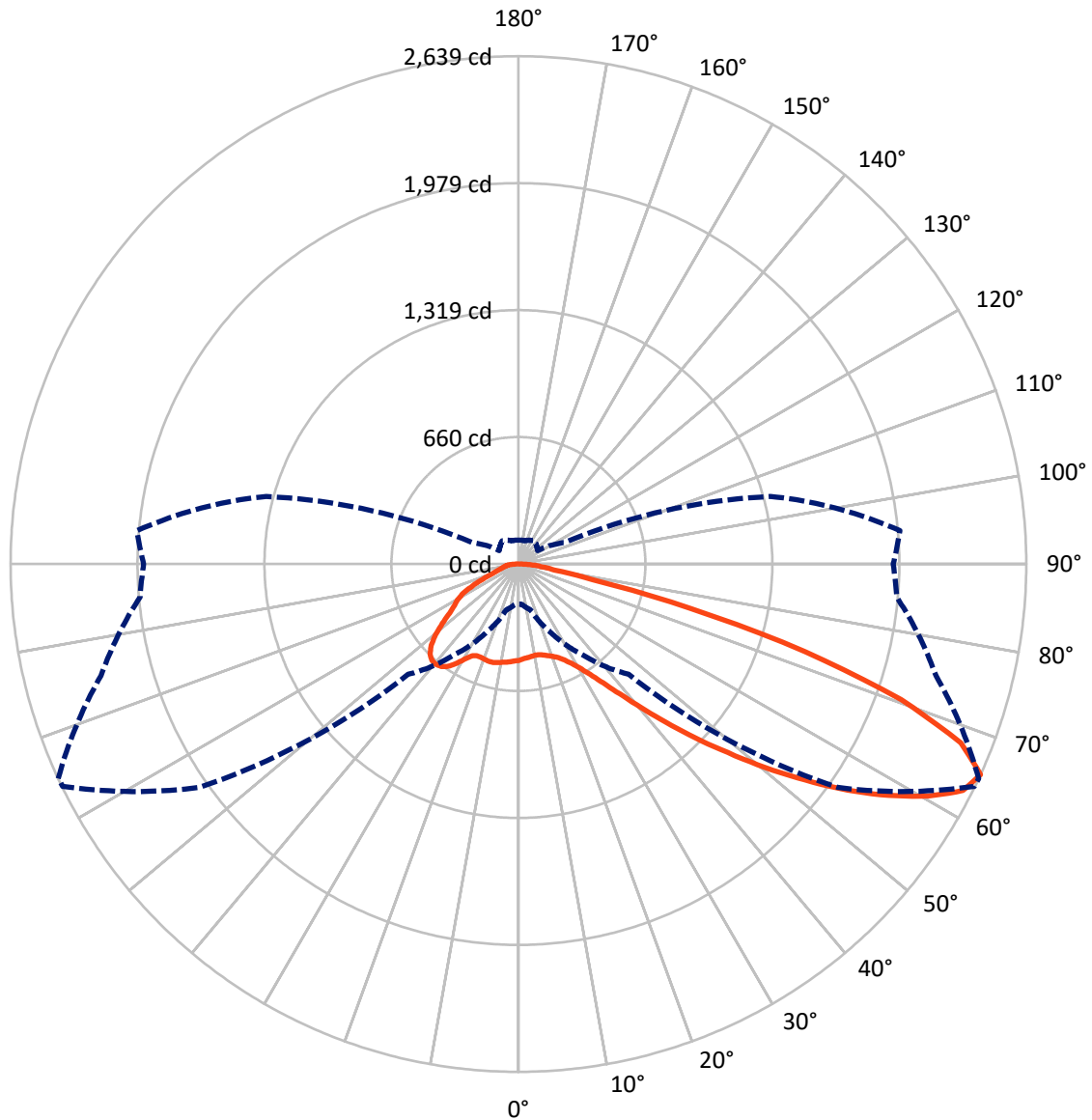


Based on 25 foot mounting height. Maximum calculated value = 1.1 fc  
 Type II - Short - Non-Cutoff

REPORT NUMBER: P397683

CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U

### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 65-Deg Vertical



REPORT NUMBER: P397683

CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1145.8	0.0	1145.8
	% Fixture	28.9	0.0	28.9
<b>Street Side</b>	Lumens	2817.2	0.0	2817.2
	% Fixture	71.1	0.0	71.1
<b>Total</b>	Lumens	3963.0	0.0	3963.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.7	1.2
10°-20°	142.4	3.6
20°-30°	253.0	6.4
30°-40°	428.0	10.8
40°-50°	745.1	18.8
50°-60°	962.9	24.3
60°-70°	842.6	21.3
70°-80°	458.3	11.6
80°-90°	82.8	2.1
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°	3963.0	100.0
0°-180°	3963.0	100.0



REPORT NUMBER: P397683

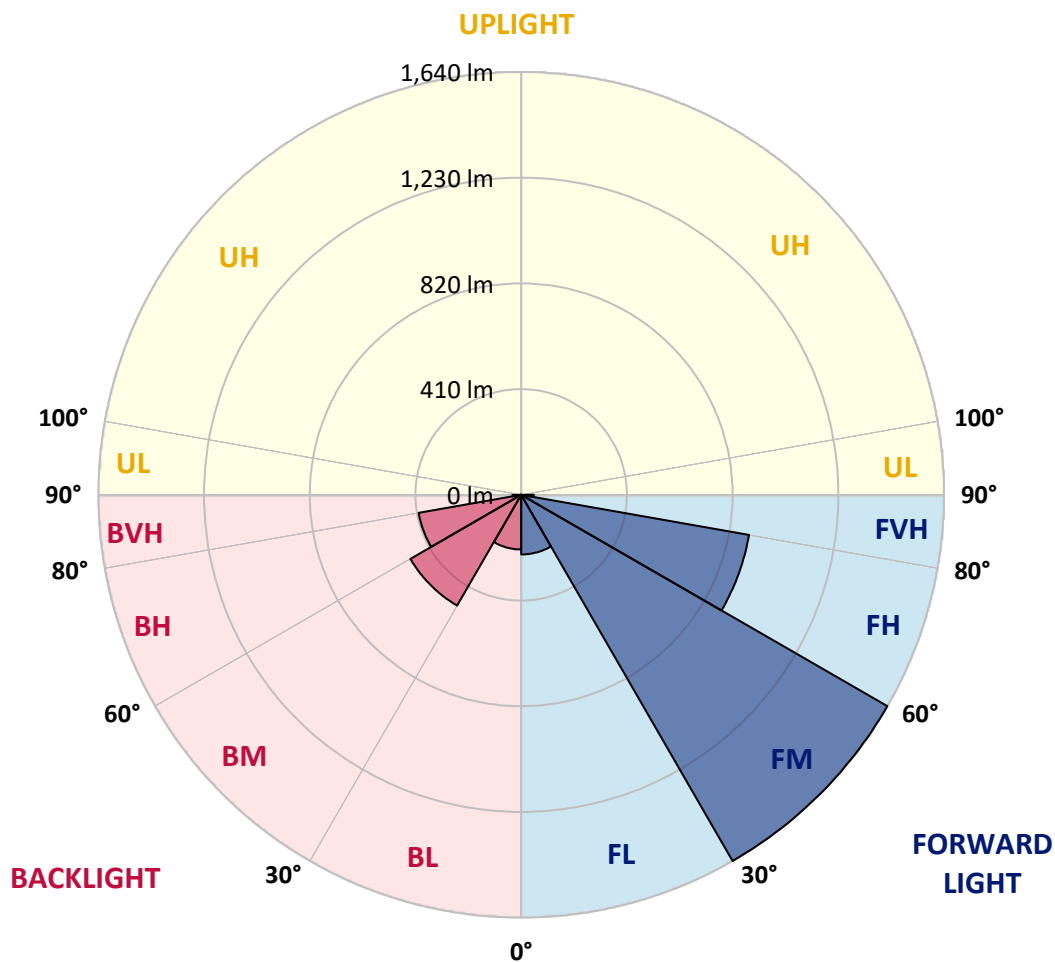
CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	231.2	5.8			
FM	(30°-60°)	1640.0	41.4			
FH	(60°-80°)	897.3	22.6			G1/1800
FVH	(80°-90°)	48.7	1.2			G1/100
BL	(0°-30°)	211.9	5.3	B1/500		
BM	(30°-60°)	496.1	12.5	B1/1000		
BH	(60°-80°)	403.7	10.2	B1/500		G1/500
BVH	(80°-90°)	34.1	0.9			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 II Short





REPORT NUMBER: P397683

CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8
2.5°	491.9	491.4	490.3	491.4	491.9	492.9	492.4	493.5	492.9	494.5	497.1
5°	479.4	478.3	477.8	480.4	482.0	484.6	485.6	489.3	488.8	491.4	495.5
7.5°	465.3	465.3	464.8	467.9	470.0	474.7	478.3	484.6	485.1	489.8	494.5
10°	454.3	454.9	454.3	456.9	460.1	465.8	472.1	480.9	481.5	488.2	492.9
12.5°	450.2	450.2	450.2	453.8	458.0	465.8	473.1	482.5	483.5	490.9	495.0
15°	455.9	456.4	455.4	459.0	463.7	473.1	479.9	489.8	490.9	497.6	500.2
17.5°	476.2	478.3	475.7	477.8	476.8	484.1	490.3	500.2	500.8	506.5	507.5
20°	516.4	518.5	514.3	511.7	502.3	501.8	504.4	512.2	512.2	515.9	513.3
22.5°	578.5	580.6	573.3	563.4	540.9	530.0	524.2	527.9	527.4	528.9	522.1
25°	660.9	660.4	651.5	633.3	597.3	570.7	556.6	550.8	550.8	547.7	539.4
27.5°	763.1	755.3	739.7	717.8	667.7	630.6	600.4	585.8	583.2	573.8	558.1
30°	872.2	866.4	844.0	812.2	754.3	706.8	656.7	627.5	626.0	605.6	582.1
32.5°	1000.5	991.1	966.1	928.0	858.6	791.8	729.2	684.9	682.3	649.9	617.6
35°	1165.3	1157.5	1109.0	1070.9	981.7	894.1	820.0	761.1	759.0	719.3	678.1
37.5°	1363.0	1342.7	1295.7	1224.3	1130.4	1026.6	932.7	858.6	856.0	812.2	760.0
40°	1539.3	1521.1	1479.3	1413.6	1312.9	1197.7	1070.4	980.7	978.1	924.8	859.1
42.5°	1669.7	1657.2	1630.1	1592.0	1520.0	1450.1	1246.2	1128.3	1123.6	1054.7	972.8
45°	1745.4	1735.5	1719.8	1729.2	1728.2	1715.1	1455.9	1304.1	1288.9	1199.7	1099.6
47.5°	1727.1	1718.2	1724.5	1797.5	1898.2	1973.8	1700.0	1484.0	1463.7	1347.4	1234.7
50°	1595.1	1598.8	1631.7	1771.4	1997.3	2165.3	1970.7	1689.0	1661.9	1496.0	1363.0
52.5°	1354.7	1363.5	1443.3	1639.0	1986.4	2289.4	2215.4	1900.8	1864.8	1641.0	1479.9
55°	1076.1	1098.5	1201.8	1407.4	1843.4	2298.3	2400.0	2113.6	2074.0	1777.2	1581.6
57.5°	796.0	829.4	948.8	1137.7	1569.6	2158.0	2492.3	2317.1	2269.1	1912.3	1689.0
60°	504.9	525.3	663.0	885.7	1201.3	1814.7	2480.3	2490.3	2448.5	2046.9	1801.2
62.5°	322.4	332.3	401.7	631.7	839.8	1343.7	2349.4	2621.2	2593.0	2169.5	1907.6
65°	207.1	211.3	246.7	388.6	571.7	811.1	2023.4	2635.3	2638.9	2246.1	1973.3
67.5°	168.5	170.6	183.6	239.9	404.3	448.1	1409.4	2435.0	2479.3	2226.3	1950.9
70°	153.4	156.0	169.5	191.4	313.0	309.3	682.3	2037.5	2110.0	2112.1	1851.3
72.5°	129.4	133.0	151.3	181.0	242.0	244.1	289.0	1451.2	1558.1	1887.8	1701.6
75°	108.0	110.1	125.7	159.6	205.0	195.1	202.9	769.4	923.8	1513.8	1542.5
77.5°	87.6	89.7	101.2	127.3	182.0	151.8	159.6	318.7	393.8	1027.6	1260.8
80°	62.6	64.7	77.7	99.1	137.7	136.7	118.4	175.8	190.9	555.5	819.0
82.5°	44.9	46.4	58.9	70.9	95.5	137.2	89.2	119.5	125.2	246.2	330.2
85°	30.3	30.3	40.7	46.9	61.6	86.6	72.0	80.9	84.5	116.8	89.2
87.5°	13.0	13.0	21.9	24.0	32.3	40.2	53.7	40.7	41.7	63.1	36.5
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: P397683

CATALOG NUMBER: ARCH-S-PA1-30-727-U-T2U

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8	500.8
2.5°	498.7	499.2	500.2	503.4	505.5	508.6	510.2	512.2	512.2	511.2	511.7
5°	497.6	499.2	502.8	508.6	512.2	518.0	522.1	525.3	526.3	525.3	525.8
7.5°	497.1	499.7	506.0	514.3	519.5	526.8	532.6	536.2	538.8	537.8	538.3
10°	495.5	499.7	507.5	518.0	525.8	533.1	538.3	539.9	541.5	540.4	539.9
12.5°	497.6	502.3	510.7	523.2	532.1	537.8	539.4	536.8	533.1	531.0	530.5
15°	501.8	506.5	514.8	527.9	535.7	537.8	534.1	525.8	517.5	512.8	512.2
17.5°	507.5	510.7	517.5	528.9	535.2	532.6	525.3	515.4	509.1	505.5	506.0
20°	511.2	511.2	516.4	525.3	530.5	528.4	519.5	508.6	498.7	494.0	492.4
22.5°	516.4	513.8	514.3	522.1	529.5	526.3	507.5	488.2	474.2	468.9	468.4
25°	530.5	523.2	518.5	523.2	540.4	514.8	477.3	454.9	441.8	437.1	437.6
27.5°	547.7	537.8	527.9	535.7	549.3	488.8	438.7	413.1	405.3	401.7	403.2
30°	564.9	551.9	538.8	567.0	543.0	448.1	389.1	364.1	357.3	354.7	356.8
32.5°	596.7	575.4	559.7	608.7	523.7	401.7	335.4	312.5	306.2	303.1	302.0
35°	649.9	622.8	607.2	645.3	496.6	350.0	286.4	270.2	263.4	256.6	255.6
37.5°	726.6	693.8	679.7	666.1	458.5	298.9	248.8	237.9	228.0	217.5	217.0
40°	818.4	775.7	765.2	675.5	405.8	250.9	222.7	212.3	199.8	189.9	190.4
42.5°	924.3	869.6	847.1	672.9	340.6	225.3	204.0	192.5	181.5	172.7	172.1
45°	1037.5	975.4	923.8	654.6	275.9	207.6	192.5	178.9	168.0	158.1	157.0
47.5°	1162.7	1093.3	994.7	619.2	228.0	195.1	185.7	166.4	156.5	150.2	150.2
50°	1288.9	1206.0	1059.9	565.4	199.8	185.7	175.8	159.6	151.8	146.6	146.6
52.5°	1396.9	1323.4	1113.7	501.3	182.0	177.9	169.0	156.5	148.1	143.4	142.9
55°	1501.8	1432.4	1161.7	437.6	167.4	167.4	167.4	153.9	144.5	140.3	139.8
57.5°	1606.1	1547.1	1211.7	395.9	154.4	158.6	164.3	150.8	141.4	137.7	137.2
60°	1724.0	1684.9	1269.6	366.7	142.9	149.2	160.1	147.1	136.1	133.0	132.5
62.5°	1849.2	1849.2	1322.3	325.5	132.5	141.4	153.9	142.4	131.5	128.8	128.3
65°	1947.2	1989.5	1356.2	263.9	122.1	133.5	146.6	136.1	125.2	124.7	123.6
67.5°	1958.7	2025.0	1334.8	199.3	112.7	125.2	139.3	129.4	118.9	118.9	117.4
70°	1876.3	1943.6	1268.1	149.2	105.9	116.8	129.9	121.0	111.1	112.2	109.5
72.5°	1738.6	1755.3	1102.2	117.9	98.1	108.0	118.4	111.6	102.8	102.8	99.1
75°	1557.1	1464.2	800.7	98.6	88.7	97.5	106.9	101.2	93.4	90.8	88.7
77.5°	1239.4	1061.0	465.3	85.0	80.9	87.6	93.9	89.7	82.9	77.2	77.2
80°	755.3	621.8	205.5	73.5	71.5	76.7	80.9	76.2	70.4	64.7	63.1
82.5°	287.4	239.9	99.6	63.1	62.6	65.7	68.9	64.2	60.0	57.4	49.6
85°	78.8	72.5	68.3	52.7	51.6	51.1	54.8	52.7	46.9	38.6	34.4
87.5°	29.7	33.9	37.0	32.3	34.4	31.8	36.5	33.4	29.7	19.3	17.2
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)