

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: P397705

Luminaire Tested: **ARCH-S-PA1-30-740-U-T4W**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P397705  
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-PA1-30-740-U-T4W  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 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: 4700 lumens  
Efficiency: N/A  
Efficacy: 151.6 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 - G2

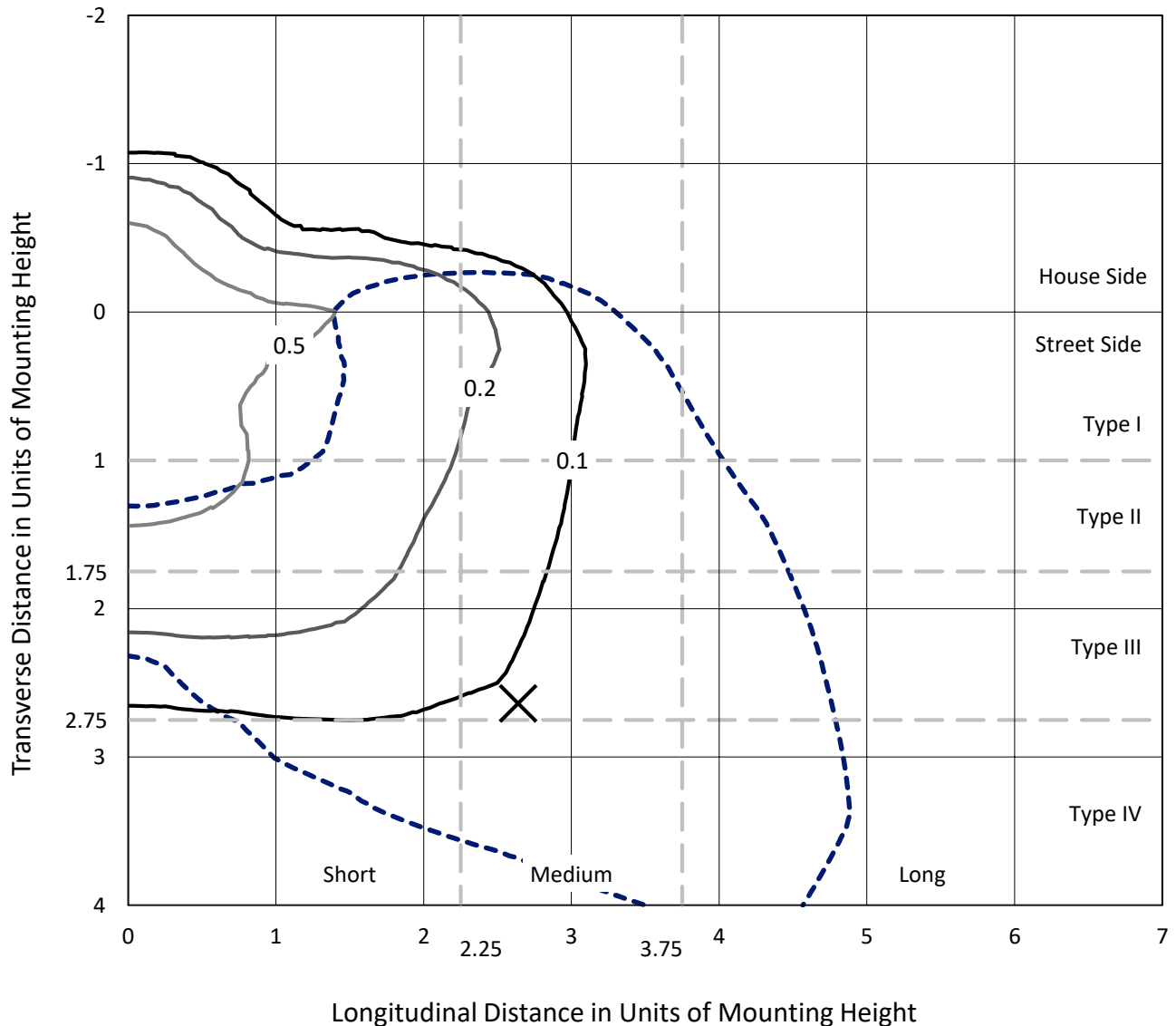
Input Watts (W): 31  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P397705  
 CATALOG NUMBER: ARCH-S-PA1-30-740-U-T4W

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

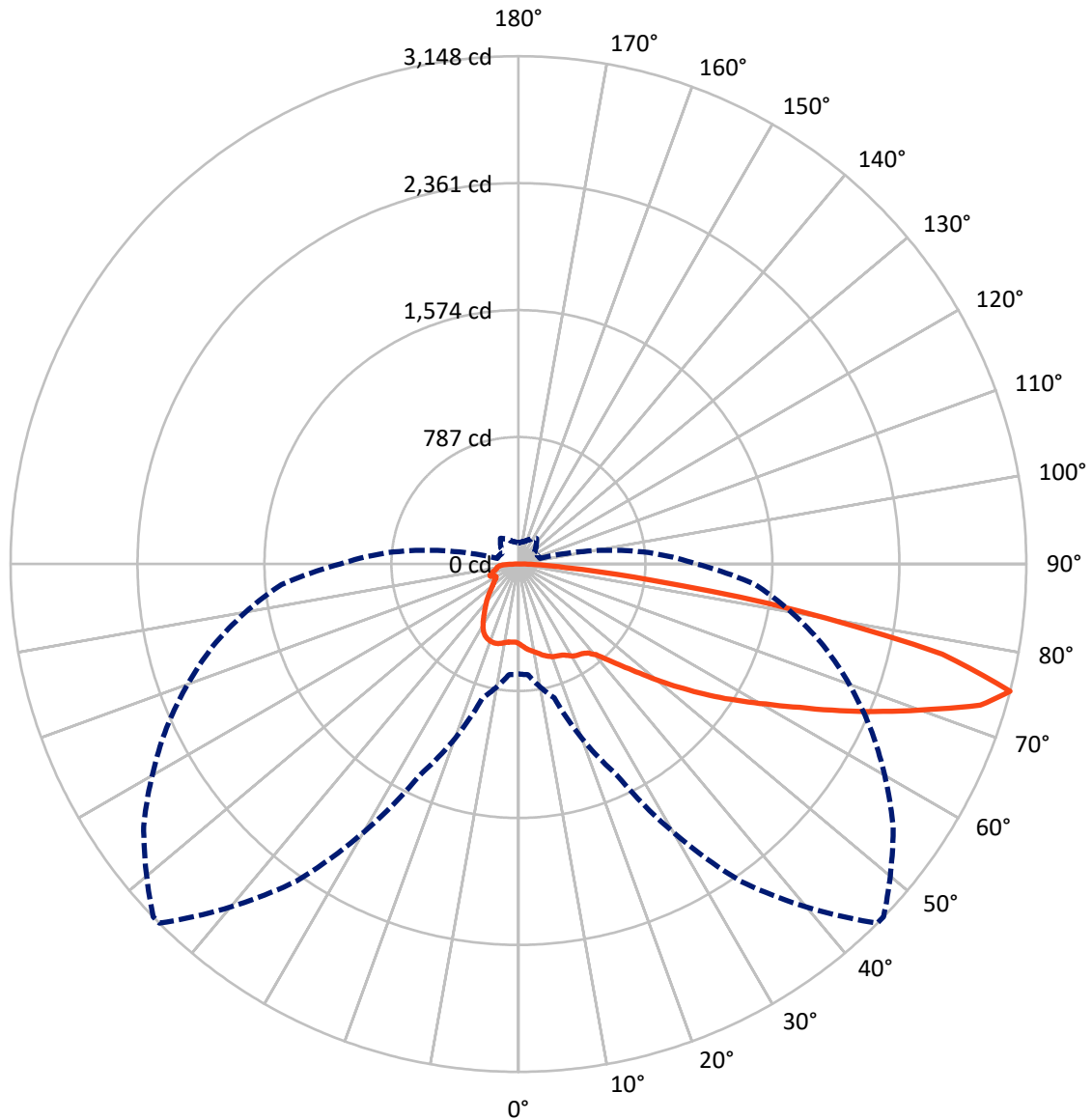


Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397705

CATALOG NUMBER: ARCH-S-PA1-30-740-U-T4W

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P397705

CATALOG NUMBER: ARCH-S-PA1-30-740-U-T4W

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1038.7	0.0	1038.7
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	3661.3	0.0	3661.3
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	4700.0	0.0	4700.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.8	1.0
10°-20°	155.4	3.3
20°-30°	264.8	5.6
30°-40°	371.1	7.9
40°-50°	545.2	11.6
50°-60°	867.7	18.5
60°-70°	1234.3	26.3
70°-80°	1033.4	22.0
80°-90°	179.3	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°	4700.0	100.0
0°-180°	4700.0	100.0



REPORT NUMBER: P397705

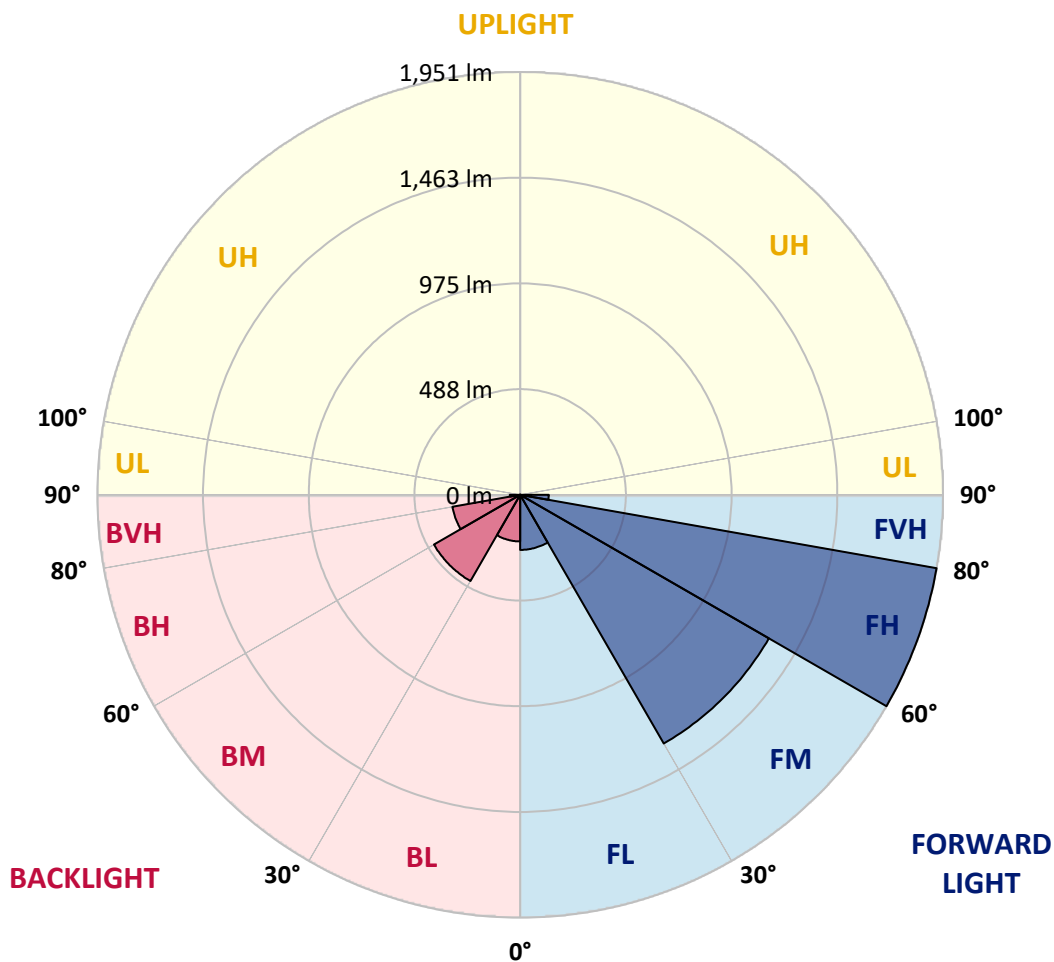
CATALOG NUMBER: ARCH-S-PA1-30-740-U-T4W

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	254.1	5.4			
FM	(30°-60°)	1324.8	28.2			
FH	(60°-80°)	1950.6	41.5			G2/5000
FVH	(80°-90°)	131.9	2.8			G2/225
BL	(0°-30°)	215.0	4.6	B1/500		
BM	(30°-60°)	459.1	9.8	B1/1000		
BH	(60°-80°)	317.1	6.7	B1/500		G1/500
BVH	(80°-90°)	47.5	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-G2**

Type IV Medium





REPORT NUMBER: P397705

CATALOG NUMBER: ARCH-S-PA1-30-740-U-T4W

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	493.6	493.6	493.6	493.6	493.6	493.6	493.6	493.6	493.6	493.6	493.6
2.5°	521.9	519.4	518.1	518.1	513.1	509.9	509.3	504.9	501.1	497.4	494.2
5°	552.0	550.1	546.4	543.2	536.3	527.5	526.3	516.8	507.4	498.6	491.1
7.5°	579.6	575.9	571.5	565.2	553.9	542.0	540.1	526.9	513.7	500.5	490.5
10°	602.9	599.1	592.8	584.0	569.6	555.1	553.3	539.4	525.6	509.9	495.5
12.5°	624.9	621.7	612.3	600.4	583.4	570.2	568.3	556.4	542.0	524.4	505.5
15°	643.7	640.6	630.5	616.7	597.2	587.2	584.7	573.4	558.9	540.1	520.6
17.5°	653.1	653.1	642.4	627.4	609.2	601.6	599.7	585.9	572.7	554.5	535.1
20°	656.3	657.5	650.0	631.8	616.1	612.9	611.0	599.7	584.7	567.1	548.9
22.5°	658.1	660.6	654.4	633.6	620.5	618.6	617.3	609.8	597.8	580.9	562.7
25°	664.4	664.4	660.0	636.8	626.1	625.5	625.5	621.1	612.9	598.5	580.3
27.5°	673.8	673.2	667.6	643.7	638.7	640.6	639.9	639.3	633.6	619.2	599.7
30°	689.5	689.5	683.3	657.5	654.4	662.5	663.2	664.4	655.6	633.0	617.3
32.5°	713.4	710.9	704.6	671.3	666.3	673.8	675.1	674.5	666.9	645.6	638.0
35°	786.9	781.2	758.6	702.1	677.0	681.4	682.0	685.1	686.4	669.4	665.7
37.5°	915.6	908.1	873.5	774.9	710.9	700.2	699.6	707.7	714.7	699.6	699.6
40°	1055.7	1049.4	1029.3	900.5	773.7	738.5	736.0	743.5	752.3	741.7	744.8
42.5°	1176.2	1181.3	1183.1	1033.7	867.9	810.1	803.2	792.5	806.3	796.9	809.5
45°	1266.7	1264.2	1298.7	1170.0	989.7	899.9	890.5	861.6	879.2	878.6	906.2
47.5°	1362.7	1358.3	1372.8	1298.1	1128.5	1009.8	995.4	952.7	979.0	997.3	1043.1
50°	1453.8	1455.1	1460.1	1399.2	1279.2	1143.6	1125.4	1068.2	1105.9	1144.2	1208.9
52.5°	1572.5	1563.7	1557.4	1517.2	1448.2	1283.0	1271.1	1205.7	1258.5	1303.7	1389.7
55°	1676.1	1670.5	1666.7	1664.8	1589.5	1436.8	1424.3	1356.5	1432.5	1464.5	1591.3
57.5°	1786.6	1783.5	1803.6	1835.6	1805.5	1593.2	1580.0	1514.7	1599.5	1622.1	1809.9
60°	1867.7	1869.5	1924.8	2006.4	1985.7	1762.8	1747.1	1689.3	1762.1	1782.2	2028.4
62.5°	1868.3	1887.1	2015.2	2161.6	2185.4	1958.1	1939.9	1877.1	1929.2	1929.2	2224.4
65°	1689.9	1711.3	1998.9	2199.9	2387.6	2190.4	2172.9	2074.3	2093.7	2067.4	2408.4
67.5°	1512.2	1537.3	1808.0	2203.0	2529.6	2439.1	2418.4	2271.5	2238.2	2171.6	2537.1
70°	1394.1	1411.7	1637.8	2162.2	2615.0	2699.1	2683.4	2458.6	2351.8	2258.9	2510.1
72.5°	1173.7	1167.4	1383.5	1968.1	2662.7	2994.3	2981.1	2662.1	2450.4	2217.4	2140.8
75°	681.4	688.9	858.5	1441.9	2400.2	3148.1	3146.9	2836.0	2407.1	1958.7	1475.2
77.5°	196.6	202.2	282.0	633.6	1517.9	2685.3	2771.3	2593.6	2034.7	1396.0	764.9
80°	86.0	90.4	122.5	211.0	653.7	1754.0	1829.3	1754.0	1227.1	640.6	300.2
82.5°	50.9	54.0	79.8	130.6	313.4	834.6	936.3	817.6	529.4	271.9	124.3
85°	28.9	30.1	45.8	82.9	197.2	292.0	327.8	307.1	258.1	154.5	65.3
87.5°	13.2	13.8	22.6	38.9	110.5	98.6	102.4	135.6	149.5	94.2	32.7
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: P397705

CATALOG NUMBER: ARCH-S-PA1-30-740-U-T4W

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	493.6	493.6	493.6	493.6	493.6	493.6	493.6	493.6	493.6	493.6	493.6
2.5°	493.0	491.1	487.3	486.1	484.2	484.8	485.4	485.4	486.1	484.2	484.2
5°	488.0	484.8	481.0	481.0	481.0	486.1	490.5	493.0	494.2	494.2	493.0
7.5°	486.1	482.3	477.9	479.2	480.4	486.7	494.9	503.0	505.5	505.5	504.3
10°	489.8	486.1	482.9	484.8	488.0	493.0	499.3	506.8	513.1	513.7	513.1
12.5°	498.6	494.2	491.1	494.9	498.6	501.8	504.9	508.0	516.2	517.5	517.5
15°	513.1	508.7	504.9	508.0	509.3	509.3	509.3	509.3	517.5	518.7	518.7
17.5°	527.5	523.7	520.0	520.6	516.8	511.8	509.9	509.3	513.7	517.5	518.1
20°	541.3	538.2	534.4	528.1	518.7	509.3	506.2	506.2	508.7	514.3	514.3
22.5°	556.4	552.6	546.4	531.9	516.2	503.0	499.9	501.8	504.9	512.4	511.8
25°	573.4	568.3	557.7	530.7	508.0	492.3	493.0	498.6	504.3	512.4	512.4
27.5°	592.2	585.3	563.9	520.6	489.8	474.8	480.4	493.6	501.8	510.6	511.8
30°	612.9	606.6	569.0	503.0	460.3	446.5	460.3	481.7	494.2	502.4	504.3
32.5°	638.0	633.0	573.4	480.4	422.0	410.1	430.2	456.6	476.6	486.1	488.0
35°	669.4	664.4	579.0	454.7	386.2	373.7	391.9	418.9	445.2	457.2	460.9
37.5°	710.3	702.7	584.0	427.0	356.1	341.6	350.4	374.9	398.8	415.1	419.5
40°	762.4	750.5	588.4	395.6	329.7	313.4	316.5	328.4	342.3	356.7	362.4
42.5°	835.9	812.0	589.1	362.4	302.7	287.6	286.4	290.1	290.1	290.1	292.0
45°	938.2	893.0	590.3	331.0	275.1	259.4	255.6	254.3	244.9	226.7	225.4
47.5°	1067.6	999.1	596.0	304.6	246.2	232.4	227.3	222.3	204.7	185.9	182.1
50°	1233.4	1122.2	607.3	279.5	221.7	212.3	206.0	194.0	174.6	160.1	156.4
52.5°	1424.3	1268.5	617.9	253.1	203.5	197.2	189.7	175.2	154.5	145.7	144.4
55°	1643.5	1431.8	639.3	229.8	187.8	183.4	176.5	162.7	147.0	140.7	140.0
57.5°	1867.7	1614.6	669.4	209.1	172.7	170.2	170.2	158.3	148.2	145.7	145.7
60°	2083.7	1771.6	646.2	189.7	158.9	160.1	172.1	168.9	161.4	164.5	166.4
62.5°	2251.4	1863.9	524.4	174.0	148.8	160.1	190.9	190.9	182.1	180.9	180.9
65°	2322.9	1862.6	368.6	162.0	145.1	175.8	212.9	202.8	179.6	170.8	168.9
67.5°	2304.7	1781.0	254.3	153.9	143.8	192.2	222.9	194.7	168.3	160.8	155.1
70°	2144.6	1608.3	195.9	146.3	141.9	185.3	219.8	185.3	159.5	152.6	147.6
72.5°	1730.1	1289.9	162.7	138.8	134.4	171.4	209.1	176.5	152.6	145.1	140.0
75°	1103.4	811.4	137.5	128.7	119.9	153.9	194.7	167.7	145.1	135.0	131.3
77.5°	530.7	349.8	119.9	116.8	108.0	142.6	180.2	156.4	135.0	126.9	124.3
80°	214.8	160.1	104.2	104.9	99.2	135.6	170.2	145.7	125.0	116.2	111.8
82.5°	111.8	92.9	87.9	90.4	90.4	129.4	162.7	136.9	116.2	112.4	98.0
85°	60.3	57.8	67.8	72.8	78.5	116.8	151.3	127.5	106.1	91.1	87.9
87.5°	29.5	37.7	38.3	44.0	54.6	93.6	127.5	106.8	88.5	73.5	72.2
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)