

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: P348684

Luminaire Tested: **ARCH-N-PA1-40-830-U-T4W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P348684
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-PA1-40-830-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 740mA LIGHT ENGINE WITH 16 LEDS AND
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4402 lumens
Efficiency: N/A
Efficacy: 107.4 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

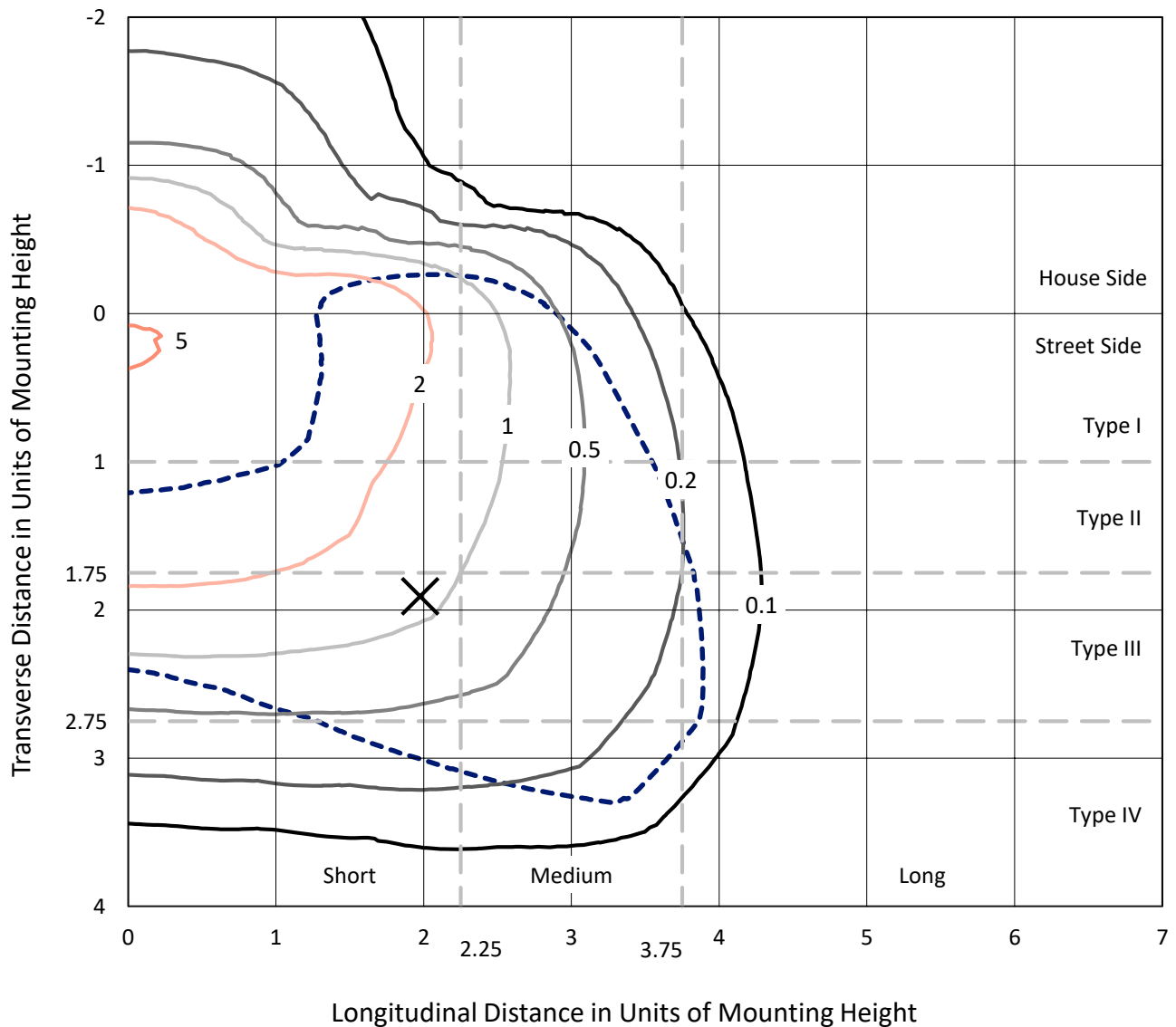
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P348684
 CATALOG NUMBER: ARCH-N-PA1-40-830-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

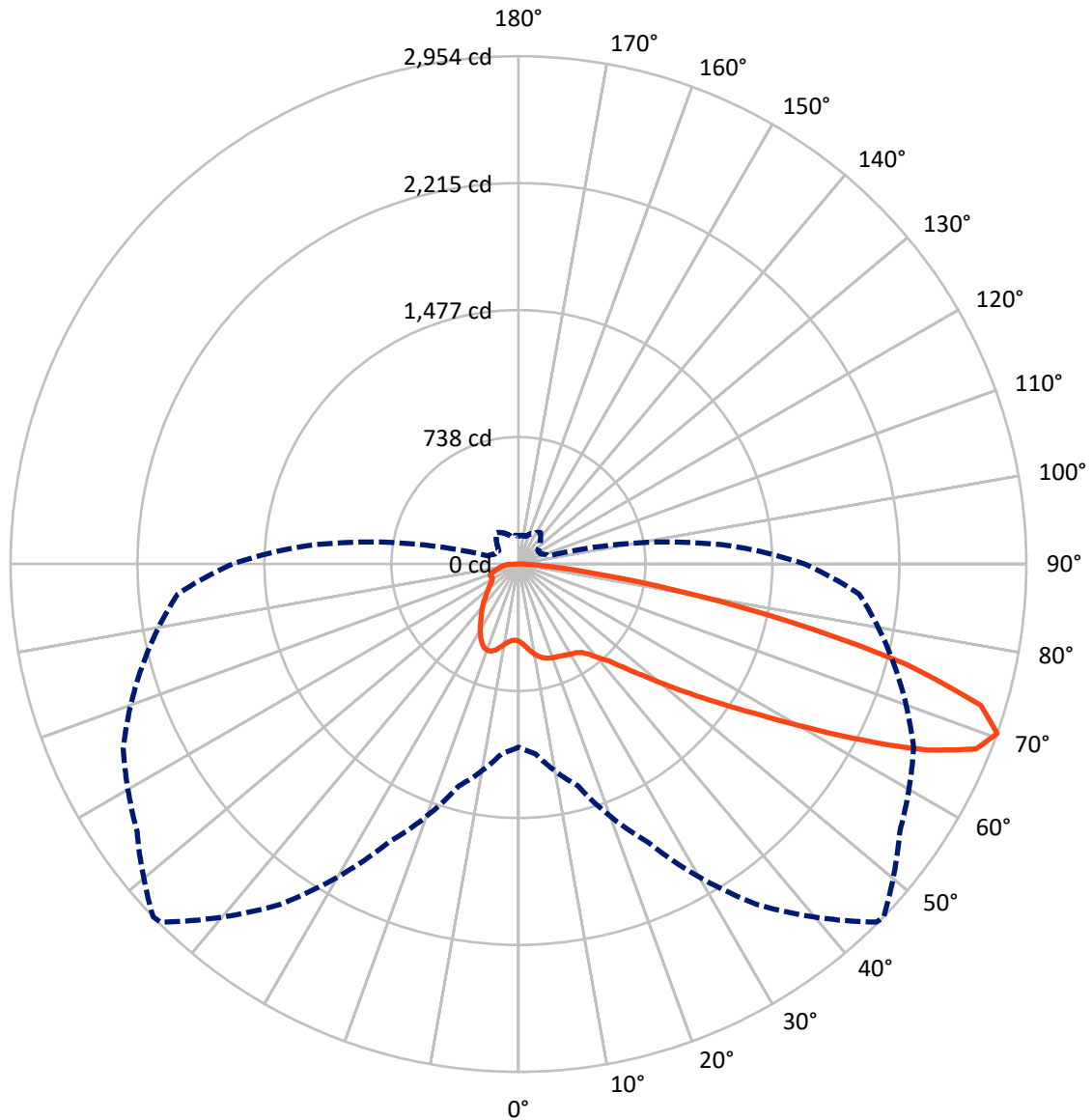
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P348684
CATALOG NUMBER: ARCH-N-PA1-40-830-U-T4W

Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P348684

CATALOG NUMBER: ARCH-N-PA1-40-830-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1008.9	0.0	1008.9
	% Fixture	22.9	0.0	22.9
Street Side	Lumens	3393.1	0.0	3393.1
	% Fixture	77.1	0.0	77.1
Total	Lumens	4402.0	0.0	4402.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.7	1.0
10°-20°	152.3	3.5
20°-30°	254.0	5.8
30°-40°	360.4	8.2
40°-50°	530.1	12.0
50°-60°	897.8	20.4
60°-70°	1274.4	29.0
70°-80°	774.2	17.6
80°-90°	113.0	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°	4402.0	100.0
0°-180°	4402.0	100.0

Coefficient of Utilization



REPORT NUMBER: P348684

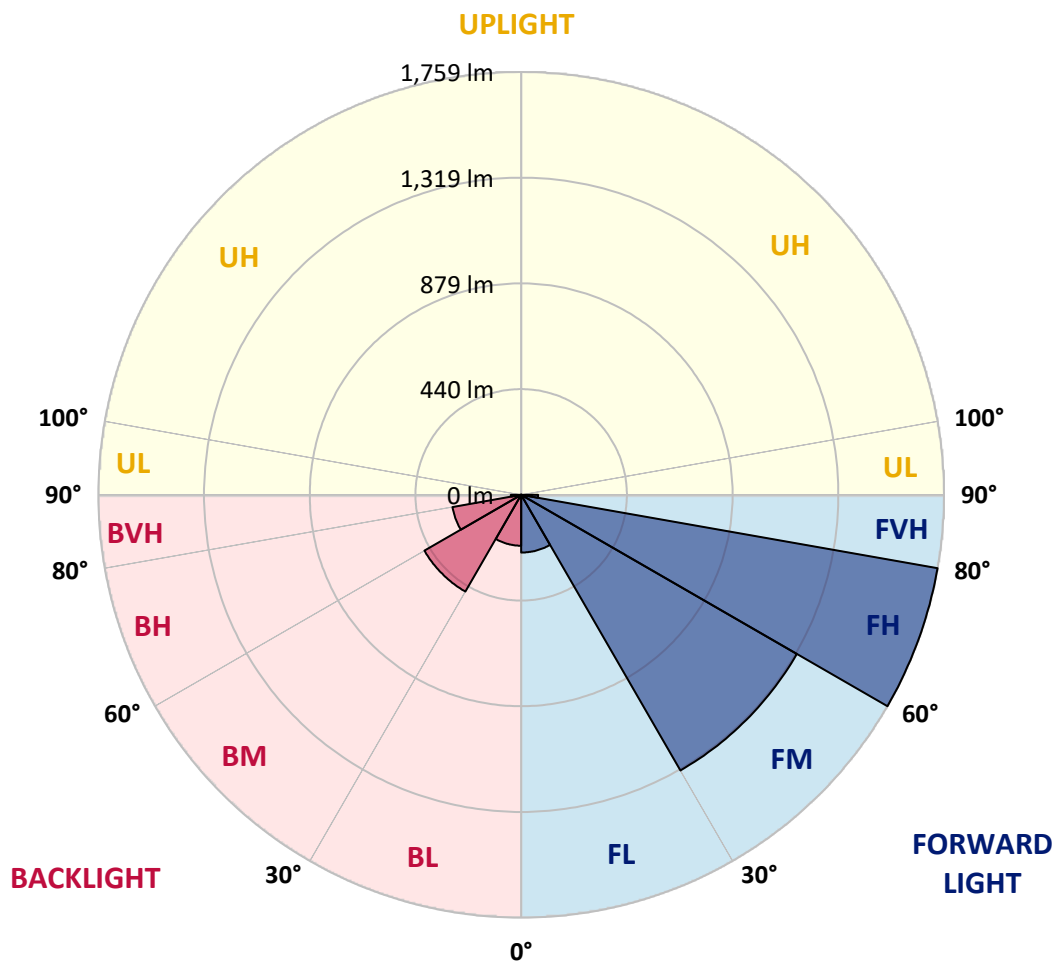
CATALOG NUMBER: ARCH-N-PA1-40-830-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	240.2	5.5			
FM	(30°-60°)	1323.9	30.1			
FH	(60°-80°)	1758.6	39.9			G1/1800
FVH	(80°-90°)	70.4	1.6			G1/100
BL	(0°-30°)	211.8	4.8	B1/500		
BM	(30°-60°)	464.4	10.6	B1/1000		
BH	(60°-80°)	290.1	6.6	B1/500		G1/500
BVH	(80°-90°)	42.6	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





REPORT NUMBER: P348684

CATALOG NUMBER: ARCH-N-PA1-40-830-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	448.5	448.5	448.5	448.5	448.5	448.5	448.5	448.5	448.5	448.5	448.5
2.5°	470.9	471.2	471.8	470.3	466.1	464.9	464.4	460.1	457.2	453.0	449.4
5°	508.6	508.9	508.0	503.8	494.4	487.5	486.9	477.0	467.9	458.3	451.0
7.5°	547.9	548.4	545.5	537.5	524.4	512.4	511.6	498.0	484.3	469.7	458.9
10°	582.7	580.9	576.2	565.1	549.6	534.8	534.2	520.0	504.2	486.6	472.1
12.5°	605.9	604.4	598.4	584.8	567.8	554.2	553.0	539.9	524.6	505.3	487.9
15°	618.7	619.8	611.6	596.3	579.7	568.2	567.2	557.8	544.1	524.7	504.8
17.5°	620.4	621.3	613.4	598.2	584.7	576.8	576.4	570.2	560.3	541.6	520.8
20°	610.7	611.3	604.8	592.3	583.5	581.0	580.9	578.2	570.8	554.2	534.0
22.5°	596.7	597.2	592.5	583.5	580.4	584.2	585.3	584.2	578.9	563.4	544.4
25°	593.2	592.9	588.1	578.9	581.5	589.5	590.8	591.3	587.7	574.1	557.7
27.5°	610.0	608.9	599.7	585.0	586.6	596.3	598.1	602.4	600.2	588.3	572.8
30°	658.3	656.5	637.7	607.9	599.7	604.7	607.0	613.9	614.3	604.4	592.8
32.5°	740.0	737.7	704.0	650.6	621.9	613.3	615.4	625.8	631.4	623.7	611.2
35°	843.2	840.6	796.3	723.4	658.9	629.7	631.2	639.5	650.6	639.8	623.2
37.5°	950.7	944.6	901.9	809.0	717.8	664.8	664.8	665.9	671.1	648.5	637.4
40°	1057.7	1051.5	1013.0	909.6	794.1	720.1	716.6	693.3	689.1	669.6	665.9
42.5°	1157.1	1155.3	1132.6	1023.3	883.5	774.5	769.7	730.0	730.9	718.9	719.0
45°	1262.9	1262.9	1244.3	1138.1	987.8	861.9	857.0	798.7	807.8	802.2	815.6
47.5°	1349.2	1351.9	1349.3	1257.8	1109.1	972.9	964.1	893.9	919.3	938.4	977.4
50°	1437.3	1441.5	1442.0	1389.0	1255.6	1104.8	1094.9	1020.3	1076.8	1131.7	1208.3
52.5°	1565.2	1574.7	1536.9	1519.9	1435.2	1261.5	1251.7	1182.9	1277.2	1354.2	1486.3
55°	1683.8	1675.5	1648.5	1659.1	1627.4	1439.9	1432.5	1372.1	1500.4	1600.5	1772.1
57.5°	1748.0	1747.4	1774.5	1819.7	1834.7	1659.8	1653.7	1594.9	1752.2	1827.4	2040.4
60°	1823.3	1824.3	1891.5	1994.1	2056.2	1933.7	1931.0	1886.4	1996.7	2039.2	2250.8
62.5°	1833.8	1852.8	1968.5	2145.1	2263.5	2253.7	2259.7	2149.0	2215.4	2208.2	2407.9
65°	1712.6	1737.6	1947.0	2190.7	2469.6	2603.6	2609.2	2413.1	2387.9	2352.7	2464.1
67.5°	1464.0	1501.1	1728.5	2091.4	2537.5	2862.3	2870.1	2617.8	2531.0	2401.6	2328.9
70°	1065.4	1106.5	1335.5	1786.2	2416.4	2945.0	2953.9	2708.3	2536.5	2262.3	1988.1
72.5°	643.6	675.8	864.6	1315.0	2039.5	2794.4	2810.2	2593.5	2315.8	1916.2	1468.1
75°	282.6	303.7	418.0	757.8	1460.1	2312.0	2331.7	2219.9	1881.6	1392.6	867.7
77.5°	120.4	126.4	171.4	329.2	825.4	1579.8	1607.0	1622.0	1276.6	757.8	366.7
80°	75.0	77.4	97.0	149.0	386.3	887.3	916.5	954.4	633.9	278.5	128.1
82.5°	45.6	48.4	64.5	90.1	201.1	402.2	416.2	442.9	246.0	120.4	66.3
85°	27.4	29.4	39.5	56.9	114.5	158.2	158.0	174.8	115.8	77.4	35.0
87.5°	13.1	14.6	21.1	29.5	57.7	59.4	55.6	63.0	70.4	50.8	17.6
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: P348684

CATALOG NUMBER: ARCH-N-PA1-40-830-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	448.5	448.5	448.5	448.5	448.5	448.5	448.5	448.5	448.5	448.5	448.5
2.5°	448.2	447.6	445.6	444.1	443.8	442.9	442.2	442.6	443.2	443.4	443.4
5°	448.0	446.4	443.8	442.8	444.1	445.9	448.2	451.2	453.0	454.4	455.3
7.5°	455.3	452.1	449.2	448.6	451.3	456.2	461.3	467.6	472.0	475.0	475.6
10°	467.3	463.4	460.5	461.1	466.0	472.9	480.1	488.2	494.9	498.9	499.2
12.5°	481.2	477.4	474.7	477.3	485.2	493.7	501.2	508.3	514.3	518.4	518.4
15°	497.1	494.4	491.3	497.1	508.0	515.5	518.7	522.1	525.5	528.5	527.9
17.5°	512.5	509.9	508.3	515.2	526.5	530.0	527.9	525.3	525.3	527.0	527.3
20°	525.8	523.5	524.6	531.3	537.2	533.6	525.8	517.6	514.3	515.2	516.1
22.5°	537.4	536.3	539.5	542.6	538.4	525.8	511.3	500.3	496.2	495.9	496.2
25°	550.9	550.8	554.7	549.0	530.3	506.9	487.5	476.8	474.5	476.3	479.4
27.5°	567.8	569.4	571.4	550.5	513.7	478.5	458.7	451.3	453.6	458.0	460.8
30°	589.3	593.9	589.6	546.7	489.9	445.9	427.1	425.0	431.2	437.3	440.3
32.5°	610.3	617.4	607.1	536.9	459.2	411.4	396.8	396.2	403.7	409.8	414.0
35°	627.1	641.2	620.2	517.5	423.6	379.6	368.9	364.9	367.6	374.7	379.5
37.5°	649.1	672.5	629.3	487.8	385.1	353.4	340.9	331.6	329.2	332.0	334.4
40°	689.4	720.2	633.5	446.4	347.4	327.2	314.6	300.8	291.4	284.4	284.6
42.5°	755.0	782.5	630.8	396.1	312.6	301.6	287.3	271.5	256.1	240.4	239.2
45°	861.7	875.0	622.6	342.7	282.0	274.8	261.4	245.6	225.1	207.3	205.6
47.5°	1032.4	1003.0	610.0	296.2	255.0	252.0	239.7	221.5	199.8	185.4	184.2
50°	1265.1	1187.9	603.8	259.1	231.2	232.1	222.1	202.8	182.3	171.7	170.5
52.5°	1543.5	1403.1	615.7	230.5	212.1	215.3	207.7	189.7	172.5	164.2	163.0
55°	1832.3	1626.1	628.5	209.7	194.0	200.2	197.6	182.7	167.2	159.5	158.5
57.5°	2079.5	1792.6	602.9	192.8	177.9	187.6	189.8	178.4	164.5	157.6	156.4
60°	2235.2	1859.6	535.7	177.0	165.1	177.5	185.3	177.2	165.6	165.0	164.1
62.5°	2309.0	1853.7	434.9	164.5	157.1	173.1	188.6	183.9	177.6	183.0	183.5
65°	2275.8	1765.1	323.9	156.2	151.4	174.8	198.6	196.7	181.1	186.5	187.3
67.5°	2057.7	1553.8	239.8	149.0	145.1	179.4	216.6	201.0	174.3	178.2	175.8
70°	1663.1	1231.8	185.0	140.9	138.6	178.8	224.8	198.4	166.9	167.8	161.3
72.5°	1146.9	840.0	150.5	133.3	129.3	163.0	219.0	192.1	160.7	153.8	145.2
75°	623.7	450.9	127.9	125.5	112.8	143.1	208.5	187.6	155.2	146.0	141.2
77.5°	245.4	187.1	111.0	114.8	98.7	126.4	196.7	179.0	147.5	135.4	133.0
80°	100.2	95.5	92.0	99.3	84.8	110.6	182.6	168.9	138.3	125.6	120.8
82.5°	56.8	59.4	71.6	78.3	68.8	101.8	175.8	160.7	127.3	112.5	106.8
85°	29.1	34.8	49.9	56.2	50.6	86.6	161.9	140.7	102.1	86.2	86.6
87.5°	14.0	19.4	31.5	35.3	32.8	62.7	121.0	102.0	79.5	63.0	61.0
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)