

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: P397804

Luminaire Tested: **ARCH-S-PA1-40-827-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397804
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-PA1-40-827-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4456 lumens
Efficiency: N/A
Efficacy: 111.4 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): 40
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

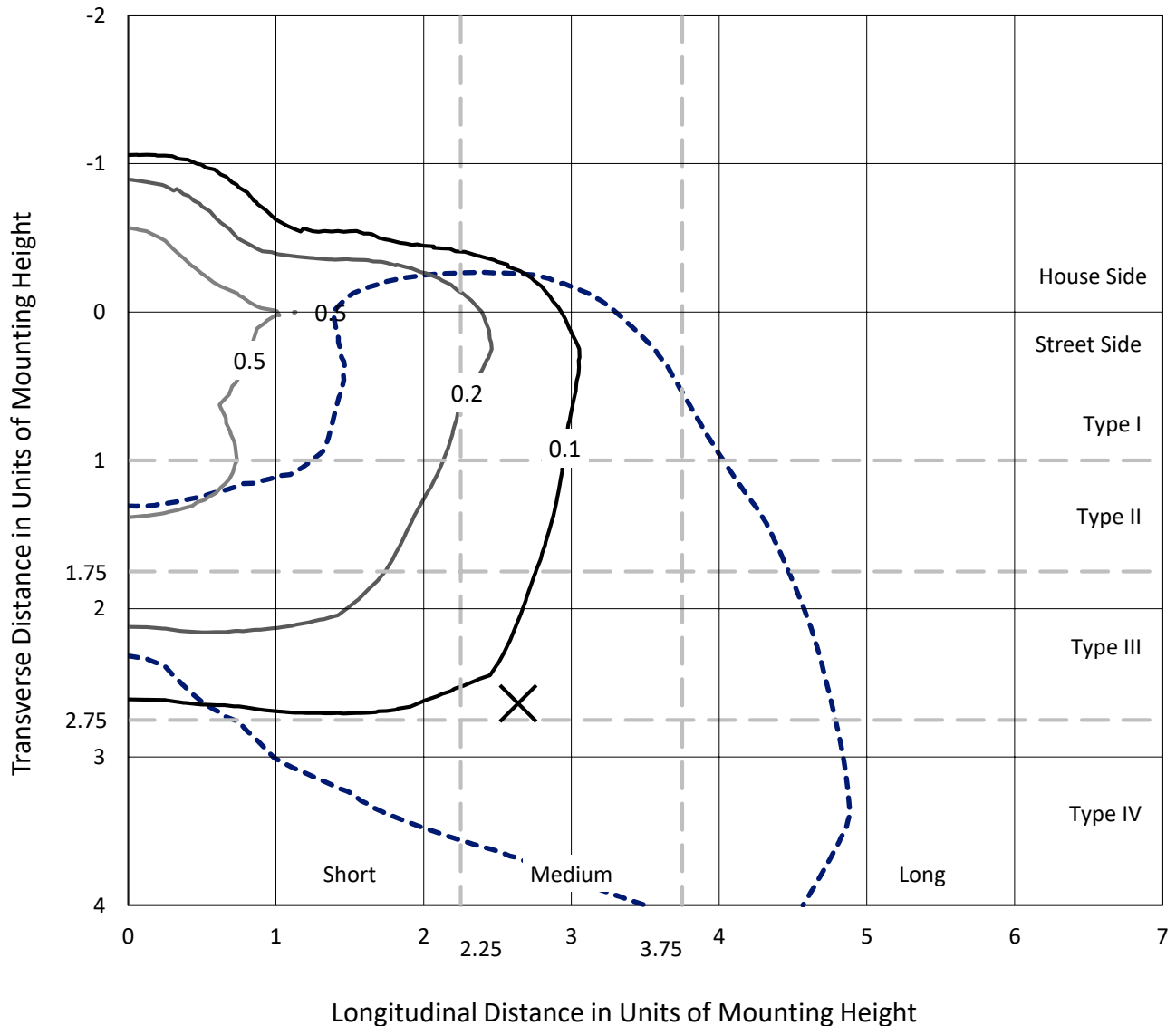


REPORT NUMBER: P397804

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T4W

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

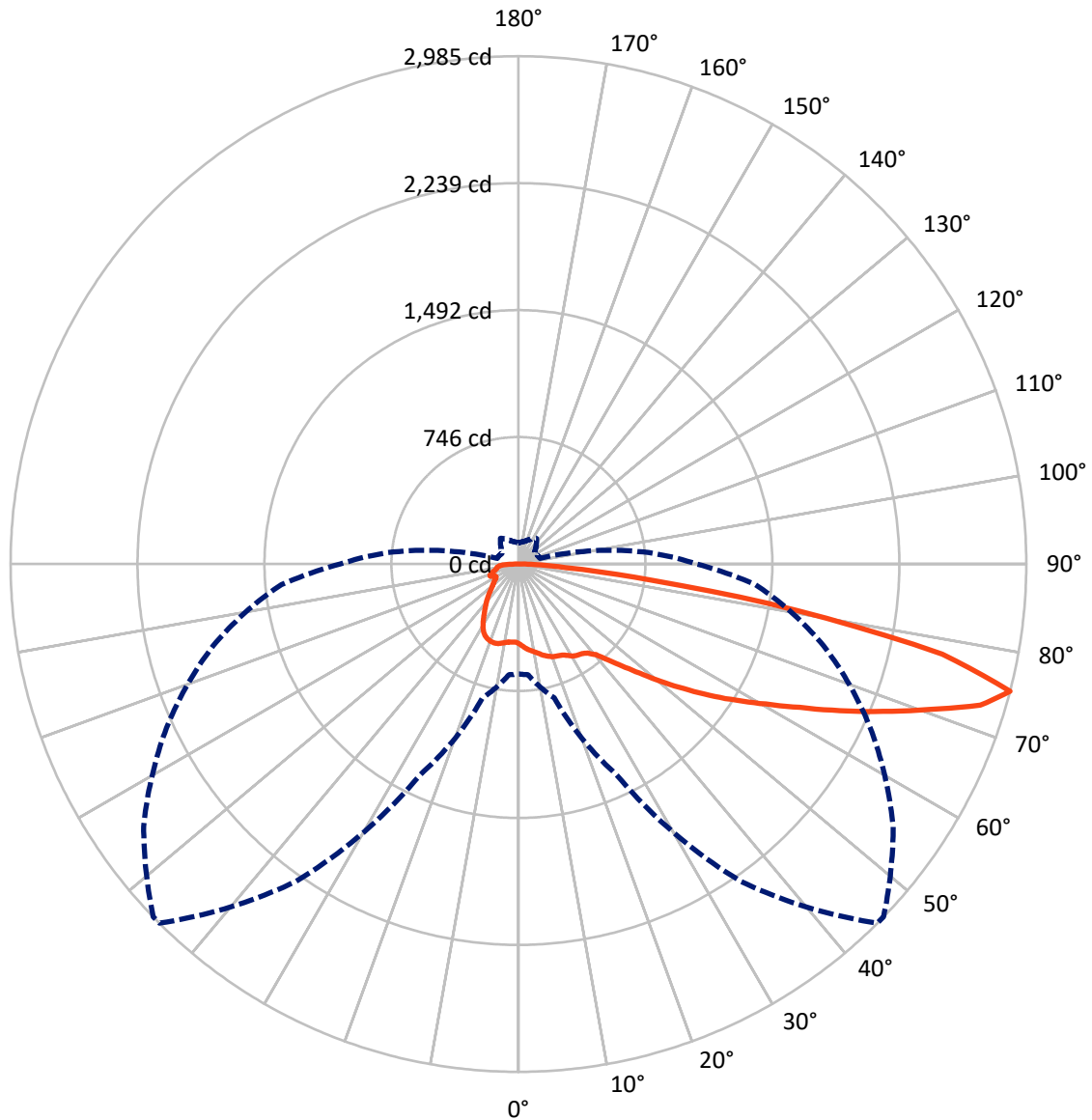


Based on 25 foot mounting height. Maximum calculated value = 0.9 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P397804

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T4W

Luminous Intensity Polar Plot



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

REPORT NUMBER: P397804

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T4W

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	984.8	0.0	984.8
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	3471.2	0.0	3471.2
	% Fixture	77.9	0.0	77.9
Total	Lumens	4456.0	0.0	4456.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.3	1.0
10°-20°	147.3	3.3
20°-30°	251.1	5.6
30°-40°	351.8	7.9
40°-50°	516.9	11.6
50°-60°	822.6	18.5
60°-70°	1170.2	26.3
70°-80°	979.8	22.0
80°-90°	170.0	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°	4456.0	100.0
0°-180°	4456.0	100.0

Coefficient of Utilization



REPORT NUMBER: P397804

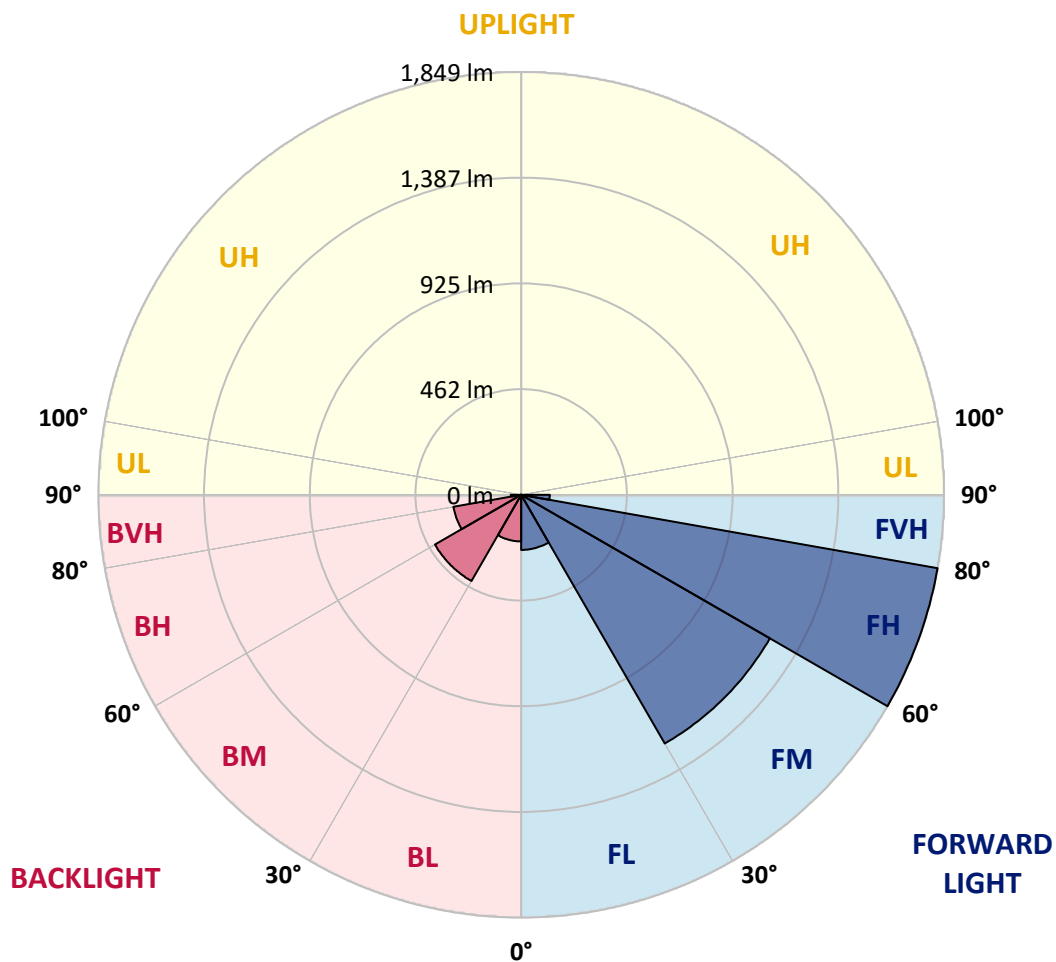
CATALOG NUMBER: ARCH-S-PA1-40-827-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	240.9	5.4			
FM (30°-60°)	1256.0	28.2			
FH (60°-80°)	1849.3	41.5			G2/5000
FVH (80°-90°)	125.0	2.8			G2/225
BL (0°-30°)	203.8	4.6	B1/500		
BM (30°-60°)	435.3	9.8	B1/1000		
BH (60°-80°)	300.6	6.7	B1/500		G1/500
BVH (80°-90°)	45.0	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: P397804

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T4W

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0
2.5°	494.8	492.4	491.2	491.2	486.4	483.5	482.9	478.7	475.1	471.5	468.6
5°	523.3	521.6	518.0	515.0	508.5	500.1	498.9	490.0	481.1	472.7	465.6
7.5°	549.5	546.0	541.8	535.9	525.1	513.8	512.0	499.5	487.0	474.5	465.0
10°	571.6	568.0	562.0	553.7	540.0	526.3	524.5	511.4	498.3	483.5	469.8
12.5°	592.4	589.4	580.5	569.2	553.1	540.6	538.8	527.5	513.8	497.2	479.3
15°	610.3	607.3	597.8	584.7	566.2	556.7	554.3	543.6	529.9	512.0	493.6
17.5°	619.2	619.2	609.1	594.8	577.5	570.4	568.6	555.5	543.0	525.7	507.3
20°	622.2	623.4	616.2	599.0	584.1	581.1	579.3	568.6	554.3	537.6	520.4
22.5°	624.0	626.4	620.4	600.7	588.2	586.5	585.3	578.1	566.8	550.7	533.5
25°	629.9	629.9	625.8	603.7	593.6	593.0	593.0	588.8	581.1	567.4	550.1
27.5°	638.9	638.3	632.9	610.3	605.5	607.3	606.7	606.1	600.7	587.1	568.6
30°	653.7	653.7	647.8	623.4	620.4	628.1	628.7	629.9	621.6	600.2	585.3
32.5°	676.4	674.0	668.0	636.5	631.7	638.9	640.0	639.5	632.3	612.1	604.9
35°	746.0	740.7	719.2	665.6	641.8	646.0	646.6	649.6	650.8	634.7	631.1
37.5°	868.1	860.9	828.2	734.7	674.0	663.9	663.3	671.0	677.6	663.3	663.3
40°	1000.9	994.9	975.8	853.8	733.5	700.2	697.8	704.9	713.3	703.2	706.1
42.5°	1115.2	1119.9	1121.7	980.0	822.8	768.1	761.5	751.4	764.5	755.6	767.5
45°	1200.9	1198.5	1231.3	1109.2	938.3	853.2	844.3	816.9	833.5	833.0	859.1
47.5°	1292.0	1287.8	1301.5	1230.7	1069.9	957.4	943.7	903.2	928.2	945.5	988.9
50°	1378.3	1379.5	1384.3	1326.5	1212.8	1084.2	1066.9	1012.8	1048.5	1084.8	1146.1
52.5°	1490.9	1482.5	1476.6	1438.5	1373.0	1216.4	1205.1	1143.2	1193.2	1236.0	1317.6
55°	1589.1	1583.7	1580.2	1578.4	1506.9	1362.3	1350.3	1286.0	1358.1	1388.5	1508.7
57.5°	1693.9	1690.9	1710.0	1740.3	1711.7	1510.5	1498.0	1436.1	1516.5	1537.9	1715.9
60°	1770.7	1772.5	1824.9	1902.3	1882.6	1671.3	1656.4	1601.6	1670.7	1689.7	1923.1
62.5°	1771.3	1789.2	1910.6	2049.3	2072.0	1856.4	1839.2	1779.6	1829.0	1829.0	2108.9
65°	1602.2	1622.4	1895.1	2085.7	2263.7	2076.7	2060.1	1966.6	1985.0	1960.0	2283.3
67.5°	1433.7	1457.5	1714.1	2088.6	2398.2	2312.5	2292.9	2153.5	2122.0	2058.9	2405.4
70°	1321.8	1338.4	1552.8	2049.9	2479.2	2559.0	2544.1	2331.0	2229.7	2141.6	2379.8
72.5°	1112.8	1106.8	1311.6	1866.0	2524.5	2838.8	2826.3	2523.9	2323.2	2102.3	2029.7
75°	646.0	653.1	813.9	1367.0	2275.6	2984.7	2983.5	2688.8	2282.1	1857.0	1398.6
77.5°	186.4	191.7	267.3	600.7	1439.1	2545.9	2627.5	2459.0	1929.1	1323.6	725.2
80°	81.6	85.7	116.1	200.1	619.8	1662.9	1734.4	1662.9	1163.4	607.3	284.6
82.5°	48.2	51.2	75.6	123.8	297.1	791.3	887.7	775.2	501.9	257.8	117.9
85°	27.4	28.6	43.5	78.6	187.0	276.9	310.8	291.1	244.7	146.5	61.9
87.5°	12.5	13.1	21.4	36.9	104.8	93.5	97.0	128.6	141.7	89.3	31.0
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: P397804

CATALOG NUMBER: ARCH-S-PA1-40-827-U-T4W

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0	468.0
2.5°	467.4	465.6	462.0	460.8	459.0	459.6	460.2	460.2	460.8	459.0	459.0
5°	462.6	459.6	456.1	456.1	456.1	460.8	465.0	467.4	468.6	468.6	467.4
7.5°	460.8	457.3	453.1	454.3	455.5	461.4	469.2	476.9	479.3	479.3	478.1
10°	464.4	460.8	457.9	459.6	462.6	467.4	473.3	480.5	486.4	487.0	486.4
12.5°	472.7	468.6	465.6	469.2	472.7	475.7	478.7	481.7	489.4	490.6	490.6
15°	486.4	482.3	478.7	481.7	482.9	482.9	482.9	482.9	490.6	491.8	491.8
17.5°	500.1	496.6	493.0	493.6	490.0	485.2	483.5	482.9	487.0	490.6	491.2
20°	513.2	510.3	506.7	500.7	491.8	482.9	479.9	479.9	482.3	487.6	487.6
22.5°	527.5	523.9	518.0	504.3	489.4	476.9	473.9	475.7	478.7	485.8	485.2
25°	543.6	538.8	528.7	503.1	481.7	466.8	467.4	472.7	478.1	485.8	485.8
27.5°	561.5	554.9	534.7	493.6	464.4	450.1	455.5	468.0	475.7	484.1	485.2
30°	581.1	575.1	539.4	476.9	436.4	423.3	436.4	456.7	468.6	476.3	478.1
32.5°	604.9	600.2	543.6	455.5	400.1	388.8	407.8	432.8	451.9	460.8	462.6
35°	634.7	629.9	549.0	431.1	366.2	354.3	371.5	397.1	422.1	433.4	437.0
37.5°	673.4	666.2	553.7	404.9	337.6	323.9	332.2	355.4	378.1	393.6	397.7
40°	722.8	711.5	557.9	375.1	312.6	297.1	300.1	311.4	324.5	338.2	343.5
42.5°	792.5	769.8	558.5	343.5	287.0	272.7	271.5	275.1	275.1	275.1	276.9
45°	889.5	846.6	559.7	313.8	260.8	245.9	242.3	241.1	232.2	214.9	213.7
47.5°	1012.2	947.3	565.0	288.8	233.4	220.3	215.5	210.8	194.1	176.2	172.7
50°	1169.3	1064.0	575.7	264.9	210.2	201.2	195.3	184.0	165.5	151.8	148.3
52.5°	1350.3	1202.7	585.9	239.9	192.9	187.0	179.8	166.1	146.5	138.1	136.9
55°	1558.1	1357.5	606.1	217.9	178.0	173.9	167.3	154.2	139.3	133.4	132.8
57.5°	1770.7	1530.8	634.7	198.3	163.7	161.4	161.4	150.0	140.5	138.1	138.1
60°	1975.5	1679.6	612.7	179.8	150.6	151.8	163.1	160.2	153.0	156.0	157.8
62.5°	2134.5	1767.1	497.2	164.9	141.1	151.8	181.0	181.0	172.7	171.5	171.5
65°	2202.4	1765.9	349.5	153.6	137.5	166.7	201.8	192.3	170.3	161.9	160.2
67.5°	2185.1	1688.5	241.1	145.9	136.3	182.2	211.4	184.6	159.6	152.4	147.1
70°	2033.3	1524.8	185.8	138.7	134.6	175.6	208.4	175.6	151.2	144.7	139.9
72.5°	1640.3	1222.9	154.2	131.6	127.4	162.5	198.3	167.3	144.7	137.5	132.8
75°	1046.1	769.2	130.4	122.1	113.7	145.9	184.6	159.0	137.5	128.0	124.4
77.5°	503.1	331.6	113.7	110.7	102.4	135.2	170.9	148.3	128.0	120.3	117.9
80°	203.6	151.8	98.8	99.4	94.1	128.6	161.4	138.1	118.5	110.1	106.0
82.5°	106.0	88.1	83.4	85.7	85.7	122.7	154.2	129.8	110.1	106.6	92.9
85°	57.2	54.8	64.3	69.1	74.4	110.7	143.5	120.9	100.6	86.3	83.4
87.5°	28.0	35.7	36.3	41.7	51.8	88.7	120.9	101.2	84.0	69.7	68.5
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)