

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: P397825

Luminaire Tested: **ARCH-S-PA1-50-727-U-T2R**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397825
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-50-727-U-T2R
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6617 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 54
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

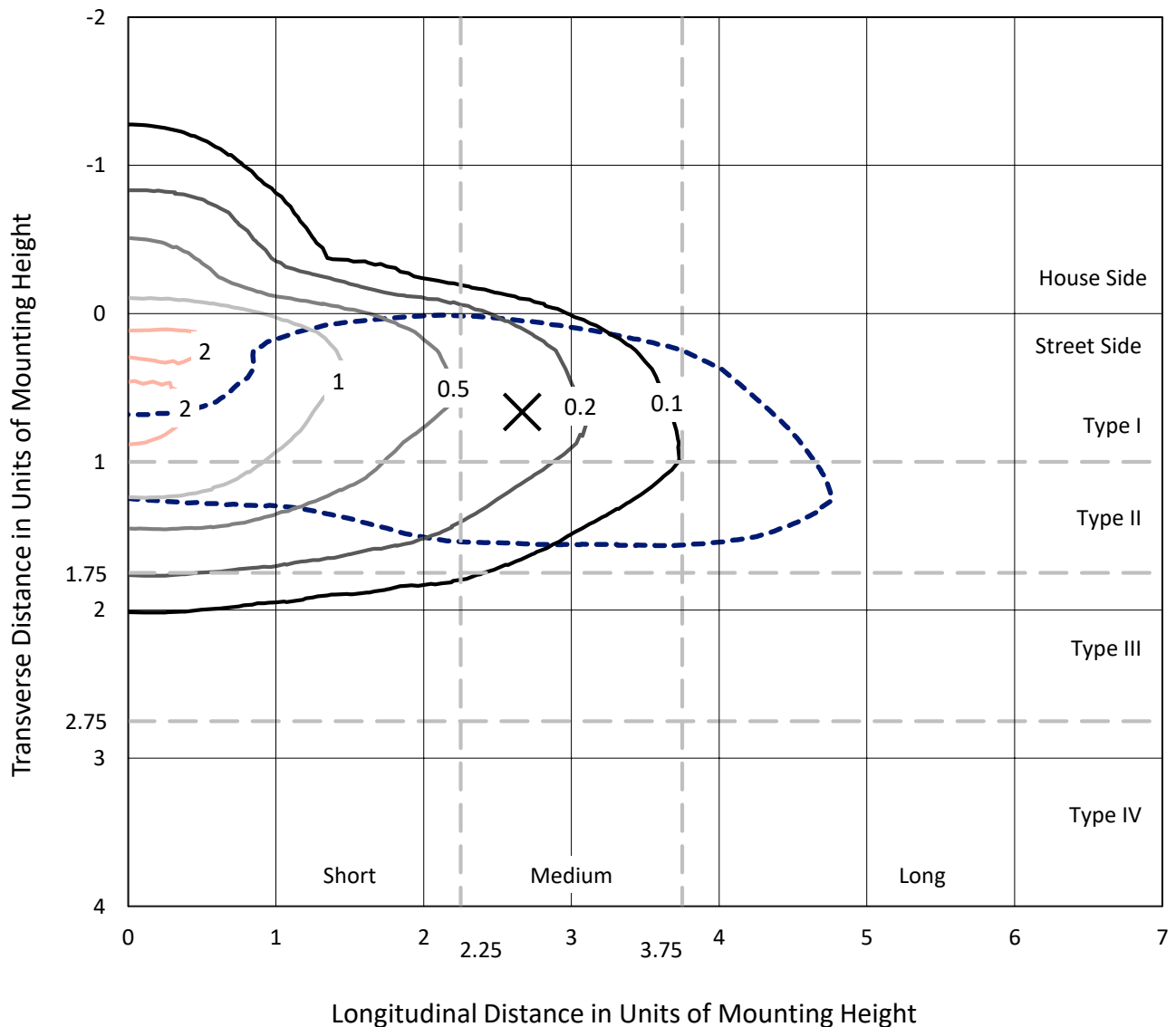


REPORT NUMBER: P397825

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T2R

Iso-Footcandle Lines of Horizontal Illumination

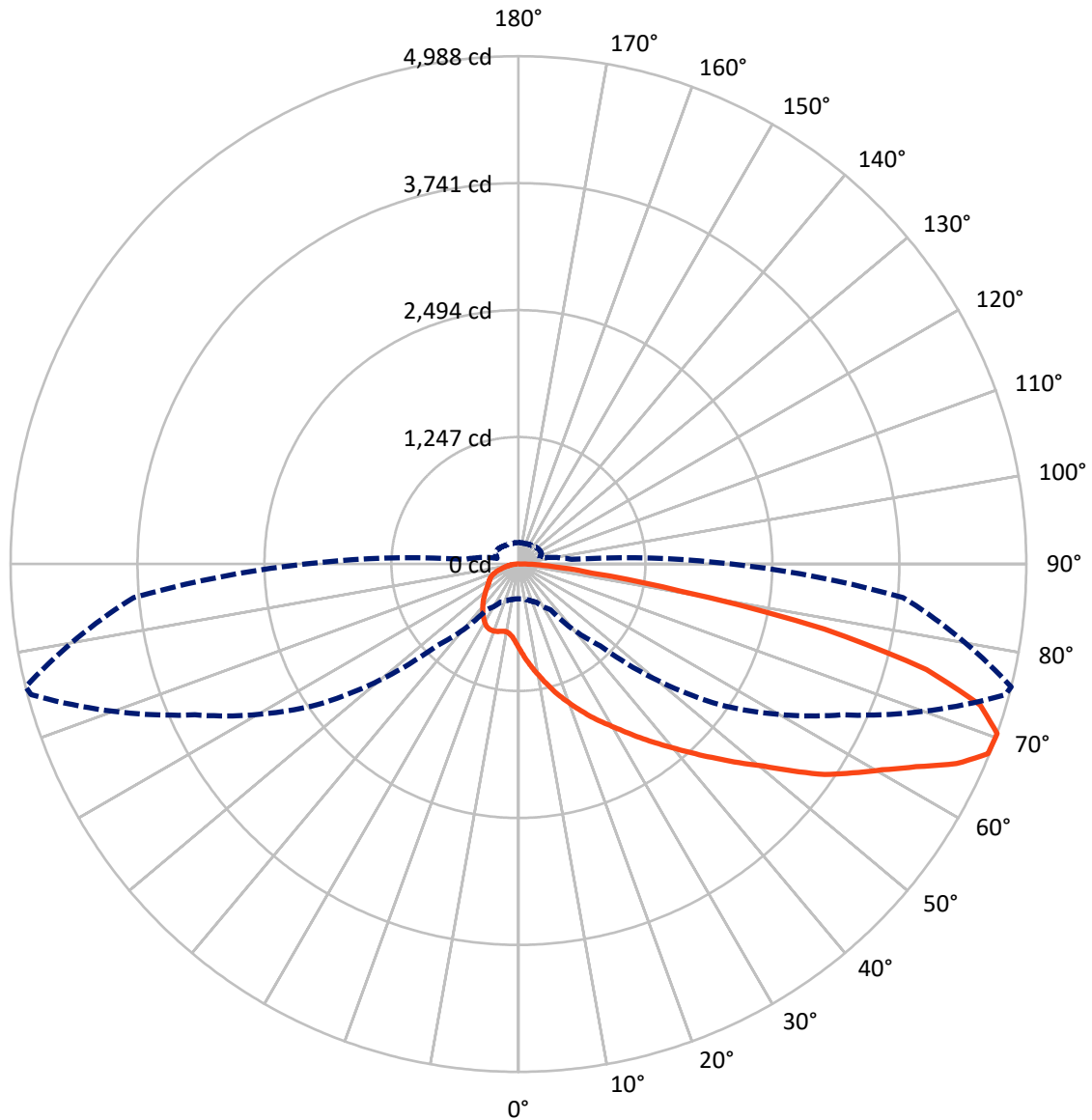
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type II - Medium - Non-Cutoff

REPORT NUMBER: P397825
CATALOG NUMBER: ARCH-S-PA1-50-727-U-T2R

Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



REPORT NUMBER: P397825

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1080.3	0.0	1080.3
	% Fixture	16.3	0.0	16.3
Street Side	Lumens	5536.7	0.0	5536.7
	% Fixture	83.7	0.0	83.7
Total	Lumens	6617.0	0.0	6617.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.0	1.3
10°-20°	292.2	4.4
20°-30°	522.8	7.9
30°-40°	845.7	12.8
40°-50°	1223.5	18.5
50°-60°	1400.3	21.2
60°-70°	1288.1	19.5
70°-80°	796.6	12.0
80°-90°	161.8	2.4
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°	6617.0	100.0
0°-180°	6617.0	100.0



REPORT NUMBER: P397825

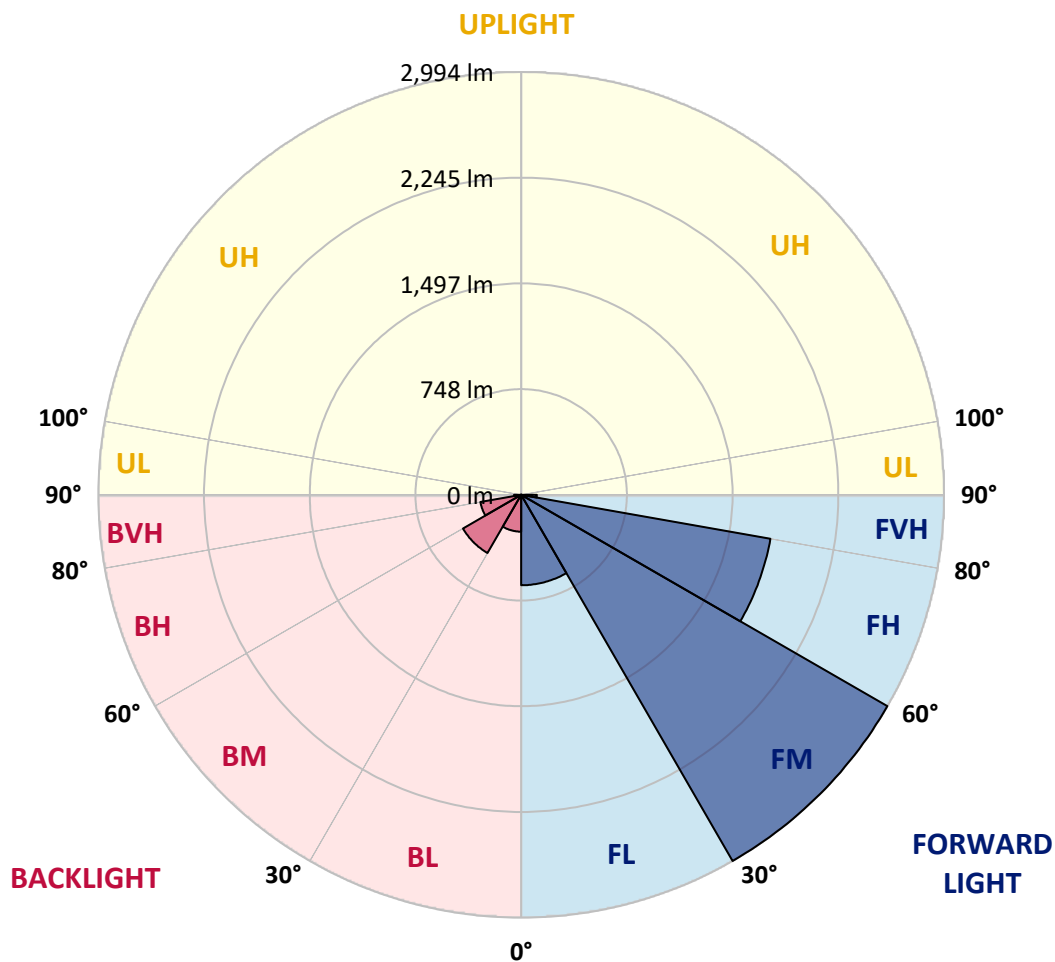
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	640.1	9.7			
FM	(30°-60°)	2993.9	45.2			
FH	(60°-80°)	1791.7	27.1			G1/1800
FVH	(80°-90°)	111.0	1.7			G2/225
BL	(0°-30°)	260.9	3.9	B1/500		
BM	(30°-60°)	475.6	7.2	B1/1000		
BH	(60°-80°)	293.0	4.4	B1/500		G1/500
BVH	(80°-90°)	50.7	0.8			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 II Medium





REPORT NUMBER: P397825

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T2R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	827.5	827.5	827.5	827.5	827.5	827.5	827.5	827.5	827.5	827.5	827.5
2.5°	1054.6	1046.8	1045.9	1033.7	1022.4	991.9	970.2	931.9	893.6	892.7	854.5
5°	1219.0	1211.2	1206.9	1192.1	1172.9	1132.9	1093.7	1034.6	969.3	965.0	892.7
7.5°	1330.4	1323.5	1314.8	1308.7	1290.4	1254.7	1206.9	1136.4	1046.8	1038.1	937.1
10°	1405.2	1400.9	1399.2	1394.8	1383.5	1354.8	1308.7	1233.8	1124.2	1114.6	984.1
12.5°	1437.4	1435.7	1443.5	1455.7	1460.1	1448.7	1404.4	1333.9	1209.5	1199.0	1040.7
15°	1400.0	1401.8	1421.8	1463.5	1507.9	1532.3	1506.2	1437.4	1306.1	1291.3	1106.8
17.5°	1382.6	1385.2	1399.2	1439.2	1501.8	1577.5	1589.7	1535.8	1399.2	1378.3	1176.4
20°	1413.1	1416.6	1427.0	1458.3	1501.8	1582.7	1646.3	1629.7	1490.5	1468.8	1243.4
22.5°	1490.5	1494.9	1494.0	1514.0	1543.6	1599.3	1677.6	1718.5	1586.2	1561.9	1313.0
25°	1655.8	1652.4	1622.8	1613.2	1621.0	1656.7	1719.4	1803.8	1686.3	1661.9	1386.1
27.5°	1880.3	1876.0	1822.0	1773.3	1729.8	1745.5	1778.5	1872.5	1788.1	1760.3	1455.7
30°	2120.5	2115.3	2052.6	1973.4	1876.8	1854.2	1849.9	1932.5	1890.8	1861.2	1529.7
32.5°	2354.5	2350.2	2283.2	2191.0	2057.8	1990.0	1948.2	1999.5	2007.4	1978.7	1610.6
35°	2567.7	2567.7	2510.3	2400.7	2250.1	2147.5	2078.7	2082.2	2141.4	2108.3	1702.8
37.5°	2757.4	2756.5	2693.9	2586.0	2441.6	2324.1	2238.8	2182.3	2269.3	2240.6	1799.4
40°	2907.9	2901.9	2855.7	2761.8	2616.5	2499.9	2413.7	2299.7	2412.0	2385.9	1902.1
42.5°	3017.6	3014.1	2982.8	2901.0	2762.6	2653.0	2593.8	2447.6	2573.8	2547.7	2022.2
45°	3060.2	3067.2	3067.2	2989.7	2880.1	2780.0	2753.9	2610.4	2748.7	2722.6	2150.9
47.5°	2991.5	3009.7	3047.2	3052.4	2955.8	2887.9	2896.6	2773.9	2928.8	2914.9	2291.9
50°	2776.6	2810.5	2892.3	3040.2	2986.3	2970.6	3018.4	2941.0	3122.0	3117.6	2463.3
52.5°	2222.3	2304.9	2559.9	2825.3	2965.4	3008.9	3139.4	3129.0	3370.8	3377.8	2686.9
55°	1704.6	1735.9	2030.9	2482.5	2837.5	2996.7	3220.3	3312.5	3640.6	3649.3	2892.3
57.5°	1378.3	1399.2	1560.1	2030.9	2546.0	2930.6	3283.8	3419.6	3847.7	3870.3	3075.0
60°	1092.0	1122.5	1230.3	1554.0	2137.9	2771.3	3328.2	3538.8	4070.4	4104.4	3293.4
62.5°	811.8	826.6	928.4	1151.2	1692.4	2485.1	3304.7	3668.4	4343.6	4384.5	3556.2
65°	577.8	590.8	663.0	818.8	1251.2	2097.9	3168.1	3765.0	4686.5	4728.2	3820.7
67.5°	432.4	437.7	478.6	572.5	843.1	1629.7	2891.4	3748.5	4937.1	4974.5	3926.9
70°	342.0	343.7	363.7	414.2	548.2	1134.6	2406.8	3505.7	4955.3	4988.4	3792.9
72.5°	283.7	282.8	294.1	318.5	382.0	717.8	1782.9	3055.0	4720.4	4743.0	3418.7
75°	234.1	235.8	243.6	257.6	291.5	473.3	1155.5	2437.2	4164.4	4140.0	2868.8
77.5°	196.6	195.8	199.3	211.4	235.8	340.2	677.0	1761.1	3086.3	3074.1	1882.9
80°	158.4	160.1	165.3	175.8	198.4	259.3	400.3	1099.0	1655.8	1611.5	899.7
82.5°	106.2	122.7	133.1	145.3	171.4	191.4	254.1	558.6	740.5	729.2	408.1
85°	50.5	67.0	99.2	113.1	139.2	120.1	172.3	266.3	370.7	366.3	147.1
87.5°	10.4	10.4	53.1	63.5	86.1	51.3	95.7	115.7	179.2	167.9	60.0
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: P397825

CATALOG NUMBER: ARCH-S-PA1-50-727-U-T2R

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	827.5	827.5	827.5	827.5	827.5	827.5	827.5	827.5	827.5	827.5	827.5
2.5°	831.8	808.3	761.4	723.9	685.7	663.9	636.9	623.9	621.3	614.3	619.5
5°	846.6	800.5	711.8	653.5	614.3	595.2	585.6	582.1	581.2	579.5	579.5
7.5°	866.6	796.2	680.4	621.3	596.0	589.9	592.6	597.8	598.6	600.4	599.5
10°	891.0	797.0	663.0	613.4	601.3	602.1	610.8	617.8	621.3	623.9	623.0
12.5°	924.9	807.5	660.4	618.7	613.4	616.9	625.6	632.6	636.1	636.9	636.9
15°	969.3	829.2	666.5	630.0	625.6	628.2	633.4	636.1	636.9	636.1	636.1
17.5°	1018.0	855.3	675.2	636.9	630.0	627.4	625.6	623.0	617.8	614.3	614.3
20°	1065.0	878.8	679.6	636.1	623.9	613.4	603.0	589.9	581.2	574.3	574.3
22.5°	1112.0	900.6	679.6	626.5	607.3	587.3	565.6	544.7	531.6	522.9	522.9
25°	1161.6	921.5	674.3	610.0	581.2	552.5	522.9	496.8	483.8	475.1	473.3
27.5°	1203.4	933.6	660.4	586.5	549.0	512.5	478.6	451.6	442.0	434.2	434.2
30°	1247.8	941.5	634.3	556.0	512.5	470.7	435.9	414.2	403.7	392.4	391.6
32.5°	1297.3	946.7	604.7	523.8	475.1	430.7	401.1	383.7	361.1	348.9	347.2
35°	1354.8	953.7	573.4	487.3	437.7	397.6	380.2	351.5	329.8	319.3	318.5
37.5°	1415.7	958.9	539.5	455.1	403.7	375.9	358.5	324.6	305.4	289.7	288.0
40°	1480.1	958.9	504.7	423.7	376.8	366.3	333.3	302.8	270.6	262.8	261.0
42.5°	1551.4	957.1	469.9	393.3	351.5	344.6	318.5	286.3	269.7	262.8	261.0
45°	1627.1	951.0	436.8	358.5	325.4	311.5	291.5	282.8	275.8	275.8	275.8
47.5°	1713.3	945.8	399.4	327.2	306.3	290.6	275.8	270.6	269.7	272.3	275.0
50°	1823.8	944.1	368.1	304.5	291.5	273.2	271.5	267.1	268.0	268.0	268.0
52.5°	1957.8	928.4	338.5	288.0	276.7	254.9	260.2	264.5	266.3	265.4	264.5
55°	2056.1	900.6	313.2	276.7	266.3	248.0	254.9	261.9	263.6	261.0	261.0
57.5°	2144.8	861.4	293.2	268.0	259.3	243.6	251.5	258.4	256.7	255.8	254.9
60°	2246.6	824.0	277.6	263.6	252.3	241.9	248.9	253.2	250.6	248.9	248.0
62.5°	2357.2	787.5	266.3	263.6	247.1	241.0	246.2	248.0	242.8	241.0	241.0
65°	2408.5	730.0	254.1	263.6	244.5	239.3	241.0	239.3	234.1	234.1	233.2
67.5°	2324.1	635.2	238.4	260.2	248.0	236.7	233.2	230.6	224.5	224.5	222.8
70°	2090.9	522.1	215.8	248.9	248.9	235.8	222.8	216.7	209.7	212.3	208.8
72.5°	1786.4	414.2	187.9	229.7	243.6	234.9	211.4	201.9	195.8	198.4	193.2
75°	1447.0	321.1	154.9	199.3	230.6	230.6	200.1	187.1	180.1	180.1	174.0
77.5°	922.3	237.5	126.2	165.3	207.1	224.5	190.6	170.5	160.1	157.5	153.1
80°	456.8	167.1	103.5	131.4	176.6	210.6	183.6	151.4	136.6	131.4	123.6
82.5°	242.8	115.7	82.7	102.7	141.0	189.7	174.9	130.5	112.2	104.4	95.7
85°	108.8	71.3	66.1	78.3	107.0	155.8	157.5	107.0	86.1	102.7	75.7
87.5°	40.0	32.2	32.2	40.0	61.8	65.3	111.4	68.7	54.8	37.4	29.6
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)