

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: P214605

Luminaire Tested: **ARCH-AF24-60-D-U-T2R-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P214605
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-60-D-U-T2R-7050
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7644 lumens
Efficiency: N/A
Efficacy: 119.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G2

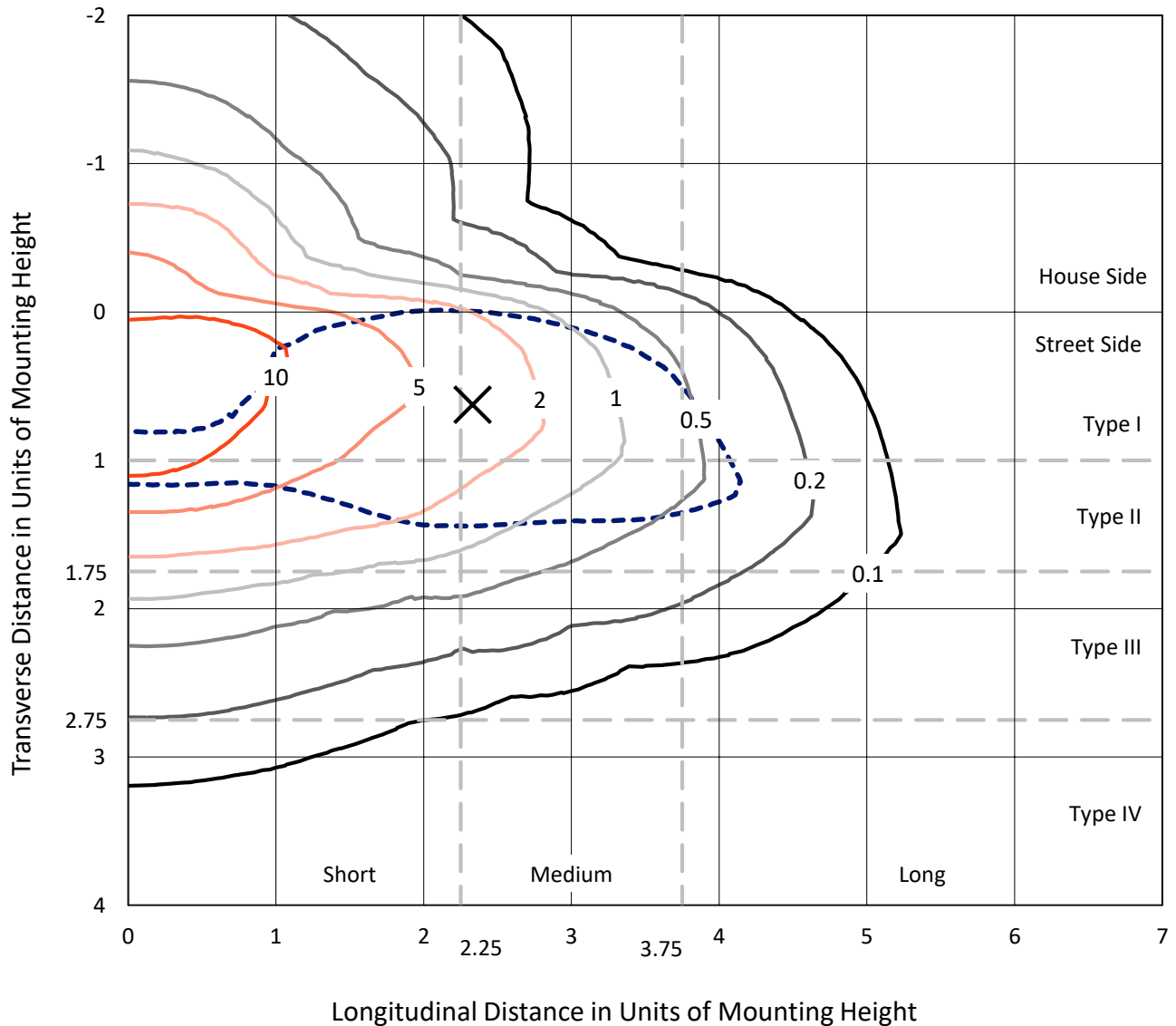
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

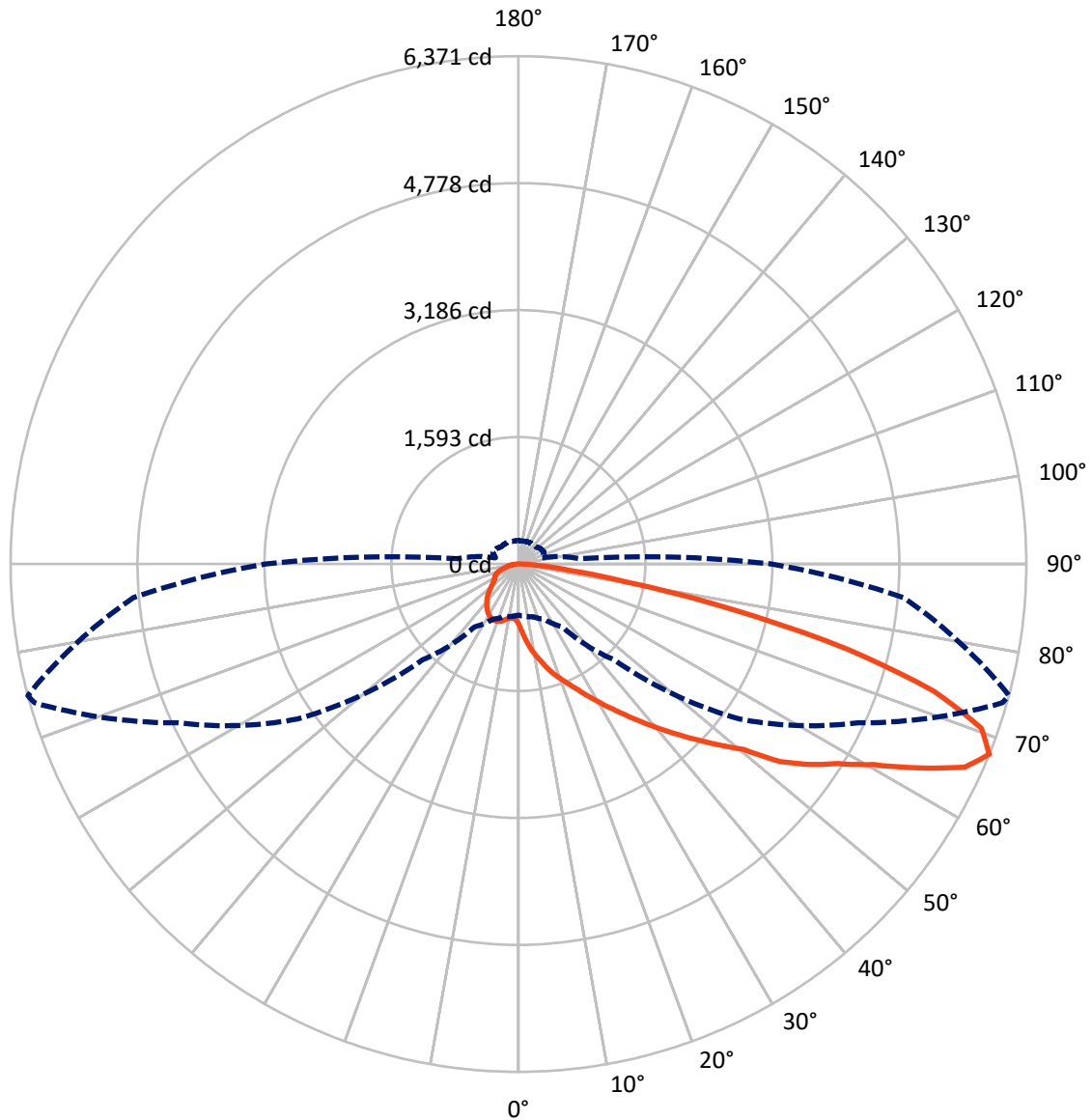
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.9 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1305.3	0.0	1305.3
	% Fixture	17.1	0.0	17.1
Street Side	Lumens	6338.7	0.0	6338.7
	% Fixture	82.9	0.0	82.9
Total	Lumens	7644.0	0.0	7644.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.0	1.2
10°-20°	321.6	4.2
20°-30°	586.5	7.7
30°-40°	962.7	12.6
40°-50°	1392.3	18.2
50°-60°	1640.8	21.5
60°-70°	1594.4	20.9
70°-80°	886.3	11.6
80°-90°	170.4	2.2
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°	7644.0	100.0
0°-180°	7644.0	100.0



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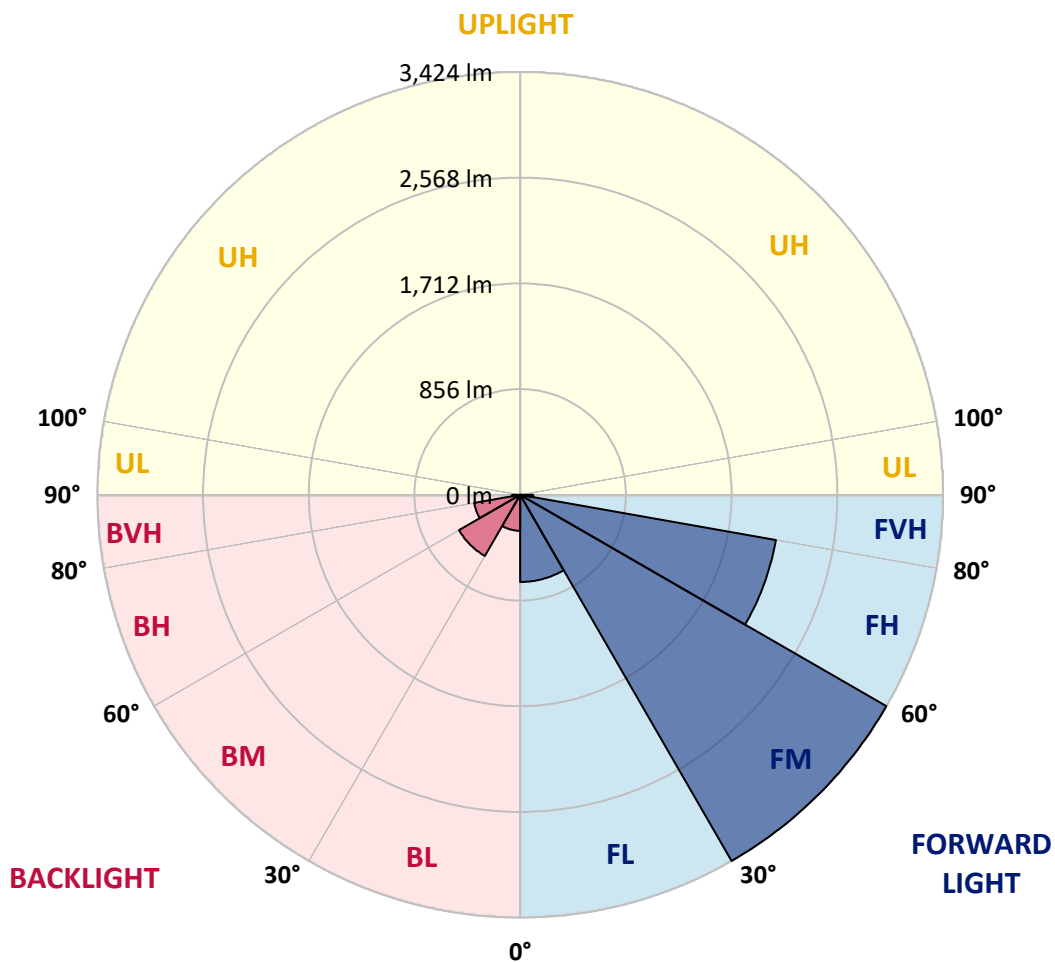
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	705.7	9.2			
FM (30°-60°)	3424.1	44.8			
FH (60°-80°)	2102.8	27.5			G2/5000
FVH (80°-90°)	106.1	1.4			G2/225
BL (0°-30°)	291.3	3.8	B1/500		
BM (30°-60°)	571.7	7.5	B1/1000		
BH (60°-80°)	377.9	4.9	B1/500		G1/500
BVH (80°-90°)	64.4	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	757.4	757.4	757.4	757.4	757.4	757.4	757.4	757.4	757.4	757.4	757.4
2.5°	1073.8	1077.0	1070.7	1056.3	1035.5	997.1	963.6	904.5	851.7	845.3	789.4
5°	1262.4	1265.6	1257.6	1240.0	1217.7	1176.1	1129.8	1053.1	968.4	952.4	834.1
7.5°	1391.8	1393.4	1383.9	1366.3	1348.7	1307.2	1260.8	1174.5	1070.7	1057.9	891.7
10°	1502.1	1505.3	1492.5	1481.3	1462.2	1420.6	1372.7	1281.6	1174.5	1156.9	950.8
12.5°	1604.4	1607.6	1599.6	1590.0	1583.6	1545.3	1492.5	1383.9	1268.8	1249.6	1021.1
15°	1673.1	1676.3	1677.9	1690.7	1698.7	1671.5	1618.8	1500.5	1371.1	1353.5	1104.2
17.5°	1653.9	1661.9	1685.9	1732.2	1781.8	1783.4	1740.2	1615.6	1471.7	1452.6	1188.9
20°	1598.0	1604.4	1633.1	1703.5	1800.9	1856.9	1853.7	1732.2	1566.0	1545.3	1267.2
22.5°	1644.3	1652.3	1652.3	1695.5	1791.3	1895.2	1936.8	1847.3	1660.3	1641.1	1345.5
25°	1842.5	1847.3	1813.7	1796.1	1831.3	1927.2	2005.5	1971.9	1775.4	1753.0	1430.2
27.5°	2118.9	2110.9	2069.4	1999.1	1960.7	1986.3	2066.2	2090.2	1908.0	1880.8	1518.1
30°	2393.8	2389.0	2341.0	2246.8	2160.5	2106.1	2133.3	2195.6	2051.8	2019.9	1602.8
32.5°	2651.1	2643.1	2590.3	2480.1	2382.6	2281.9	2229.2	2291.5	2205.2	2168.5	1697.1
35°	2887.6	2866.8	2814.1	2699.0	2598.3	2502.4	2373.0	2382.6	2371.4	2333.1	1800.9
37.5°	3079.3	3063.3	3005.8	2898.7	2791.7	2700.6	2564.8	2486.5	2550.4	2513.6	1920.8
40°	3248.7	3231.1	3172.0	3064.9	2965.9	2879.6	2772.5	2612.7	2751.7	2710.2	2055.0
42.5°	3376.5	3363.8	3315.8	3210.4	3114.5	3036.2	2983.4	2772.5	2961.1	2921.1	2202.0
45°	3445.3	3432.5	3406.9	3322.2	3234.3	3173.6	3178.4	2962.7	3180.0	3146.4	2376.2
47.5°	3360.6	3370.2	3392.5	3376.5	3322.2	3293.4	3352.6	3159.2	3424.5	3392.5	2564.8
50°	3133.7	3143.2	3232.7	3343.0	3362.2	3397.3	3509.2	3386.1	3683.4	3657.8	2798.1
52.5°	2576.0	2628.7	2876.4	3140.0	3320.6	3466.0	3683.4	3723.3	4119.6	4119.6	3210.4
55°	1946.3	1992.7	2275.5	2735.8	3159.2	3472.4	3811.2	3951.8	4434.4	4440.8	3426.1
57.5°	1577.2	1606.0	1745.0	2216.4	2820.4	3392.5	3963.0	4148.4	4696.5	4725.2	3704.1
60°	1280.0	1296.0	1387.1	1714.6	2352.2	3176.8	4071.7	4429.6	5070.4	5110.4	4058.9
62.5°	1029.1	1045.1	1105.8	1302.4	1845.7	2772.5	4052.5	4722.0	5569.0	5634.5	4523.9
65°	821.4	838.9	878.9	1000.3	1367.9	2270.7	3855.9	4872.3	6085.1	6149.1	4832.3
67.5°	640.8	656.8	683.9	763.8	963.6	1698.7	3390.9	4714.1	6316.8	6371.2	4848.3
70°	484.2	492.2	514.6	565.7	688.7	1128.2	2654.3	4183.5	6109.1	6158.6	4528.7
72.5°	375.5	373.9	386.7	412.3	481.0	776.6	1759.4	3402.1	5401.2	5452.3	3863.9
75°	306.8	305.2	313.2	321.2	348.4	520.9	1038.7	2561.6	4359.3	4261.8	2898.7
77.5°	258.9	257.3	265.3	266.9	278.0	359.5	591.3	1685.9	2908.3	2740.5	1633.1
80°	218.9	217.3	226.9	230.1	238.1	263.7	340.4	912.5	1460.6	1383.9	779.8
82.5°	164.6	171.0	188.6	196.6	206.1	195.0	210.9	402.7	677.5	647.2	338.8
85°	79.9	94.3	142.2	158.2	169.4	123.0	143.8	190.2	305.2	290.8	137.4
87.5°	27.2	24.0	84.7	100.7	110.3	55.9	79.9	105.5	126.2	115.1	43.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	757.4	757.4	757.4	757.4	757.4	757.4	757.4	757.4	757.4	757.4	757.4
2.5°	765.4	741.5	706.3	679.1	661.6	647.2	640.8	639.2	636.0	634.4	634.4
5°	781.4	738.3	683.9	655.2	647.2	640.8	644.0	645.6	645.6	645.6	645.6
7.5°	805.4	744.7	679.1	660.0	658.4	658.4	668.0	672.8	675.9	675.9	675.9
10°	837.3	755.8	687.1	671.2	675.9	679.1	690.3	696.7	699.9	701.5	703.1
12.5°	880.5	779.8	703.1	690.3	696.7	698.3	706.3	709.5	712.7	714.3	714.3
15°	938.0	815.0	728.7	712.7	714.3	712.7	712.7	709.5	707.9	707.9	711.1
17.5°	997.1	848.5	751.1	728.7	722.3	709.5	699.9	691.9	687.1	683.9	685.5
20°	1056.3	878.9	763.8	731.9	714.3	693.5	675.9	664.8	658.4	652.0	655.2
22.5°	1115.4	907.7	768.6	722.3	696.7	666.4	647.2	629.6	615.2	605.6	607.2
25°	1180.9	939.6	768.6	711.1	672.8	640.8	616.8	588.1	567.3	559.3	562.5
27.5°	1246.4	966.8	760.6	690.3	645.6	613.6	578.5	544.9	532.1	527.3	528.9
30°	1311.9	987.6	743.1	664.8	616.8	581.7	535.3	513.0	497.0	484.2	485.8
32.5°	1377.5	1001.9	719.1	632.8	586.5	541.7	503.4	477.8	449.0	433.1	434.7
35°	1452.6	1013.1	690.3	600.8	552.9	506.6	477.8	436.3	405.9	393.1	389.9
37.5°	1530.9	1021.1	660.0	565.7	519.3	481.0	452.2	401.1	372.3	354.8	353.2
40°	1615.6	1024.3	623.2	528.9	487.4	465.0	418.7	380.3	330.8	319.6	319.6
42.5°	1716.2	1022.7	586.5	492.2	452.2	428.3	394.7	377.1	334.0	322.8	316.4
45°	1831.3	1022.7	546.5	449.0	417.1	381.9	367.5	356.4	327.6	332.4	335.6
47.5°	1962.3	1019.5	498.6	413.9	388.3	357.9	350.0	326.0	314.8	318.0	321.2
50°	2142.9	1024.3	455.4	385.1	367.5	342.0	332.4	319.6	314.8	316.4	314.8
52.5°	2393.8	1008.3	413.9	367.5	351.6	318.0	318.0	316.4	318.0	316.4	316.4
55°	2531.2	973.2	383.5	357.9	340.4	306.8	313.2	316.4	319.6	318.0	318.0
57.5°	2726.2	949.2	359.5	351.6	334.0	303.6	310.0	316.4	318.0	316.4	316.4
60°	2956.3	933.2	343.6	353.2	329.2	303.6	311.6	316.4	314.8	313.2	313.2
62.5°	3223.1	926.8	332.4	357.9	324.4	305.2	311.6	316.4	310.0	308.4	308.4
65°	3323.8	869.3	318.0	361.1	327.6	305.2	310.0	311.6	303.6	302.0	300.4
67.5°	3168.8	770.2	297.2	354.8	337.2	305.2	305.2	303.6	294.0	292.4	289.2
70°	2822.0	639.2	265.3	334.0	343.6	306.8	298.8	290.8	281.2	281.2	274.9
72.5°	2310.7	503.4	223.7	297.2	338.8	311.6	286.0	274.9	263.7	263.7	257.3
75°	1665.1	375.5	179.0	247.7	318.0	310.0	270.1	255.7	242.9	241.3	233.3
77.5°	949.2	263.7	145.4	193.4	282.8	302.0	255.7	233.3	218.9	214.1	209.3
80°	487.4	177.4	118.3	151.8	234.9	279.6	244.5	207.7	191.8	183.8	175.8
82.5°	231.7	118.3	91.1	111.9	177.4	244.5	230.1	179.0	161.4	151.8	142.2
85°	103.9	70.3	60.7	71.9	126.2	190.2	202.9	147.0	126.2	158.2	116.7
87.5°	33.6	32.0	32.0	33.6	60.7	83.1	148.6	108.7	100.7	83.1	70.3
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)