

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: P265954

Luminaire Tested: **ARCH-AF24-60-D-U-T3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265954  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
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-T3-7027  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6604.4 lumens  
Efficiency: N/A  
Efficacy: 103.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

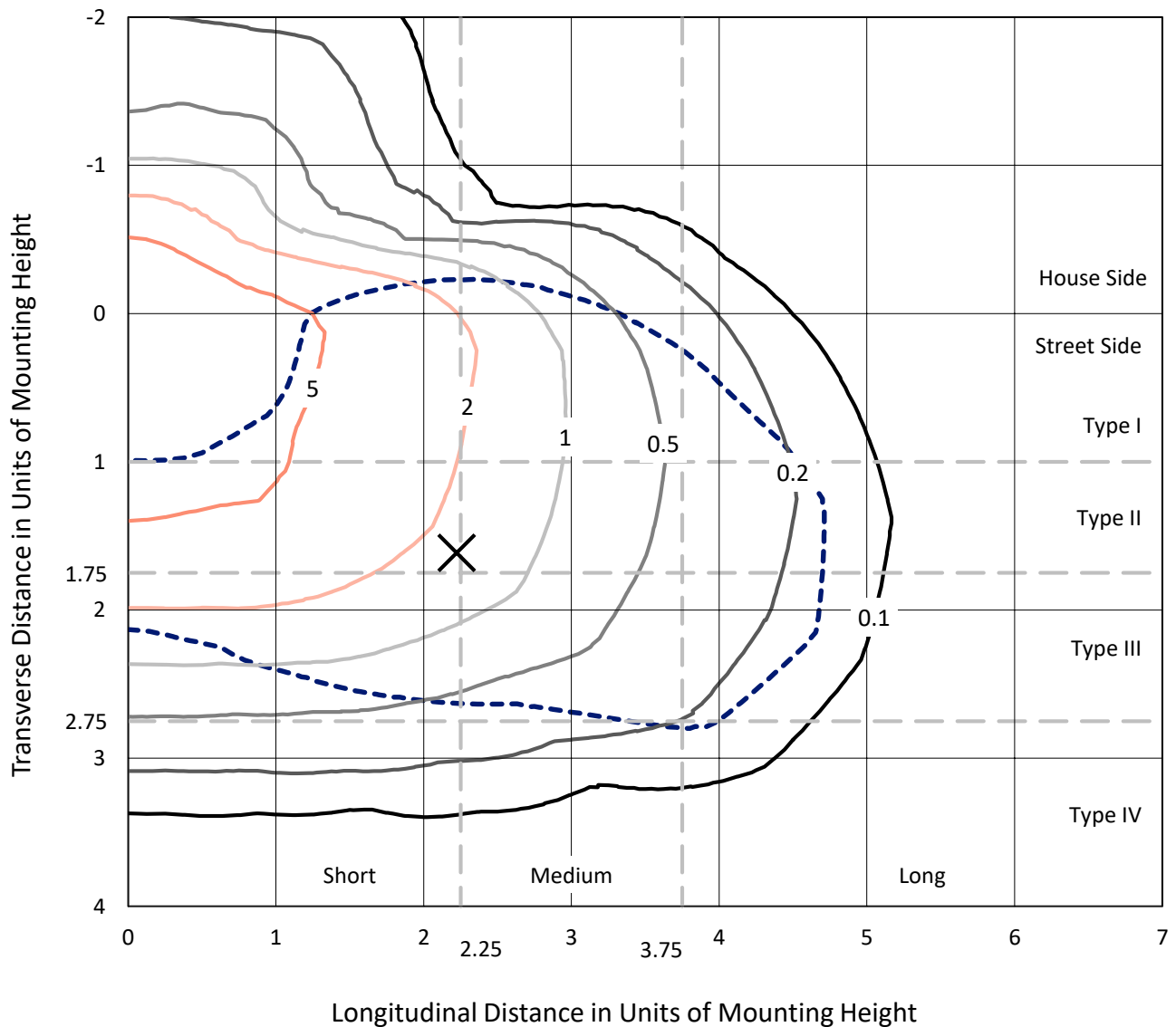
Input Watts (W): 64  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

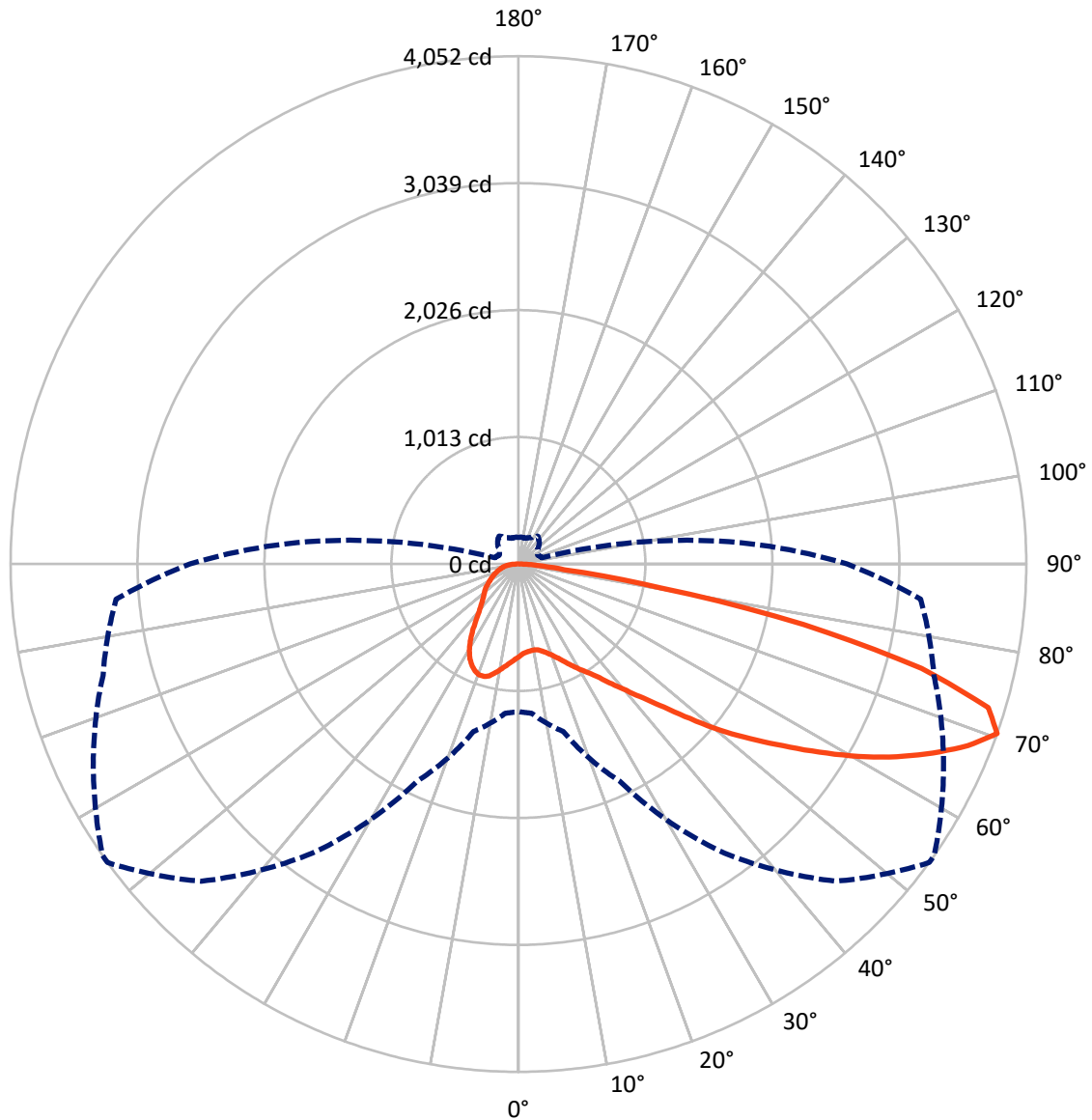


Based on 10 foot mounting height. Maximum calculated value = 8.6 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P265954

CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027

### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1497.9	0.0	1497.9
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	5106.5	0.0	5106.5
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	6604.4	0.0	6604.4
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.5	1.1
10°-20°	231.7	3.5
20°-30°	402.5	6.1
30°-40°	588.3	8.9
40°-50°	923.3	14.0
50°-60°	1419.8	21.5
60°-70°	1734.6	26.3
70°-80°	1075.5	16.3
80°-90°	156.2	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°	6604.4	100.0
0°-180°	6604.4	100.0



REPORT NUMBER: P265954

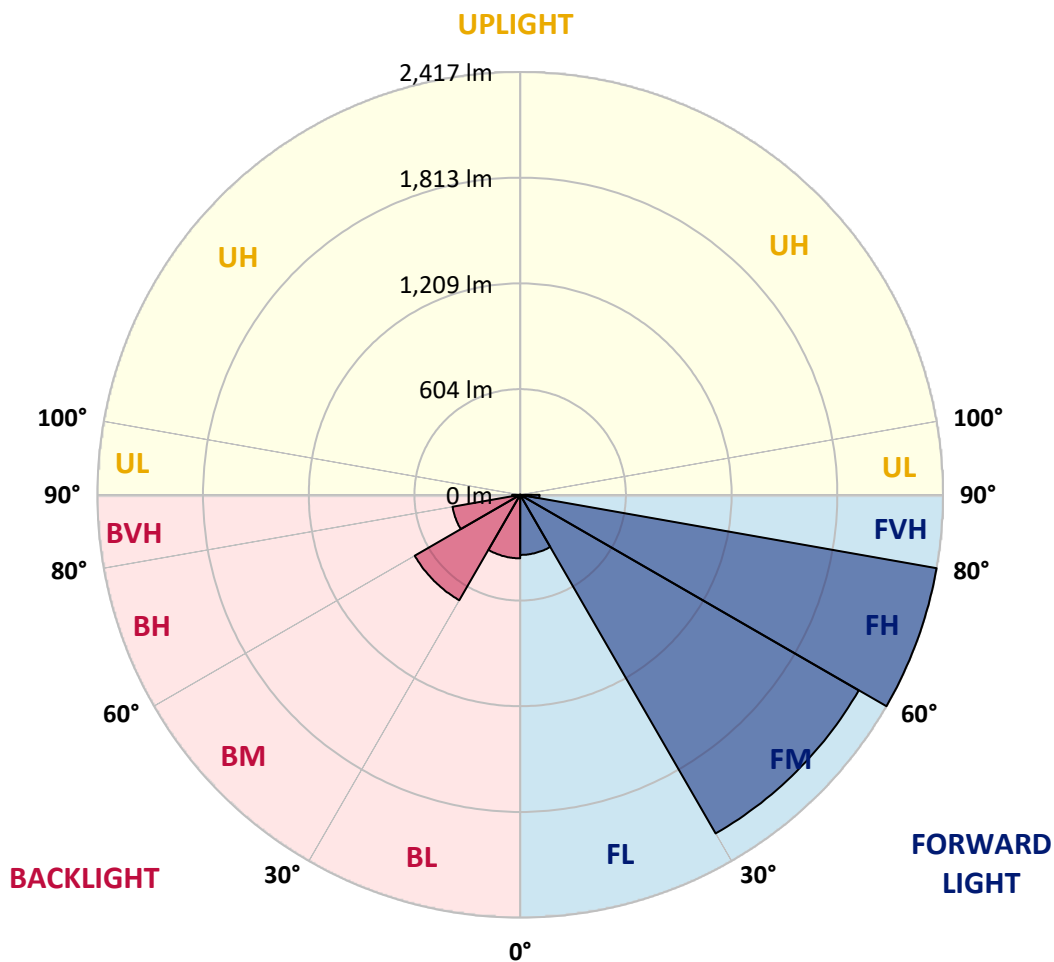
CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	343.6	5.2			
FM	(30°-60°)	2235.3	33.8			
FH	(60°-80°)	2417.3	36.6			G2/5000
FVH	(80°-90°)	110.3	1.7			G2/225
BL	(0°-30°)	363.1	5.5	B1/500		
BM	(30°-60°)	696.0	10.5	B1/1000		
BH	(60°-80°)	392.8	5.9	B1/500		G1/500
BVH	(80°-90°)	45.9	0.7			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 III Short





REPORT NUMBER: P265954

CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	738.9	738.9	738.9	738.9	738.9	738.9	738.9	738.9	738.9	738.9	738.9
2.5°	709.9	707.4	707.4	711.1	712.3	715.9	715.9	717.1	720.8	726.8	734.0
5°	688.1	686.9	688.1	693.0	695.4	702.7	705.0	706.2	713.6	723.1	734.0
7.5°	666.4	665.1	667.5	674.7	682.1	693.0	699.1	700.1	711.1	724.5	738.9
10°	659.0	657.9	661.5	667.5	674.7	686.9	696.5	697.8	713.6	729.2	749.7
12.5°	668.8	667.5	671.2	677.2	684.5	693.0	703.8	705.0	725.7	746.1	768.0
15°	693.0	693.0	694.1	697.8	705.0	712.3	722.0	723.1	745.0	769.0	790.9
17.5°	730.4	727.9	727.9	726.8	731.6	735.3	747.4	748.6	771.6	793.4	815.1
20°	776.3	775.1	770.3	764.3	763.1	765.4	777.7	778.8	801.7	820.0	840.5
22.5°	832.0	833.2	822.4	809.1	802.9	806.6	817.5	818.7	835.7	851.4	869.5
25°	905.9	902.2	886.4	867.0	854.9	854.9	865.8	865.8	881.5	891.3	903.3
27.5°	975.9	968.6	954.2	926.3	907.0	910.6	921.5	921.5	936.0	939.6	945.6
30°	1052.2	1044.9	1026.8	991.6	966.2	963.8	977.1	975.9	995.3	994.1	989.3
32.5°	1145.2	1141.6	1111.4	1066.6	1032.7	1024.2	1036.4	1037.6	1049.7	1046.0	1030.4
35°	1275.9	1274.7	1246.8	1168.2	1123.5	1107.7	1114.9	1114.9	1123.5	1113.8	1087.2
37.5°	1440.3	1442.7	1418.6	1302.5	1239.5	1212.9	1214.1	1212.9	1215.3	1204.4	1176.7
40°	1604.8	1610.8	1609.7	1469.4	1389.5	1343.5	1326.6	1324.2	1330.3	1325.4	1298.8
42.5°	1821.3	1835.7	1801.9	1674.9	1585.4	1508.1	1462.1	1456.1	1469.4	1475.3	1450.0
45°	2046.2	2041.4	1988.0	1896.2	1815.1	1716.0	1628.9	1619.3	1628.9	1647.1	1620.5
47.5°	2163.5	2159.9	2146.6	2100.5	2088.5	1974.8	1843.1	1834.6	1816.5	1841.9	1810.4
50°	2357.0	2360.6	2306.2	2301.4	2352.1	2289.2	2084.8	2065.6	2032.9	2053.4	2026.8
52.5°	2497.3	2481.6	2447.7	2490.0	2648.5	2614.5	2312.2	2303.8	2273.5	2268.7	2256.6
55°	2554.2	2554.2	2560.1	2658.1	2884.3	2839.5	2558.9	2567.4	2526.3	2492.3	2508.2
57.5°	2570.9	2578.2	2630.2	2792.3	3161.1	3014.8	2831.0	2843.1	2783.8	2716.1	2765.7
60°	2487.5	2509.3	2633.9	2868.5	3317.3	3201.1	3117.7	3121.3	3035.5	2936.2	3023.3
62.5°	2273.5	2300.1	2522.6	2900.0	3291.7	3392.2	3388.5	3397.0	3279.7	3156.4	3265.2
65°	2011.1	2037.7	2274.8	2811.7	3272.4	3528.8	3636.5	3659.4	3508.2	3342.6	3416.3
67.5°	1625.4	1660.3	1885.4	2514.1	3178.2	3641.3	3868.6	3892.9	3684.8	3439.3	3403.0
70°	1177.9	1194.8	1383.5	1910.8	2793.5	3579.6	4052.4	4051.3	3742.9	3432.1	3221.6
72.5°	567.2	580.5	743.7	1186.3	1997.8	3037.8	3919.5	3942.4	3663.1	3326.9	2806.8
75°	233.4	246.8	301.1	500.6	1048.5	2007.5	3322.0	3376.4	3326.9	2985.8	2196.1
77.5°	145.2	149.9	176.5	258.8	478.8	937.2	2325.5	2399.4	2636.3	2392.0	1450.0
80°	108.9	112.5	131.8	181.4	302.3	345.8	1155.0	1248.0	1597.5	1372.6	656.8
82.5°	90.6	91.8	105.2	131.8	205.6	198.3	370.0	412.4	745.0	523.6	226.2
85°	84.6	87.0	94.3	94.3	130.7	124.5	153.6	160.8	216.5	179.0	78.6
87.5°	43.6	41.1	83.5	73.8	67.7	60.5	65.2	70.2	81.0	85.9	35.0
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: P265954

CATALOG NUMBER: ARCH-AF24-60-D-U-T3-7027

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	738.9	738.9	738.9	738.9	738.9	738.9	738.9	738.9	738.9	738.9	738.9
2.5°	736.5	740.2	746.1	752.2	759.4	768.0	772.7	778.8	783.6	781.3	780.0
5°	740.2	746.1	759.4	771.6	786.0	802.9	813.9	826.0	835.7	838.1	834.4
7.5°	746.1	757.0	775.1	796.9	816.3	838.1	854.9	872.0	884.0	886.4	886.4
10°	760.7	772.7	796.9	826.0	849.0	872.0	891.3	904.6	915.5	920.4	920.4
12.5°	781.3	795.7	824.7	859.9	885.2	907.0	917.9	923.9	928.8	933.6	934.7
15°	805.4	821.1	856.3	893.8	920.4	931.2	931.2	929.9	929.9	932.4	934.7
17.5°	829.6	846.6	882.9	922.6	939.6	933.6	925.2	921.5	919.1	917.9	921.5
20°	854.9	872.0	908.1	945.6	940.9	915.5	903.3	894.9	887.6	884.0	888.9
22.5°	882.9	898.6	936.0	961.5	925.2	886.4	863.5	850.2	838.1	830.8	835.7
25°	915.5	931.2	967.5	966.2	897.2	842.9	806.6	784.8	771.6	764.3	764.3
27.5°	954.2	967.5	1002.5	954.2	858.6	784.8	731.6	711.1	707.4	701.3	701.3
30°	994.1	1004.9	1035.1	926.3	805.4	708.7	650.6	640.9	642.2	636.1	637.3
32.5°	1035.1	1046.0	1054.5	885.2	736.5	622.9	584.1	576.8	575.6	570.9	565.9
35°	1093.2	1109.0	1056.9	829.6	653.1	551.5	523.6	516.3	509.1	492.2	492.2
37.5°	1181.5	1198.5	1050.8	760.7	567.2	495.9	470.4	460.7	448.7	431.7	425.6
40°	1302.5	1302.5	1037.6	683.3	498.2	451.0	426.9	414.7	401.5	384.6	380.9
42.5°	1445.2	1411.2	1017.1	604.6	447.4	420.9	399.0	385.8	370.0	350.7	348.4
45°	1612.0	1520.1	988.0	534.5	409.9	402.7	389.3	366.4	339.7	319.3	315.7
47.5°	1774.2	1618.0	960.2	484.9	378.5	395.4	384.6	345.8	309.6	280.6	276.9
50°	1951.8	1705.2	927.6	443.9	354.3	390.7	378.5	315.7	275.7	255.2	252.8
52.5°	2129.6	1793.5	892.5	400.3	333.8	380.9	364.1	293.8	274.5	246.8	243.1
55°	2317.1	1896.2	851.4	352.0	309.6	361.6	344.7	292.7	283.0	246.8	238.2
57.5°	2499.7	2009.9	784.8	304.7	283.0	332.6	337.5	285.4	264.8	244.2	234.5
60°	2701.7	2130.8	674.7	264.8	260.0	308.4	327.7	269.8	244.2	237.1	232.2
62.5°	2863.6	2239.7	527.2	237.1	240.7	289.1	315.7	260.0	235.9	229.7	228.6
65°	2933.9	2242.1	378.5	212.9	221.3	270.8	303.5	251.5	228.6	226.2	224.9
67.5°	2860.1	2118.7	266.1	189.8	200.7	254.0	287.7	243.1	221.3	222.5	220.1
70°	2621.9	1858.8	194.8	168.2	181.4	235.9	270.8	232.2	212.9	215.2	211.6
72.5°	2193.8	1448.7	155.9	149.9	165.6	216.5	254.0	220.1	199.6	200.7	193.4
75°	1620.5	960.2	130.7	134.2	147.5	198.3	232.2	204.4	185.1	180.2	175.3
77.5°	963.8	493.3	107.6	117.3	131.8	176.5	208.0	185.1	169.3	160.8	157.3
80°	397.9	199.6	88.3	99.2	115.0	157.3	183.9	162.1	151.2	142.7	137.9
82.5°	158.5	97.9	70.2	81.0	96.7	136.6	160.8	142.7	131.8	125.8	112.5
85°	60.5	48.4	47.3	56.9	72.6	105.2	132.9	119.7	111.3	95.5	91.8
87.5°	24.2	21.7	21.7	27.8	41.1	66.6	95.5	83.5	87.0	68.9	70.2
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)