

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: P214726

Luminaire Tested: **ARCH-AF16-60-D-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P214726  
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-AF16-60-D-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1160mA LIGHT ENGINE WITH 16 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6867.1 lumens  
Efficiency: N/A  
Efficacy: 109.0 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

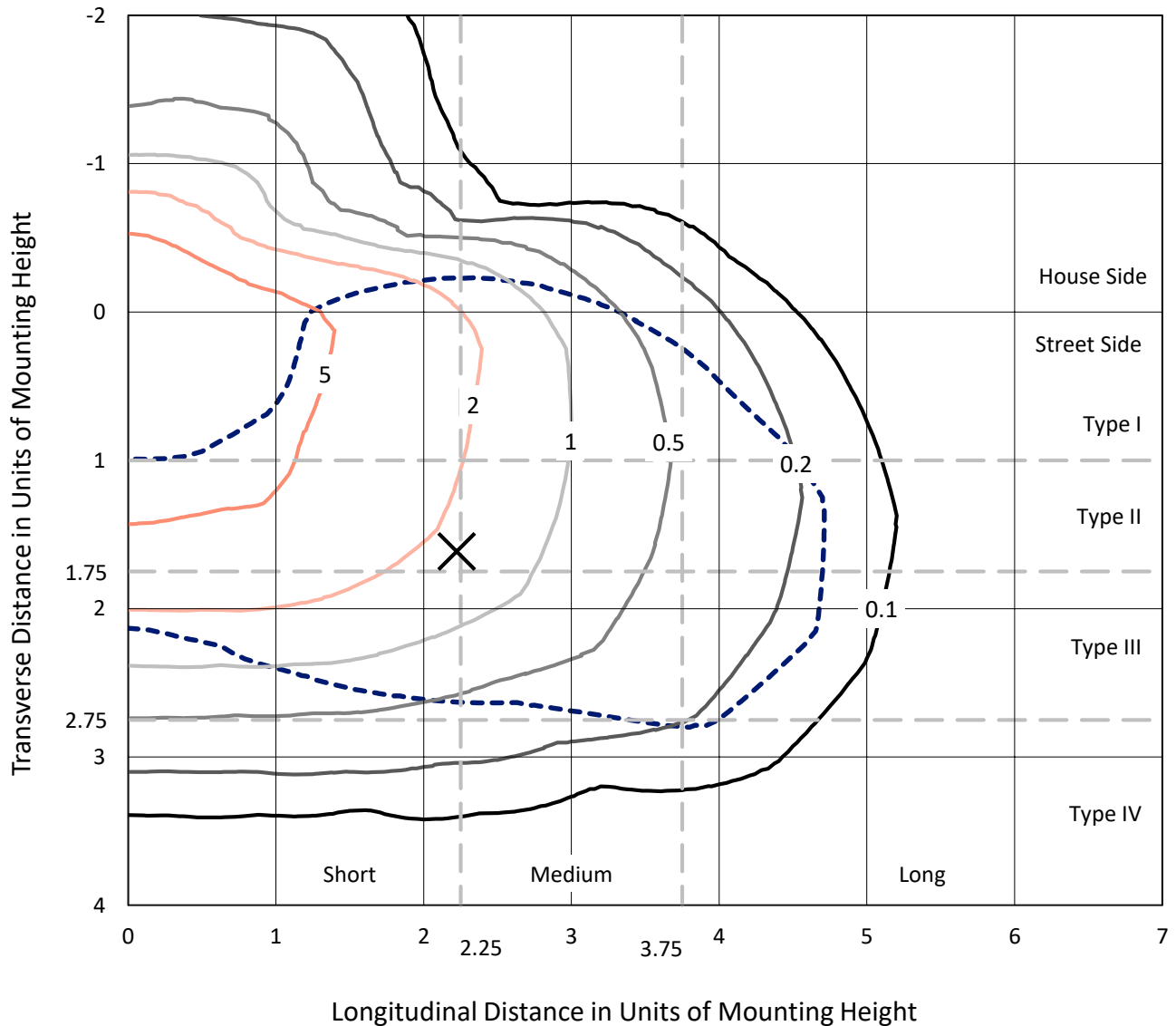
Input Watts (W): 63  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

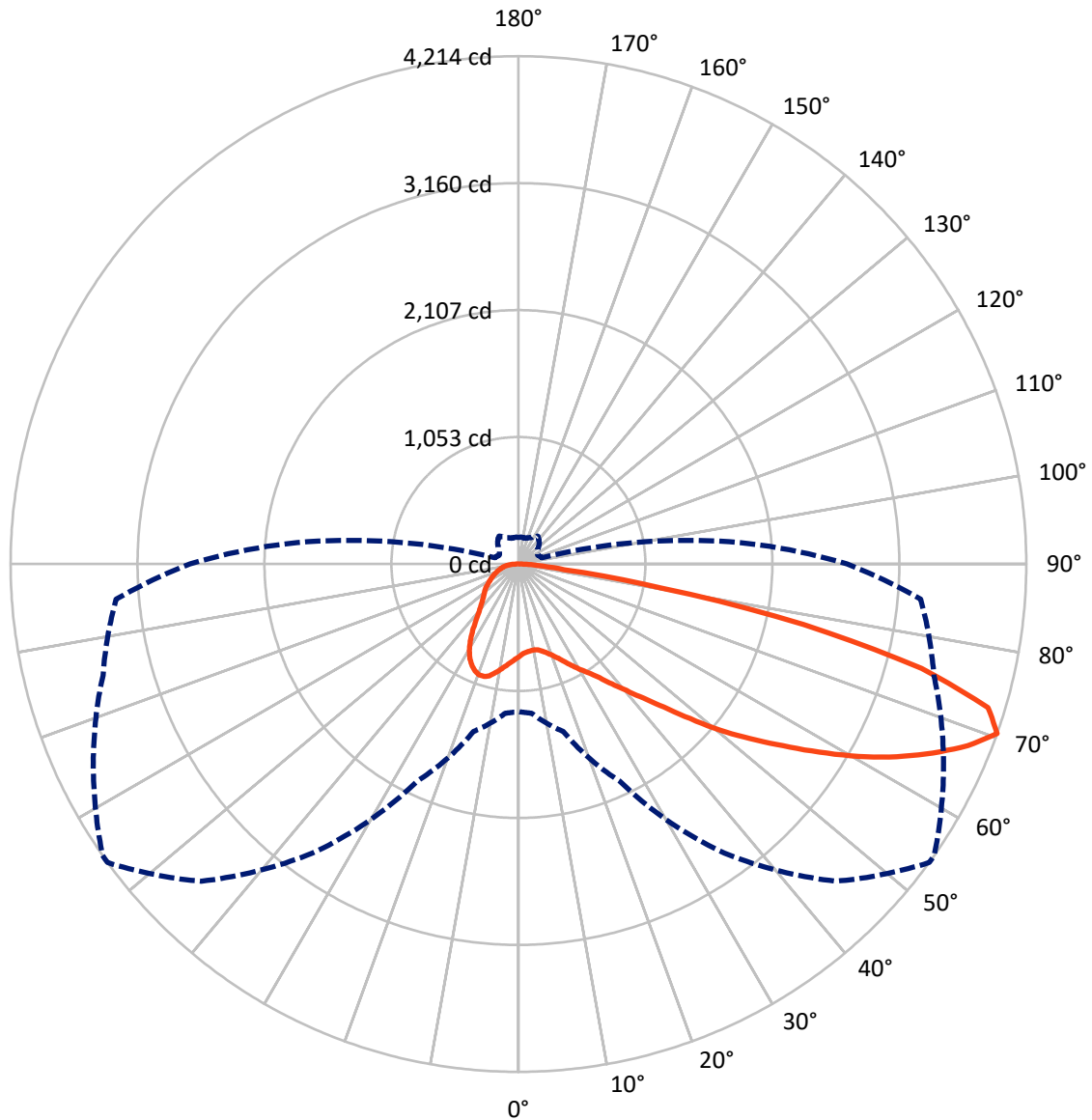


Based on 10 foot mounting height. Maximum calculated value = 8.9 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1557.4	0.0	1557.4
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	5309.6	0.0	5309.6
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	6867.1	0.0	6867.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.4	1.1
10°-20°	240.9	3.5
20°-30°	418.6	6.1
30°-40°	611.7	8.9
40°-50°	960.0	14.0
50°-60°	1476.2	21.5
60°-70°	1803.6	26.3
70°-80°	1118.2	16.3
80°-90°	162.4	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°	6867.1	100.0
0°-180°	6867.1	100.0

**Coefficient of Utilization**



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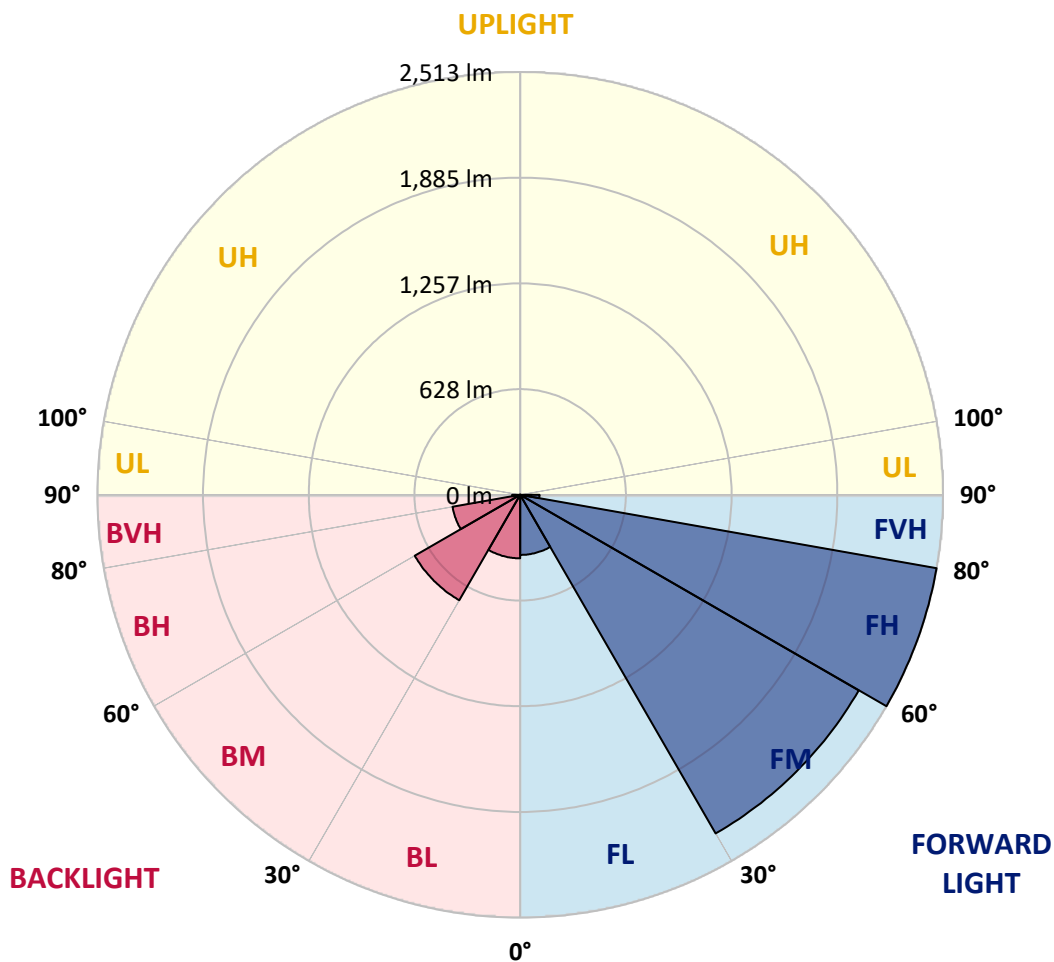
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	357.3	5.2			
FM	(30°-60°)	2324.2	33.8			
FH	(60°-80°)	2513.5	36.6			G2/5000
FVH	(80°-90°)	114.7	1.7			G2/225
BL	(0°-30°)	377.6	5.5	B1/500		
BM	(30°-60°)	723.7	10.5	B1/1000		
BH	(60°-80°)	408.4	5.9	B1/500		G1/500
BVH	(80°-90°)	47.7	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	768.2	768.2	768.2	768.2	768.2	768.2	768.2	768.2	768.2	768.2	768.2
2.5°	738.1	735.6	735.6	739.4	740.6	744.4	744.4	745.6	749.4	755.8	763.2
5°	715.5	714.2	715.5	720.5	723.0	730.6	733.0	734.4	741.8	752.0	763.2
7.5°	692.8	691.6	694.1	701.6	709.2	720.5	726.8	728.0	739.4	753.2	768.2
10°	685.3	684.0	687.8	694.1	701.6	714.2	724.2	725.6	741.8	758.2	779.6
12.5°	695.4	694.1	697.9	704.2	711.7	720.5	731.8	733.0	754.4	775.8	798.5
15°	720.5	720.5	721.8	725.6	733.0	740.6	750.6	752.0	774.6	799.7	822.4
17.5°	759.4	757.0	757.0	755.8	760.8	764.6	777.1	778.4	802.2	824.9	847.5
20°	807.3	806.0	801.0	794.7	793.4	796.0	808.5	809.8	833.7	852.5	873.9
22.5°	865.1	866.3	855.1	841.2	834.9	838.7	850.0	851.3	868.9	885.3	904.1
25°	941.8	938.0	921.7	901.5	889.0	889.0	900.3	900.3	916.7	926.7	939.3
27.5°	1014.8	1007.2	992.1	963.2	943.1	946.8	958.2	958.2	973.2	977.0	983.3
30°	1093.9	1086.4	1067.6	1031.1	1004.6	1002.2	1016.0	1014.8	1034.8	1033.6	1028.6
32.5°	1190.8	1187.0	1155.5	1109.1	1073.8	1065.0	1077.6	1078.9	1091.5	1087.7	1071.3
35°	1326.6	1325.3	1296.4	1214.7	1168.1	1151.8	1159.3	1159.3	1168.1	1158.1	1130.5
37.5°	1497.6	1500.2	1475.0	1354.3	1288.8	1261.2	1262.4	1261.2	1263.8	1252.4	1223.4
40°	1668.6	1674.9	1673.6	1527.8	1444.8	1397.0	1379.3	1376.9	1383.1	1378.1	1350.5
42.5°	1893.7	1908.7	1873.5	1741.6	1648.5	1568.0	1520.2	1514.0	1527.8	1534.0	1507.6
45°	2127.5	2122.5	2067.2	1971.6	1887.3	1784.3	1693.7	1683.7	1693.7	1712.6	1684.9
47.5°	2249.6	2245.8	2232.0	2184.1	2171.6	2053.4	1916.3	1907.5	1888.7	1915.1	1882.3
50°	2450.7	2454.5	2397.9	2392.9	2445.7	2380.3	2167.8	2147.7	2113.7	2135.1	2107.5
52.5°	2596.6	2580.2	2545.0	2589.0	2753.8	2718.6	2404.2	2395.4	2363.9	2358.9	2346.3
55°	2655.7	2655.7	2661.9	2763.8	2999.0	2952.4	2660.7	2669.5	2626.7	2591.5	2607.9
57.5°	2673.3	2680.8	2734.9	2903.4	3286.9	3134.7	2943.6	2956.2	2894.5	2824.2	2875.7
60°	2586.5	2609.1	2738.6	2982.6	3449.1	3328.4	3241.6	3245.4	3156.1	3053.0	3143.5
62.5°	2363.9	2391.7	2622.9	3015.4	3422.7	3527.0	3523.3	3532.1	3410.1	3281.8	3395.1
65°	2091.1	2118.7	2365.2	2923.5	3402.6	3669.1	3781.0	3805.0	3647.7	3475.5	3552.2
67.5°	1690.0	1726.4	1960.3	2614.2	3304.5	3786.1	4022.5	4047.6	3831.4	3576.1	3538.4
70°	1224.8	1242.4	1438.5	1986.8	2904.7	3722.0	4213.6	4212.4	3891.7	3568.6	3349.8
72.5°	589.7	603.5	773.4	1233.6	2077.3	3158.7	4075.3	4099.2	3808.8	3459.2	2918.5
75°	242.6	256.6	313.1	520.6	1090.2	2087.3	3454.1	3510.8	3459.2	3104.6	2283.5
77.5°	150.9	155.9	183.6	269.1	498.0	974.5	2418.1	2494.8	2741.2	2487.2	1507.6
80°	113.1	116.9	137.1	188.6	314.4	359.7	1200.8	1297.6	1661.1	1427.2	682.8
82.5°	94.3	95.5	109.4	137.1	213.8	206.2	384.7	428.8	774.6	544.4	235.2
85°	88.0	90.5	98.1	98.1	135.8	129.5	159.7	167.3	225.0	186.1	81.7
87.5°	45.3	42.8	86.7	76.7	70.4	62.9	67.9	72.9	84.3	89.3	36.4
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°	768.2	768.2	768.2	768.2	768.2	768.2	768.2	768.2	768.2	768.2	768.2
2.5°	765.8	769.6	775.8	782.1	789.6	798.5	803.5	809.8	814.8	812.3	811.0
5°	769.6	775.8	789.6	802.2	817.3	834.9	846.3	858.9	868.9	871.3	867.7
7.5°	775.8	787.2	806.0	828.7	848.7	871.3	889.0	906.6	919.2	921.7	921.7
10°	790.9	803.5	828.7	858.9	882.7	906.6	926.7	940.6	951.9	956.9	956.9
12.5°	812.3	827.4	857.5	894.1	920.5	943.1	954.4	960.7	965.7	970.8	972.0
15°	837.5	853.8	890.3	929.2	956.9	968.2	968.2	967.0	967.0	969.5	972.0
17.5°	862.6	880.1	917.9	959.4	977.0	970.8	961.9	958.2	955.6	954.4	958.2
20°	889.0	906.6	944.3	983.3	978.2	951.9	939.3	930.5	922.9	919.2	924.2
22.5°	917.9	934.3	973.2	999.6	961.9	921.7	897.8	883.9	871.3	863.9	868.9
25°	951.9	968.2	1006.0	1004.6	933.0	876.5	838.7	816.1	802.2	794.7	794.7
27.5°	992.1	1006.0	1042.4	992.1	892.7	816.1	760.8	739.4	735.6	729.3	729.3
30°	1033.6	1044.9	1076.3	963.2	837.5	736.8	676.5	666.5	667.7	661.4	662.7
32.5°	1076.3	1087.7	1096.5	920.5	765.8	647.5	607.3	599.8	598.5	593.5	588.5
35°	1136.7	1153.1	1099.0	862.6	679.0	573.4	544.4	536.9	529.4	511.8	511.8
37.5°	1228.5	1246.2	1092.7	790.9	589.7	515.6	489.2	479.0	466.5	448.9	442.6
40°	1354.3	1354.3	1078.9	710.4	518.0	469.0	443.9	431.3	417.5	399.9	396.1
42.5°	1502.6	1467.4	1057.5	628.7	465.2	437.6	414.9	401.1	384.7	364.7	362.1
45°	1676.1	1580.6	1027.3	555.8	426.3	418.7	404.9	381.0	353.3	331.9	328.2
47.5°	1844.7	1682.4	998.4	504.2	393.5	411.2	399.9	359.7	321.9	291.7	288.0
50°	2029.4	1773.0	964.4	461.5	368.5	406.1	393.5	328.2	286.7	265.4	262.8
52.5°	2214.3	1864.7	928.0	416.2	347.1	396.1	378.5	305.6	285.4	256.6	252.8
55°	2409.3	1971.6	885.3	365.9	321.9	375.9	358.3	304.3	294.2	256.6	247.8
57.5°	2599.1	2089.9	816.1	316.9	294.2	345.8	350.9	296.8	275.4	254.0	244.0
60°	2809.1	2215.6	701.6	275.4	270.4	320.6	340.7	280.4	254.0	246.4	241.4
62.5°	2977.6	2328.7	548.2	246.4	250.2	300.5	328.2	270.4	245.2	239.0	237.6
65°	3050.5	2331.3	393.5	221.3	230.1	281.6	315.6	261.6	237.6	235.2	233.8
67.5°	2973.8	2203.0	276.6	197.4	208.7	264.0	299.3	252.8	230.1	231.4	228.8
70°	2726.1	1932.7	202.4	174.8	188.6	245.2	281.6	241.4	221.3	223.8	220.0
72.5°	2281.0	1506.4	162.2	155.9	172.3	225.0	264.0	228.8	207.5	208.7	201.2
75°	1684.9	998.4	135.8	139.5	153.4	206.2	241.4	212.5	192.4	187.4	182.3
77.5°	1002.2	513.0	111.9	121.9	137.1	183.6	216.3	192.4	176.0	167.3	163.5
80°	413.7	207.5	91.8	103.1	119.5	163.5	191.1	168.5	157.2	148.3	143.3
82.5°	164.7	101.9	72.9	84.3	100.6	142.1	167.3	148.3	137.1	130.7	116.9
85°	62.9	50.3	49.0	59.1	75.5	109.4	138.3	124.5	115.7	99.3	95.5
87.5°	25.2	22.6	22.6	28.9	42.8	69.2	99.3	86.7	90.5	71.7	72.9
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)