

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: P348601

Luminaire Tested: **ARCH-N-PA1-50-740-U-T3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P348601  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-N-PA1-50-740-U-T3  
Description: ARCHEON ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 980mA LIGHT ENGINE WITH 16 LEDS AND  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6784 lumens  
Efficiency: N/A  
Efficacy: 130.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 52  
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

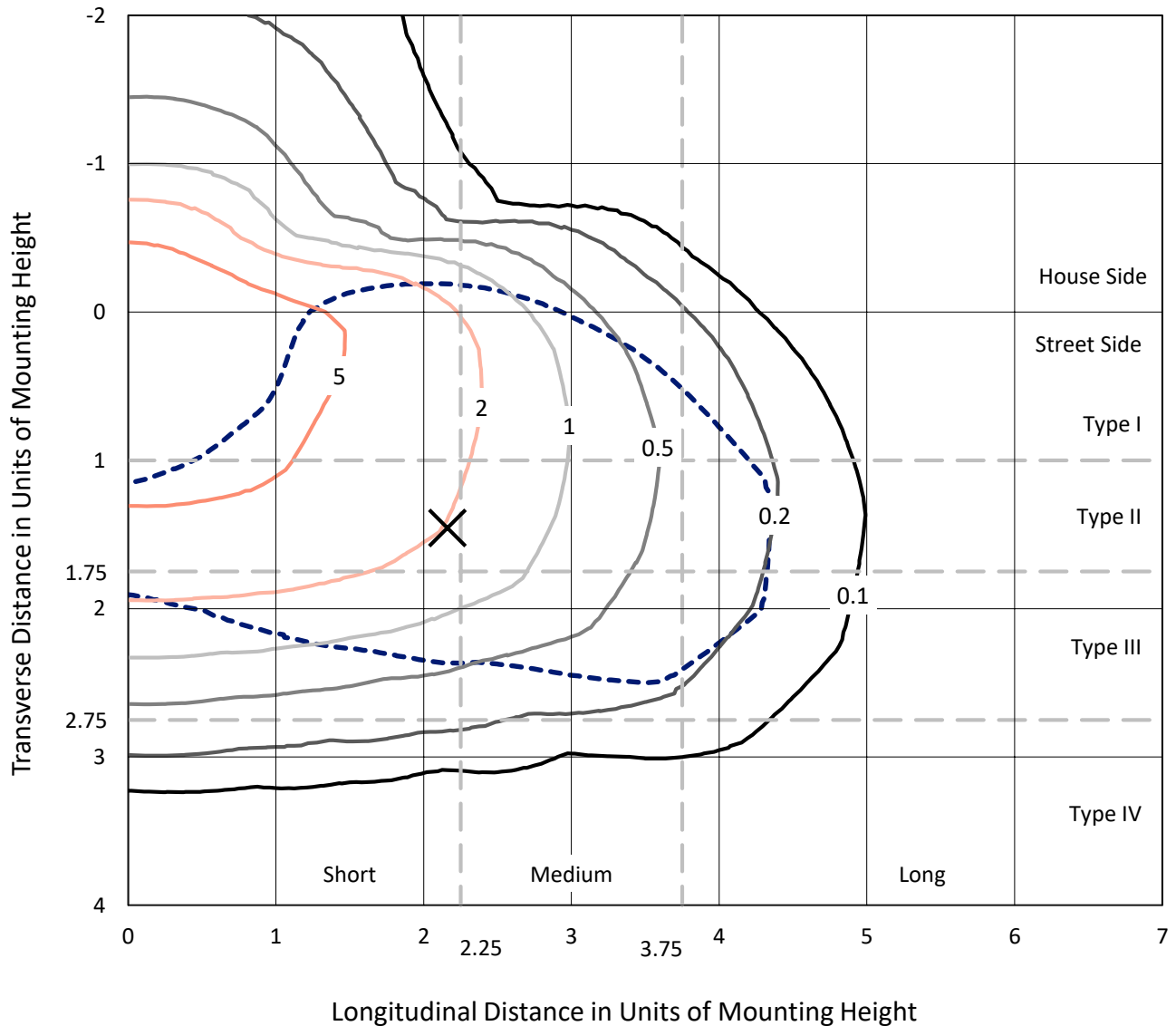


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

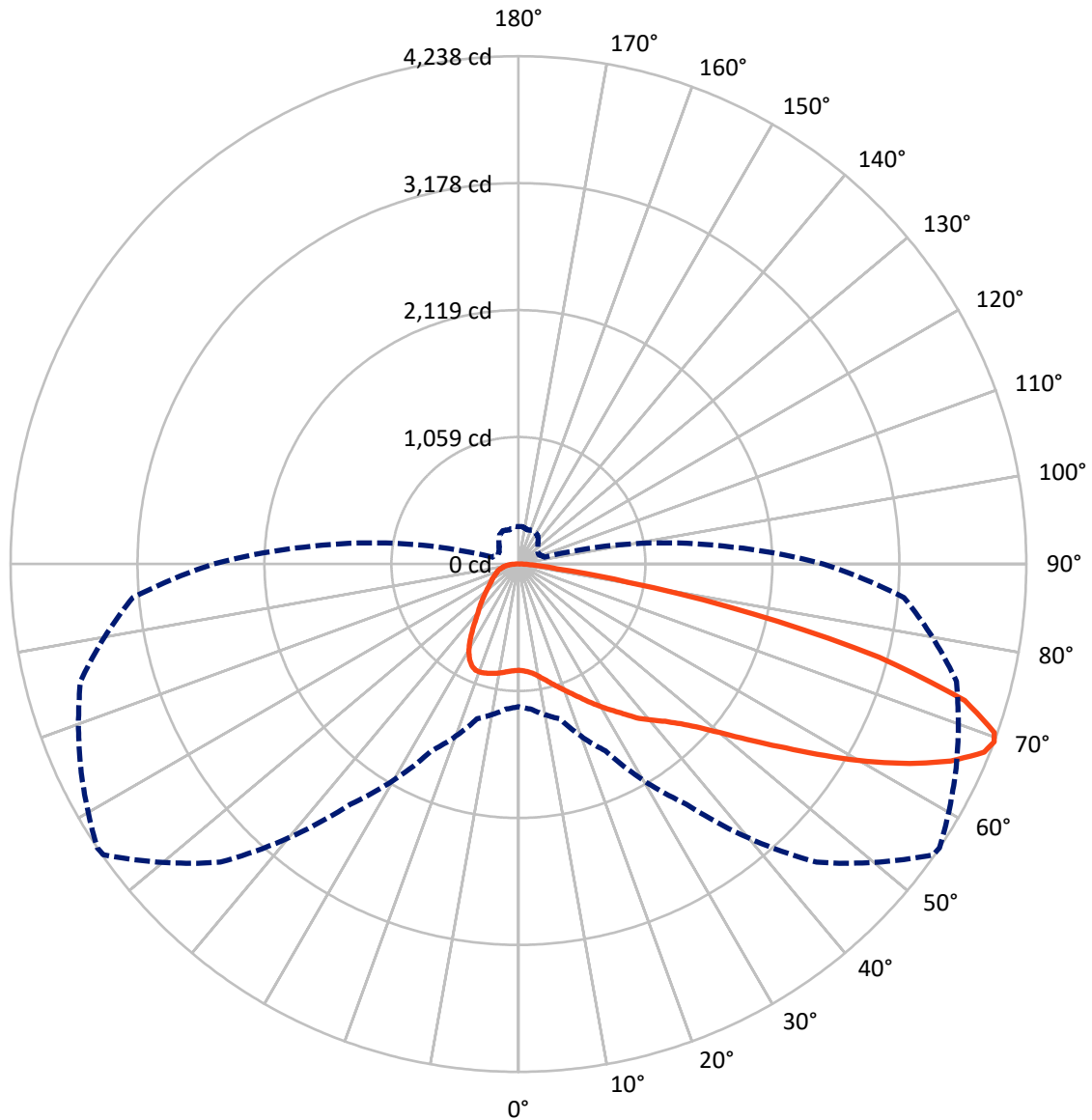


Based on 10 foot mounting height. Maximum calculated value = 9.6 fc  
 Type III - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1510.8	0.0	1510.8
	% Fixture	22.3	0.0	22.3
<b>Street Side</b>	Lumens	5273.2	0.0	5273.2
	% Fixture	77.7	0.0	77.7
<b>Total</b>	Lumens	6784.0	0.0	6784.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.1	1.3
10°-20°	280.1	4.1
20°-30°	489.0	7.2
30°-40°	702.4	10.4
40°-50°	972.0	14.3
50°-60°	1424.2	21.0
60°-70°	1736.3	25.6
70°-80°	960.0	14.2
80°-90°	133.0	2.0
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°	6784.0	100.0
0°-180°	6784.0	100.0



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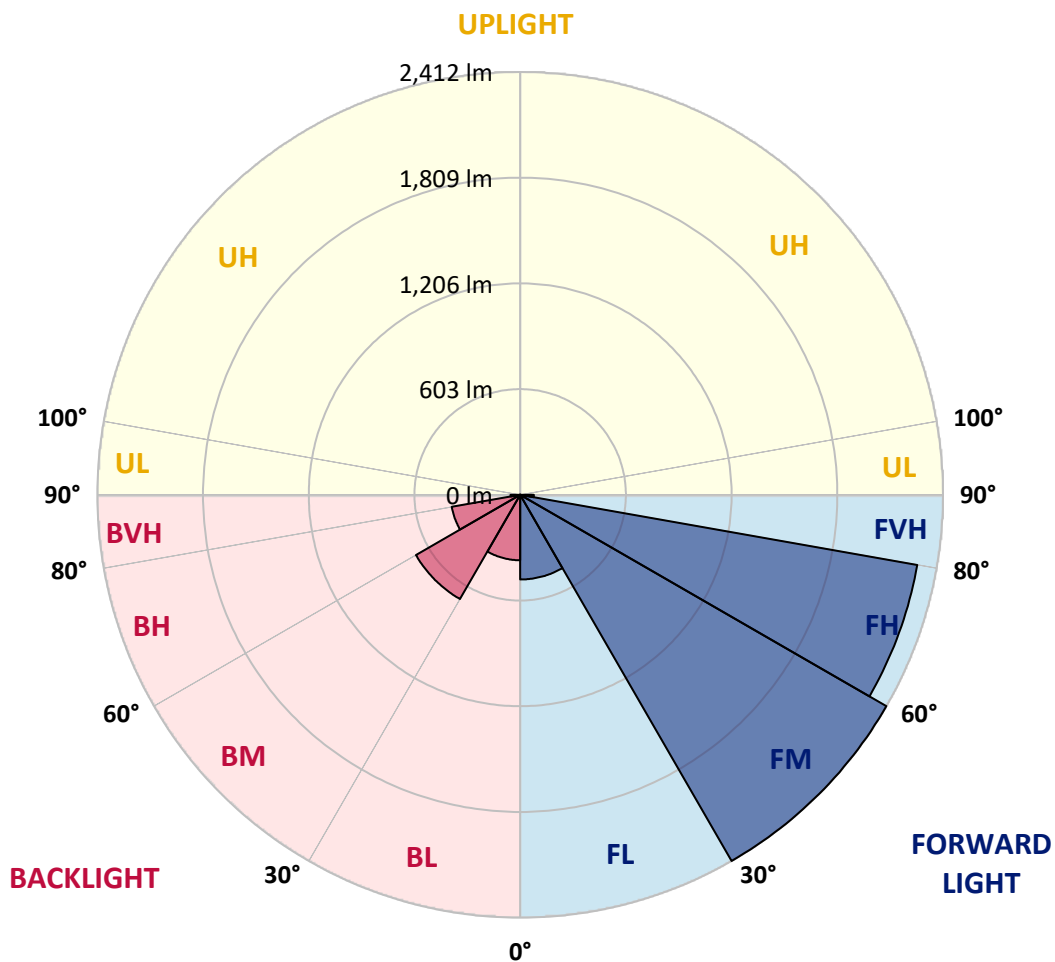
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	482.8	7.1			
FM	(30°-60°)	2412.0	35.6			
FH	(60°-80°)	2300.1	33.9			G2/5000
FVH	(80°-90°)	78.3	1.2			G1/100
BL	(0°-30°)	373.3	5.5	B1/500		
BM	(30°-60°)	686.6	10.1	B1/1000		
BH	(60°-80°)	396.2	5.8	B1/500		G1/500
BVH	(80°-90°)	54.6	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 III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	886.9	886.9	886.9	886.9	886.9	886.9	886.9	886.9	886.9	886.9	886.9
2.5°	892.5	893.4	892.7	894.6	892.5	893.9	892.7	892.7	892.0	889.9	887.6
5°	906.5	908.4	907.2	909.1	906.5	907.0	904.9	904.9	902.8	898.4	893.7
7.5°	928.5	930.6	929.7	931.5	928.0	928.0	925.2	925.0	920.8	913.5	908.2
10°	954.7	957.5	956.5	959.4	956.5	957.5	954.7	954.7	949.1	938.8	932.0
12.5°	992.8	996.3	993.7	993.5	992.3	994.2	991.8	991.4	986.2	972.2	962.9
15°	1043.7	1047.5	1042.1	1041.6	1035.1	1034.4	1034.4	1033.7	1030.4	1013.6	998.1
17.5°	1102.4	1103.5	1098.9	1091.4	1083.0	1077.6	1076.9	1078.8	1078.8	1059.1	1034.6
20°	1159.9	1162.0	1158.2	1149.8	1139.1	1131.1	1125.5	1129.3	1129.0	1105.7	1070.8
22.5°	1222.5	1227.4	1221.8	1211.1	1198.4	1189.6	1179.7	1183.0	1183.2	1154.5	1106.4
25°	1303.6	1299.2	1295.7	1280.5	1262.5	1253.4	1244.2	1247.5	1246.6	1207.1	1143.0
27.5°	1375.3	1376.3	1371.6	1355.5	1334.7	1314.6	1314.1	1316.2	1312.7	1261.8	1177.6
30°	1458.8	1459.2	1452.7	1438.2	1415.5	1389.6	1383.5	1387.0	1379.6	1313.6	1214.1
32.5°	1541.7	1544.1	1536.8	1519.3	1501.1	1469.5	1457.4	1459.7	1441.0	1366.7	1251.7
35°	1614.4	1617.7	1615.4	1603.7	1583.8	1556.7	1542.2	1540.8	1517.7	1431.7	1301.5
37.5°	1688.5	1691.5	1689.0	1679.2	1671.2	1642.5	1634.8	1634.8	1594.6	1498.0	1364.8
40°	1764.7	1769.4	1766.3	1752.8	1746.0	1732.9	1714.5	1710.0	1666.5	1577.7	1468.1
42.5°	1835.5	1841.6	1853.7	1845.8	1832.0	1833.9	1796.7	1794.4	1762.6	1695.5	1597.8
45°	1936.0	1944.9	1965.4	1959.4	1956.6	1946.3	1902.1	1900.0	1887.9	1854.0	1758.9
47.5°	2045.6	2057.8	2094.9	2096.1	2126.2	2106.8	2046.8	2039.5	2042.3	2043.7	1955.4
50°	2146.6	2159.9	2220.9	2249.6	2320.7	2324.9	2228.8	2222.3	2233.3	2265.5	2184.4
52.5°	2227.2	2244.0	2320.2	2409.0	2530.8	2565.4	2453.0	2448.0	2456.2	2511.8	2443.4
55°	2286.3	2304.6	2387.5	2549.2	2743.7	2804.7	2711.0	2706.3	2711.4	2782.2	2725.0
57.5°	2300.1	2304.6	2424.9	2643.7	2923.4	3069.9	3026.7	3017.3	2992.1	3053.8	3035.8
60°	2235.4	2253.1	2394.1	2676.8	3062.5	3331.4	3356.7	3345.0	3274.2	3324.7	3310.2
62.5°	2104.0	2135.8	2278.8	2626.4	3116.9	3545.1	3680.4	3666.3	3544.4	3577.1	3507.4
65°	1889.5	1903.0	2053.3	2452.3	3047.7	3681.8	3969.0	3962.0	3808.4	3757.3	3543.9
67.5°	1505.8	1531.2	1658.8	2088.4	2764.7	3665.6	4192.2	4191.5	3980.9	3824.1	3414.6
69°	1189.6	1216.0	1337.5	1720.3	2446.4	3518.2	4229.6	4237.8	4029.5	3783.4	3230.0
70°	948.4	979.0	1062.4	1449.0	2163.9	3323.7	4198.5	4213.2	4020.2	3716.4	3059.7
72.5°	403.6	428.4	487.7	746.9	1318.8	2481.9	3838.8	3894.4	3803.5	3401.3	2528.7
75°	176.2	183.9	210.8	304.5	585.4	1350.8	3007.3	3110.1	3252.2	2875.0	1883.7
77.5°	129.0	132.3	147.0	178.8	262.7	510.2	1933.9	1993.7	2345.5	2092.1	1155.4
80°	99.8	102.1	113.6	131.3	171.5	206.4	882.0	933.4	1318.8	1074.6	481.2
82.5°	79.5	81.1	89.0	96.8	118.5	125.0	292.8	324.8	486.8	296.8	127.4
85°	73.9	75.7	78.5	70.6	76.0	73.4	126.7	132.5	147.0	116.6	53.3
87.5°	33.4	39.5	77.8	54.9	40.4	32.3	51.9	54.2	61.0	61.2	23.6
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°	886.9	886.9	886.9	886.9	886.9	886.9	886.9	886.9	886.9	886.9	886.9
2.5°	889.0	888.3	889.5	886.7	890.2	889.9	888.8	889.2	891.6	891.3	891.6
5°	894.4	893.9	895.3	893.2	897.4	898.8	899.1	901.2	903.7	904.4	904.4
7.5°	907.9	907.9	908.6	905.8	908.6	908.4	907.2	909.3	911.9	912.1	911.9
10°	931.3	931.5	930.4	923.1	920.8	914.5	908.6	908.9	912.1	914.7	915.4
12.5°	960.8	959.8	954.7	941.4	931.5	918.7	912.6	912.4	915.7	917.8	918.5
15°	994.4	991.8	978.5	956.8	939.5	926.9	917.1	914.7	912.8	910.5	910.7
17.5°	1026.2	1020.4	998.1	968.0	949.8	932.9	914.0	898.8	888.3	882.2	880.4
20°	1058.4	1047.0	1015.0	978.5	955.4	924.8	888.3	857.5	838.3	829.4	827.8
22.5°	1087.9	1069.4	1030.6	989.5	950.9	897.2	839.9	795.1	768.4	756.5	757.4
25°	1116.6	1090.9	1047.0	997.2	928.5	848.6	772.6	717.5	686.6	673.3	672.8
27.5°	1141.9	1112.7	1064.8	990.9	886.7	779.4	692.9	639.2	613.5	602.0	600.2
30°	1170.9	1140.0	1088.4	966.8	825.4	699.5	615.1	577.2	559.0	547.6	545.5
32.5°	1206.1	1177.2	1107.8	923.1	747.2	616.0	554.3	527.9	511.3	498.5	496.2
35°	1257.6	1226.2	1112.7	860.5	661.1	550.1	509.7	482.6	460.2	443.6	441.9
37.5°	1322.1	1287.7	1101.4	779.4	577.7	507.4	472.5	439.1	409.9	386.5	382.8
40°	1415.1	1363.2	1070.4	685.9	516.3	474.4	436.3	398.2	362.0	334.7	329.3
42.5°	1526.8	1451.8	1022.7	592.9	471.1	441.0	400.3	353.1	318.5	299.1	296.3
45°	1668.9	1543.8	956.5	511.6	426.7	407.6	361.5	318.1	296.6	282.3	280.0
47.5°	1831.1	1647.1	887.1	445.4	389.1	376.3	330.5	302.4	285.4	274.1	272.0
50°	2030.4	1763.8	813.5	391.2	351.3	338.6	315.7	293.8	280.2	271.6	269.5
52.5°	2255.2	1895.3	760.5	348.5	319.9	310.8	308.0	289.1	278.1	271.6	269.5
55°	2497.4	2029.3	703.2	312.5	292.8	295.4	302.9	289.6	282.1	274.1	271.1
57.5°	2739.7	2167.6	639.4	282.1	271.3	284.0	299.4	290.5	284.2	276.5	273.7
60°	2931.3	2255.2	540.6	256.6	254.3	271.3	291.0	283.5	275.3	275.5	275.1
62.5°	3020.9	2250.6	431.4	233.9	237.2	254.3	277.4	272.5	265.7	274.8	275.5
65°	2970.6	2138.4	335.8	213.4	219.0	236.5	263.4	267.1	269.5	287.0	289.3
67.5°	2759.8	1920.1	260.1	195.4	202.4	224.4	264.8	291.0	294.0	312.5	312.2
69°	2541.8	1715.4	226.0	186.0	194.2	227.4	283.0	306.2	294.7	314.3	311.5
70°	2359.0	1553.4	207.8	179.7	190.5	232.8	295.2	305.9	291.2	308.0	303.3
72.5°	1816.8	1117.6	176.2	168.0	177.8	222.7	298.7	299.1	283.0	286.3	278.3
75°	1246.1	706.3	153.8	152.1	158.7	200.8	287.5	285.8	261.7	257.1	250.5
77.5°	687.1	358.7	130.6	137.0	141.4	177.8	261.3	258.9	239.1	229.3	226.9
80°	265.0	157.0	110.3	121.8	124.6	154.0	229.0	226.9	210.3	197.7	194.2
82.5°	100.0	82.3	91.1	105.4	104.5	127.1	194.0	192.8	176.7	158.2	152.6
85°	46.3	49.3	72.2	86.9	80.2	94.2	155.2	157.3	137.7	115.7	115.7
87.5°	19.6	27.6	51.2	65.7	54.0	63.6	113.8	108.7	99.8	69.2	65.0
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)