

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: P798999

Luminaire Tested: **ARCH1-50-730-U-T3**

Issue Date: 4/4/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P798999  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/4/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH1-50-730-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 3000K, 1470mA LIGHTSQUARE WITH 10 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6459 lumens  
Efficiency: N/A  
Efficacy: 121.9 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

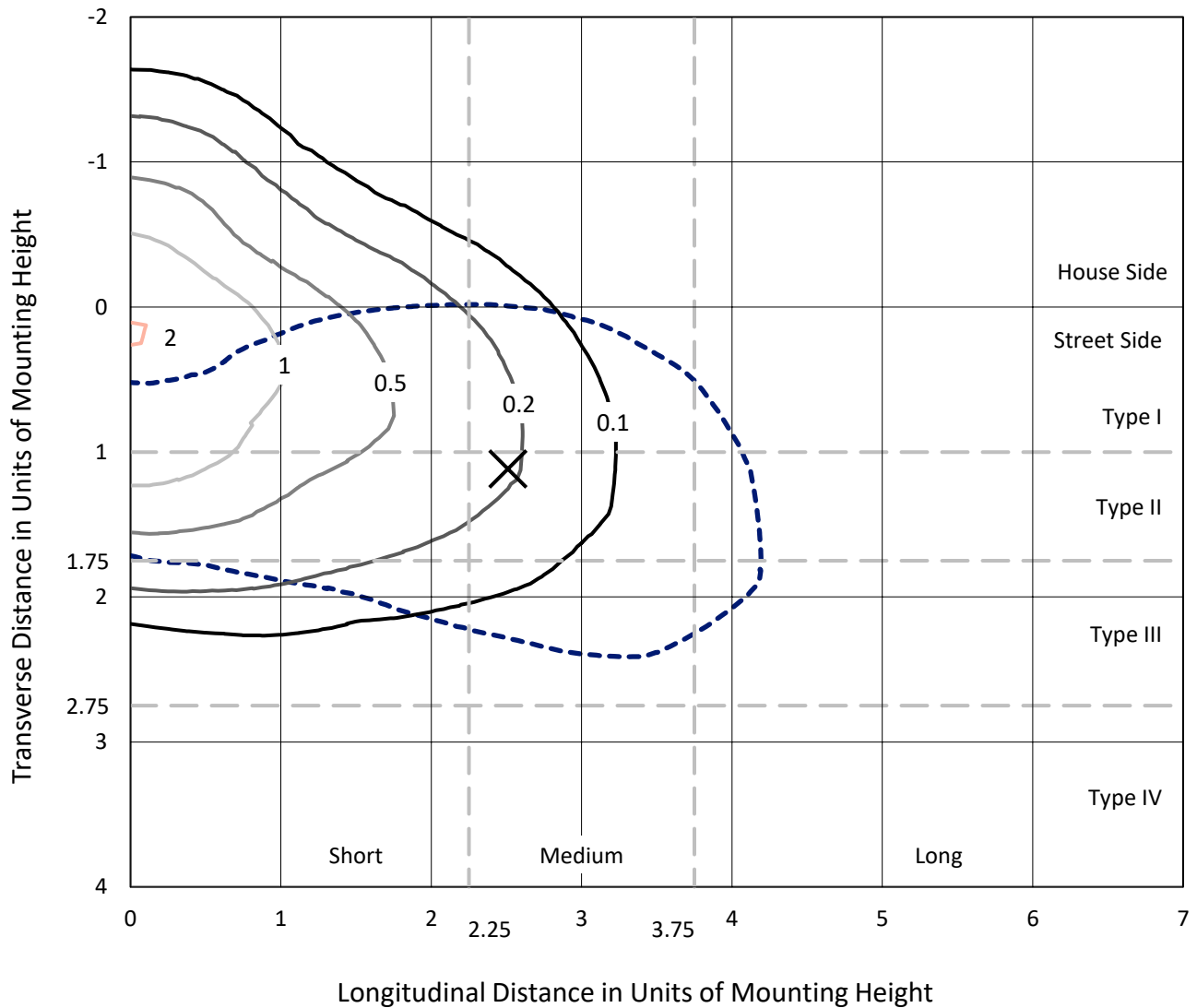
Input Watts (W): 53  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

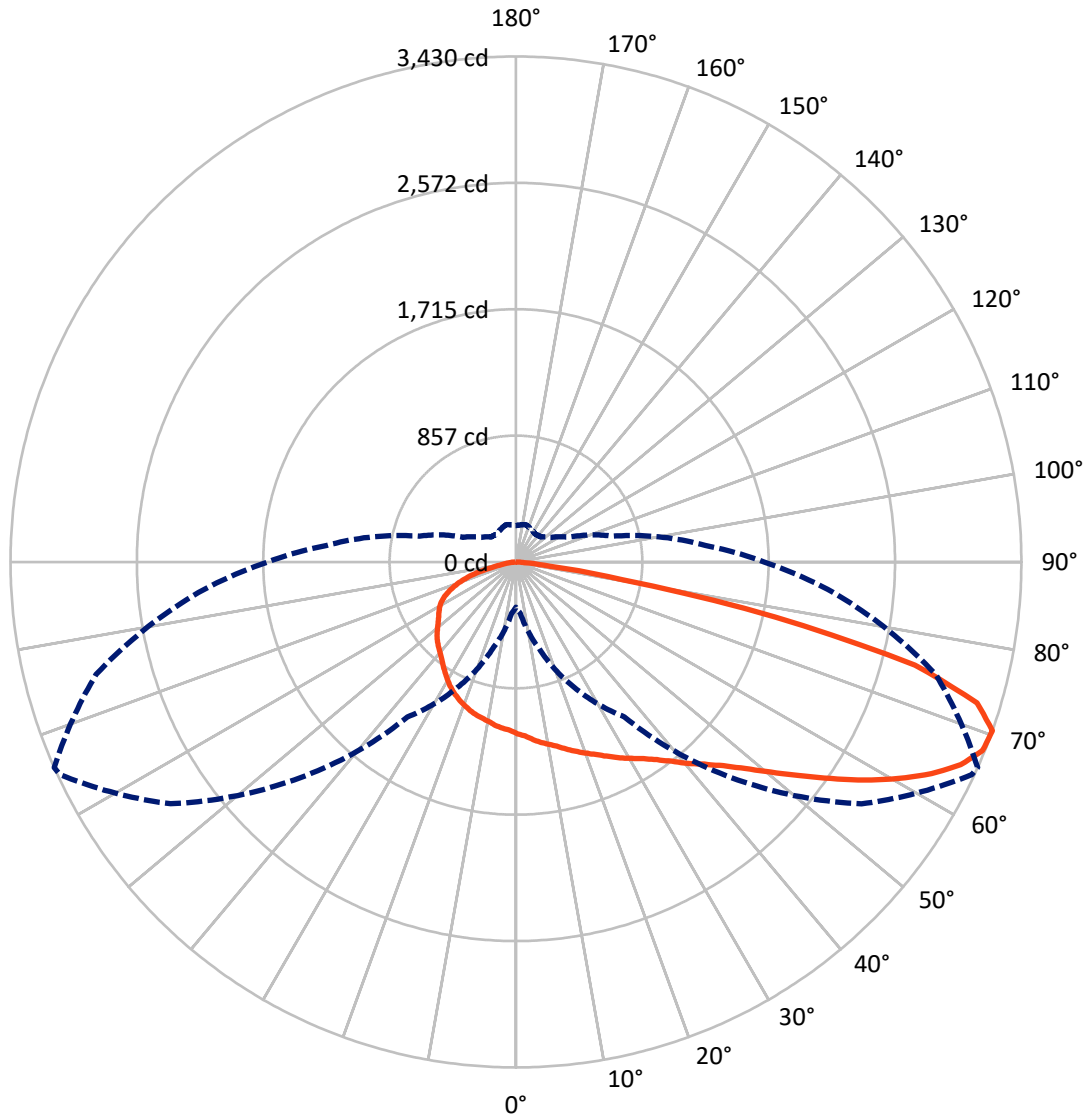
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2 fc  
 Type III - Medium - N/A

REPORT NUMBER: P798999  
CATALOG NUMBER: ARCH1-50-730-U-T3

### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1711.5	0.0	1711.5
	% Fixture	26.5	0.0	26.5
<b>Street Side</b>	Lumens	4747.5	0.0	4747.5
	% Fixture	73.5	0.0	73.5
<b>Total</b>	Lumens	6459.0	0.0	6459.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.0	1.7
10°-20°	336.0	5.2
20°-30°	563.2	8.7
30°-40°	843.4	13.1
40°-50°	1127.6	17.5
50°-60°	1316.5	20.4
60°-70°	1309.0	20.3
70°-80°	775.0	12.0
80°-90°	76.4	1.2
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°	6459.0	100.0
0°-180°	6459.0	100.0

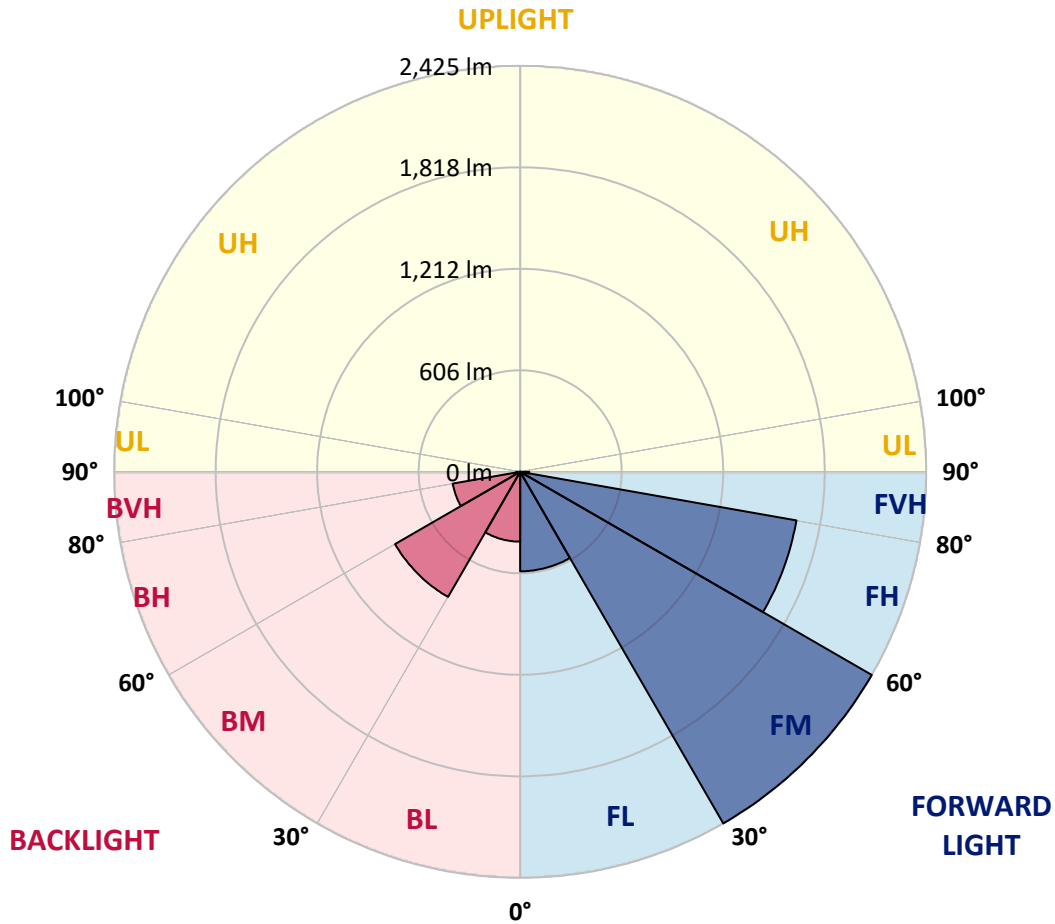


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 CATALOG NUMBER: ARCH1-50-730-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	594.1	9.2			
FM (30°-60°)	2424.6	37.5			
FH (60°-80°)	1675.2	25.9			G1/1800
FVH (80°-90°)	53.7	0.8			G1/100
BL (0°-30°)	417.2	6.5	B1/500		
BM (30°-60°)	862.8	13.4	B1/1000		
BH (60°-80°)	408.8	6.3	B1/500		G1/500
BVH (80°-90°)	22.7	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G1**  
 Type III Medium



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 CATALOG NUMBER: ARCH1-50-730-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7
2.5°	1208.6	1206.7	1205.7	1201.9	1193.3	1197.1	1188.6	1182.8	1181.9	1168.6	1160.9
5°	1258.1	1257.1	1255.2	1249.5	1236.2	1238.1	1223.8	1213.3	1210.5	1189.5	1173.3
7.5°	1300.0	1298.1	1297.1	1289.5	1275.2	1274.3	1257.1	1241.9	1237.1	1208.6	1183.8
10°	1332.4	1329.5	1331.4	1323.8	1308.6	1305.7	1283.8	1263.8	1259.0	1222.8	1188.6
12.5°	1360.0	1358.1	1360.9	1354.3	1341.9	1339.0	1317.1	1291.4	1285.7	1243.8	1199.0
15°	1390.5	1383.8	1389.5	1386.7	1378.1	1377.1	1357.1	1328.6	1320.9	1270.5	1215.2
17.5°	1406.7	1402.8	1409.5	1410.5	1406.7	1413.3	1394.3	1360.0	1353.3	1295.2	1229.5
20°	1418.1	1412.4	1420.0	1425.7	1428.6	1441.9	1426.7	1393.3	1385.7	1319.0	1242.8
22.5°	1457.1	1444.7	1445.7	1449.5	1451.4	1470.5	1460.9	1428.6	1420.9	1348.6	1259.0
25°	1555.2	1530.5	1514.3	1502.8	1489.5	1505.7	1500.0	1468.6	1461.9	1383.8	1279.0
27.5°	1707.6	1676.2	1643.8	1610.5	1558.1	1551.4	1541.9	1513.3	1505.7	1419.0	1299.0
30°	1880.9	1849.5	1811.4	1758.1	1660.0	1608.6	1586.7	1555.2	1546.7	1450.5	1318.1
32.5°	2053.3	2025.7	1987.6	1922.8	1782.8	1678.1	1631.4	1599.0	1590.5	1484.7	1340.9
35°	2187.6	2170.5	2145.7	2064.7	1904.7	1760.0	1696.2	1657.1	1647.6	1539.0	1382.8
37.5°	2296.2	2283.8	2262.8	2178.1	1993.3	1841.9	1770.5	1725.7	1715.2	1598.1	1427.6
40°	2456.2	2423.8	2406.6	2283.8	2070.5	1916.2	1854.3	1807.6	1796.2	1660.9	1463.8
42.5°	2592.4	2568.5	2547.6	2378.1	2143.8	1980.0	1933.3	1890.5	1875.2	1722.8	1502.8
45°	2615.2	2624.7	2614.3	2424.7	2260.0	2042.8	2013.3	1985.7	1971.4	1806.6	1561.9
47.5°	2616.2	2616.2	2554.3	2451.4	2403.8	2113.3	2099.0	2108.5	2093.3	1913.3	1632.4
50°	2547.6	2560.0	2527.6	2458.1	2441.9	2183.8	2203.8	2255.2	2240.0	2026.6	1708.6
52.5°	2405.7	2446.6	2445.7	2447.6	2386.6	2243.8	2314.3	2431.4	2405.7	2154.3	1789.5
55°	2155.2	2237.1	2310.5	2373.3	2339.0	2280.0	2449.5	2619.0	2592.4	2297.1	1871.4
57.5°	1940.9	1993.3	2084.7	2262.8	2282.8	2311.4	2576.2	2815.2	2791.4	2455.2	1957.1
60°	1696.2	1768.6	1860.0	2113.3	2214.3	2352.4	2715.2	3006.6	2983.8	2615.2	2040.0
62.5°	1320.0	1413.3	1596.2	1883.8	2114.3	2378.1	2824.7	3175.2	3164.7	2766.6	2114.3
65°	920.0	1002.8	1259.0	1601.9	1955.2	2366.6	2912.4	3325.7	3316.2	2890.4	2166.6
67.5°	537.1	633.3	922.8	1289.5	1674.3	2287.6	2940.9	3414.3	3414.3	2965.7	2180.9
70°	306.7	351.4	608.6	940.0	1283.8	2069.5	2860.9	3413.3	3429.5	2948.5	2121.9
72.5°	214.3	234.3	409.5	632.4	870.5	1674.3	2651.4	3248.5	3270.4	2786.6	1920.0
75°	166.7	181.0	288.6	431.4	548.6	1137.1	2193.3	2739.0	2797.1	2375.2	1552.4
77.5°	126.7	137.1	168.6	269.5	351.4	653.3	1447.6	1796.2	1800.0	1454.3	832.4
80°	92.4	102.9	112.4	164.8	186.7	305.7	546.7	750.5	729.5	703.8	450.5
82.5°	55.2	65.7	68.6	89.5	91.4	130.5	191.4	241.9	232.4	309.5	211.4
85°	23.8	33.3	35.2	41.0	39.0	53.3	76.2	63.8	57.1	65.7	45.7
87.5°	5.7	9.5	9.5	10.5	8.6	13.3	14.3	10.5	9.5	11.4	11.4
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: P798999  
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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7	1165.7
2.5°	1159.0	1156.2	1157.1	1140.9	1136.2	1131.4	1128.6	1126.7	1124.8	1127.6	1130.5
5°	1167.6	1160.9	1153.3	1129.5	1120.0	1109.5	1101.9	1095.2	1092.4	1092.4	1095.2
7.5°	1174.3	1162.8	1146.7	1115.2	1098.1	1083.8	1071.4	1062.8	1058.1	1058.1	1060.9
10°	1175.2	1159.0	1133.3	1095.2	1072.4	1051.4	1037.1	1027.6	1020.9	1020.9	1022.8
12.5°	1180.9	1159.0	1125.7	1080.0	1051.4	1025.7	1008.6	994.3	991.4	991.4	993.3
15°	1190.5	1163.8	1120.9	1066.7	1032.4	1002.8	983.8	968.6	962.8	966.7	967.6
17.5°	1199.0	1166.7	1112.4	1049.5	1008.6	976.2	955.2	941.9	934.3	942.8	942.8
20°	1204.7	1166.7	1100.0	1027.6	982.8	946.7	926.7	910.5	904.8	915.2	916.2
22.5°	1213.3	1165.7	1086.7	1005.7	955.2	917.1	897.1	884.8	881.9	893.3	897.1
25°	1222.8	1167.6	1072.4	980.9	924.8	887.6	872.4	866.7	868.6	882.8	887.6
27.5°	1233.3	1171.4	1058.1	953.3	891.4	858.1	849.5	852.4	860.0	878.1	883.8
30°	1242.8	1172.4	1038.1	920.9	853.3	821.9	825.7	838.1	849.5	867.6	874.3
32.5°	1255.2	1173.3	1017.1	885.7	812.4	789.5	806.7	826.7	838.1	855.2	862.8
35°	1285.7	1189.5	1000.9	851.4	774.3	761.9	790.5	816.2	822.8	838.1	844.8
37.5°	1320.9	1216.2	992.4	816.2	737.1	734.3	770.5	796.2	798.1	807.6	814.3
40°	1342.8	1227.6	982.8	786.7	703.8	705.7	742.8	762.8	759.0	765.7	770.5
42.5°	1364.7	1231.4	962.8	761.9	672.4	674.3	702.8	717.1	719.0	733.3	740.0
45°	1401.9	1241.9	940.9	739.0	643.8	637.1	654.3	673.3	698.1	725.7	733.3
47.5°	1451.4	1263.8	918.1	711.4	616.2	594.3	600.9	634.3	660.0	685.7	690.5
50°	1501.9	1285.7	897.1	678.1	588.6	548.6	551.4	581.9	602.9	622.9	625.7
52.5°	1551.4	1304.7	879.0	646.7	557.1	494.3	505.7	537.1	551.4	560.9	563.8
55°	1600.9	1320.9	862.8	620.0	520.9	451.4	461.9	491.4	505.7	510.5	512.4
57.5°	1652.4	1340.0	850.5	597.1	480.0	413.3	420.0	440.9	454.3	460.0	458.1
60°	1695.2	1356.2	843.8	573.3	439.0	378.1	376.2	395.2	414.3	420.0	418.1
62.5°	1728.6	1366.7	833.3	542.9	402.9	342.9	333.3	358.1	378.1	381.9	384.8
65°	1746.6	1367.6	807.6	503.8	365.7	304.8	298.1	322.9	335.2	339.0	339.0
67.5°	1743.8	1352.4	757.1	451.4	331.4	270.5	264.8	280.0	298.1	300.9	298.1
70°	1684.7	1289.5	676.2	396.2	290.5	240.0	229.5	244.8	261.9	251.4	246.7
72.5°	1517.1	1126.7	557.1	335.2	244.8	201.9	197.1	212.4	213.3	215.2	210.5
75°	1197.1	839.0	417.1	260.9	198.1	169.5	168.6	165.7	169.5	177.1	171.4
77.5°	628.6	419.0	225.7	160.0	143.8	136.2	129.5	128.6	140.0	144.8	139.0
80°	340.9	235.2	129.5	96.2	87.6	88.6	97.1	95.2	107.6	110.5	105.7
82.5°	148.6	111.4	63.8	58.1	58.1	57.1	60.0	66.7	80.0	80.0	63.8
85°	32.4	27.6	24.8	28.6	32.4	32.4	32.4	32.4	22.9	12.4	8.6
87.5°	10.5	10.5	10.5	11.4	12.4	12.4	10.5	7.6	4.8	1.0	0.0
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)