

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: P799623

Luminaire Tested: **ARCH2-40-727-U-T3**

Issue Date: 4/4/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P799623  
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: ARCH2-40-727-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 335mA LIGHTSQUARES WITH 10 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

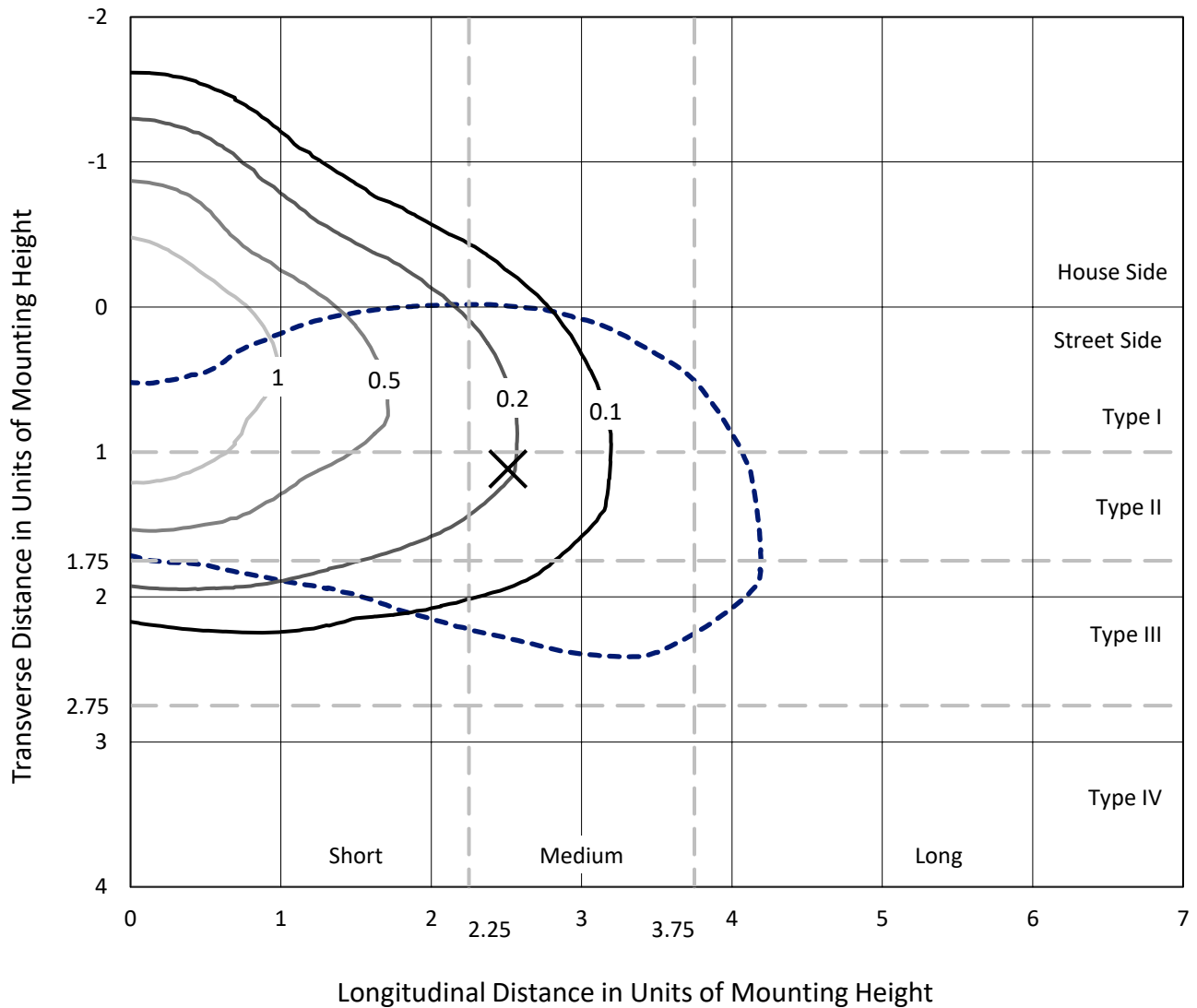
Lumens per Lamp: N/A  
Luminaire Lumens: 6208 lumens  
Efficiency: N/A  
Efficacy: 140.8 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 0.33' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 44.1  
Input Voltage (V): NR  
Input Current (Ain): 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



REPORT NUMBER: P799623  
 CATALOG NUMBER: ARCH2-40-727-U-T3

### Iso-Footcandle Lines of Horizontal Illumination

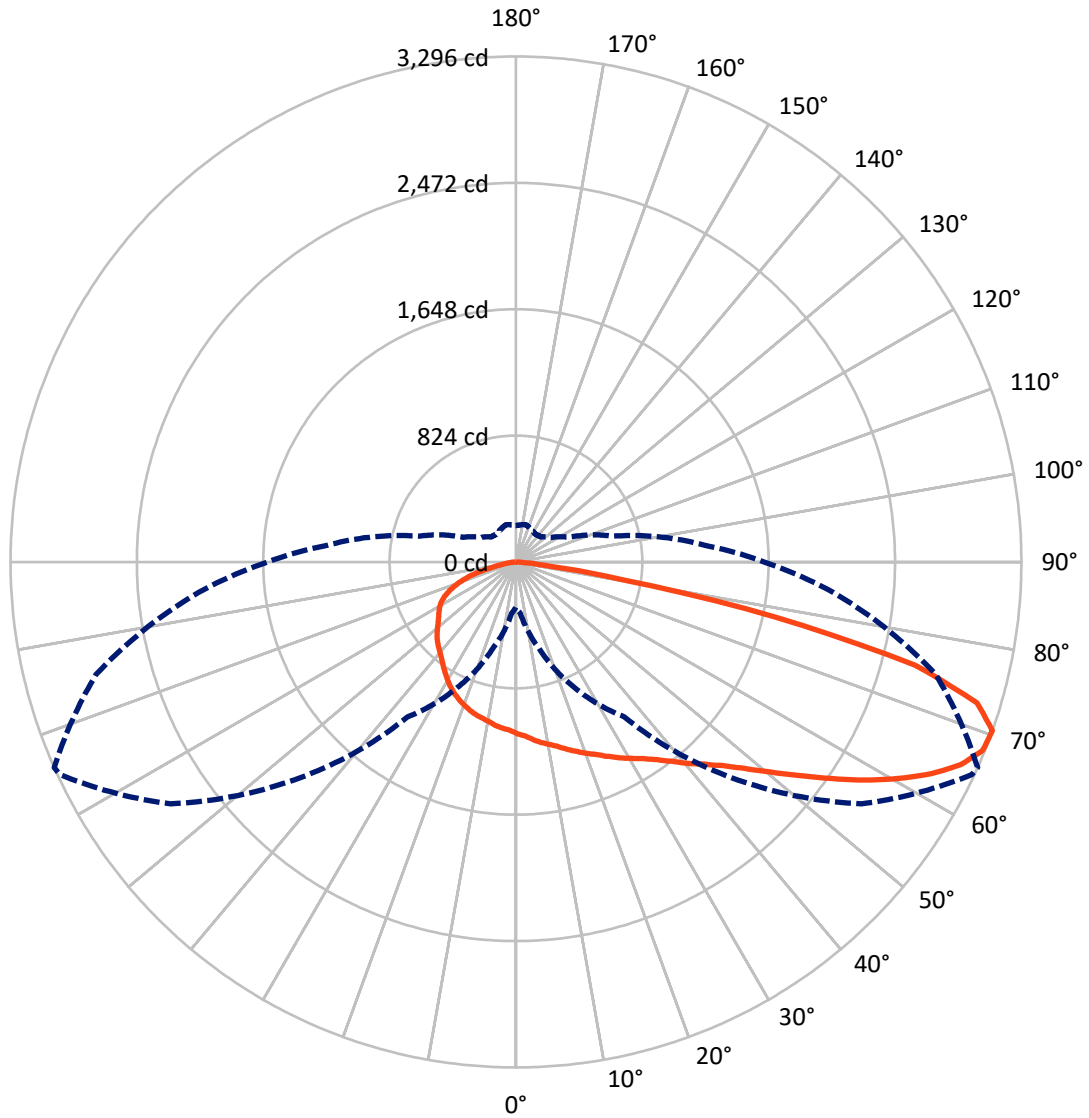
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type III - Medium - N/A

REPORT NUMBER: P799623  
CATALOG NUMBER: ARCH2-40-727-U-T3

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P799623  
 CATALOG NUMBER: ARCH2-40-727-U-T3

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1645.0	0.0	1645.0
	% Fixture	26.5	0.0	26.5
<b>Street Side</b>	Lumens	4563.0	0.0	4563.0
	% Fixture	73.5	0.0	73.5
<b>Total</b>	Lumens	6208.0	0.0	6208.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.7	1.7
10°-20°	322.9	5.2
20°-30°	541.3	8.7
30°-40°	810.6	13.1
40°-50°	1083.7	17.5
50°-60°	1265.3	20.4
60°-70°	1258.2	20.3
70°-80°	744.8	12.0
80°-90°	73.4	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°	6208.0	100.0
0°-180°	6208.0	100.0

**Coefficient of Utilization**

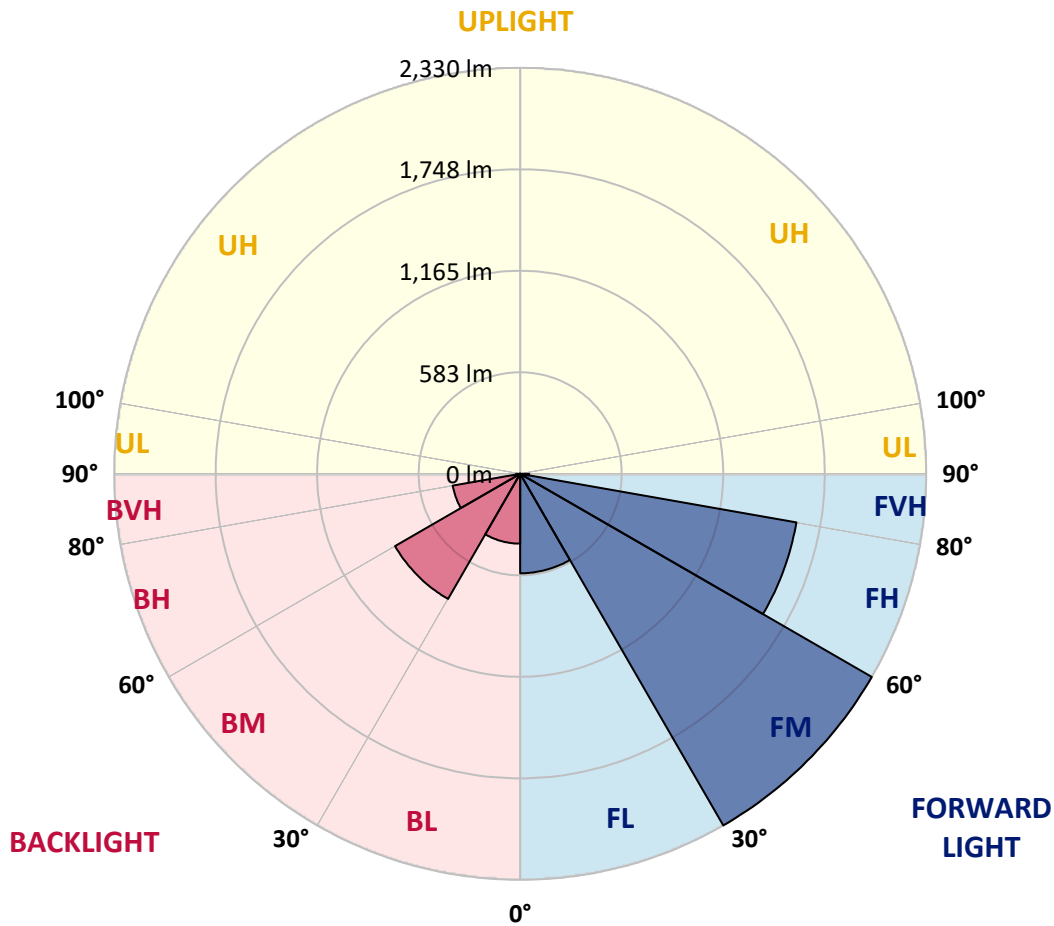


REPORT NUMBER: P799623  
 CATALOG NUMBER: ARCH2-40-727-U-T3

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	571.0	9.2			
FM (30°-60°)	2330.4	37.5			
FH (60°-80°)	1610.1	25.9			G1/1800
FVH (80°-90°)	51.6	0.8			G1/100
BL (0°-30°)	401.0	6.5	B1/500		
BM (30°-60°)	829.2	13.4	B1/1000		
BH (60°-80°)	392.9	6.3	B1/500		G1/500
BVH (80°-90°)	21.8	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



REPORT NUMBER: P799623  
 CATALOG NUMBER: ARCH2-40-727-U-T3

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4
2.5°	1161.6	1159.8	1158.8	1155.2	1146.9	1150.6	1142.4	1136.9	1136.0	1123.1	1115.8
5°	1209.2	1208.3	1206.4	1201.0	1188.1	1190.0	1176.2	1166.2	1163.4	1143.3	1127.7
7.5°	1249.5	1247.6	1246.7	1239.4	1225.7	1224.8	1208.3	1193.6	1189.1	1161.6	1137.8
10°	1280.6	1277.8	1279.7	1272.4	1257.7	1255.0	1233.9	1214.7	1210.1	1175.3	1142.4
12.5°	1307.1	1305.3	1308.1	1301.6	1289.7	1287.0	1265.9	1241.2	1235.7	1195.5	1152.4
15°	1336.4	1330.0	1335.5	1332.8	1324.5	1323.6	1304.4	1276.9	1269.6	1221.1	1168.0
17.5°	1352.0	1348.3	1354.7	1355.7	1352.0	1358.4	1340.1	1307.1	1300.7	1244.9	1181.7
20°	1363.0	1357.5	1364.8	1370.3	1373.0	1385.9	1371.2	1339.2	1331.9	1267.8	1194.5
22.5°	1400.5	1388.6	1389.5	1393.2	1395.0	1413.3	1404.2	1373.0	1365.7	1296.2	1210.1
25°	1494.8	1471.0	1455.4	1444.4	1431.6	1447.2	1441.7	1411.5	1405.1	1330.0	1229.3
27.5°	1641.2	1611.0	1579.9	1547.9	1497.5	1491.1	1482.0	1454.5	1447.2	1363.9	1248.6
30°	1807.8	1777.6	1741.0	1689.8	1595.5	1546.0	1525.0	1494.8	1486.5	1394.1	1266.9
32.5°	1973.5	1947.0	1910.4	1848.1	1713.6	1612.9	1568.0	1536.9	1528.7	1427.0	1288.8
35°	2102.6	2086.1	2062.3	1984.5	1830.7	1691.6	1630.3	1592.7	1583.6	1479.2	1329.1
37.5°	2206.9	2195.0	2174.9	2093.4	1915.9	1770.3	1701.7	1658.6	1648.6	1536.0	1372.1
40°	2360.7	2329.6	2313.1	2195.0	1990.0	1841.7	1782.2	1737.4	1726.4	1596.4	1406.9
42.5°	2491.6	2468.7	2448.6	2285.7	2060.5	1903.0	1858.2	1817.0	1802.3	1655.9	1444.4
45°	2513.6	2522.7	2512.7	2330.5	2172.2	1963.5	1935.1	1908.5	1894.8	1736.4	1501.2
47.5°	2514.5	2514.5	2455.0	2356.1	2310.4	2031.2	2017.5	2026.6	2012.0	1839.0	1568.9
50°	2448.6	2460.5	2429.4	2362.5	2347.0	2098.9	2118.1	2167.6	2152.9	1947.9	1642.2
52.5°	2312.2	2351.6	2350.6	2352.5	2293.9	2156.6	2224.3	2336.9	2312.2	2070.5	1720.0
55°	2071.5	2150.2	2220.7	2281.1	2248.1	2191.4	2354.3	2517.2	2491.6	2207.9	1798.7
57.5°	1865.5	1915.9	2003.7	2174.9	2194.1	2221.6	2476.1	2705.8	2682.9	2359.8	1881.1
60°	1630.3	1699.8	1787.7	2031.2	2128.2	2260.9	2609.7	2889.8	2867.8	2513.6	1960.7
62.5°	1268.7	1358.4	1534.1	1810.6	2032.1	2285.7	2715.0	3051.8	3041.7	2659.1	2032.1
65°	884.2	963.9	1210.1	1539.6	1879.2	2274.7	2799.2	3196.4	3187.3	2778.1	2082.4
67.5°	516.3	608.7	887.0	1239.4	1609.2	2198.7	2826.6	3281.6	3281.6	2850.4	2096.2
70°	294.7	337.8	584.9	903.5	1233.9	1989.1	2749.7	3280.7	3296.2	2834.0	2039.4
72.5°	206.0	225.2	393.6	607.8	836.6	1609.2	2548.4	3122.3	3143.4	2678.3	1845.4
75°	160.2	173.9	277.4	414.7	527.2	1092.9	2108.1	2632.6	2688.4	2282.9	1492.0
77.5°	121.7	131.8	162.0	259.0	337.8	627.9	1391.3	1726.4	1730.0	1397.8	800.0
80°	88.8	98.9	108.0	158.4	179.4	293.8	525.4	721.3	701.2	676.5	433.0
82.5°	53.1	63.2	65.9	86.0	87.9	125.4	184.0	232.5	223.3	297.5	203.2
85°	22.9	32.0	33.9	39.4	37.5	51.3	73.2	61.3	54.9	63.2	43.9
87.5°	5.5	9.2	9.2	10.1	8.2	12.8	13.7	10.1	9.2	11.0	11.0
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: P799623  
 CATALOG NUMBER: ARCH2-40-727-U-T3

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4	1120.4
2.5°	1114.0	1111.2	1112.2	1096.6	1092.0	1087.4	1084.7	1082.9	1081.0	1083.8	1086.5
5°	1122.2	1115.8	1108.5	1085.6	1076.5	1066.4	1059.1	1052.7	1049.9	1049.9	1052.7
7.5°	1128.6	1117.7	1102.1	1071.9	1055.4	1041.7	1029.8	1021.5	1017.0	1017.0	1019.7
10°	1129.6	1114.0	1089.3	1052.7	1030.7	1010.6	996.8	987.7	981.3	981.3	983.1
12.5°	1135.0	1114.0	1082.0	1038.0	1010.6	985.8	969.4	955.6	952.9	952.9	954.7
15°	1144.2	1118.6	1077.4	1025.2	992.3	963.9	945.6	930.9	925.4	929.1	930.0
17.5°	1152.4	1121.3	1069.1	1008.7	969.4	938.2	918.1	905.3	898.0	906.2	906.2
20°	1157.9	1121.3	1057.2	987.7	944.7	909.9	890.6	875.1	869.6	879.7	880.6
22.5°	1166.2	1120.4	1044.4	966.6	918.1	881.5	862.3	850.4	847.6	858.6	862.3
25°	1175.3	1122.2	1030.7	942.8	888.8	853.1	838.5	833.0	834.8	848.5	853.1
27.5°	1185.4	1125.9	1017.0	916.3	856.8	824.7	816.5	819.2	826.6	844.0	849.5
30°	1194.5	1126.8	997.7	885.2	820.2	790.0	793.6	805.5	816.5	833.9	840.3
32.5°	1206.4	1127.7	977.6	851.3	780.8	758.8	775.3	794.5	805.5	822.0	829.3
35°	1235.7	1143.3	962.0	818.3	744.2	732.3	759.8	784.5	790.9	805.5	811.9
37.5°	1269.6	1168.9	953.8	784.5	708.5	705.7	740.5	765.2	767.1	776.2	782.6
40°	1290.7	1179.9	944.7	756.1	676.5	678.3	714.0	733.2	729.5	736.0	740.5
42.5°	1311.7	1183.6	925.4	732.3	646.2	648.1	675.5	689.3	691.1	704.8	711.2
45°	1347.4	1193.6	904.4	710.3	618.8	612.4	628.9	647.2	671.0	697.5	704.8
47.5°	1395.0	1214.7	882.4	683.8	592.2	571.2	577.6	609.6	634.3	659.1	663.6
50°	1443.5	1235.7	862.3	651.7	565.7	527.2	530.0	559.3	579.4	598.6	601.4
52.5°	1491.1	1254.0	844.9	621.5	535.5	475.1	486.1	516.3	530.0	539.1	541.9
55°	1538.7	1269.6	829.3	595.9	500.7	433.9	444.0	472.3	486.1	490.6	492.5
57.5°	1588.2	1287.9	817.4	573.9	461.3	397.3	403.7	423.8	436.6	442.1	440.3
60°	1629.3	1303.5	811.0	551.0	422.0	363.4	361.6	379.9	398.2	403.7	401.8
62.5°	1661.4	1313.5	800.9	521.8	387.2	329.5	320.4	344.2	363.4	367.1	369.8
65°	1678.8	1314.5	776.2	484.2	351.5	292.9	286.5	310.3	322.2	325.9	325.9
67.5°	1676.0	1299.8	727.7	433.9	318.5	260.0	254.5	269.1	286.5	289.3	286.5
70°	1619.3	1239.4	649.9	380.8	279.2	230.7	220.6	235.2	251.7	241.7	237.1
72.5°	1458.2	1082.9	535.5	322.2	235.2	194.1	189.5	204.1	205.0	206.9	202.3
75°	1150.6	806.4	400.9	250.8	190.4	162.9	162.0	159.3	162.9	170.3	164.8
77.5°	604.1	402.8	216.9	153.8	138.2	130.9	124.5	123.6	134.6	139.1	133.6
80°	327.7	226.1	124.5	92.5	84.2	85.1	93.4	91.5	103.4	106.2	101.6
82.5°	142.8	107.1	61.3	55.8	55.8	54.9	57.7	64.1	76.9	76.9	61.3
85°	31.1	26.5	23.8	27.5	31.1	31.1	31.1	31.1	22.0	11.9	8.2
87.5°	10.1	10.1	10.1	11.0	11.9	11.9	10.1	7.3	4.6	0.9	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)