

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: P398128

Luminaire Tested: **ARCH-S-PA1-90-730-U-T4W**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398128
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-11)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-90-730-U-T4W
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10554 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

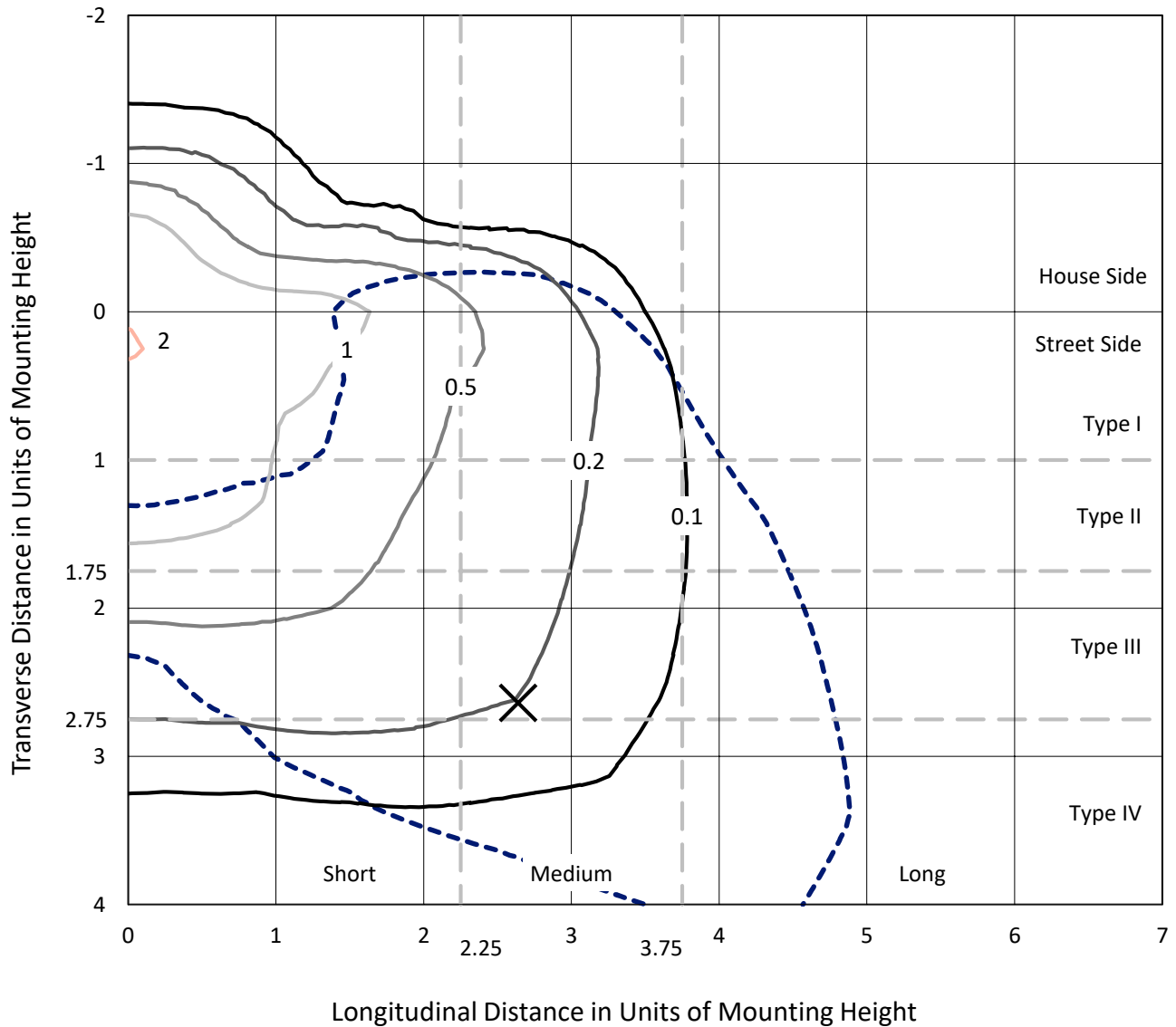
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

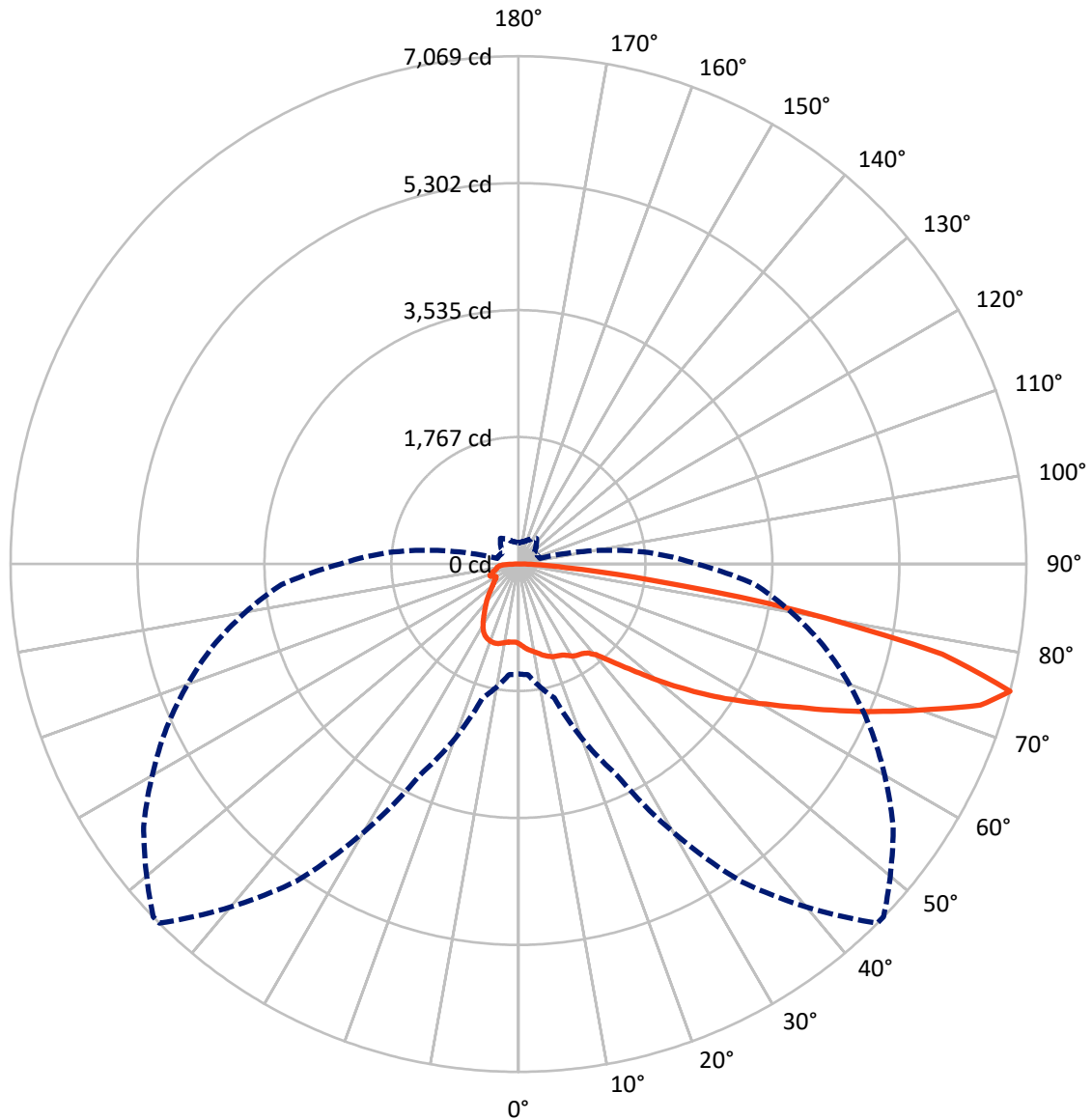
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2332.4	0.0	2332.4
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	8221.6	0.0	8221.6
	% Fixture	77.9	0.0	77.9
Total	Lumens	10554.0	0.0	10554.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.7	1.0
10°-20°	348.8	3.3
20°-30°	594.7	5.6
30°-40°	833.3	7.9
40°-50°	1224.2	11.6
50°-60°	1948.4	18.5
60°-70°	2771.5	26.3
70°-80°	2320.6	22.0
80°-90°	402.7	3.8
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°	10554.0	100.0
0°-180°	10554.0	100.0

Coefficient of Utilization



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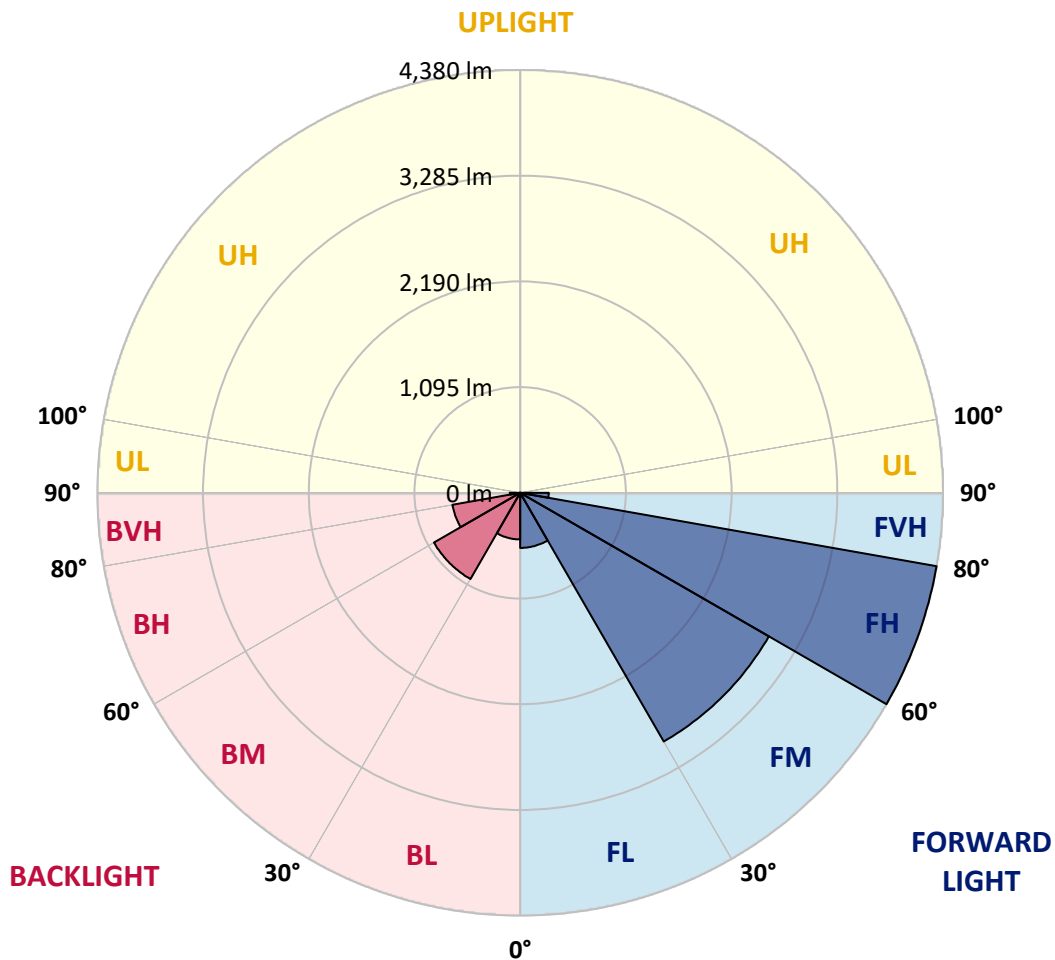
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	570.5	5.4			
FM	(30°-60°)	2974.9	28.2			
FH	(60°-80°)	4380.2	41.5			G2/5000
FVH	(80°-90°)	296.1	2.8			G3/500
BL	(0°-30°)	482.7	4.6	B1/500		
BM	(30°-60°)	1031.0	9.8	B2/2500		
BH	(60°-80°)	712.0	6.7	B2/1000		G2/1000
BVH	(80°-90°)	106.7	1.0			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4
2.5°	1171.9	1166.2	1163.4	1163.4	1152.1	1145.1	1143.7	1133.8	1125.3	1116.9	1109.8
5°	1239.5	1235.3	1226.9	1219.8	1204.3	1184.6	1181.7	1160.6	1139.4	1119.7	1102.8
7.5°	1301.6	1293.1	1283.3	1269.2	1243.8	1217.0	1212.8	1183.1	1153.5	1123.9	1101.4
10°	1353.8	1345.3	1331.2	1311.5	1279.0	1246.6	1242.4	1211.3	1180.3	1145.1	1112.6
12.5°	1403.1	1396.1	1374.9	1348.1	1310.1	1280.4	1276.2	1249.4	1217.0	1177.5	1135.2
15°	1445.4	1438.4	1415.8	1384.8	1341.1	1318.5	1312.9	1287.5	1255.1	1212.8	1169.0
17.5°	1466.6	1466.6	1442.6	1408.8	1367.9	1351.0	1346.7	1315.7	1286.1	1245.2	1201.5
20°	1473.6	1476.5	1459.5	1418.6	1383.4	1376.3	1372.1	1346.7	1312.9	1273.4	1232.5
22.5°	1477.9	1483.5	1469.4	1422.9	1393.3	1389.0	1386.2	1369.3	1342.5	1304.4	1263.5
25°	1492.0	1492.0	1482.1	1429.9	1405.9	1404.5	1404.5	1394.7	1376.3	1343.9	1303.0
27.5°	1513.1	1511.7	1499.0	1445.4	1434.2	1438.4	1437.0	1435.6	1422.9	1390.4	1346.7
30°	1548.4	1548.4	1534.3	1476.5	1469.4	1487.7	1489.1	1492.0	1472.2	1421.5	1386.2
32.5°	1602.0	1596.3	1582.2	1507.5	1496.2	1513.1	1515.9	1514.5	1497.6	1449.7	1432.7
35°	1767.0	1754.3	1703.5	1576.6	1520.2	1530.0	1531.5	1538.5	1541.3	1503.3	1494.8
37.5°	2056.0	2039.1	1961.6	1740.2	1596.3	1572.3	1570.9	1589.3	1604.8	1570.9	1570.9
40°	2370.5	2356.4	2311.3	2022.2	1737.3	1658.4	1652.7	1669.7	1689.4	1665.4	1672.5
42.5°	2641.3	2652.5	2656.8	2321.2	1948.9	1819.1	1803.6	1779.6	1810.7	1789.5	1817.7
45°	2844.3	2838.7	2916.3	2627.2	2222.4	2020.8	1999.6	1934.8	1974.3	1972.8	2034.9
47.5°	3060.1	3050.2	3082.7	2914.8	2534.1	2267.6	2235.1	2139.2	2198.5	2239.4	2342.3
50°	3264.6	3267.4	3278.7	3141.9	2872.5	2567.9	2527.0	2398.7	2483.3	2569.3	2714.6
52.5°	3531.1	3511.3	3497.2	3407.0	3251.9	2881.0	2854.2	2707.5	2826.0	2927.5	3120.7
55°	3763.8	3751.1	3742.6	3738.4	3569.2	3226.5	3198.3	3046.0	3216.6	3288.5	3573.4
57.5°	4012.0	4004.9	4050.0	4122.0	4054.3	3577.6	3548.0	3401.4	3591.7	3642.5	4064.1
60°	4193.9	4198.1	4322.2	4505.5	4459.0	3958.4	3923.1	3793.4	3957.0	4002.1	4554.9
62.5°	4195.3	4237.6	4525.3	4853.8	4907.4	4396.9	4356.0	4215.0	4332.1	4332.1	4994.9
65°	3794.8	3842.7	4488.6	4939.9	5361.5	4918.7	4879.2	4657.8	4701.5	4642.3	5408.0
67.5°	3395.7	3452.1	4059.9	4946.9	5680.2	5477.1	5430.6	5100.6	5025.9	4876.4	5697.1
70°	3130.6	3170.1	3677.7	4855.2	5872.0	6061.0	6025.7	5520.9	5281.1	5072.4	5636.5
72.5°	2635.6	2621.5	3106.6	4419.5	5979.2	6723.7	6694.1	5977.8	5502.5	4979.3	4807.3
75°	1530.0	1547.0	1927.7	3237.8	5389.7	7069.2	7066.4	6368.4	5405.2	4398.3	3312.5
77.5°	441.4	454.1	633.2	1422.9	3408.4	6029.9	6223.1	5824.0	4569.0	3134.8	1717.6
80°	193.2	203.1	275.0	473.8	1468.0	3938.6	4107.9	3938.6	2755.5	1438.4	674.1
82.5°	114.2	121.3	179.1	293.3	703.7	1874.1	2102.6	1836.1	1188.8	610.6	279.2
85°	64.9	67.7	102.9	186.1	442.8	655.7	736.1	689.6	579.6	346.9	146.7
87.5°	29.6	31.0	50.8	87.4	248.2	221.4	229.9	304.6	335.6	211.5	73.3
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°	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4	1108.4
2.5°	1107.0	1102.8	1094.3	1091.5	1087.2	1088.7	1090.1	1090.1	1091.5	1087.2	1087.2
5°	1095.7	1088.7	1080.2	1080.2	1080.2	1091.5	1101.4	1107.0	1109.8	1109.8	1107.0
7.5°	1091.5	1083.0	1073.1	1076.0	1078.8	1092.9	1111.2	1129.6	1135.2	1135.2	1132.4
10°	1099.9	1091.5	1084.4	1088.7	1095.7	1107.0	1121.1	1138.0	1152.1	1153.5	1152.1
12.5°	1119.7	1109.8	1102.8	1111.2	1119.7	1126.7	1133.8	1140.8	1159.2	1162.0	1162.0
15°	1152.1	1142.2	1133.8	1140.8	1143.7	1143.7	1143.7	1143.7	1162.0	1164.8	1164.8
17.5°	1184.6	1176.1	1167.6	1169.0	1160.6	1149.3	1145.1	1143.7	1153.5	1162.0	1163.4
20°	1215.6	1208.5	1200.1	1186.0	1164.8	1143.7	1136.6	1136.6	1142.2	1154.9	1154.9
22.5°	1249.4	1241.0	1226.9	1194.4	1159.2	1129.6	1122.5	1126.7	1133.8	1150.7	1149.3
25°	1287.5	1276.2	1252.2	1191.6	1140.8	1105.6	1107.0	1119.7	1132.4	1150.7	1150.7
27.5°	1329.8	1314.3	1266.3	1169.0	1099.9	1066.1	1078.8	1108.4	1126.7	1146.5	1149.3
30°	1376.3	1362.2	1277.6	1129.6	1033.7	1002.6	1033.7	1081.6	1109.8	1128.1	1132.4
32.5°	1432.7	1421.5	1287.5	1078.8	947.6	920.8	966.0	1025.2	1070.3	1091.5	1095.7
35°	1503.3	1492.0	1300.2	1021.0	867.3	839.1	880.0	940.6	999.8	1026.6	1035.1
37.5°	1594.9	1578.0	1311.5	958.9	799.6	767.1	786.9	841.9	895.5	932.1	942.0
40°	1712.0	1685.2	1321.3	888.4	740.3	703.7	710.7	737.5	768.5	801.0	813.7
42.5°	1876.9	1823.4	1322.7	813.7	679.7	645.9	643.0	651.5	651.5	651.5	655.7
45°	2106.8	2005.3	1325.6	743.2	617.7	582.4	573.9	571.1	550.0	509.1	506.3
47.5°	2397.3	2243.6	1338.3	683.9	552.8	521.8	510.5	499.2	459.7	417.4	409.0
50°	2769.6	2520.0	1363.6	627.5	497.8	476.6	462.5	435.7	392.0	359.6	351.1
52.5°	3198.3	2848.6	1387.6	568.3	456.9	442.8	425.9	393.4	346.9	327.2	324.3
55°	3690.4	3215.2	1435.6	516.1	421.6	411.8	396.3	365.2	330.0	315.9	314.5
57.5°	4193.9	3625.6	1503.3	469.6	387.8	382.2	382.2	355.4	332.8	327.2	327.2
60°	4679.0	3978.1	1451.1	425.9	356.8	359.6	386.4	379.3	362.4	369.5	373.7
62.5°	5055.5	4185.4	1177.5	390.6	334.2	359.6	428.7	428.7	409.0	406.1	406.1
65°	5216.3	4182.6	827.8	363.8	325.8	394.9	478.1	455.5	403.3	383.6	379.3
67.5°	5175.4	3999.3	571.1	345.5	322.9	431.5	500.6	437.2	377.9	361.0	348.3
70°	4815.8	3611.5	440.0	328.6	318.7	416.0	493.6	416.0	358.2	342.7	331.4
72.5°	3885.0	2896.5	365.2	311.6	301.8	385.0	469.6	396.3	342.7	325.8	314.5
75°	2477.7	1822.0	308.8	289.1	269.3	345.5	437.2	376.5	325.8	303.2	294.7
77.5°	1191.6	785.5	269.3	262.3	242.6	320.1	404.7	351.1	303.2	284.9	279.2
80°	482.3	359.6	234.1	235.5	222.8	304.6	382.2	327.2	280.6	260.9	251.0
82.5°	251.0	208.7	197.4	203.1	203.1	290.5	365.2	307.4	260.9	252.4	220.0
85°	135.4	129.7	152.3	163.6	176.3	262.3	339.9	286.3	238.3	204.5	197.4
87.5°	66.3	84.6	86.0	98.7	122.7	210.1	286.3	239.7	198.8	165.0	162.2
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)