

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: P265578

Luminaire Tested: **ARCH-L-AF72-90-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265578
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-90-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11312.6 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G3

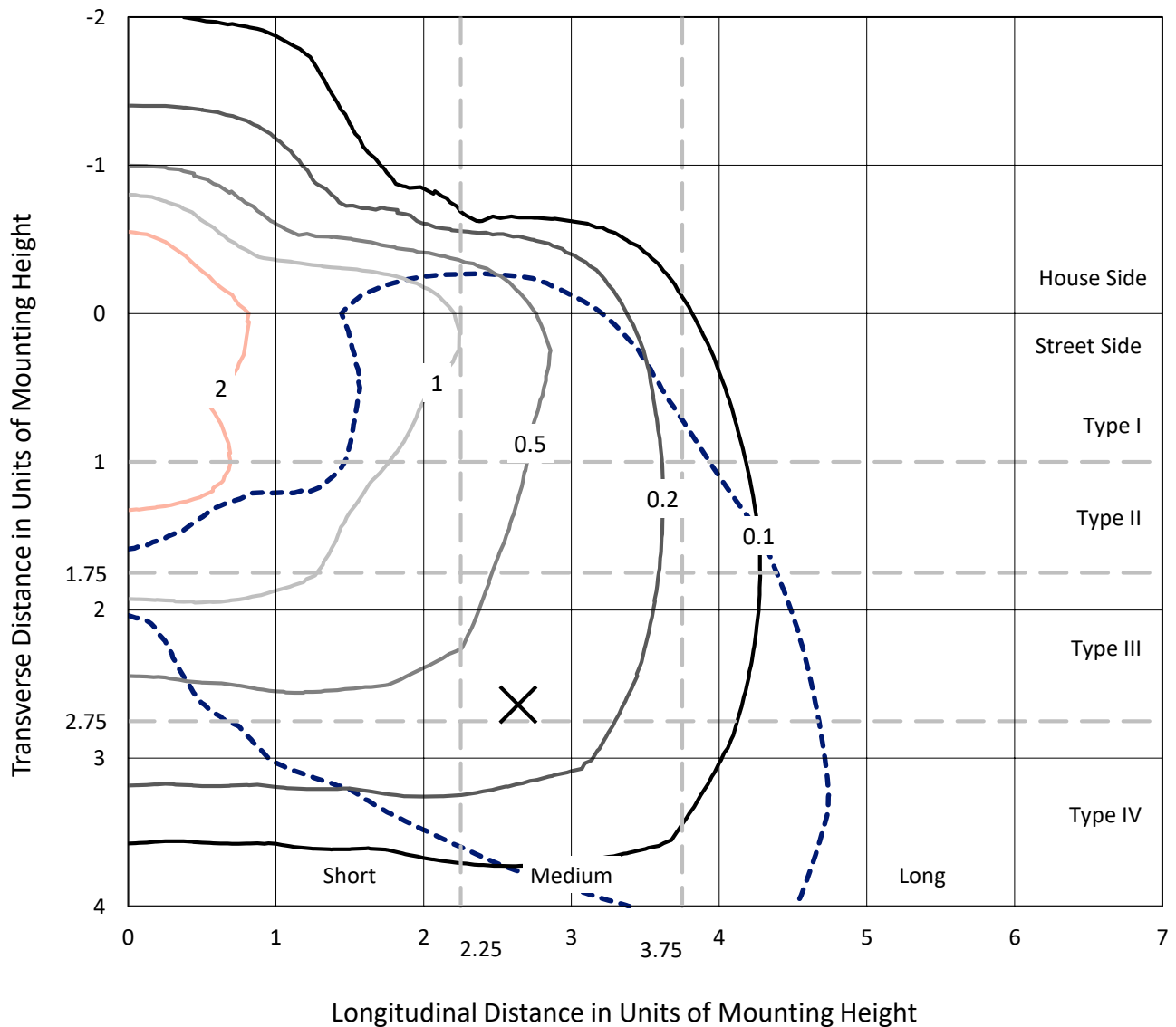
Input Watts (W): 93
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P265578
 CATALOG NUMBER: ARCH-L-AF72-90-D-U-T4W-7027

Iso-Footcandle Lines of Horizontal Illumination

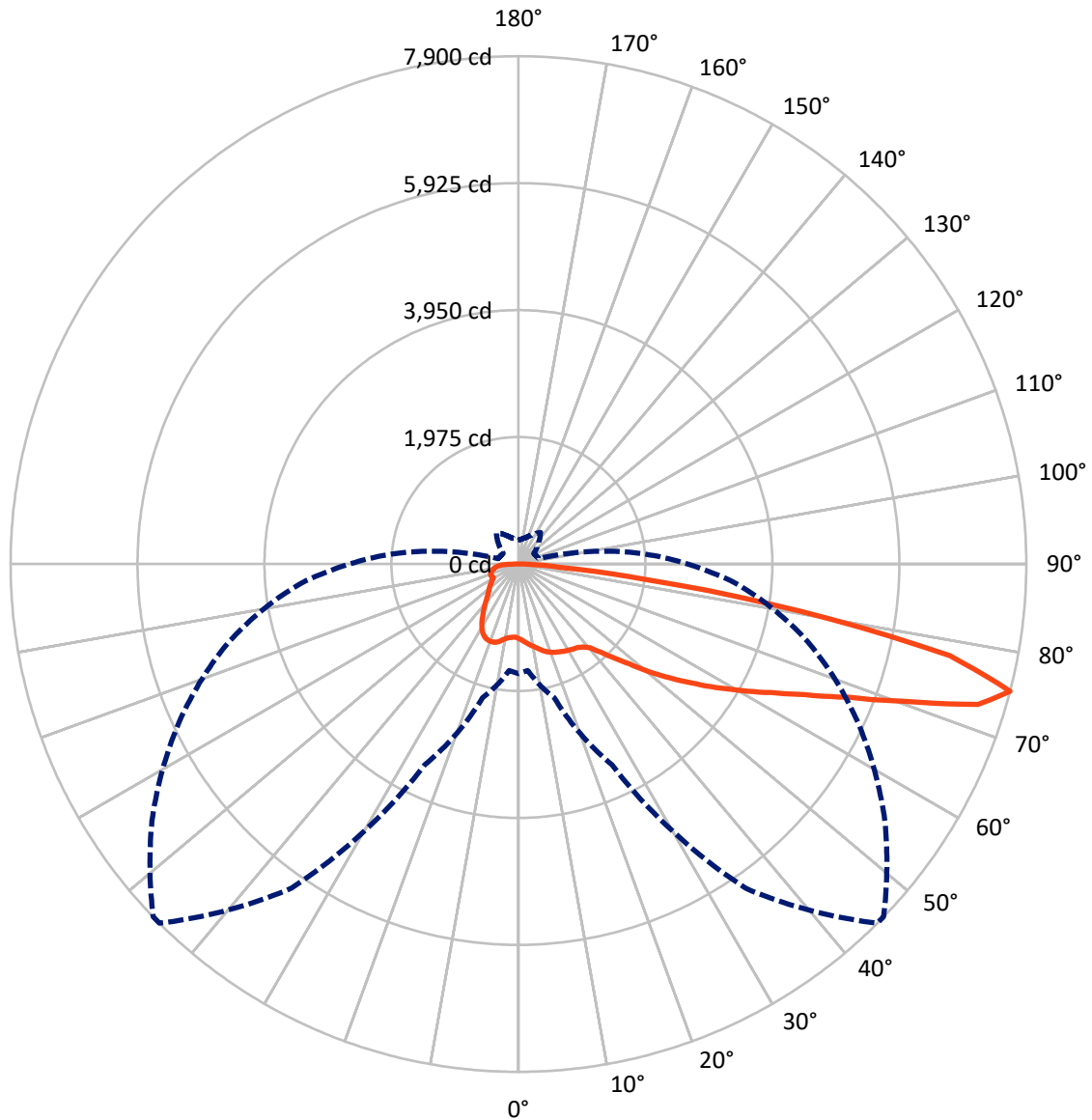
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.4 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265578
CATALOG NUMBER: ARCH-L-AF72-90-D-U-T4W-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P265578

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T4W-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2620.6	0.0	2620.6
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	8691.9	0.0	8691.9
	% Fixture	76.8	0.0	76.8
Total	Lumens	11312.6	0.0	11312.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.9	1.0
10°-20°	372.4	3.3
20°-30°	639.1	5.6
30°-40°	893.8	7.9
40°-50°	1311.2	11.6
50°-60°	2042.4	18.1
60°-70°	2938.9	26.0
70°-80°	2560.1	22.6
80°-90°	439.7	3.9
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°	11312.6	100.0
0°-180°	11312.6	100.0

Coefficient of Utilization



REPORT NUMBER: P265578

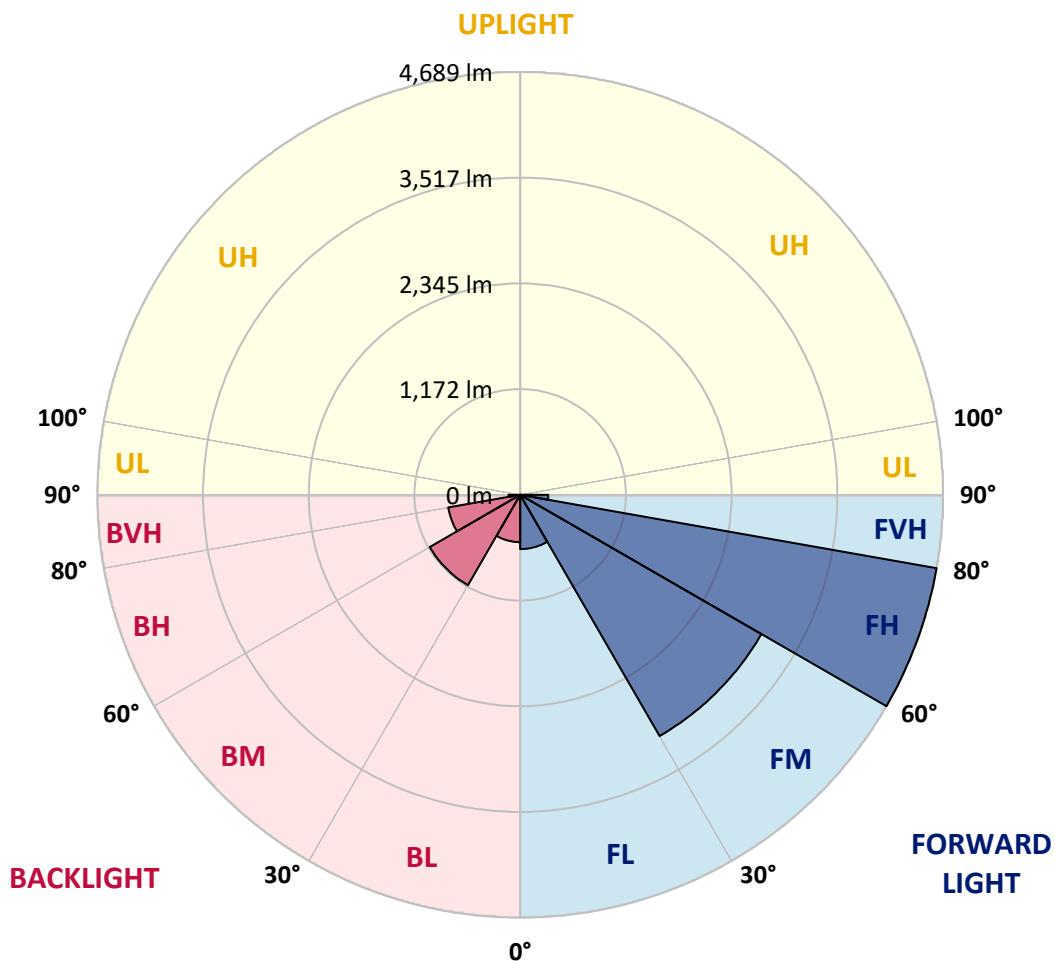
CATALOG NUMBER: ARCH-L-AF72-90-D-U-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	601.6	5.3			
FM	(30°-60°)	3089.2	27.3			
FH	(60°-80°)	4689.2	41.5			G2/5000
FVH	(80°-90°)	311.9	2.8			G3/500
BL	(0°-30°)	524.9	4.6	B2/1000		
BM	(30°-60°)	1158.2	10.2	B2/2500		
BH	(60°-80°)	809.9	7.2	B2/1000		G2/1000
BVH	(80°-90°)	127.7	1.1			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





REPORT NUMBER: P265578

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T4W-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7
2.5°	1216.9	1208.1	1208.1	1201.6	1201.6	1190.6	1186.1	1183.8	1172.8	1166.3	1159.7
5°	1287.4	1276.3	1274.2	1258.7	1252.1	1228.0	1225.6	1210.2	1190.6	1170.8	1155.3
7.5°	1351.1	1344.6	1333.5	1318.2	1298.3	1267.5	1265.4	1241.1	1208.1	1181.7	1159.7
10°	1397.4	1392.9	1377.6	1357.8	1335.7	1305.0	1302.7	1276.3	1236.7	1206.0	1175.2
12.5°	1452.4	1445.7	1426.0	1399.6	1375.3	1346.7	1344.6	1322.6	1278.6	1238.9	1199.2
15°	1505.2	1496.3	1472.2	1445.7	1419.3	1395.2	1395.2	1371.0	1324.7	1278.6	1232.4
17.5°	1531.6	1527.2	1503.0	1474.4	1452.4	1434.8	1432.5	1410.6	1364.3	1315.9	1265.4
20°	1540.5	1542.6	1520.7	1489.7	1474.4	1465.6	1463.3	1448.0	1397.4	1351.1	1302.7
22.5°	1538.2	1544.7	1527.2	1494.2	1489.7	1489.7	1489.7	1472.2	1432.5	1386.4	1337.9
25°	1547.1	1555.9	1542.6	1503.0	1503.0	1511.8	1511.8	1503.0	1467.8	1428.1	1379.7
27.5°	1577.9	1584.4	1573.4	1518.3	1520.7	1533.8	1531.6	1533.8	1511.8	1474.4	1426.0
30°	1615.2	1624.0	1610.8	1542.6	1540.5	1553.6	1553.6	1564.6	1549.1	1509.6	1469.9
32.5°	1716.4	1714.2	1672.5	1569.0	1562.4	1575.5	1575.5	1586.5	1577.9	1547.1	1509.6
35°	2018.0	1985.0	1892.5	1654.8	1588.8	1595.4	1595.4	1615.2	1619.6	1595.4	1562.4
37.5°	2326.0	2315.0	2244.5	1883.7	1685.6	1637.3	1635.1	1663.7	1683.5	1663.7	1641.7
40°	2636.3	2627.5	2612.1	2189.6	1888.1	1712.0	1705.4	1729.6	1764.9	1751.7	1738.4
42.5°	2924.5	2920.1	2935.5	2491.0	2145.5	1872.6	1852.8	1824.3	1874.9	1870.5	1870.5
45°	3151.3	3162.3	3170.9	2772.7	2425.1	2079.5	2055.3	1958.6	2026.8	2044.4	2057.5
47.5°	3278.9	3287.6	3318.5	3047.8	2704.4	2319.5	2301.7	2143.4	2233.5	2286.4	2323.7
50°	3461.4	3437.3	3463.7	3316.3	3041.2	2631.9	2583.4	2391.9	2506.5	2598.8	2686.9
52.5°	3637.5	3597.9	3619.9	3626.5	3424.1	2937.7	2887.2	2684.7	2827.8	2973.0	3129.2
55°	3796.0	3793.8	3815.8	3928.0	3793.8	3265.7	3208.4	3008.2	3215.0	3371.2	3635.4
57.5°	3923.5	3945.6	4042.5	4277.9	4220.6	3622.1	3558.4	3384.5	3628.8	3785.0	4222.9
60°	4073.3	4108.5	4269.0	4575.0	4610.2	3996.2	3930.3	3804.9	4053.4	4211.9	4902.9
62.5°	4123.8	4174.5	4504.6	4887.5	5017.4	4405.6	4346.1	4262.5	4500.1	4643.2	5580.6
65°	3787.2	3884.0	4634.4	5048.0	5455.1	4898.5	4847.9	4775.2	4944.7	5039.3	6040.6
67.5°	3694.8	3738.7	4381.4	5279.2	5866.7	5532.2	5481.5	5356.1	5360.5	5321.0	6190.2
70°	3565.0	3613.3	4121.7	5453.0	6456.5	6399.3	6337.6	5967.9	5741.2	5501.4	5895.2
72.5°	3036.8	3021.4	3551.7	4984.2	6740.3	7473.1	7400.4	6625.9	6023.0	5345.2	4975.5
75°	1705.4	1661.4	2154.3	3448.2	6154.9	7900.1	7897.8	6958.2	5824.9	4656.5	3386.7
77.5°	495.1	481.9	710.7	1445.7	4143.6	6863.6	6947.2	6276.0	4861.1	3344.8	1859.5
80°	233.3	237.6	305.9	477.4	1769.2	4429.7	4669.6	4132.7	2904.8	1542.6	768.1
82.5°	147.4	149.7	209.0	308.1	748.2	2011.3	2209.4	1859.5	1150.9	666.8	338.9
85°	92.4	92.4	138.7	202.5	446.6	642.6	697.5	633.8	492.9	363.1	184.8
87.5°	50.7	50.7	83.6	116.6	244.2	206.9	213.4	253.1	308.1	222.3	92.4
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: P265578

CATALOG NUMBER: ARCH-L-AF72-90-D-U-T4W-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7	1159.7
2.5°	1157.5	1153.2	1146.4	1144.4	1142.0	1139.9	1142.0	1146.4	1142.0	1142.0	1144.4
5°	1150.9	1146.4	1137.8	1137.8	1139.9	1142.0	1153.2	1159.7	1161.9	1161.9	1161.9
7.5°	1150.9	1144.4	1137.8	1139.9	1144.4	1153.2	1170.8	1181.7	1190.6	1192.7	1192.7
10°	1161.9	1153.2	1148.8	1153.2	1166.3	1172.8	1190.6	1208.1	1219.1	1223.5	1223.5
12.5°	1181.7	1172.8	1172.8	1181.7	1199.2	1208.1	1223.5	1236.7	1249.9	1256.5	1256.5
15°	1214.7	1203.6	1206.0	1221.3	1241.1	1249.9	1261.0	1265.4	1276.3	1285.1	1285.1
17.5°	1245.5	1234.5	1238.9	1256.5	1269.8	1274.2	1280.8	1278.6	1282.9	1289.5	1291.8
20°	1280.8	1269.8	1271.9	1282.9	1285.1	1280.8	1280.8	1274.2	1271.9	1282.9	1287.4
22.5°	1315.9	1305.0	1302.7	1296.2	1285.1	1274.2	1267.5	1261.0	1256.5	1267.5	1271.9
25°	1357.8	1342.3	1331.4	1302.7	1274.2	1254.4	1245.5	1241.1	1238.9	1249.9	1254.4
27.5°	1404.0	1388.6	1355.5	1293.9	1247.7	1214.7	1208.1	1208.1	1212.5	1219.1	1223.5
30°	1448.0	1432.5	1373.1	1274.2	1201.6	1153.2	1146.4	1153.2	1164.2	1170.8	1177.3
32.5°	1491.9	1476.5	1384.2	1243.3	1133.3	1071.7	1067.2	1078.2	1095.9	1100.2	1104.6
35°	1551.5	1536.0	1397.4	1199.2	1047.5	981.5	977.0	983.6	999.0	1005.7	1012.3
37.5°	1635.1	1626.2	1417.2	1150.9	968.3	895.6	882.5	878.1	886.8	884.7	893.5
40°	1745.0	1751.7	1452.4	1087.0	891.2	816.4	787.9	774.6	765.7	748.2	757.0
42.5°	1905.7	1910.1	1491.9	1014.5	825.3	741.6	704.2	679.9	662.4	633.8	638.2
45°	2141.1	2103.7	1538.2	937.4	765.7	682.2	638.2	609.6	585.3	561.1	563.3
47.5°	2453.6	2339.1	1588.8	873.6	706.3	633.8	594.1	561.1	532.5	512.8	514.9
50°	2838.7	2631.9	1639.4	814.3	647.0	596.4	561.1	526.0	497.3	477.4	475.4
52.5°	3347.1	2984.0	1672.5	748.2	587.5	563.3	532.5	499.5	464.3	440.1	438.0
55°	3875.2	3393.3	1701.0	669.0	530.3	526.0	510.5	473.0	431.2	400.6	396.2
57.5°	4456.1	3831.2	1723.0	592.0	486.3	495.1	490.7	446.6	400.6	371.9	369.7
60°	4984.2	4284.5	1652.6	523.7	446.6	464.3	468.7	431.2	407.1	413.7	415.9
62.5°	5516.9	4634.4	1384.2	473.0	420.2	444.5	481.9	479.8	468.7	479.8	481.9
65°	5708.3	4706.9	981.5	431.2	393.8	453.4	523.7	519.3	468.7	449.0	444.5
67.5°	5600.5	4491.3	660.2	398.3	374.1	464.3	567.8	519.3	451.0	424.7	415.9
70°	5087.7	3961.0	484.1	365.3	356.4	462.1	592.0	517.2	442.3	413.7	402.7
72.5°	4057.9	3056.7	389.4	334.4	330.0	451.0	605.2	512.8	433.5	402.7	389.4
75°	2627.5	1901.4	327.9	303.6	290.5	433.5	598.5	499.5	422.6	382.9	374.1
77.5°	1219.1	818.6	279.5	268.5	253.1	407.1	578.8	473.0	398.3	360.8	349.9
80°	567.8	387.3	235.4	233.3	226.6	385.2	552.4	442.3	369.7	338.9	321.2
82.5°	303.6	233.3	191.5	191.5	198.0	358.8	519.3	404.9	332.4	316.9	270.7
85°	160.6	134.2	138.7	149.7	169.4	316.9	475.4	365.3	290.5	242.1	235.4
87.5°	81.4	85.8	85.8	101.1	129.8	257.5	391.8	301.6	246.4	198.0	193.7
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)