

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: P265587

Luminaire Tested: **ARCH-L-AF72-100-D-U-T4W-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265587
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-AF72-100-D-U-T4W-7027
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12181.2 lumens
Efficiency: N/A
Efficacy: 119.4 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): 102
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



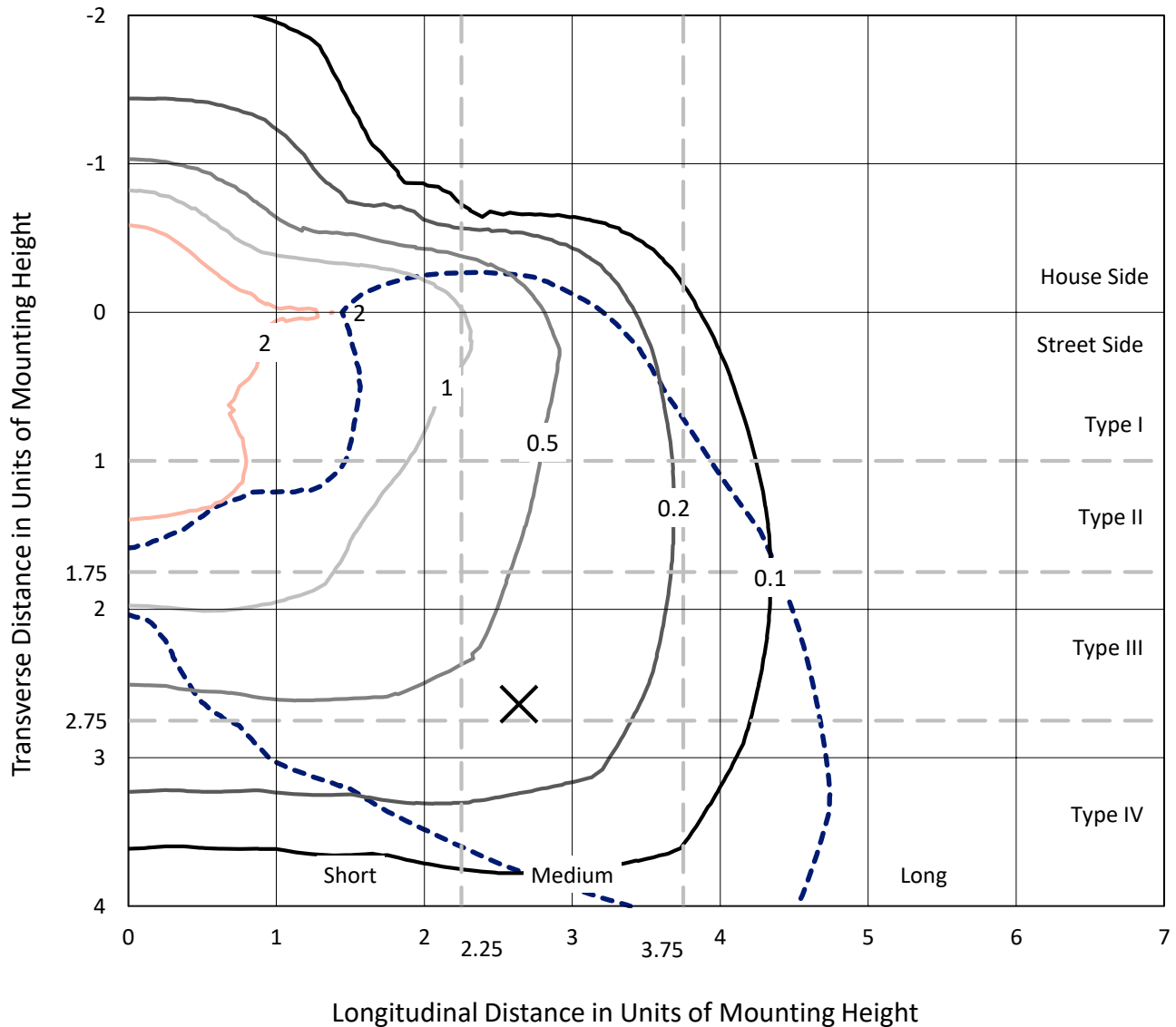


REPORT NUMBER: P265587

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

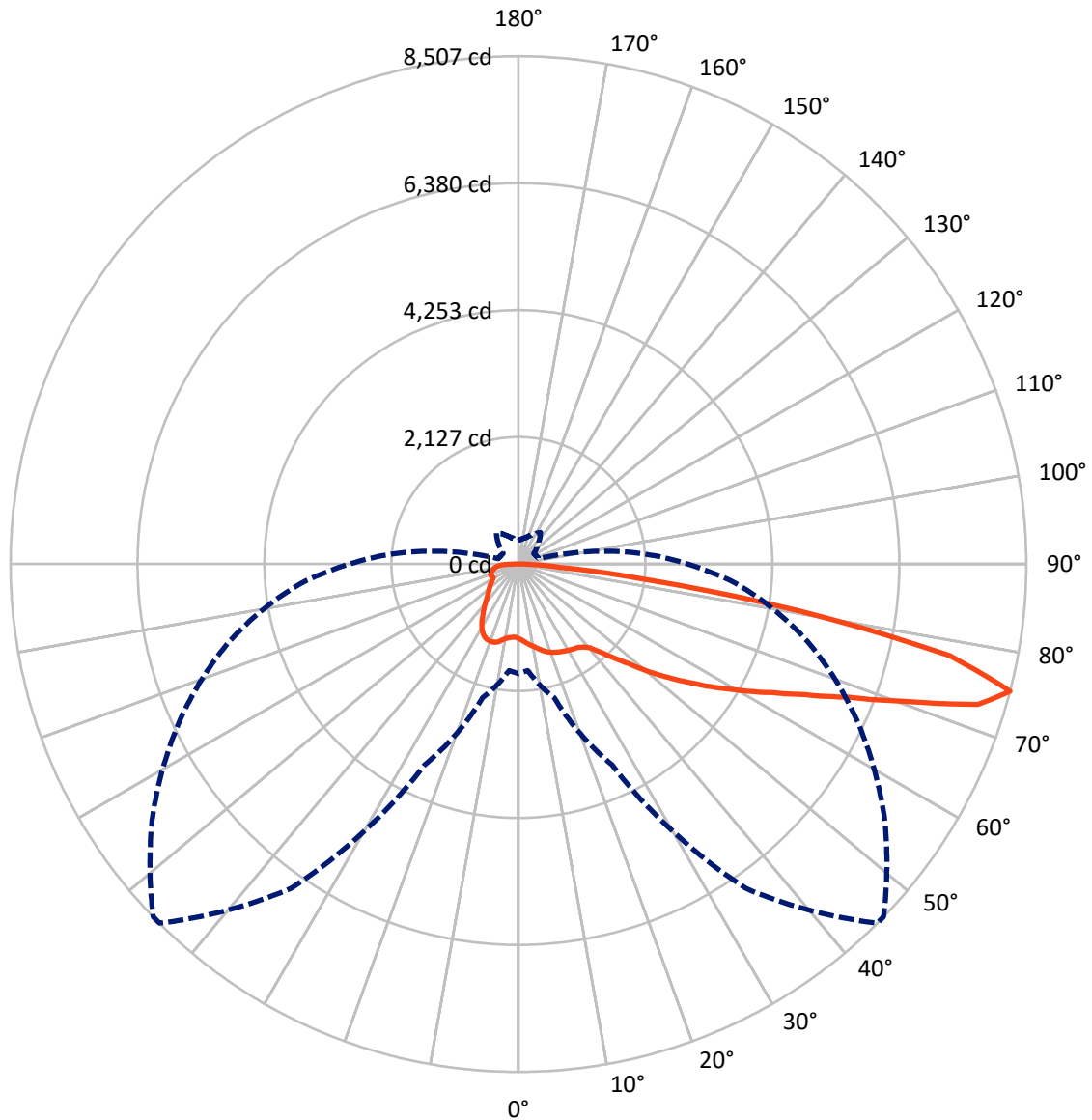


Based on 20 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Medium - Non-Cutoff

REPORT NUMBER: P265587

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027

Luminous Intensity Polar Plot



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



REPORT NUMBER: P265587

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2821.9	0.0	2821.9
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	9359.3	0.0	9359.3
	% Fixture	76.8	0.0	76.8
Total	Lumens	12181.2	0.0	12181.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.8	1.0
10°-20°	401.0	3.3
20°-30°	688.2	5.6
30°-40°	962.5	7.9
40°-50°	1411.8	11.6
50°-60°	2199.3	18.1
60°-70°	3164.6	26.0
70°-80°	2756.7	22.6
80°-90°	473.4	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°	12181.2	100.0
0°-180°	12181.2	100.0



REPORT NUMBER: P265587

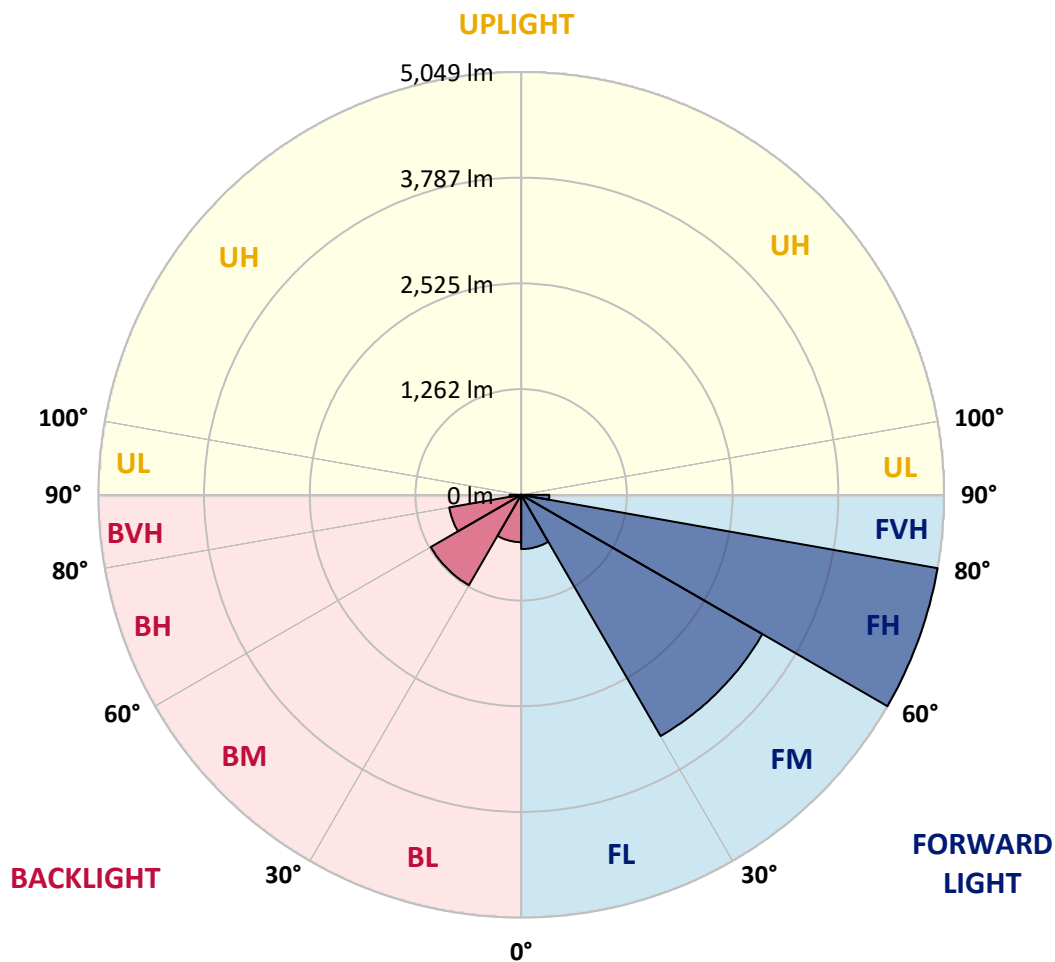
CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	647.7	5.3			
FM	(30°-60°)	3326.4	27.3			
FH	(60°-80°)	5049.2	41.5			G3/7500
FVH	(80°-90°)	335.9	2.8			G3/500
BL	(0°-30°)	565.2	4.6	B2/1000		
BM	(30°-60°)	1247.1	10.2	B2/2500		
BH	(60°-80°)	872.0	7.2	B2/1000		G2/1000
BVH	(80°-90°)	137.5	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: P265587

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7
2.5°	1310.4	1300.8	1300.8	1293.7	1293.7	1281.9	1277.2	1274.9	1262.9	1255.8	1248.7
5°	1386.2	1374.3	1371.9	1355.4	1348.3	1322.1	1319.8	1303.3	1281.9	1260.6	1244.1
7.5°	1454.8	1447.8	1435.9	1419.3	1398.0	1364.9	1362.5	1336.4	1300.8	1272.4	1248.7
10°	1504.7	1499.9	1483.3	1462.0	1438.2	1405.0	1402.8	1374.3	1331.6	1298.5	1265.4
12.5°	1563.9	1556.9	1535.5	1507.0	1480.9	1450.1	1447.8	1424.2	1376.7	1334.1	1291.5
15°	1620.7	1611.3	1585.1	1556.9	1528.3	1502.2	1502.2	1476.3	1426.5	1376.7	1326.9
17.5°	1649.2	1644.4	1618.3	1587.6	1563.9	1544.9	1542.6	1518.9	1469.1	1416.9	1362.5
20°	1658.7	1661.1	1637.3	1604.2	1587.6	1578.1	1575.7	1559.2	1504.7	1454.8	1402.8
22.5°	1656.4	1663.4	1644.4	1609.0	1604.2	1604.2	1604.2	1585.1	1542.6	1492.9	1440.7
25°	1665.7	1675.2	1661.1	1618.3	1618.3	1627.9	1627.9	1618.3	1580.5	1537.8	1485.6
27.5°	1699.0	1706.2	1694.3	1634.9	1637.3	1651.5	1649.2	1651.5	1627.9	1587.6	1535.5
30°	1739.3	1748.7	1734.4	1661.1	1658.7	1673.0	1673.0	1684.7	1668.2	1625.6	1582.9
32.5°	1848.3	1845.8	1800.8	1689.5	1682.3	1696.5	1696.5	1708.4	1699.0	1665.7	1625.6
35°	2172.9	2137.2	2037.7	1781.9	1710.8	1717.9	1717.9	1739.3	1744.0	1717.9	1682.3
37.5°	2504.6	2492.7	2416.9	2028.4	1815.0	1763.0	1760.6	1791.4	1812.7	1791.4	1767.7
40°	2838.7	2829.2	2812.7	2357.7	2033.0	1843.5	1836.3	1862.5	1900.4	1886.1	1871.9
42.5°	3149.1	3144.3	3161.0	2682.2	2310.4	2016.4	1995.1	1964.4	2018.9	2014.1	2014.1
45°	3393.2	3405.0	3414.5	2985.5	2611.3	2239.3	2213.2	2109.0	2182.3	2201.2	2215.5
47.5°	3530.6	3540.1	3573.3	3281.8	2912.1	2497.5	2478.6	2307.9	2405.1	2462.0	2502.1
50°	3727.2	3701.1	3729.7	3570.9	3274.7	2834.0	2781.8	2575.7	2698.9	2798.4	2893.3
52.5°	3916.8	3874.2	3897.8	3905.0	3687.1	3163.3	3108.9	2890.8	3044.9	3201.2	3369.5
55°	4087.5	4085.0	4108.8	4229.6	4085.0	3516.3	3454.8	3239.2	3461.9	3630.1	3914.5
57.5°	4224.9	4248.5	4352.8	4606.4	4544.7	3900.3	3831.5	3644.3	3907.4	4075.6	4547.1
60°	4386.1	4424.0	4596.8	4926.2	4964.2	4303.2	4231.9	4096.9	4364.7	4535.4	5279.2
62.5°	4440.5	4494.9	4850.4	5262.7	5402.5	4743.8	4679.8	4589.8	4845.6	4999.6	6009.1
65°	4077.9	4182.1	4990.3	5435.7	5874.0	5274.6	5220.1	5141.9	5324.3	5426.2	6504.4
67.5°	3978.5	4025.8	4717.7	5684.6	6317.2	5957.0	5902.6	5767.5	5772.1	5729.5	6665.6
70°	3838.6	3890.7	4438.2	5871.7	6952.3	6890.5	6824.2	6426.1	6182.0	5923.9	6348.0
72.5°	3269.9	3253.3	3824.4	5367.0	7257.9	8046.9	7968.8	7134.7	6485.5	5755.6	5357.5
75°	1836.3	1789.0	2319.8	3713.1	6627.5	8506.6	8504.3	7492.5	6272.1	5013.9	3646.7
77.5°	533.1	519.0	765.4	1556.9	4461.8	7390.5	7480.6	6757.9	5234.3	3601.7	2002.2
80°	251.2	255.8	329.4	514.2	1905.0	4769.9	5028.2	4449.9	3127.8	1661.1	827.0
82.5°	158.8	161.2	225.1	331.7	805.6	2165.8	2379.0	2002.2	1239.2	717.9	364.9
85°	99.5	99.5	149.3	218.0	481.0	692.0	751.2	682.4	530.8	390.9	199.1
87.5°	54.4	54.4	90.0	125.7	263.1	222.7	229.8	272.5	331.7	239.3	99.5
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: P265587

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7	1248.7
2.5°	1246.4	1241.6	1234.5	1232.1	1229.8	1227.4	1229.8	1234.5	1229.8	1229.8	1232.1
5°	1239.2	1234.5	1225.1	1225.1	1227.4	1229.8	1241.6	1248.7	1251.1	1251.1	1251.1
7.5°	1239.2	1232.1	1225.1	1227.4	1232.1	1241.6	1260.6	1272.4	1281.9	1284.2	1284.2
10°	1251.1	1241.6	1236.8	1241.6	1255.8	1262.9	1281.9	1300.8	1312.8	1317.5	1317.5
12.5°	1272.4	1262.9	1262.9	1272.4	1291.5	1300.8	1317.5	1331.6	1345.9	1352.9	1352.9
15°	1308.0	1296.2	1298.5	1315.1	1336.4	1345.9	1357.8	1362.5	1374.3	1383.7	1383.7
17.5°	1341.2	1329.3	1334.1	1352.9	1367.2	1371.9	1379.1	1376.7	1381.5	1388.5	1390.9
20°	1379.1	1367.2	1369.6	1381.5	1383.7	1379.1	1379.1	1371.9	1369.6	1381.5	1386.2
22.5°	1416.9	1405.0	1402.8	1395.6	1383.7	1371.9	1364.9	1357.8	1352.9	1364.9	1369.6
25°	1462.0	1445.5	1433.5	1402.8	1371.9	1350.6	1341.2	1336.4	1334.1	1345.9	1350.6
27.5°	1511.8	1495.1	1459.7	1393.4	1343.5	1308.0	1300.8	1300.8	1305.5	1312.8	1317.5
30°	1559.2	1542.6	1478.6	1371.9	1293.7	1241.6	1234.5	1241.6	1253.5	1260.6	1267.7
32.5°	1606.6	1590.0	1490.5	1338.7	1220.3	1154.0	1149.2	1161.1	1180.1	1184.8	1189.4
35°	1670.5	1653.9	1504.7	1291.5	1127.9	1056.9	1052.0	1059.2	1075.8	1082.8	1090.0
37.5°	1760.6	1751.1	1526.0	1239.2	1042.7	964.4	950.1	945.5	954.9	952.6	962.1
40°	1879.1	1886.1	1563.9	1170.5	959.7	879.1	848.3	834.0	824.6	805.6	815.1
42.5°	2052.0	2056.8	1606.6	1092.3	888.6	798.6	758.3	732.2	713.3	682.4	687.2
45°	2305.6	2265.3	1656.4	1009.4	824.6	734.5	687.2	656.3	630.3	604.2	606.5
47.5°	2642.1	2518.8	1710.8	940.7	760.7	682.4	639.8	604.2	573.4	552.1	554.4
50°	3056.8	2834.0	1765.3	876.7	696.6	642.2	604.2	566.3	535.5	514.2	511.9
52.5°	3604.1	3213.1	1800.8	805.6	632.6	606.5	573.4	537.8	499.9	473.9	471.5
55°	4172.7	3653.9	1831.6	720.4	571.1	566.3	549.8	509.5	464.5	431.2	426.5
57.5°	4798.2	4125.3	1855.3	637.3	523.6	533.1	528.5	481.0	431.2	400.5	398.0
60°	5367.0	4613.4	1779.5	564.0	481.0	499.9	504.7	464.5	438.4	445.5	447.9
62.5°	5940.4	4990.3	1490.5	509.5	452.6	478.6	519.0	516.5	504.7	516.5	519.0
65°	6146.6	5068.4	1056.9	464.5	424.1	488.0	564.0	559.3	504.7	483.4	478.6
67.5°	6030.4	4836.3	710.9	428.9	402.8	499.9	611.3	559.3	485.8	457.2	447.9
70°	5478.4	4265.2	521.2	393.4	383.8	497.7	637.3	556.8	476.3	445.5	433.6
72.5°	4369.4	3291.3	419.4	360.2	355.4	485.8	651.6	552.1	466.8	433.6	419.4
75°	2829.2	2047.2	353.0	327.1	312.8	466.8	644.5	537.8	454.9	412.3	402.8
77.5°	1312.8	881.4	300.9	289.1	272.5	438.4	623.2	509.5	428.9	388.5	376.7
80°	611.3	417.1	253.5	251.2	244.1	414.7	594.8	476.3	398.0	364.9	345.9
82.5°	327.1	251.2	206.2	206.2	213.3	386.2	559.3	435.9	357.7	341.3	291.5
85°	173.0	144.5	149.3	161.2	182.4	341.3	511.9	393.4	312.8	260.7	253.5
87.5°	87.7	92.4	92.4	109.1	139.7	277.2	421.8	324.6	265.4	213.3	208.5
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)