

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: P237322

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237322
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
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 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: 13319.9 lumens
Efficiency: N/A
Efficacy: 143.2 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

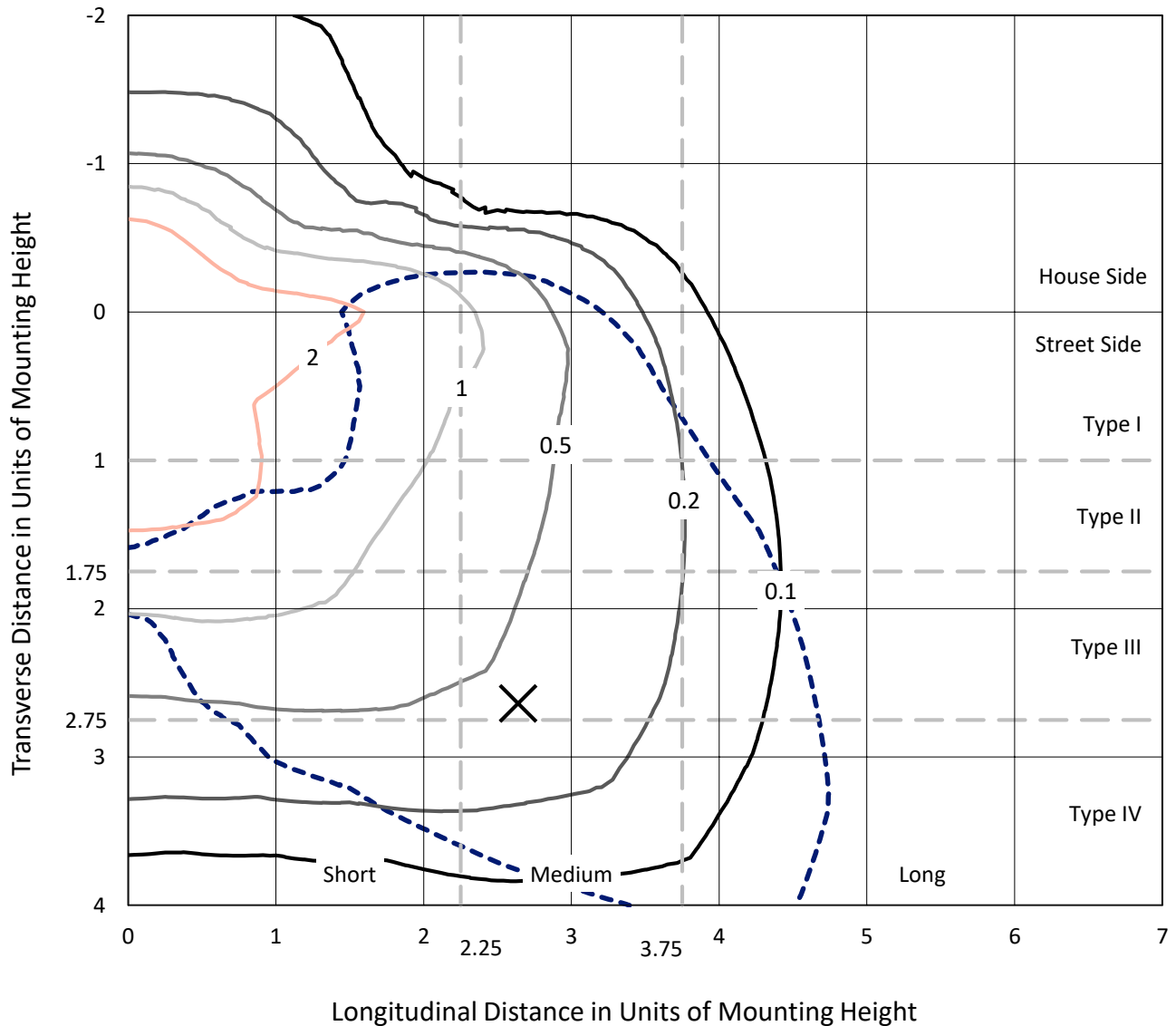


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Iso-Footcandle Lines of Horizontal Illumination

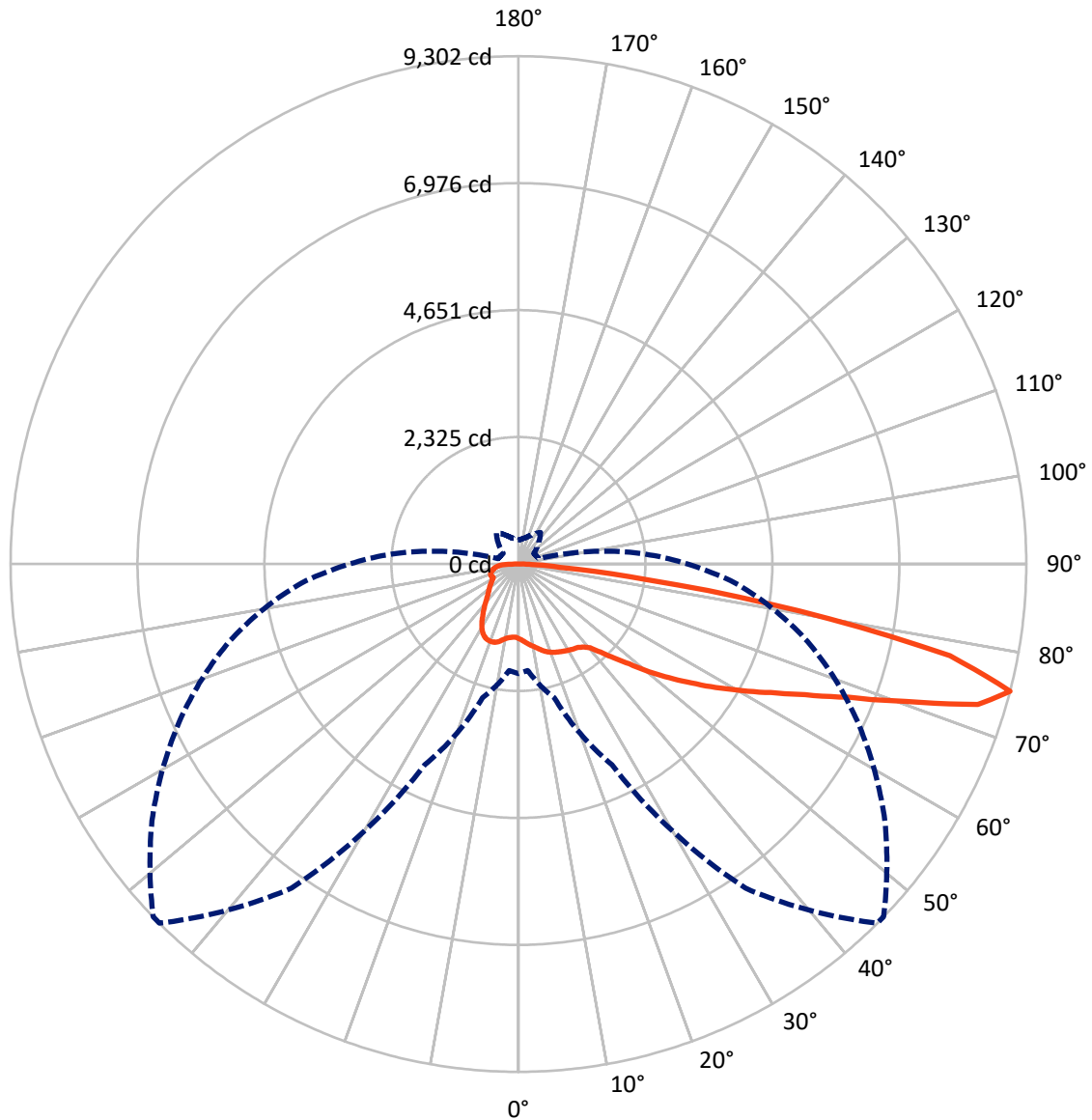
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4 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	3085.7	0.0	3085.7
	% Fixture	23.2	0.0	23.2
Street Side	Lumens	10234.2	0.0	10234.2
	% Fixture	76.8	0.0	76.8
Total	Lumens	13319.9	0.0	13319.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.3	1.0
10°-20°	438.5	3.3
20°-30°	752.5	5.6
30°-40°	1052.4	7.9
40°-50°	1543.8	11.6
50°-60°	2404.9	18.1
60°-70°	3460.4	26.0
70°-80°	3014.4	22.6
80°-90°	517.7	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°	13319.9	100.0
0°-180°	13319.9	100.0



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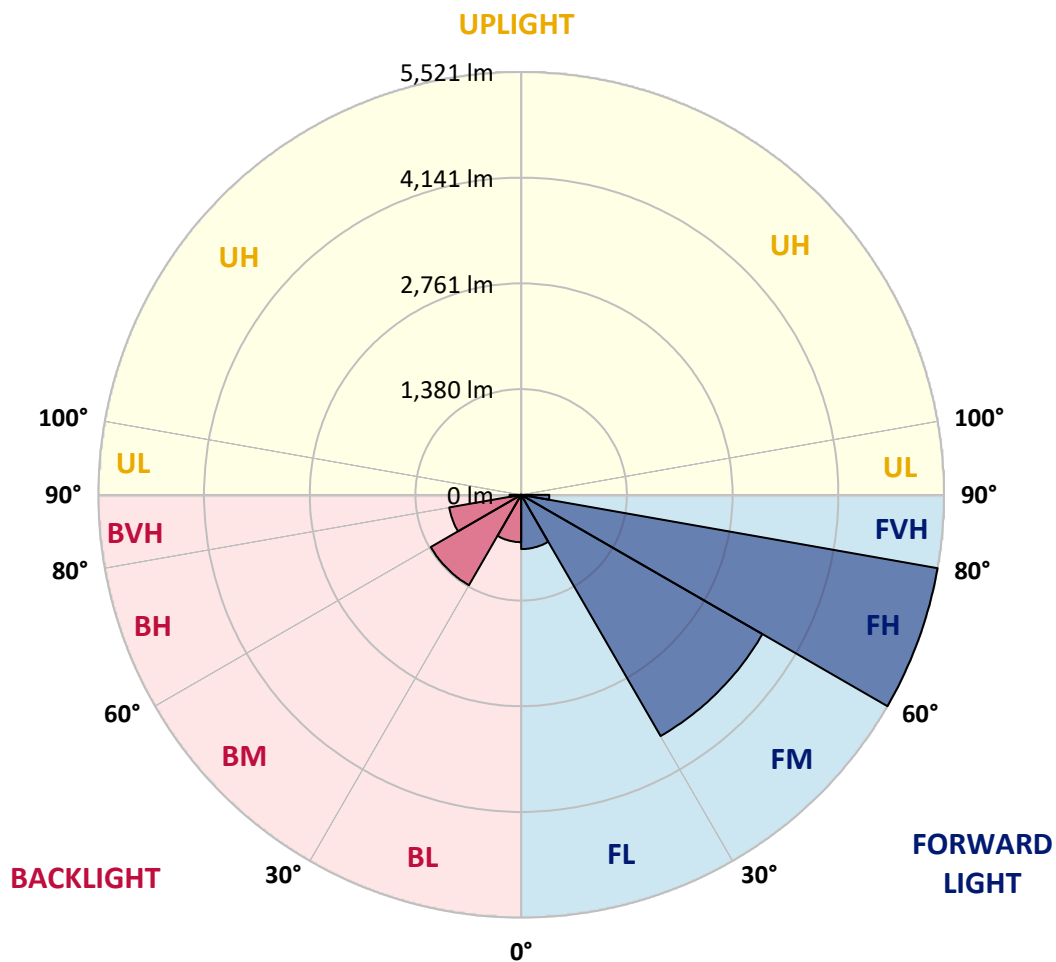
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	708.3	5.3			
FM (30°-60°)	3637.4	27.3			
FH (60°-80°)	5521.2	41.5			G3/7500
FVH (80°-90°)	367.3	2.8			G3/500
BL (0°-30°)	618.0	4.6	B2/1000		
BM (30°-60°)	1363.7	10.2	B2/2500		
BH (60°-80°)	953.6	7.2	B2/1000		G2/1000
BVH (80°-90°)	150.4	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4
2.5°	1432.8	1422.5	1422.5	1414.7	1414.7	1401.7	1396.5	1394.0	1381.0	1373.2	1365.4
5°	1515.7	1502.8	1500.2	1482.1	1474.3	1445.8	1443.2	1425.1	1401.7	1378.4	1360.3
7.5°	1590.9	1583.1	1570.1	1552.0	1528.7	1492.4	1489.8	1461.4	1422.5	1391.4	1365.4
10°	1645.3	1640.1	1622.0	1598.7	1572.8	1536.5	1533.9	1502.8	1456.2	1419.9	1383.6
12.5°	1710.1	1702.3	1679.0	1647.9	1619.4	1585.7	1583.1	1557.2	1505.4	1458.7	1412.1
15°	1772.3	1761.9	1733.4	1702.3	1671.2	1642.8	1642.8	1614.2	1559.8	1505.4	1451.0
17.5°	1803.4	1798.1	1769.7	1735.9	1710.1	1689.3	1686.7	1660.9	1606.4	1549.5	1489.8
20°	1813.7	1816.4	1790.4	1754.2	1735.9	1725.6	1723.1	1704.8	1645.3	1590.9	1533.9
22.5°	1811.1	1818.9	1798.1	1759.3	1754.2	1754.2	1754.2	1733.4	1686.7	1632.3	1575.3
25°	1821.5	1831.9	1816.4	1769.7	1769.7	1780.0	1780.0	1769.7	1728.2	1681.6	1624.5
27.5°	1857.8	1865.6	1852.6	1787.8	1790.4	1805.9	1803.4	1805.9	1780.0	1735.9	1679.0
30°	1901.8	1912.2	1896.7	1816.4	1813.7	1829.2	1829.2	1842.2	1824.1	1777.5	1730.8
32.5°	2021.0	2018.4	1969.2	1847.4	1839.7	1855.2	1855.2	1868.1	1857.8	1821.5	1777.5
35°	2376.0	2337.1	2228.3	1948.4	1870.8	1878.5	1878.5	1901.8	1907.0	1878.5	1839.7
37.5°	2738.7	2725.8	2642.9	2218.0	1984.7	1927.8	1925.1	1958.8	1982.2	1958.8	1932.9
40°	3104.0	3093.7	3075.5	2578.0	2223.1	2015.8	2008.1	2036.6	2078.0	2062.5	2046.9
42.5°	3443.5	3438.3	3456.4	2933.0	2526.3	2205.0	2181.6	2148.0	2207.5	2202.4	2202.4
45°	3710.3	3723.3	3733.7	3264.7	2855.4	2448.5	2420.0	2306.0	2386.3	2407.1	2422.7
47.5°	3860.6	3870.9	3907.3	3588.6	3184.3	2731.0	2710.2	2523.6	2629.9	2692.1	2736.1
50°	4075.6	4047.2	4078.3	3904.7	3580.8	3098.8	3041.8	2816.5	2951.2	3060.1	3163.7
52.5°	4283.0	4236.3	4262.2	4270.0	4031.7	3459.0	3399.5	3161.0	3329.5	3500.4	3684.5
55°	4469.5	4466.9	4492.8	4625.0	4466.9	3845.1	3777.8	3542.0	3785.5	3969.5	4280.3
57.5°	4619.9	4645.7	4759.7	5037.0	4969.6	4264.9	4189.7	3985.0	4272.6	4456.6	4972.2
60°	4796.0	4837.4	5026.6	5386.8	5428.2	4705.3	4627.6	4479.9	4772.7	4959.3	5772.8
62.5°	4855.6	4915.2	5303.8	5754.7	5907.5	5187.3	5117.3	5018.8	5298.7	5467.1	6570.8
65°	4459.1	4573.2	5456.7	5943.9	6423.2	5767.6	5708.1	5622.5	5822.0	5933.4	7112.4
67.5°	4350.3	4402.2	5158.7	6215.9	6907.7	6513.8	6454.2	6306.6	6311.7	6265.1	7288.5
70°	4197.5	4254.5	4853.0	6420.6	7602.1	7534.7	7462.1	7026.9	6760.0	6477.5	6941.3
72.5°	3575.6	3557.5	4181.9	5868.7	7936.4	8799.1	8713.6	7801.6	7091.6	6293.6	5858.3
75°	2008.1	1956.2	2536.6	4060.2	7247.1	9301.8	9299.2	8192.8	6858.5	5482.6	3987.6
77.5°	583.0	567.4	836.9	1702.3	4878.9	8081.4	8179.9	7389.6	5723.6	3938.4	2189.4
80°	274.7	279.9	360.2	562.2	2083.2	5215.7	5498.2	4866.0	3420.1	1816.4	904.3
82.5°	173.6	176.2	246.1	362.7	881.0	2368.2	2601.4	2189.4	1355.1	785.1	399.1
85°	108.8	108.8	163.3	238.3	526.0	756.6	821.3	746.2	580.4	427.5	217.7
87.5°	59.6	59.6	98.5	137.3	287.7	243.6	251.3	298.0	362.7	261.7	108.8
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°	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4	1365.4
2.5°	1362.9	1357.7	1349.9	1347.3	1344.8	1342.1	1344.8	1349.9	1344.8	1344.8	1347.3
5°	1355.1	1349.9	1339.6	1339.6	1342.1	1344.8	1357.7	1365.4	1368.1	1368.1	1368.1
7.5°	1355.1	1347.3	1339.6	1342.1	1347.3	1357.7	1378.4	1391.4	1401.7	1404.3	1404.3
10°	1368.1	1357.7	1352.5	1357.7	1373.2	1381.0	1401.7	1422.5	1435.4	1440.6	1440.6
12.5°	1391.4	1381.0	1381.0	1391.4	1412.1	1422.5	1440.6	1456.2	1471.7	1479.5	1479.5
15°	1430.3	1417.3	1419.9	1438.1	1461.4	1471.7	1484.7	1489.8	1502.8	1513.1	1513.1
17.5°	1466.5	1453.6	1458.7	1479.5	1495.0	1500.2	1507.9	1505.4	1510.6	1518.4	1520.9
20°	1507.9	1495.0	1497.6	1510.6	1513.1	1507.9	1507.9	1500.2	1497.6	1510.6	1515.7
22.5°	1549.5	1536.5	1533.9	1526.1	1513.1	1500.2	1492.4	1484.7	1479.5	1492.4	1497.6
25°	1598.7	1580.6	1567.6	1533.9	1500.2	1476.9	1466.5	1461.4	1458.7	1471.7	1476.9
27.5°	1653.1	1635.0	1596.1	1523.5	1469.2	1430.3	1422.5	1422.5	1427.6	1435.4	1440.6
30°	1704.8	1686.7	1616.8	1500.2	1414.7	1357.7	1349.9	1357.7	1370.7	1378.4	1386.2
32.5°	1756.7	1738.6	1629.8	1463.9	1334.3	1261.8	1256.7	1269.6	1290.4	1295.5	1300.7
35°	1826.7	1808.6	1645.3	1412.1	1233.4	1155.6	1150.4	1158.2	1176.3	1184.1	1191.8
37.5°	1925.1	1914.8	1668.6	1355.1	1140.1	1054.6	1039.0	1033.8	1044.2	1041.6	1052.0
40°	2054.7	2062.5	1710.1	1280.0	1049.3	961.3	927.6	912.1	901.6	881.0	891.3
42.5°	2243.8	2249.1	1756.7	1194.5	971.6	873.2	829.1	800.7	779.9	746.2	751.4
45°	2521.1	2477.1	1811.1	1103.8	901.6	803.2	751.4	717.7	689.3	660.7	663.3
47.5°	2889.0	2754.3	1870.8	1028.7	831.8	746.2	699.6	660.7	627.1	603.7	606.3
50°	3342.4	3098.8	1930.3	958.7	761.8	702.2	660.7	619.3	585.5	562.2	559.7
52.5°	3940.9	3513.4	1969.2	881.0	691.8	663.3	627.1	588.2	546.7	518.2	515.6
55°	4562.8	3995.3	2002.8	787.7	624.4	619.3	601.1	557.1	507.8	471.6	466.4
57.5°	5246.8	4511.0	2028.8	696.9	572.6	583.0	577.8	526.0	471.6	437.9	435.3
60°	5868.7	5044.8	1945.9	616.6	526.0	546.7	551.9	507.8	479.4	487.1	489.7
62.5°	6495.7	5456.7	1629.8	557.1	494.9	523.3	567.4	564.9	551.9	564.9	567.4
65°	6721.1	5542.2	1155.6	507.8	463.8	533.8	616.6	611.5	551.9	528.6	523.3
67.5°	6594.1	5288.2	777.3	469.0	440.5	546.7	668.5	611.5	531.1	500.0	489.7
70°	5990.5	4663.8	570.0	430.2	419.7	544.1	696.9	608.9	520.8	487.1	474.1
72.5°	4777.9	3598.9	458.6	393.8	388.6	531.1	712.5	603.7	510.5	474.1	458.6
75°	3093.7	2238.6	386.1	357.5	342.0	510.5	704.7	588.2	497.5	450.8	440.5
77.5°	1435.4	963.8	329.1	316.1	298.0	479.4	681.5	557.1	469.0	424.9	411.9
80°	668.5	456.0	277.2	274.7	266.9	453.5	650.4	520.8	435.3	399.1	378.3
82.5°	357.5	274.7	225.5	225.5	233.2	422.4	611.5	476.8	391.3	373.1	318.6
85°	189.1	158.0	163.3	176.2	199.5	373.1	559.7	430.2	342.0	285.0	277.2
87.5°	95.9	101.1	101.1	119.2	152.8	303.1	461.2	355.0	290.2	233.2	228.0
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)