

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: P237463

Luminaire Tested: **ARCH-L-AF72-100-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237463
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-100-D-U-T4W-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10150 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

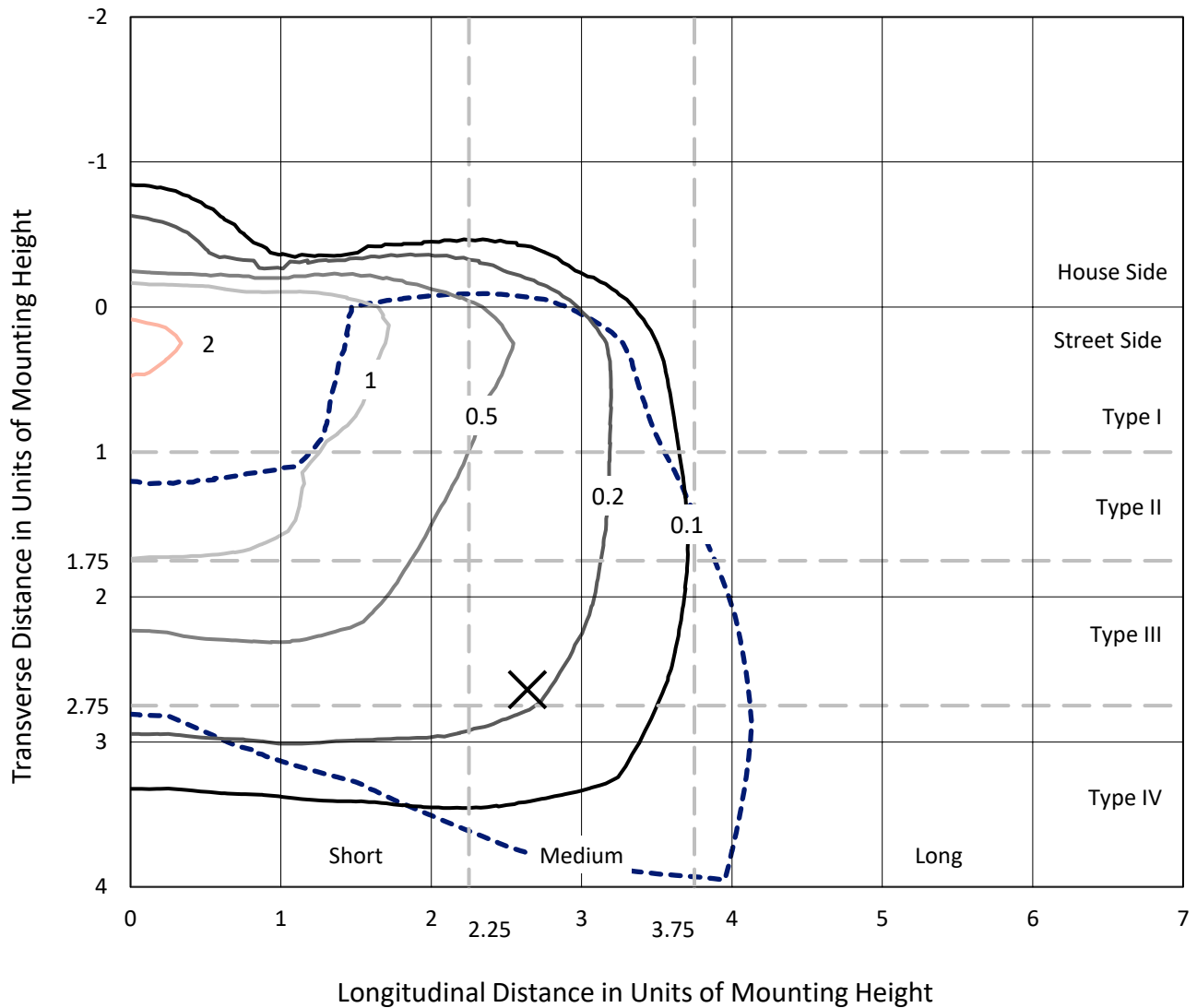
Input Watts (W): 102
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P237463
 CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7050-HSS

Iso-Footcandle Lines of Horizontal Illumination

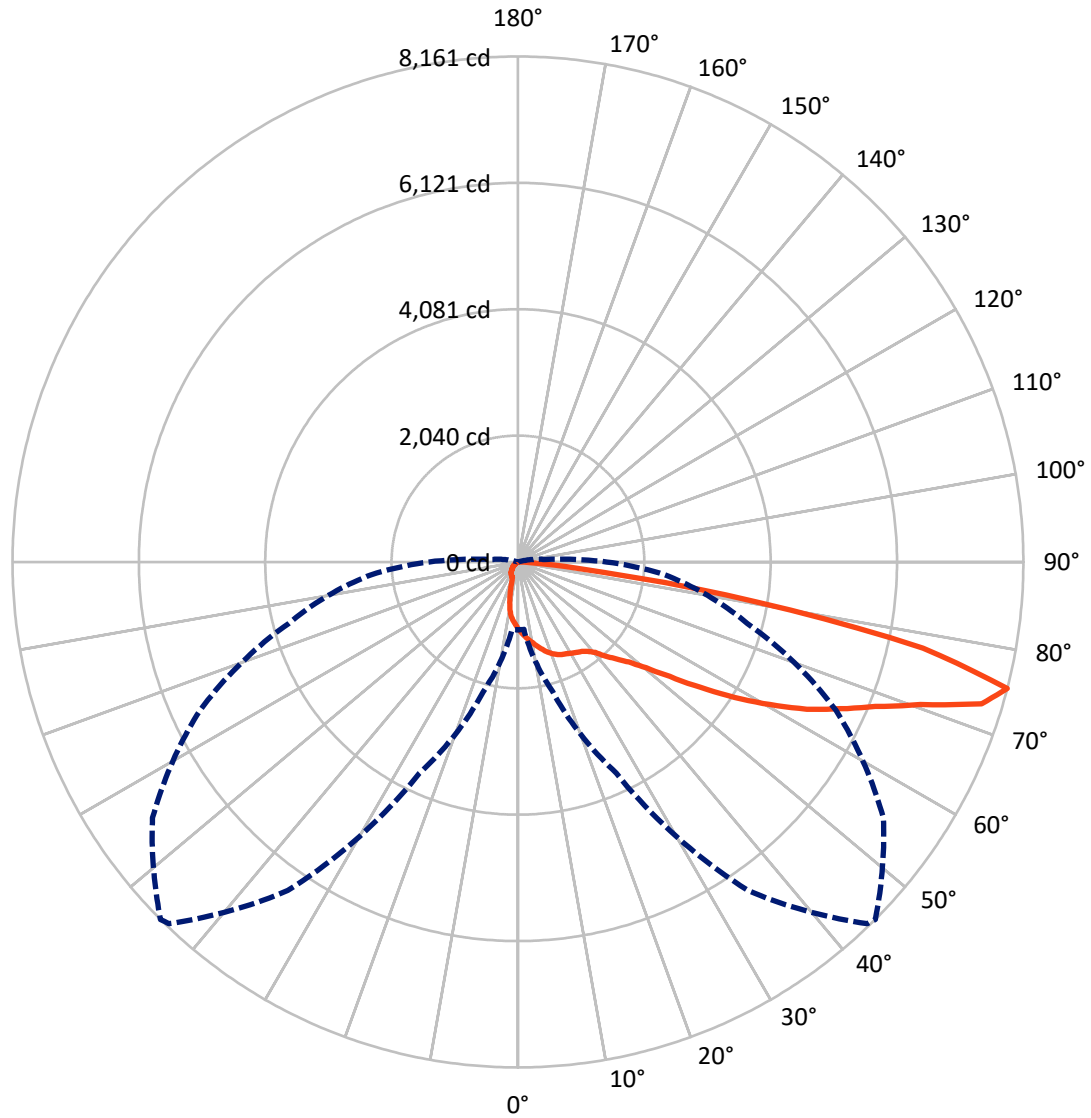
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Medium - N/A

REPORT NUMBER: P237463
CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7050-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P237463
 CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7050-HSS

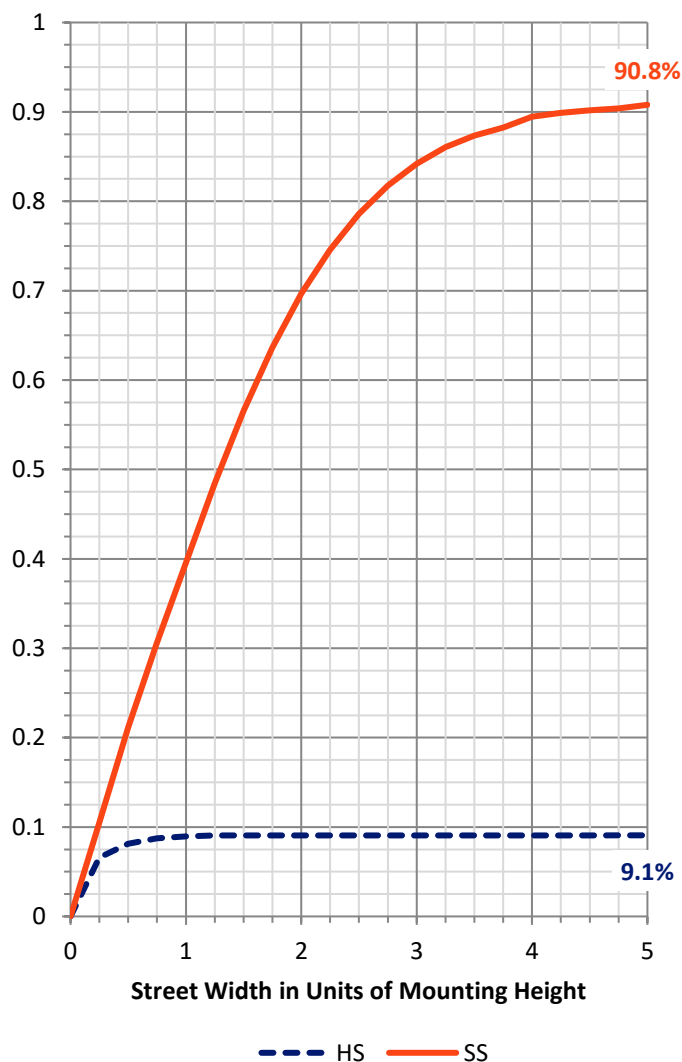
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	928.4	0.0	928.4
	% Fixture	9.1	0.0	9.1
Street Side	Lumens	9221.6	0.0	9221.6
	% Fixture	90.9	0.0	90.9
Total	Lumens	10150.0	0.0	10150.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.5	1.0
10°-20°	290.3	2.9
20°-30°	480.7	4.7
30°-40°	695.7	6.9
40°-50°	1139.2	11.2
50°-60°	2029.8	20.0
60°-70°	2984.1	29.4
70°-80°	2251.2	22.2
80°-90°	176.6	1.7
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°	10150.0	100.0
0°-180°	10150.0	100.0

Coefficient of Utilization



REPORT NUMBER: P237463

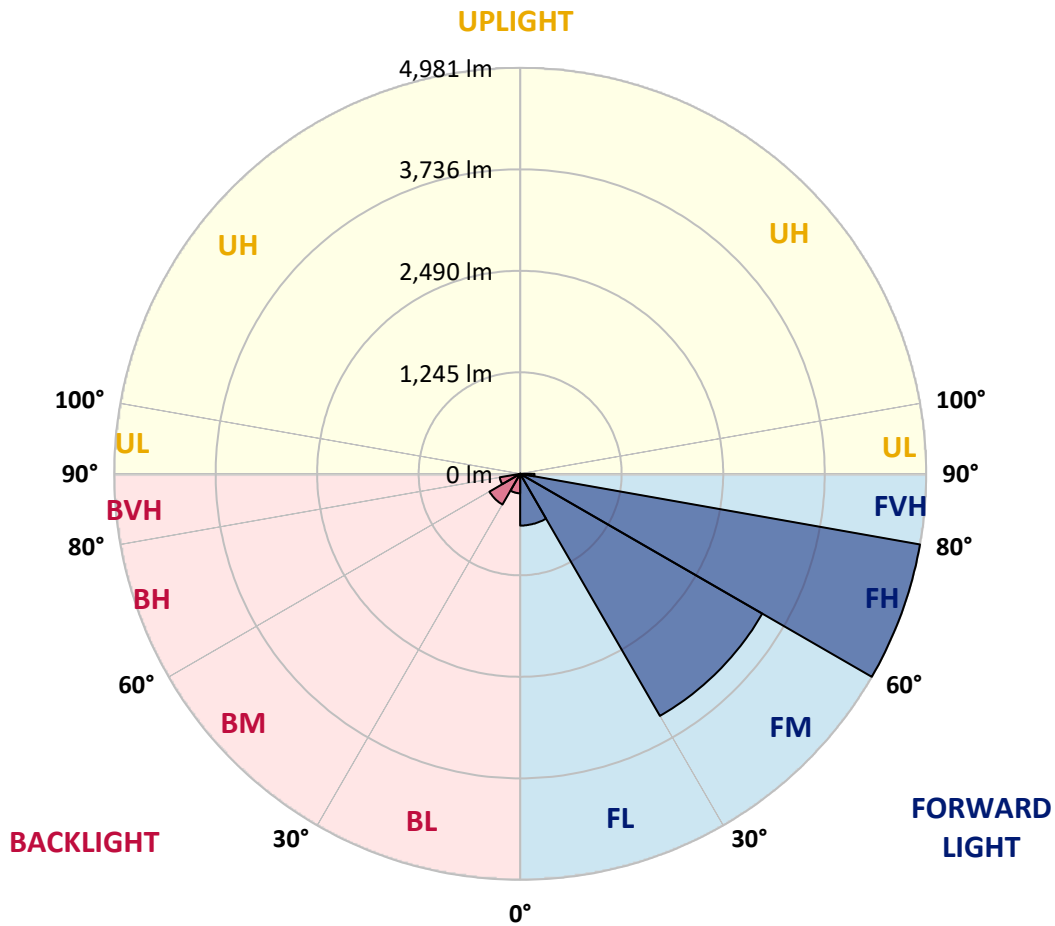
CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7050-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	634.9	6.3			
FM (30°-60°)	3429.6	33.8			
FH (60°-80°)	4981.0	49.1			G2/5000
FVH (80°-90°)	176.1	1.7			G2/225
BL (0°-30°)	238.6	2.4	B1/500		
BM (30°-60°)	435.1	4.3	B1/1000		
BH (60°-80°)	254.3	2.5	B1/500		G1/500
BVH (80°-90°)	0.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type IV Medium





REPORT NUMBER: P237463

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6
2.5°	1179.3	1179.3	1176.9	1174.5	1162.5	1150.4	1148.0	1140.8	1119.2	1104.8	1090.4
5°	1277.7	1280.1	1275.3	1263.3	1236.9	1210.5	1208.1	1188.9	1148.0	1119.2	1088.0
7.5°	1371.4	1376.2	1364.2	1342.6	1311.4	1272.9	1270.5	1234.5	1181.7	1140.8	1095.2
10°	1450.7	1450.7	1433.9	1407.4	1373.8	1333.0	1328.2	1287.3	1227.3	1176.9	1116.8
12.5°	1537.1	1534.7	1510.7	1474.7	1436.3	1397.8	1395.4	1345.0	1287.3	1222.5	1148.0
15°	1616.4	1611.6	1580.4	1546.7	1505.9	1465.1	1462.7	1412.2	1352.2	1275.3	1193.7
17.5°	1659.6	1657.2	1628.4	1594.8	1561.1	1529.9	1527.5	1474.7	1409.8	1330.6	1239.3
20°	1666.8	1669.2	1645.2	1616.4	1597.2	1580.4	1580.4	1532.3	1462.7	1378.6	1287.3
22.5°	1669.2	1676.4	1659.6	1621.2	1616.4	1618.8	1623.6	1585.2	1513.1	1433.9	1337.8
25°	1686.0	1695.6	1683.6	1638.0	1633.2	1650.0	1654.8	1638.0	1573.2	1493.9	1395.4
27.5°	1719.7	1729.3	1719.7	1662.0	1654.8	1671.6	1676.4	1686.0	1638.0	1551.5	1455.5
30°	1786.9	1789.3	1767.7	1695.6	1681.2	1702.9	1710.1	1736.5	1698.0	1606.8	1513.1
32.5°	1904.6	1880.6	1815.7	1719.7	1707.7	1731.7	1738.9	1767.7	1753.3	1659.6	1573.2
35°	2144.8	2019.9	1871.0	1753.3	1741.3	1765.3	1774.9	1815.7	1822.9	1734.1	1647.6
37.5°	2142.4	2029.5	2000.7	1818.1	1801.3	1818.1	1830.1	1880.6	1909.4	1832.5	1755.7
40°	2293.7	2245.6	2245.6	1940.6	1885.4	1909.4	1921.4	1971.8	2022.3	1962.2	1883.0
42.5°	2769.2	2738.0	2704.4	2176.0	2003.1	2070.3	2077.5	2108.7	2168.8	2149.6	2055.9
45°	3300.0	3271.2	3141.5	2574.7	2204.8	2216.8	2233.6	2284.1	2370.5	2406.6	2296.1
47.5°	3715.5	3686.7	3576.2	3055.0	2519.5	2413.8	2413.8	2512.2	2646.7	2738.0	2632.3
50°	4049.4	4015.8	3948.5	3566.6	3035.8	2697.2	2682.8	2798.1	2997.4	3139.1	3067.1
52.5°	4373.6	4275.1	4234.3	4095.0	3619.5	3107.9	3069.5	3151.1	3427.3	3602.6	3542.6
55°	4589.8	4575.4	4532.1	4580.2	4231.9	3607.5	3573.8	3590.6	3936.5	4054.2	3979.7
57.5°	4791.5	4789.1	4885.2	5108.6	4899.6	4179.1	4126.2	4099.8	4428.9	4400.0	4464.9
60°	5041.3	4998.1	5221.4	5540.9	5512.0	4736.3	4676.2	4623.4	4805.9	4724.3	5046.1
62.5°	5053.3	5041.3	5495.2	5954.0	6119.7	5303.1	5233.4	5043.7	5135.0	5041.3	5600.9
65°	4594.6	4654.6	5610.5	6172.5	6628.9	5800.3	5716.2	5420.8	5428.0	5365.5	6254.2
67.5°	4491.3	4522.5	5293.5	6407.9	6996.3	6302.2	6223.0	5855.5	5769.0	5773.8	6640.9
70°	4234.3	4282.3	4899.6	6391.1	7287.0	6972.3	6893.1	6494.4	6285.4	6052.4	6343.1
72.5°	3235.2	3316.8	4128.6	5603.3	7207.7	7849.0	7827.4	7303.8	6492.0	5557.7	4798.7
75°	1095.2	1092.8	2168.8	3763.6	6475.2	8118.0	8161.2	7202.9	5663.4	3833.2	2382.6
77.5°	235.4	237.8	446.7	1525.1	4301.6	6518.4	6684.1	5432.8	3653.1	1707.7	545.2
80°	115.3	117.7	184.9	403.5	1719.7	3655.5	3914.9	2793.3	1349.8	341.1	91.3
82.5°	57.6	60.0	96.1	213.8	636.5	1299.4	1388.2	1028.0	386.7	192.1	45.6
85°	21.6	21.6	48.0	127.3	290.6	305.0	374.7	297.8	233.0	156.1	12.0
87.5°	4.8	4.8	26.4	62.4	129.7	96.1	96.1	91.3	141.7	105.7	4.8
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: P237463

CATALOG NUMBER: ARCH-L-AF72-100-D-U-T4W-7050-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6	1085.6
2.5°	1083.2	1073.6	1056.8	1040.0	1028.0	1013.5	1006.3	999.1	996.7	994.3	999.1
5°	1071.2	1056.8	1025.6	999.1	975.1	955.9	941.5	927.1	919.9	915.1	917.5
7.5°	1071.2	1049.6	1003.9	963.1	924.7	883.8	843.0	811.8	787.8	773.4	775.8
10°	1083.2	1054.4	994.3	939.1	867.0	780.6	691.7	624.5	578.8	552.4	552.4
12.5°	1109.6	1071.2	996.7	910.3	787.8	636.5	502.0	420.3	386.7	367.5	369.9
15°	1145.6	1100.0	1008.7	871.8	677.3	473.1	350.7	297.8	297.8	302.6	305.0
17.5°	1186.5	1136.0	1018.3	814.2	535.6	338.6	276.2	271.4	278.6	290.6	290.6
20°	1227.3	1172.1	1023.2	722.9	401.1	269.0	261.8	261.8	266.6	278.6	281.0
22.5°	1277.7	1217.7	1018.3	610.0	300.2	254.6	252.2	252.2	252.2	266.6	266.6
25°	1330.6	1270.5	999.1	490.0	254.6	245.0	242.6	240.2	240.2	252.2	254.6
27.5°	1390.6	1325.8	953.5	374.7	240.2	235.4	233.0	228.2	228.2	237.8	237.8
30°	1450.7	1388.2	883.8	283.4	228.2	225.8	221.0	216.2	211.4	221.0	221.0
32.5°	1515.5	1453.1	792.6	225.8	211.4	211.4	209.0	201.7	196.9	201.7	204.1
35°	1602.0	1527.5	689.3	196.9	189.7	189.7	189.7	187.3	177.7	182.5	182.5
37.5°	1717.3	1630.8	569.2	182.5	172.9	168.1	168.1	168.1	160.9	163.3	163.3
40°	1863.8	1750.9	453.9	170.5	160.9	148.9	144.1	146.5	141.7	141.7	139.3
42.5°	2063.1	1880.6	341.1	160.9	151.3	134.5	124.9	122.5	117.7	115.3	115.3
45°	2348.9	2039.1	245.0	151.3	144.1	117.7	108.1	100.9	88.9	81.7	81.7
47.5°	2718.8	2219.2	182.5	141.7	136.9	103.3	91.3	76.9	60.0	55.2	55.2
50°	3170.3	2421.0	153.7	127.3	124.9	91.3	72.1	50.4	33.6	28.8	31.2
52.5°	3609.9	2610.7	136.9	112.9	110.5	79.3	52.8	26.4	14.4	14.4	14.4
55°	3979.7	2745.2	124.9	100.9	96.1	62.4	28.8	12.0	7.2	7.2	7.2
57.5°	4313.6	2822.1	112.9	88.9	76.9	43.2	12.0	4.8	4.8	2.4	2.4
60°	4618.6	2867.7	98.5	76.9	60.0	24.0	4.8	2.4	2.4	0.0	0.0
62.5°	4918.8	2901.3	84.1	62.4	45.6	9.6	2.4	2.4	0.0	0.0	0.0
65°	5147.0	2889.3	67.2	50.4	28.8	4.8	2.4	0.0	0.0	0.0	0.0
67.5°	5139.8	2726.0	50.4	38.4	14.4	2.4	0.0	0.0	0.0	0.0	0.0
70°	4597.0	2296.1	33.6	24.0	4.8	2.4	0.0	0.0	0.0	0.0	0.0
72.5°	3261.6	1472.3	21.6	14.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	1436.3	446.7	12.0	7.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	281.0	103.3	7.2	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	67.2	12.0	2.4	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	28.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.2	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)