

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: P237467

Luminaire Tested: **ARCH-L-AF72-140-D-U-T4W-7050-HSS**

Issue Date: 2/14/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237467  
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-AF72-140-D-U-T4W-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

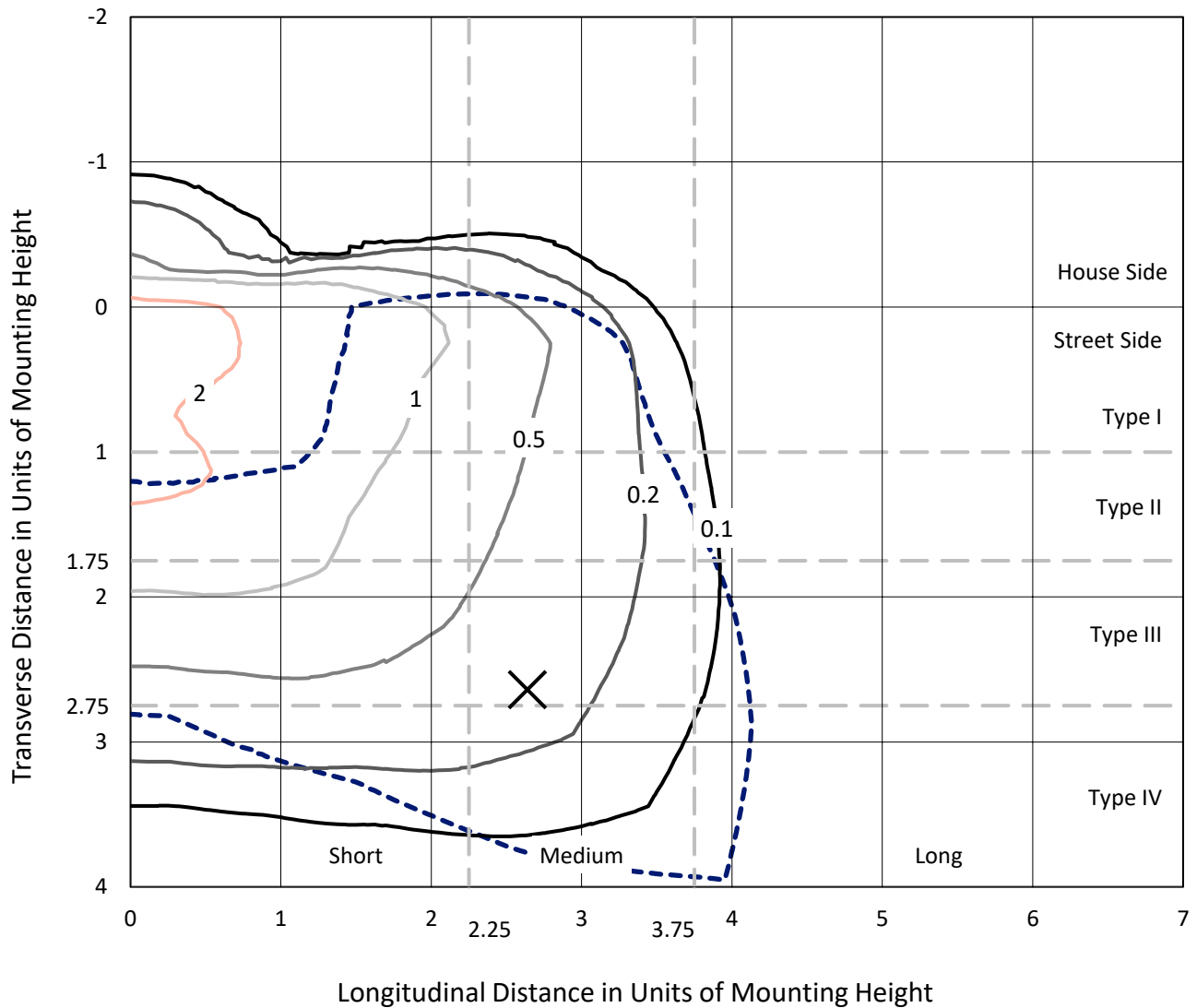
Lumens per Lamp: N/A  
Luminaire Lumens: 13636 lumens  
Efficiency: N/A  
Efficacy: 95.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G3  
  
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
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: P237467  
 CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050-HSS

### Iso-Footcandle Lines of Horizontal Illumination

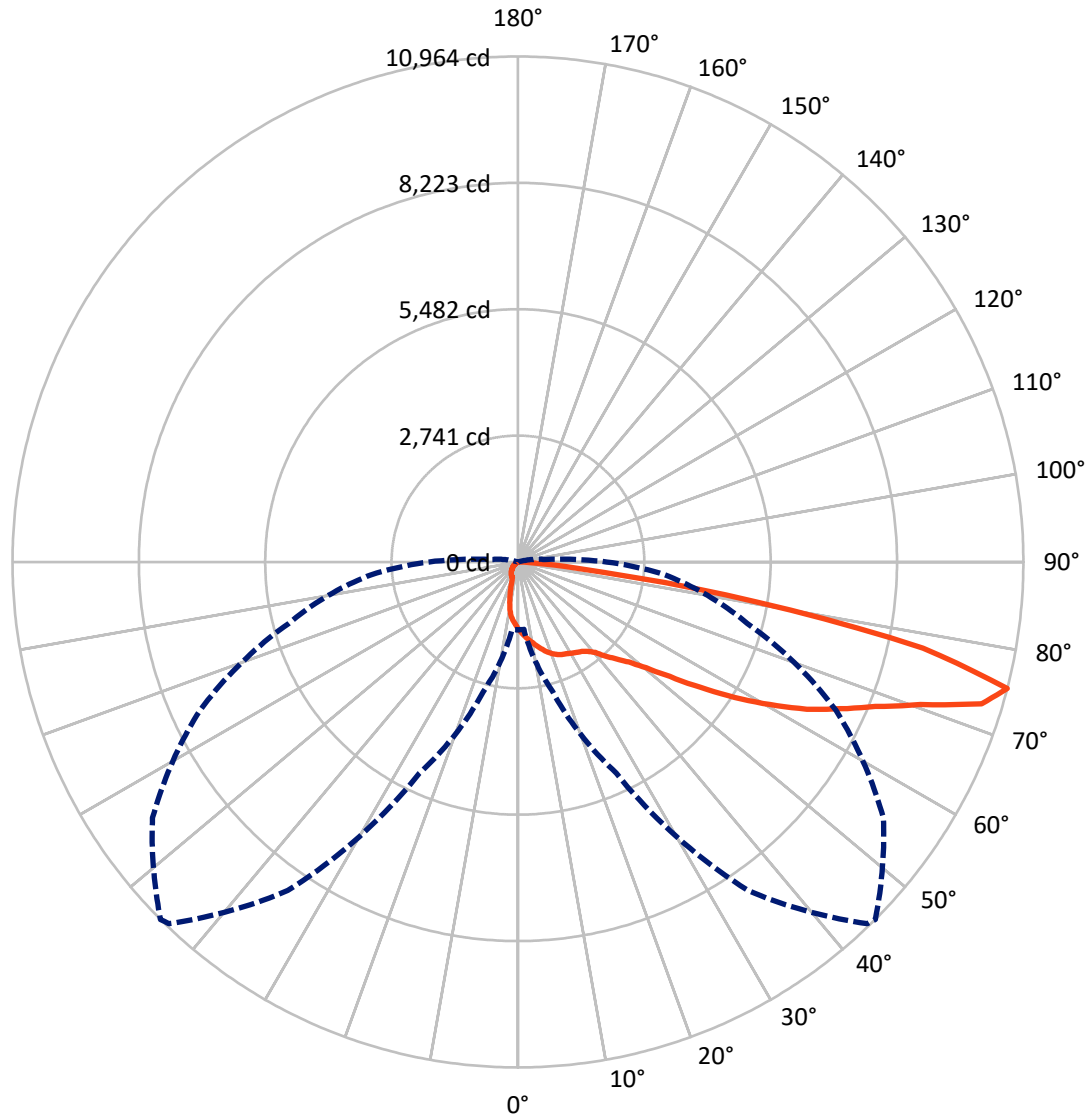
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P237467  
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050-HSS

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P237467

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050-HSS

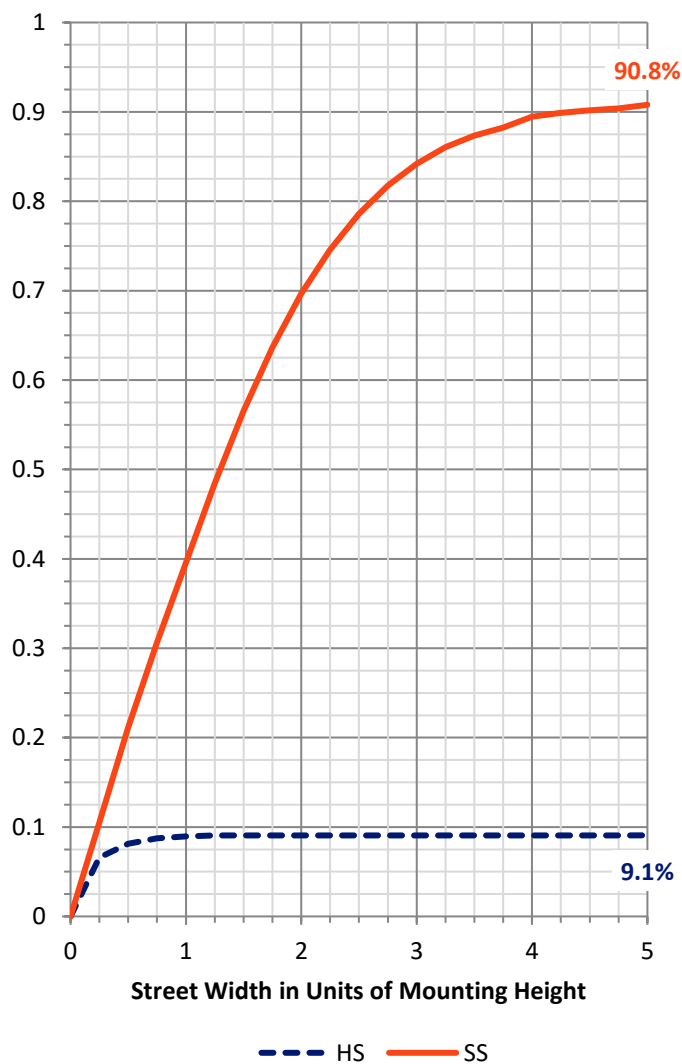
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1247.3	0.0	1247.3
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	12388.7	0.0	12388.7
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	13636.0	0.0	13636.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.6	1.0
10°-20°	390.0	2.9
20°-30°	645.8	4.7
30°-40°	934.6	6.9
40°-50°	1530.4	11.2
50°-60°	2726.9	20.0
60°-70°	4008.9	29.4
70°-80°	3024.4	22.2
80°-90°	237.3	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°	13636.0	100.0
0°-180°	13636.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P237467

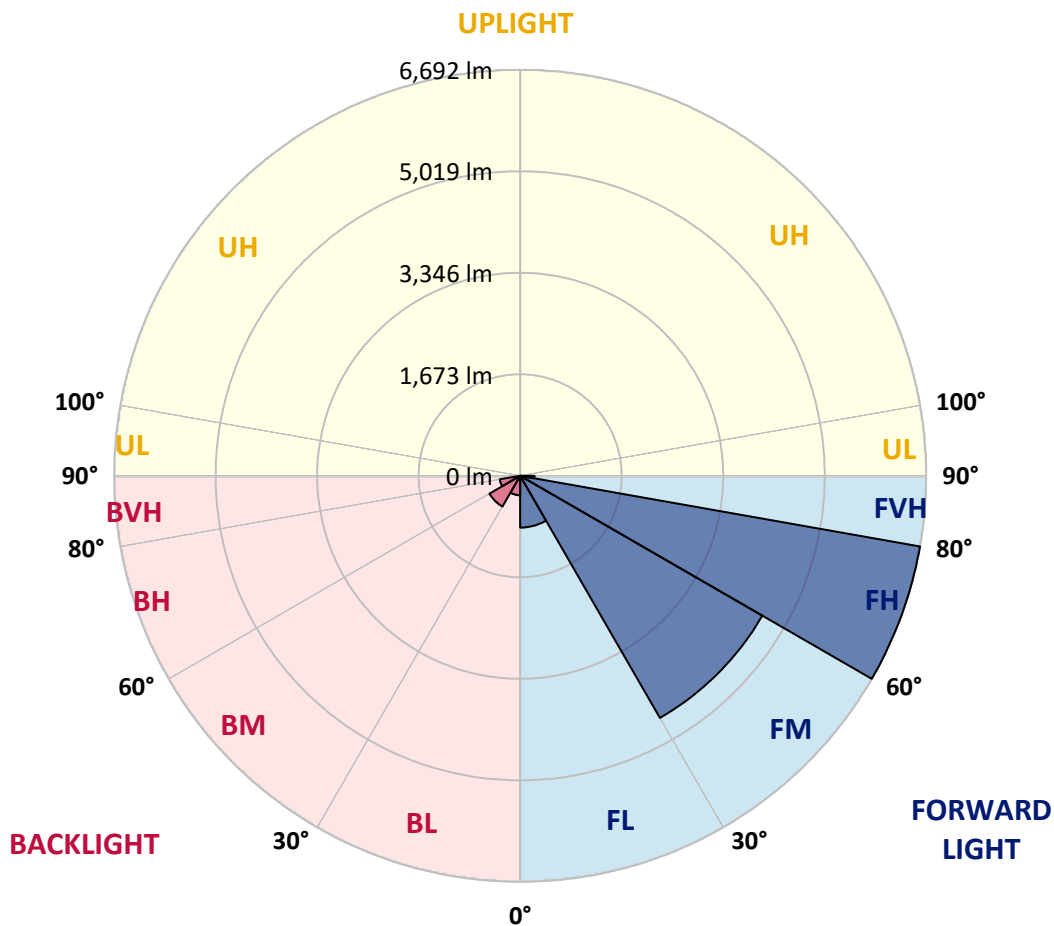
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	852.9	6.3			
FM (30°-60°)	4607.5	33.8			
FH (60°-80°)	6691.7	49.1			G3/7500
FVH (80°-90°)	236.6	1.7			G3/500
BL (0°-30°)	320.5	2.4	B1/500		
BM (30°-60°)	584.5	4.3	B1/1000		
BH (60°-80°)	341.6	2.5	B1/500		G1/500
BVH (80°-90°)	0.7	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-G3**

Type IV Medium





REPORT NUMBER: P237467

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4
2.5°	1584.3	1584.3	1581.1	1577.8	1561.7	1545.6	1542.3	1532.7	1503.6	1484.3	1464.9
5°	1716.6	1719.8	1713.3	1697.2	1661.7	1626.2	1623.0	1597.2	1542.3	1503.6	1461.7
7.5°	1842.4	1848.9	1832.7	1803.7	1761.7	1710.1	1706.9	1658.5	1587.5	1532.7	1471.4
10°	1948.9	1948.9	1926.3	1890.8	1845.6	1790.8	1784.3	1729.5	1648.8	1581.1	1500.4
12.5°	2065.1	2061.8	2029.6	1981.2	1929.5	1877.9	1874.7	1806.9	1729.5	1642.4	1542.3
15°	2171.5	2165.1	2123.1	2078.0	2023.1	1968.3	1965.0	1897.3	1816.6	1713.3	1603.6
17.5°	2229.6	2226.4	2187.7	2142.5	2097.3	2055.4	2052.1	1981.2	1894.0	1787.6	1664.9
20°	2239.3	2242.5	2210.3	2171.5	2145.7	2123.1	2123.1	2058.6	1965.0	1852.1	1729.5
22.5°	2242.5	2252.2	2229.6	2178.0	2171.5	2174.8	2181.2	2129.6	2032.8	1926.3	1797.2
25°	2265.1	2278.0	2261.9	2200.6	2194.1	2216.7	2223.2	2200.6	2113.5	2007.0	1874.7
27.5°	2310.3	2323.2	2310.3	2232.8	2223.2	2245.7	2252.2	2265.1	2200.6	2084.4	1955.3
30°	2400.6	2403.9	2374.8	2278.0	2258.7	2287.7	2297.4	2332.9	2281.2	2158.6	2032.8
32.5°	2558.7	2526.5	2439.3	2310.3	2294.1	2326.4	2336.1	2374.8	2355.5	2229.6	2113.5
35°	2881.4	2713.6	2513.6	2355.5	2339.3	2371.6	2384.5	2439.3	2449.0	2329.6	2213.5
37.5°	2878.2	2726.5	2687.8	2442.6	2420.0	2442.6	2458.7	2526.5	2565.2	2461.9	2358.7
40°	3081.4	3016.9	3016.9	2607.1	2532.9	2565.2	2581.3	2649.1	2716.8	2636.2	2529.7
42.5°	3720.3	3678.4	3633.2	2923.3	2691.0	2781.4	2791.0	2833.0	2913.7	2887.8	2762.0
45°	4433.4	4394.7	4220.5	3459.0	2962.1	2978.2	3000.8	3068.5	3184.7	3233.1	3084.7
47.5°	4991.6	4952.9	4804.5	4104.3	3384.8	3242.8	3242.8	3375.1	3555.8	3678.4	3536.4
50°	5440.1	5395.0	5304.6	4791.6	4078.5	3623.5	3604.2	3759.0	4026.9	4217.2	4120.4
52.5°	5875.7	5743.4	5688.6	5501.4	4862.6	4175.3	4123.7	4233.4	4604.4	4840.0	4759.3
55°	6166.1	6146.8	6088.7	6153.2	5685.4	4846.4	4801.2	4823.8	5288.5	5446.6	5346.6
57.5°	6437.2	6433.9	6563.0	6863.1	6582.4	5614.4	5543.4	5507.9	5949.9	5911.2	5998.3
60°	6772.7	6714.7	7014.7	7443.9	7405.2	6362.9	6282.3	6211.3	6456.5	6346.8	6779.2
62.5°	6788.9	6772.7	7382.6	7998.9	8221.5	7124.4	7030.9	6776.0	6898.6	6772.7	7524.5
65°	6172.6	6253.2	7537.4	8292.5	8905.5	7792.4	7679.4	7282.5	7292.2	7208.3	8402.2
67.5°	6033.8	6075.8	7111.5	8608.7	9399.2	8466.7	8360.2	7866.6	7750.4	7756.9	8921.7
70°	5688.6	5753.1	6582.4	8586.1	9789.6	9367.0	9260.5	8724.9	8444.1	8131.1	8521.6
72.5°	4346.3	4456.0	5546.6	7527.8	9683.2	10544.7	10515.6	9812.2	8721.6	7466.5	6446.8
75°	1471.4	1468.1	2913.7	5056.2	8699.0	10906.1	10964.1	9676.7	7608.4	5149.7	3200.8
77.5°	316.2	319.4	600.2	2048.9	5778.9	8757.1	8979.8	7298.7	4907.7	2294.1	732.4
80°	154.9	158.1	248.5	542.1	2310.3	4911.0	5259.4	3752.6	1813.4	458.2	122.6
82.5°	77.4	80.7	129.1	287.2	855.1	1745.6	1865.0	1381.0	519.5	258.1	61.3
85°	29.0	29.0	64.5	171.0	390.4	409.8	503.4	400.1	313.0	209.7	16.1
87.5°	6.5	6.5	35.5	83.9	174.2	129.1	129.1	122.6	190.4	142.0	6.5
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: P237467

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T4W-7050-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4	1458.4
2.5°	1455.2	1442.3	1419.7	1397.1	1381.0	1361.6	1352.0	1342.3	1339.1	1335.8	1342.3
5°	1439.1	1419.7	1377.8	1342.3	1310.0	1284.2	1264.8	1245.5	1235.8	1229.4	1232.6
7.5°	1439.1	1410.0	1348.7	1293.9	1242.3	1187.4	1132.6	1090.6	1058.3	1039.0	1042.2
10°	1455.2	1416.5	1335.8	1261.6	1164.8	1048.7	929.3	838.9	777.6	742.1	742.1
12.5°	1490.7	1439.1	1339.1	1222.9	1058.3	855.1	674.4	564.7	519.5	493.7	496.9
15°	1539.1	1477.8	1355.2	1171.3	909.9	635.6	471.1	400.1	400.1	406.6	409.8
17.5°	1594.0	1526.2	1368.1	1093.8	719.5	455.0	371.1	364.6	374.3	390.4	390.4
20°	1648.8	1574.6	1374.6	971.2	538.8	361.4	351.7	351.7	358.2	374.3	377.5
22.5°	1716.6	1635.9	1368.1	819.6	403.3	342.0	338.8	338.8	338.8	358.2	358.2
25°	1787.6	1706.9	1342.3	658.2	342.0	329.1	325.9	322.7	322.7	338.8	342.0
27.5°	1868.2	1781.1	1281.0	503.4	322.7	316.2	313.0	306.5	306.5	319.4	319.4
30°	1948.9	1865.0	1187.4	380.7	306.5	303.3	296.9	290.4	283.9	296.9	296.9
32.5°	2036.0	1952.1	1064.8	303.3	283.9	283.9	280.7	271.0	264.6	271.0	274.3
35°	2152.2	2052.1	926.0	264.6	254.9	254.9	254.9	251.7	238.8	245.2	245.2
37.5°	2307.1	2190.9	764.7	245.2	232.3	225.9	225.9	225.9	216.2	219.4	219.4
40°	2503.9	2352.2	609.8	229.1	216.2	200.1	193.6	196.8	190.4	190.4	187.1
42.5°	2771.7	2526.5	458.2	216.2	203.3	180.7	167.8	164.6	158.1	154.9	154.9
45°	3155.7	2739.4	329.1	203.3	193.6	158.1	145.2	135.5	119.4	109.7	109.7
47.5°	3652.6	2981.4	245.2	190.4	183.9	138.7	122.6	103.3	80.7	74.2	74.2
50°	4259.2	3252.5	206.5	171.0	167.8	122.6	96.8	67.8	45.2	38.7	41.9
52.5°	4849.6	3507.4	183.9	151.7	148.4	106.5	71.0	35.5	19.4	19.4	19.4
55°	5346.6	3688.1	167.8	135.5	129.1	83.9	38.7	16.1	9.7	9.7	9.7
57.5°	5795.1	3791.3	151.7	119.4	103.3	58.1	16.1	6.5	6.5	3.2	3.2
60°	6204.8	3852.6	132.3	103.3	80.7	32.3	6.5	3.2	3.2	0.0	0.0
62.5°	6608.2	3897.8	112.9	83.9	61.3	12.9	3.2	3.2	0.0	0.0	0.0
65°	6914.7	3881.7	90.3	67.8	38.7	6.5	3.2	0.0	0.0	0.0	0.0
67.5°	6905.0	3662.2	67.8	51.6	19.4	3.2	0.0	0.0	0.0	0.0	0.0
70°	6175.8	3084.7	45.2	32.3	6.5	3.2	0.0	0.0	0.0	0.0	0.0
72.5°	4381.8	1977.9	29.0	19.4	3.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	1929.5	600.2	16.1	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	377.5	138.7	9.7	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	90.3	16.1	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	38.7	6.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.7	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.5	3.2	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)