

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: P258090

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P258090  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-140-D-U-T2U-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13070 lumens  
Efficiency: N/A  
Efficacy: 91.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

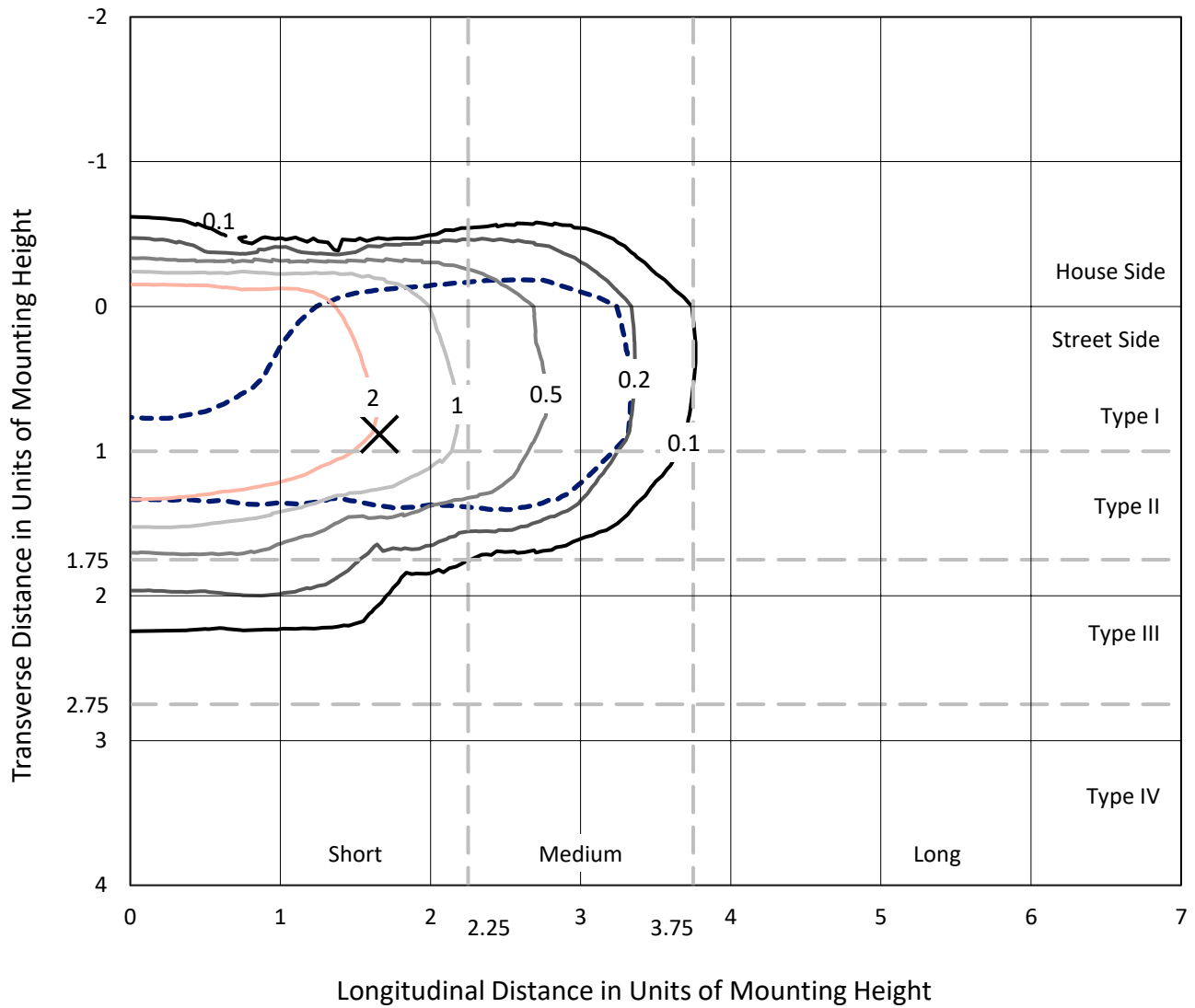
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P258090  
 CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7050-HSS

### Iso-Footcandle Lines of Horizontal Illumination

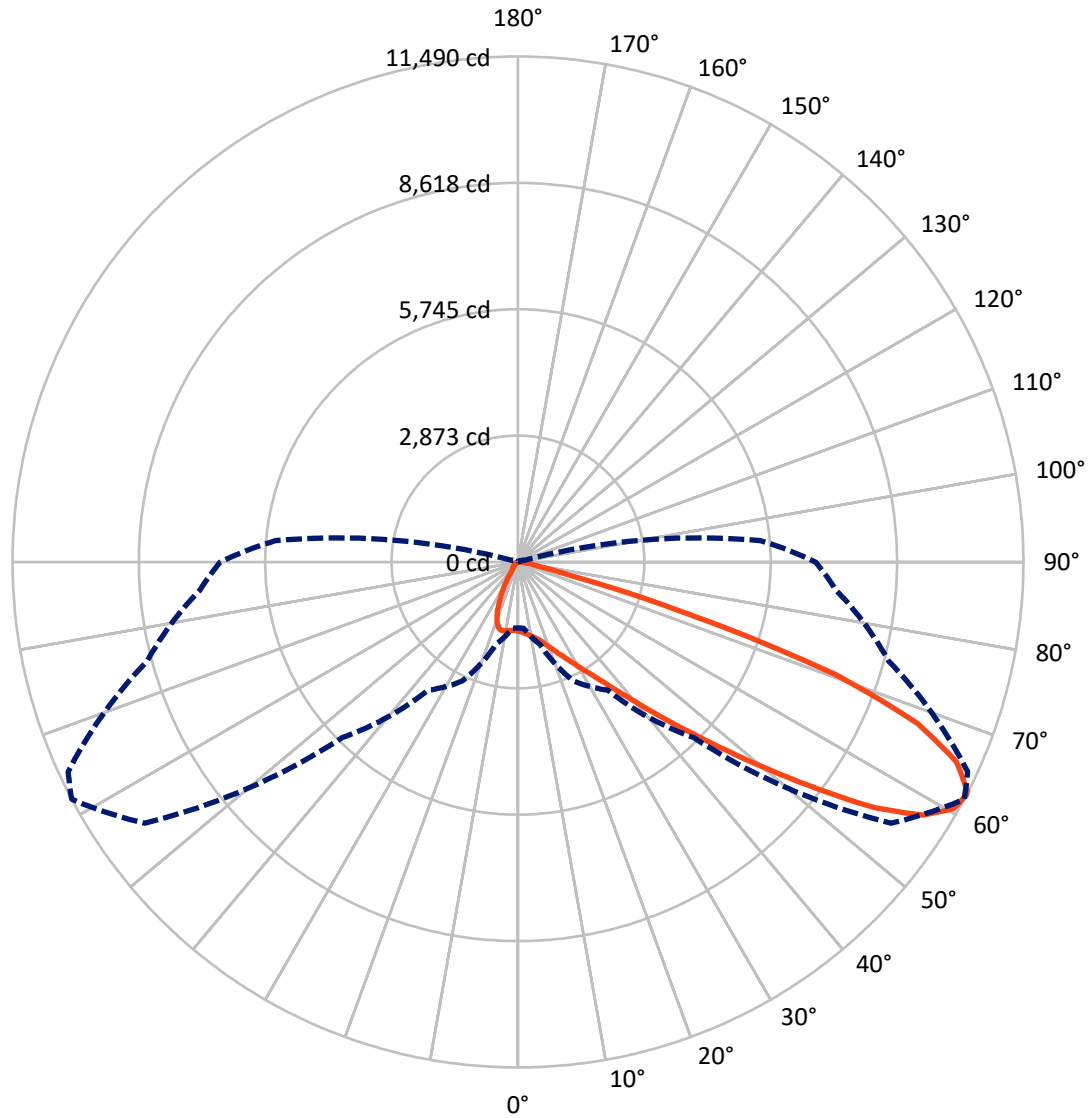
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc  
 Type II - Short - N/A

REPORT NUMBER: P258090  
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7050-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral      - - - Horizontal Cone Through 62-Deg Vertical

REPORT NUMBER: P258090

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7050-HSS

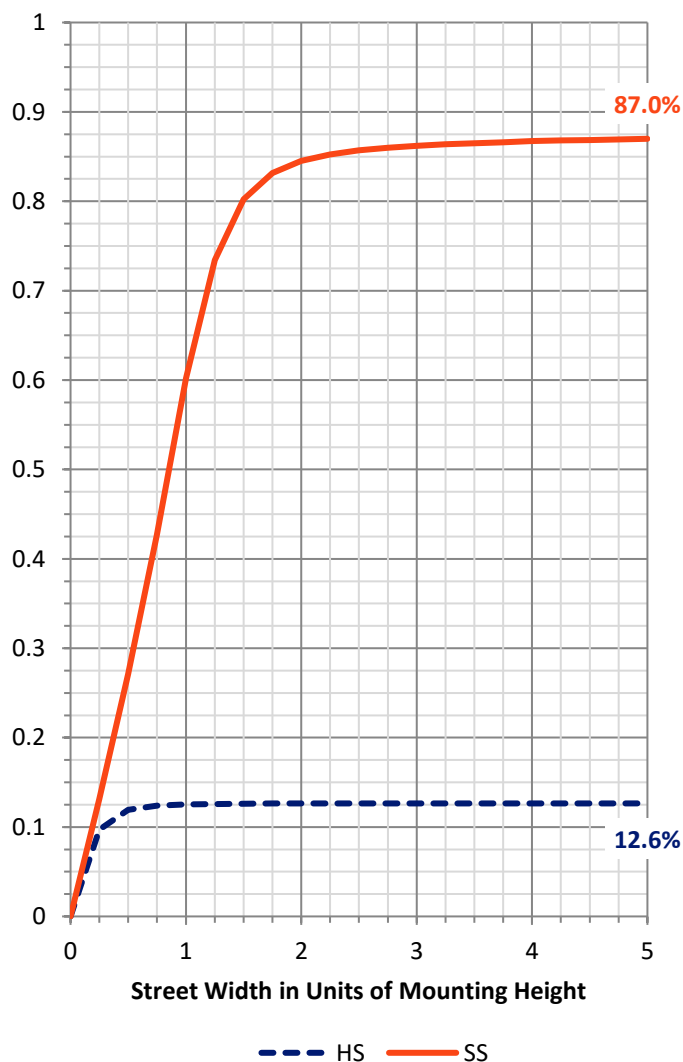
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1671.2	0.0	1671.2
	% Fixture	12.8	0.0	12.8
<b>Street Side</b>	Lumens	11398.8	0.0	11398.8
	% Fixture	87.2	0.0	87.2
<b>Total</b>	Lumens	13070.0	0.0	13070.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.5	1.2
10°-20°	423.1	3.2
20°-30°	710.6	5.4
30°-40°	1362.2	10.4
40°-50°	2782.3	21.3
50°-60°	3681.9	28.2
60°-70°	2860.2	21.9
70°-80°	1032.4	7.9
80°-90°	65.8	0.5
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°	13070.0	100.0
0°-180°	13070.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P258090

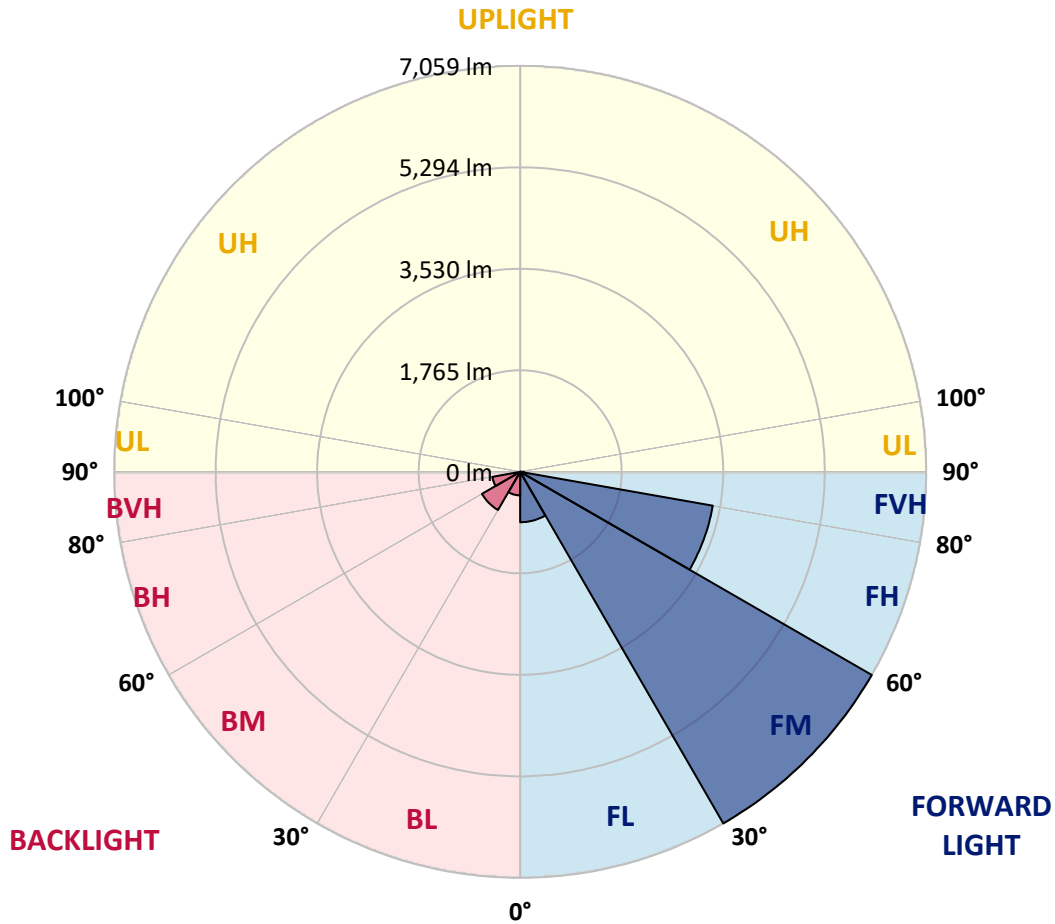
CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7050-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	876.2	6.7			
FM (30°-60°)	7059.1	54.0			
FH (60°-80°)	3400.5	26.0			G2/5000
FVH (80°-90°)	62.9	0.5			G1/100
BL (0°-30°)	409.0	3.1	B1/500		
BM (30°-60°)	767.2	5.9	B1/1000		
BH (60°-80°)	492.1	3.8	B1/500		G1/500
BVH (80°-90°)	2.9	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 II Short





REPORT NUMBER: P258090

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7050-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	62°	65°	75°	85°
0°	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5
2.5°	1616.2	1613.0	1609.8	1606.6	1606.6	1603.4	1600.2	1593.7	1587.3	1580.9	1577.7
5°	1645.1	1641.9	1638.7	1641.9	1638.7	1638.7	1635.5	1629.1	1622.6	1613.0	1603.4
7.5°	1667.6	1664.4	1661.2	1664.4	1667.6	1670.8	1674.1	1667.6	1664.4	1651.6	1641.9
10°	1696.6	1693.3	1690.1	1696.6	1696.6	1712.6	1715.8	1712.6	1709.4	1699.8	1683.7
12.5°	1738.3	1741.5	1741.5	1748.0	1754.4	1773.7	1780.1	1770.5	1770.5	1757.6	1738.3
15°	1815.4	1815.4	1815.4	1821.9	1825.1	1850.8	1857.2	1847.6	1854.0	1831.5	1812.2
17.5°	1889.3	1892.6	1899.0	1911.8	1911.8	1934.3	1947.2	1947.2	1960.0	1931.1	1905.4
20°	1963.2	1966.5	1976.1	2005.0	2005.0	2033.9	2056.4	2066.1	2078.9	2050.0	2005.0
22.5°	2043.6	2043.6	2059.6	2104.6	2095.0	2152.8	2194.6	2210.7	2223.5	2185.0	2114.3
25°	2165.7	2152.8	2165.7	2207.4	2201.0	2281.3	2358.5	2374.5	2390.6	2345.6	2239.6
27.5°	2397.0	2377.7	2332.8	2336.0	2336.0	2429.2	2538.4	2560.9	2570.5	2532.0	2400.2
30°	2859.7	2859.7	2692.6	2580.2	2506.3	2589.8	2744.0	2782.6	2795.5	2737.6	2564.1
32.5°	3666.2	3666.2	3357.8	3071.8	2792.2	2792.2	2969.0	3039.7	3052.5	2985.0	2782.6
35°	4694.4	4688.0	4225.3	3833.3	3287.1	3081.4	3232.4	3351.3	3389.9	3299.9	3065.4
37.5°	5786.9	5745.1	5247.1	4797.3	4048.6	3544.1	3589.1	3746.6	3781.9	3708.0	3431.7
40°	6673.7	6625.6	6223.9	5848.0	5031.8	4283.2	4103.2	4247.8	4289.6	4186.8	3868.7
42.5°	7477.0	7358.2	7081.8	6811.9	6162.9	5562.0	4787.6	4845.5	4890.4	4781.2	4360.3
45°	8058.6	7875.5	7734.1	7650.6	7306.7	6966.1	5674.5	5558.8	5574.8	5439.9	4896.9
47.5°	8074.7	7946.2	7959.0	8177.5	8318.9	8306.0	6828.0	6416.7	6355.6	6130.7	5468.8
50°	7303.5	7377.4	7612.0	8235.3	9000.1	9462.8	8200.0	7432.1	7248.9	6844.0	6037.5
52.5°	6018.3	6133.9	6574.1	7624.8	9099.7	10224.3	9623.4	8592.0	8264.3	7550.9	6474.5
55°	4713.7	4720.1	5182.8	6252.8	8434.6	10362.5	10760.9	9867.6	9366.4	8087.5	6763.7
57.5°	3242.1	3418.8	4006.8	4726.6	6934.0	9674.8	11188.2	10857.3	10211.4	8418.5	6966.1
60°	2123.9	2133.5	2817.9	3650.2	4720.1	7872.3	10928.0	11381.0	10895.8	8614.5	7104.3
62°	1497.3	1513.4	1937.5	2981.8	3557.0	5642.3	10352.8	11490.3	11281.4	8730.2	7248.9
62.5°	1388.1	1400.9	1757.6	2814.7	3341.7	5060.7	10147.2	11464.6	11339.3	8768.7	7300.3
65°	1018.6	1018.6	1150.3	1934.3	2448.4	2734.4	8598.4	10953.7	11262.2	9077.2	7493.1
67.5°	787.2	793.7	838.6	1192.1	1847.6	1658.0	5488.1	9803.4	10458.9	9533.5	7602.4
70°	678.0	674.8	706.9	790.4	1333.5	1102.1	2416.3	7650.6	8759.1	9417.8	7502.7
72.5°	501.3	504.5	578.4	694.0	928.6	716.5	1092.5	4061.4	5680.9	7371.0	6429.5
75°	321.3	324.5	408.1	546.2	668.3	469.1	629.8	1211.4	2326.3	4087.1	3932.9
77.5°	215.3	221.7	266.7	382.4	584.8	292.4	395.2	507.7	700.5	1532.7	1410.6
80°	144.6	144.6	170.3	257.1	369.5	244.2	212.1	337.4	363.1	475.5	237.8
82.5°	96.4	96.4	112.5	170.3	241.0	218.5	128.5	183.2	212.1	237.8	83.5
85°	57.8	57.8	77.1	106.0	157.4	122.1	83.5	102.8	109.2	151.0	45.0
87.5°	35.3	32.1	51.4	73.9	83.5	73.9	54.6	54.6	57.8	83.5	22.5
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: P258090

CATALOG NUMBER: ARCH-L-AF72-140-D-U-T2U-7050-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5	1574.5
2.5°	1571.2	1568.0	1564.8	1558.4	1548.7	1542.3	1535.9	1529.5	1523.0	1523.0	1532.7
5°	1600.2	1590.5	1577.7	1564.8	1545.5	1532.7	1523.0	1510.2	1503.8	1503.8	1507.0
7.5°	1635.5	1625.9	1603.4	1580.9	1552.0	1529.5	1507.0	1478.1	1455.6	1445.9	1455.6
10°	1674.1	1661.2	1629.1	1593.7	1561.6	1503.8	1429.9	1339.9	1262.8	1227.4	1243.5
12.5°	1722.3	1706.2	1667.6	1619.4	1545.5	1404.2	1221.0	1012.1	880.4	819.4	832.2
15°	1792.9	1770.5	1715.8	1641.9	1478.1	1172.8	874.0	633.0	510.9	459.5	465.9
17.5°	1876.5	1847.6	1773.7	1635.5	1304.5	845.1	520.5	369.5	318.1	305.3	305.3
20°	1966.5	1927.9	1831.5	1587.3	1041.1	530.2	324.5	282.8	263.5	253.8	253.8
22.5°	2059.6	2008.2	1879.7	1474.8	742.2	331.0	266.7	237.8	215.3	205.6	205.6
25°	2172.1	2104.6	1927.9	1278.8	472.3	266.7	228.1	199.2	176.7	163.9	167.1
27.5°	2303.8	2217.1	1969.7	1034.6	305.3	231.3	189.6	160.7	141.4	135.0	135.0
30°	2442.0	2339.2	1979.3	774.4	247.4	199.2	157.4	131.7	118.9	112.5	112.5
32.5°	2631.6	2496.6	1950.4	514.1	208.9	167.1	131.7	109.2	99.6	96.4	96.4
35°	2882.2	2702.3	1882.9	318.1	176.7	138.2	109.2	96.4	86.8	83.5	83.5
37.5°	3200.3	2988.2	1764.0	218.5	151.0	112.5	93.2	83.5	77.1	73.9	73.9
40°	3624.5	3335.3	1609.8	189.6	128.5	96.4	80.3	73.9	67.5	67.5	67.5
42.5°	4074.3	3756.2	1410.6	167.1	109.2	83.5	70.7	64.3	61.1	57.8	57.8
45°	4565.9	4186.8	1163.2	147.8	93.2	73.9	64.3	54.6	51.4	51.4	51.4
47.5°	5054.3	4630.2	893.3	128.5	80.3	64.3	54.6	48.2	45.0	41.8	41.8
50°	5555.6	5031.8	655.5	112.5	70.7	57.8	48.2	41.8	35.3	32.1	32.1
52.5°	5918.7	5272.8	478.8	96.4	61.1	48.2	38.6	32.1	25.7	22.5	22.5
55°	6185.3	5420.6	350.2	80.3	54.6	41.8	32.1	25.7	19.3	19.3	16.1
57.5°	6394.2	5491.3	263.5	70.7	48.2	35.3	25.7	19.3	16.1	12.9	12.9
60°	6554.9	5494.5	196.0	57.8	41.8	28.9	19.3	12.9	9.6	9.6	9.6
62°	6766.9	5536.3	160.7	48.2	38.6	25.7	16.1	9.6	6.4	3.2	3.2
62.5°	6828.0	5552.4	154.2	48.2	35.3	22.5	12.9	9.6	6.4	3.2	3.2
65°	7110.7	5581.3	118.9	38.6	28.9	19.3	9.6	6.4	0.0	0.0	0.0
67.5°	7367.8	5536.3	86.8	28.9	22.5	12.9	9.6	3.2	0.0	0.0	0.0
70°	7342.1	5227.8	61.1	19.3	16.1	9.6	6.4	0.0	0.0	0.0	0.0
72.5°	6050.4	3913.6	41.8	16.1	9.6	6.4	3.2	0.0	0.0	0.0	0.0
75°	3653.4	1712.6	28.9	9.6	9.6	6.4	3.2	0.0	0.0	0.0	0.0
77.5°	1198.5	620.1	19.3	6.4	6.4	3.2	3.2	0.0	0.0	0.0	0.0
80°	196.0	102.8	9.6	6.4	6.4	3.2	3.2	0.0	0.0	0.0	0.0
82.5°	61.1	25.7	6.4	6.4	3.2	3.2	0.0	0.0	0.0	0.0	0.0
85°	22.5	9.6	6.4	6.4	3.2	3.2	0.0	0.0	0.0	0.0	0.0
87.5°	9.6	6.4	6.4	6.4	3.2	3.2	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)