

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: P399410

Luminaire Tested: **ARCH-L-PA3-140-727-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399410  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-140-727-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 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: 12988 lumens  
Efficiency: N/A  
Efficacy: 90.8 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

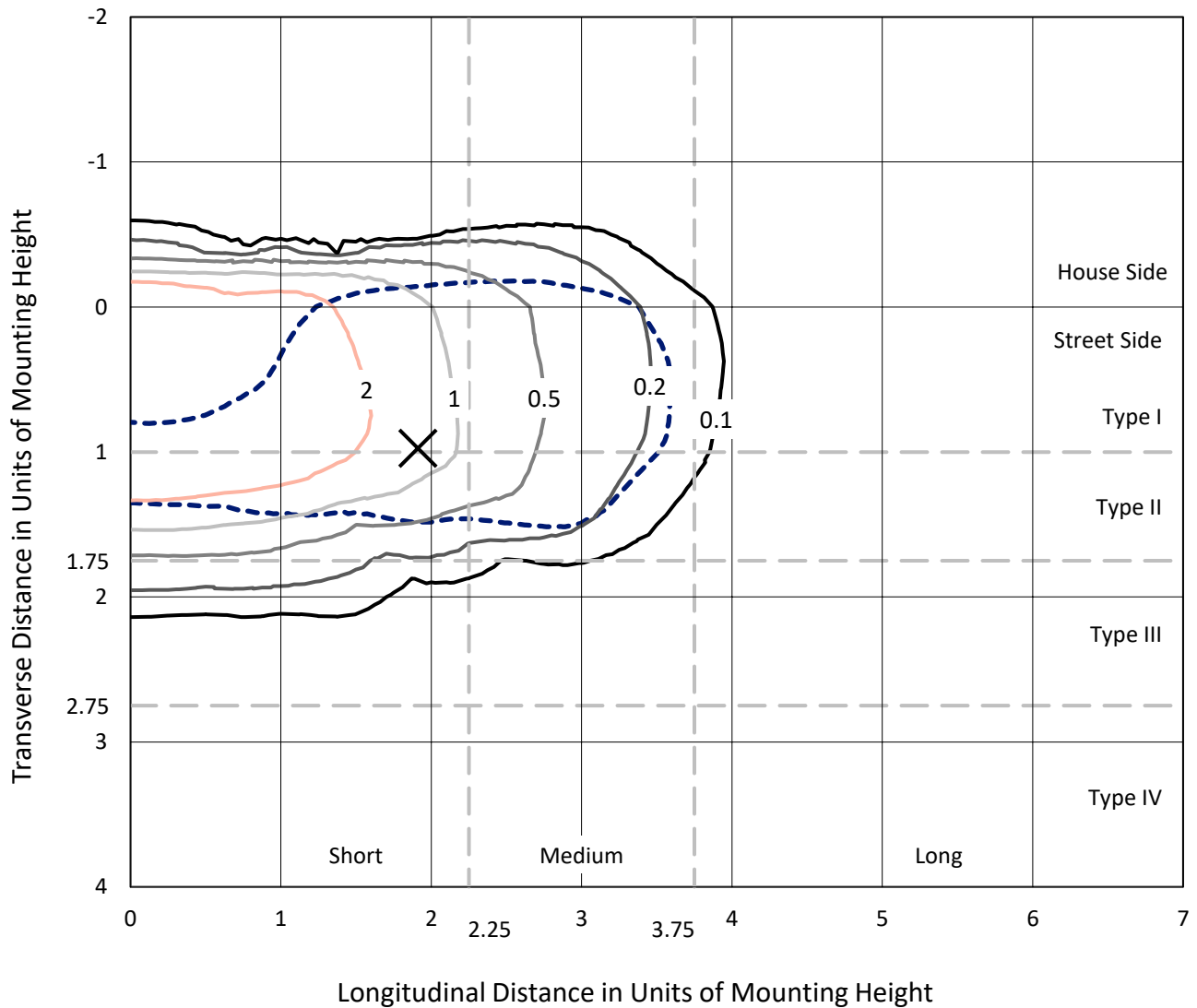
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P399410  
 CATALOG NUMBER: ARCH-L-PA3-140-727-U-T2U-HSS

### Iso-Footcandle Lines of Horizontal Illumination

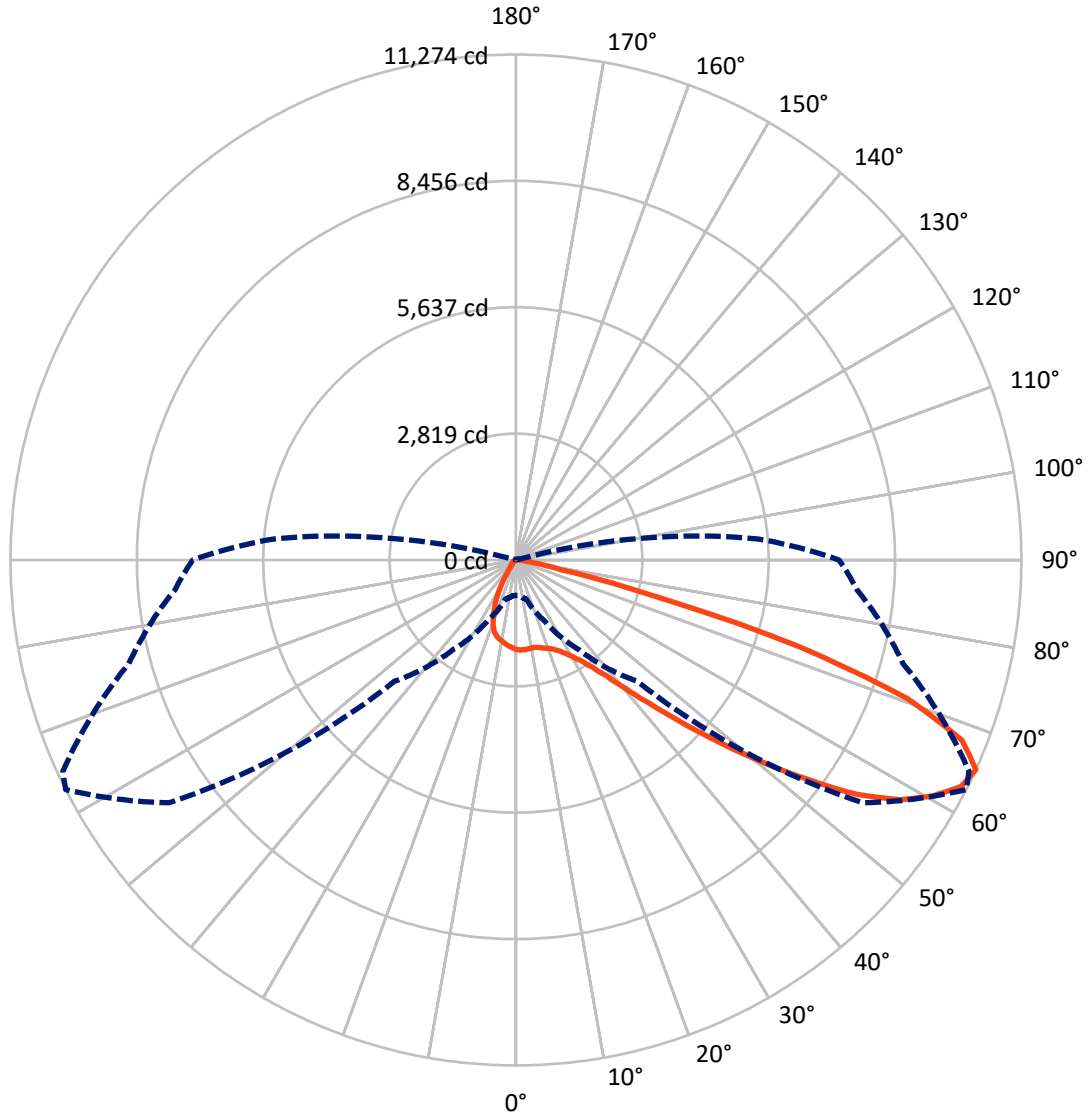
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Short - N/A

REPORT NUMBER: P399410  
CATALOG NUMBER: ARCH-L-PA3-140-727-U-T2U-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P399410  
 CATALOG NUMBER: ARCH-L-PA3-140-727-U-T2U-HSS

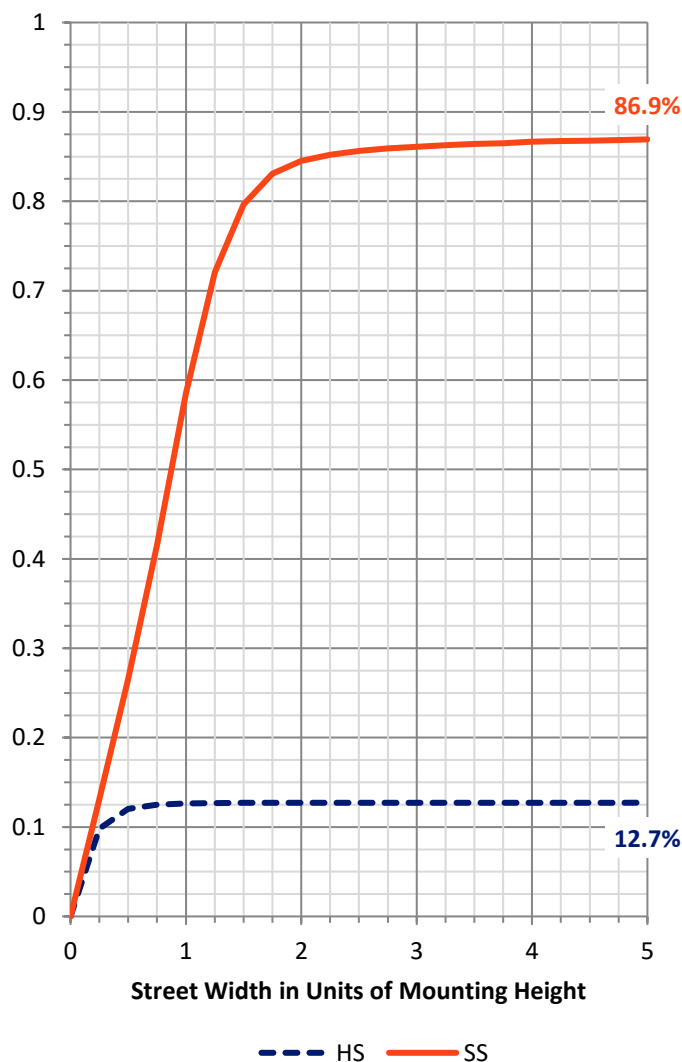
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1671.5	0.0	1671.5
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	11316.5	0.0	11316.5
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	12988.0	0.0	12988.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	182.6	1.4
10°-20°	450.4	3.5
20°-30°	667.5	5.1
30°-40°	1239.5	9.5
40°-50°	2625.7	20.2
50°-60°	3630.7	28.0
60°-70°	2906.5	22.4
70°-80°	1207.6	9.3
80°-90°	77.5	0.6
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°	12988.0	100.0
0°-180°	12988.0	100.0

**Coefficient of Utilization**

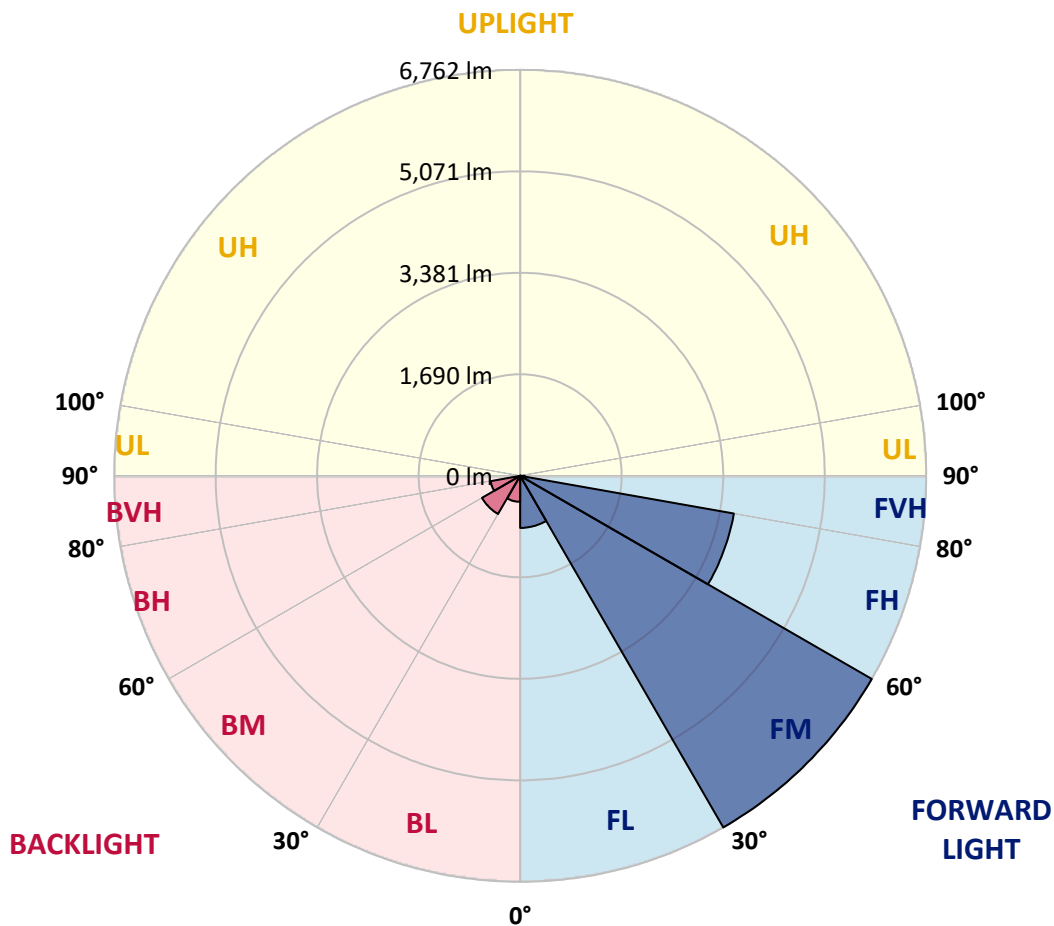


REPORT NUMBER: P399410  
 CATALOG NUMBER: ARCH-L-PA3-140-727-U-T2U-HSS

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	867.3	6.7			
FM (30°-60°)	6761.6	52.1			
FH (60°-80°)	3613.6	27.8			G2/5000
FVH (80°-90°)	74.0	0.6			G1/100
BL (0°-30°)	433.2	3.3	B1/500		
BM (30°-60°)	734.3	5.7	B1/1000		
BH (60°-80°)	500.5	3.9	B2/1000		G2/1000
BVH (80°-90°)	3.5	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**  
 Type II Short





REPORT NUMBER: P399410  
 CATALOG NUMBER: ARCH-L-PA3-140-727-U-T2U-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8
2.5°	2035.1	2030.2	2025.3	2022.9	2022.9	2020.4	2010.6	2008.2	2003.3	1998.4	1993.5
5°	2015.5	2008.2	2005.7	2008.2	2010.6	2015.5	2010.6	2010.6	2005.7	2000.8	1991.0
7.5°	1966.5	1961.6	1964.0	1971.4	1973.8	1991.0	1993.5	2000.8	2000.8	1995.9	1988.5
10°	1907.6	1905.2	1905.2	1917.4	1929.7	1954.2	1971.4	1991.0	1993.5	1993.5	1981.2
12.5°	1863.5	1861.0	1868.4	1883.1	1907.6	1939.5	1968.9	1998.4	2003.3	2005.7	1986.1
15°	1836.5	1836.5	1846.3	1875.8	1910.1	1954.2	1988.5	2027.8	2032.7	2030.2	2003.3
17.5°	1812.0	1814.5	1834.1	1883.1	1922.3	1981.2	2022.9	2067.0	2069.5	2067.0	2022.9
20°	1802.2	1807.1	1836.5	1900.3	1944.4	2010.6	2064.6	2108.7	2111.1	2101.3	2042.5
22.5°	1829.2	1831.6	1868.4	1937.1	1978.7	2052.3	2121.0	2162.6	2165.1	2150.4	2071.9
25°	1922.3	1922.3	1954.2	2013.1	2049.8	2123.4	2197.0	2246.0	2246.0	2228.8	2138.1
27.5°	2140.6	2121.0	2113.6	2130.8	2143.0	2221.5	2299.9	2361.2	2358.8	2334.3	2223.9
30°	2562.3	2513.3	2434.8	2346.5	2302.4	2356.3	2429.9	2508.4	2505.9	2466.7	2329.4
32.5°	3270.9	3199.8	3013.5	2780.5	2591.7	2530.4	2599.1	2684.9	2687.4	2640.8	2498.6
35°	4264.0	4151.2	3817.7	3494.1	3062.5	2829.6	2849.2	2942.4	2971.8	2947.3	2783.0
37.5°	5220.2	5117.3	4798.5	4349.8	3763.8	3288.1	3204.7	3285.6	3320.0	3320.0	3145.9
40°	6183.9	6063.7	5781.7	5330.6	4712.7	4004.1	3704.9	3771.1	3807.9	3815.3	3587.2
42.5°	6956.2	6877.8	6662.0	6311.4	5732.7	5259.5	4425.8	4389.0	4423.4	4396.4	4099.7
45°	7490.8	7429.5	7279.9	7147.5	6865.5	6627.7	5389.4	5141.8	5163.9	5070.7	4675.9
47.5°	7601.1	7532.5	7500.6	7684.5	7885.5	7944.4	6573.7	6036.8	6014.7	5808.7	5274.2
50°	7120.5	7127.9	7245.6	7770.3	8608.9	9138.5	7946.8	7047.0	6966.0	6507.5	5830.8
52.5°	6083.3	6201.0	6497.7	7348.6	8829.5	10006.5	9319.9	8118.5	7993.4	7186.7	6247.6
55°	4759.3	4911.3	5399.2	6377.6	8368.6	10393.9	10477.3	9231.7	8947.2	7696.7	6571.3
57.5°	3538.2	3584.8	4153.6	5046.2	7277.5	10013.8	11070.6	10089.9	9724.5	8103.8	6892.5
60°	2204.3	2233.7	2834.5	3842.2	5512.0	8608.9	11070.6	10680.8	10332.6	8469.1	7186.7
62.5°	1370.7	1380.5	1606.0	2633.4	3746.6	6384.9	10612.1	11139.3	10859.8	8731.5	7439.3
65°	789.5	799.3	904.8	1488.3	2437.3	3822.6	9440.1	11274.2	11149.1	8939.9	7635.4
67.5°	576.2	581.1	622.8	836.1	1593.8	1964.0	7091.1	10732.3	10889.2	9042.9	7630.5
70°	500.2	507.6	561.5	652.2	1150.0	1206.4	3609.3	9268.5	9707.4	8895.8	7402.5
72.5°	385.0	394.8	475.7	613.0	843.5	868.0	1306.9	6595.8	7260.3	7976.3	6777.2
75°	264.8	274.6	355.5	505.1	696.4	649.8	718.4	3035.5	3830.0	5350.2	5158.9
77.5°	169.2	171.6	223.1	367.8	600.7	461.0	492.8	990.6	1390.3	2420.1	2434.8
80°	112.8	115.2	137.3	237.8	411.9	426.6	304.0	458.5	502.7	706.2	490.4
82.5°	68.7	68.7	93.2	149.6	250.1	353.1	198.6	240.3	257.5	272.2	127.5
85°	27.0	27.0	56.4	98.1	156.9	164.3	125.1	139.8	147.1	159.4	58.8
87.5°	7.4	7.4	31.9	53.9	68.7	76.0	76.0	68.7	73.6	90.7	29.4
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: P399410

CATALOG NUMBER: ARCH-L-PA3-140-727-U-T2U-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8	2000.8
2.5°	1991.0	1983.6	1973.8	1964.0	1954.2	1946.9	1939.5	1939.5	1934.6	1927.2	1922.3
5°	1986.1	1973.8	1951.8	1934.6	1907.6	1888.0	1873.3	1861.0	1853.7	1836.5	1834.1
7.5°	1978.7	1964.0	1932.2	1897.8	1853.7	1819.4	1785.0	1760.5	1736.0	1716.4	1711.5
10°	1966.5	1949.3	1902.7	1853.7	1792.4	1728.6	1647.7	1554.5	1468.7	1419.7	1405.0
12.5°	1966.5	1944.4	1883.1	1816.9	1728.6	1571.7	1365.7	1159.8	1000.4	929.3	909.7
15°	1978.7	1949.3	1868.4	1777.7	1613.4	1294.6	961.2	689.0	514.9	461.0	448.7
17.5°	1991.0	1949.3	1846.3	1723.7	1402.5	939.1	546.8	362.9	306.5	294.2	294.2
20°	1995.9	1944.4	1816.9	1623.2	1120.6	583.6	326.1	272.2	250.1	242.7	242.7
22.5°	2015.5	1946.9	1794.8	1478.5	814.1	343.3	257.5	228.0	206.0	198.6	198.6
25°	2064.6	1976.3	1799.7	1294.6	522.3	259.9	218.2	188.8	166.7	156.9	156.9
27.5°	2143.0	2042.5	1826.7	1081.3	328.6	223.1	183.9	152.0	134.9	125.1	125.1
30°	2231.3	2116.1	1839.0	836.1	245.2	188.8	149.6	120.1	107.9	100.5	98.1
32.5°	2385.8	2243.6	1829.2	573.8	201.1	159.4	120.1	95.6	85.8	83.4	83.4
35°	2633.4	2466.7	1809.6	360.4	166.7	127.5	95.6	78.5	71.1	68.7	66.2
37.5°	2969.3	2792.8	1750.7	237.8	137.3	100.5	78.5	66.2	58.8	56.4	56.4
40°	3378.8	3165.5	1637.9	181.4	117.7	80.9	66.2	56.4	51.5	49.0	49.0
42.5°	3847.1	3579.9	1458.9	156.9	98.1	68.7	56.4	46.6	44.1	41.7	41.7
45°	4359.6	4013.9	1211.3	139.8	83.4	56.4	46.6	41.7	36.8	36.8	34.3
47.5°	4903.9	4450.3	931.7	122.6	71.1	49.0	41.7	34.3	31.9	29.4	29.4
50°	5428.7	4840.2	654.7	105.4	58.8	41.7	34.3	29.4	27.0	24.5	24.5
52.5°	5798.9	5075.6	463.4	90.7	49.0	36.8	27.0	22.1	19.6	19.6	19.6
55°	6095.6	5222.7	323.7	76.0	41.7	31.9	22.1	17.2	17.2	14.7	14.7
57.5°	6375.1	5318.3	237.8	63.8	34.3	24.5	17.2	12.3	12.3	9.8	9.8
60°	6664.5	5369.8	181.4	51.5	29.4	19.6	12.3	9.8	7.4	7.4	7.4
62.5°	6956.2	5401.7	139.8	41.7	24.5	14.7	9.8	7.4	4.9	2.5	2.5
65°	7211.2	5411.5	107.9	31.9	19.6	9.8	7.4	2.5	0.0	0.0	0.0
67.5°	7287.3	5298.7	83.4	24.5	14.7	7.4	4.9	0.0	0.0	0.0	0.0
70°	7081.3	4999.6	63.8	19.6	12.3	4.9	2.5	0.0	0.0	0.0	0.0
72.5°	6284.4	4192.9	49.0	12.3	9.8	4.9	2.5	0.0	0.0	0.0	0.0
75°	4496.9	2236.2	34.3	9.8	7.4	2.5	0.0	0.0	0.0	0.0	0.0
77.5°	2069.5	865.5	24.5	7.4	4.9	2.5	0.0	0.0	0.0	0.0	0.0
80°	404.6	215.8	9.8	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	93.2	36.8	4.9	4.9	2.5	0.0	0.0	0.0	0.0	0.0	0.0
85°	31.9	12.3	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	12.3	4.9	2.5	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)