

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: P399140

Luminaire Tested: **ARCH-L-PA3-100-740-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399140  
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-PA3-100-740-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 440mA 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: 11559 lumens  
Efficiency: N/A  
Efficacy: 113.3 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

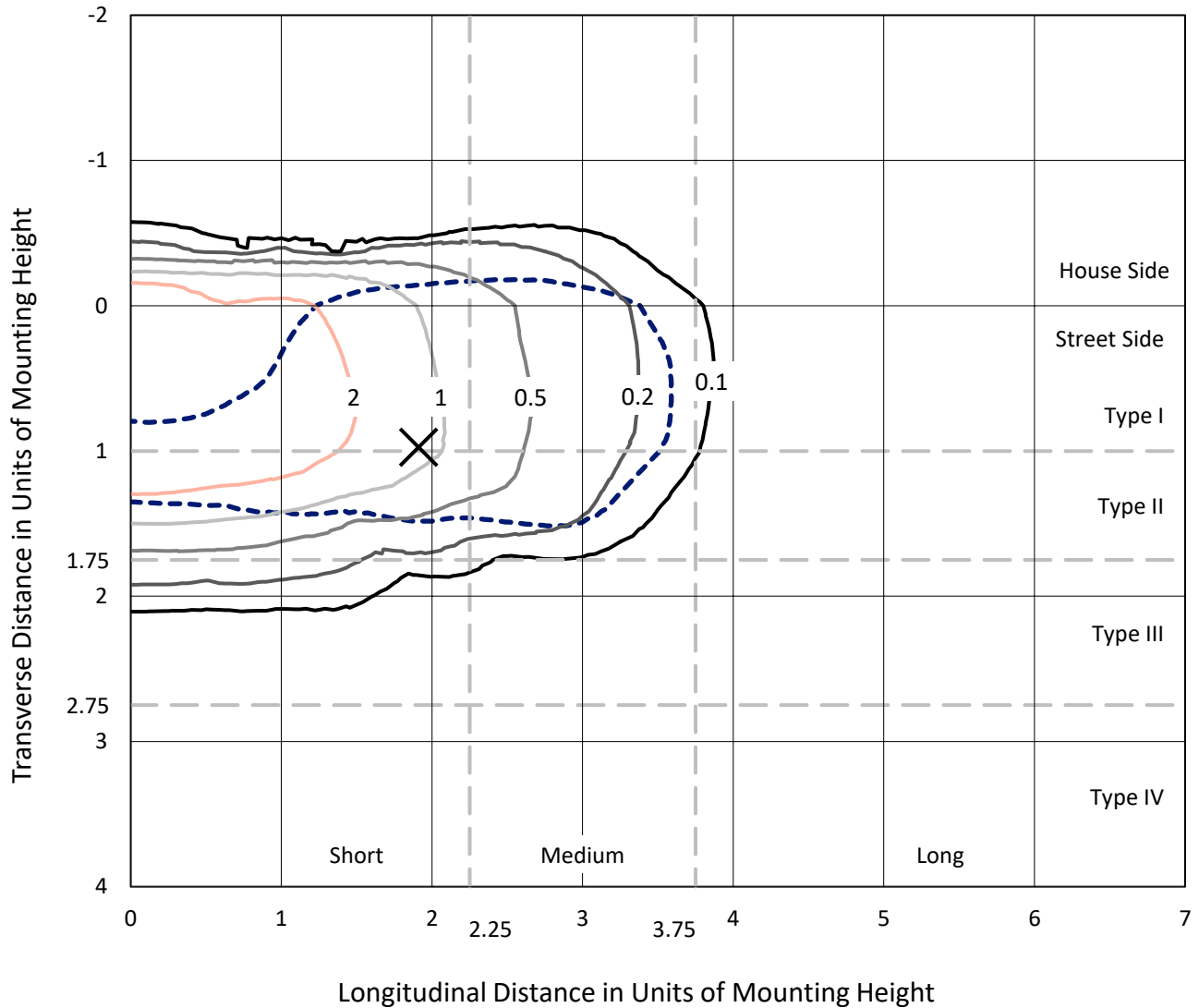
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

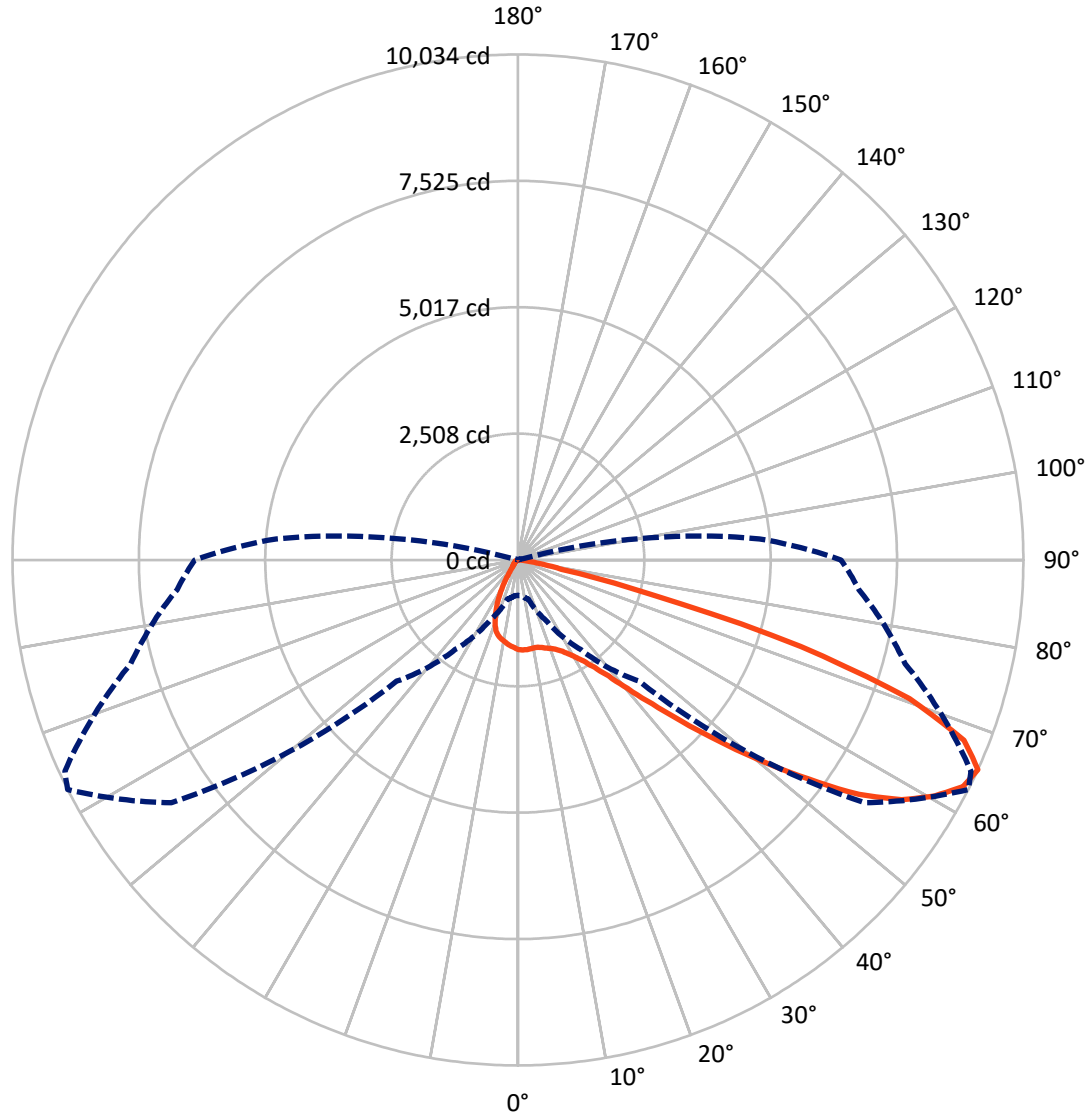
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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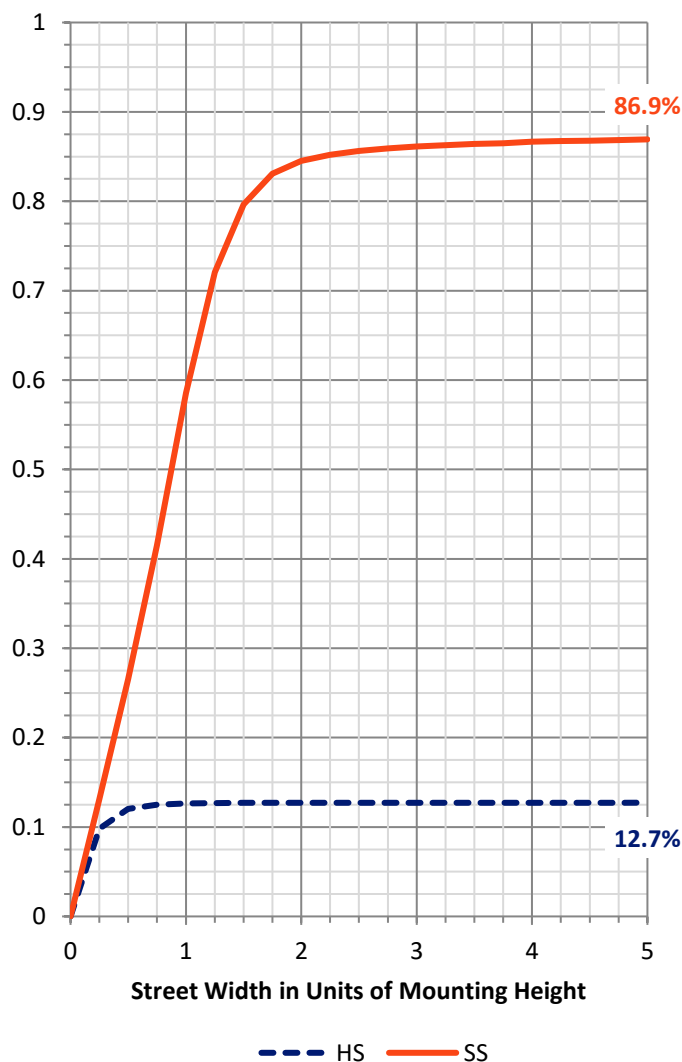
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1487.6	0.0	1487.6
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	10071.4	0.0	10071.4
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	11559.0	0.0	11559.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.5	1.4
10°-20°	400.8	3.5
20°-30°	594.1	5.1
30°-40°	1103.1	9.5
40°-50°	2336.8	20.2
50°-60°	3231.2	28.0
60°-70°	2586.7	22.4
70°-80°	1074.7	9.3
80°-90°	69.0	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°	11559.0	100.0
0°-180°	11559.0	100.0

**Coefficient of Utilization**

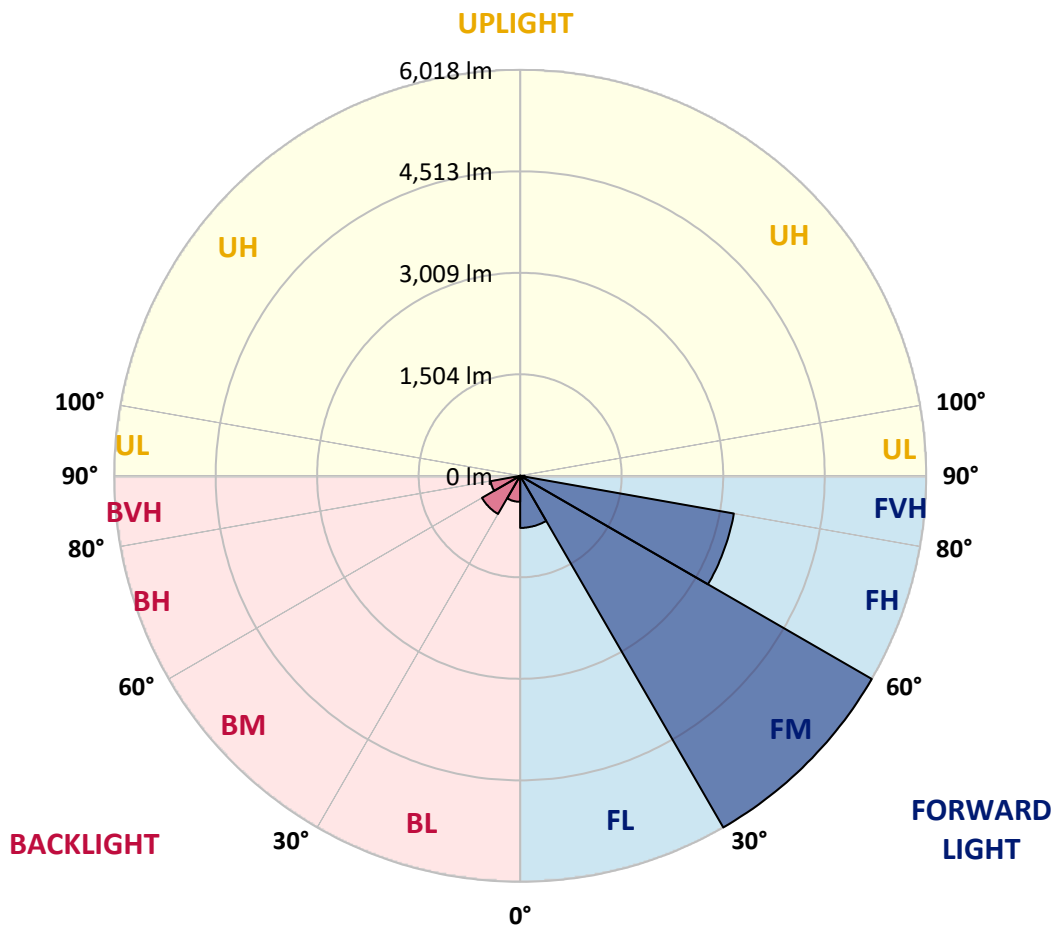


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	771.9	6.7			
FM (30°-60°)	6017.7	52.1			
FH (60°-80°)	3216.0	27.8			G2/5000
FVH (80°-90°)	65.9	0.6			G1/100
BL (0°-30°)	385.5	3.3	B1/500		
BM (30°-60°)	653.5	5.7	B1/1000		
BH (60°-80°)	445.4	3.9	B1/500		G1/500
BVH (80°-90°)	3.1	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7
2.5°	1811.2	1806.9	1802.5	1800.3	1800.3	1798.1	1789.4	1787.2	1782.9	1778.5	1774.1
5°	1793.8	1787.2	1785.0	1787.2	1789.4	1793.8	1789.4	1789.4	1785.0	1780.7	1771.9
7.5°	1750.1	1745.8	1747.9	1754.5	1756.7	1771.9	1774.1	1780.7	1780.7	1776.3	1769.8
10°	1697.7	1695.6	1695.6	1706.5	1717.4	1739.2	1754.5	1771.9	1774.1	1774.1	1763.2
12.5°	1658.5	1656.3	1662.8	1675.9	1697.7	1726.1	1752.3	1778.5	1782.9	1785.0	1767.6
15°	1634.5	1634.5	1643.2	1669.4	1699.9	1739.2	1769.8	1804.7	1809.0	1806.9	1782.9
17.5°	1612.6	1614.8	1632.3	1675.9	1710.8	1763.2	1800.3	1839.6	1841.8	1839.6	1800.3
20°	1603.9	1608.3	1634.5	1691.2	1730.5	1789.4	1837.4	1876.7	1878.9	1870.1	1817.8
22.5°	1627.9	1630.1	1662.8	1723.9	1761.0	1826.5	1887.6	1924.7	1926.9	1913.8	1844.0
25°	1710.8	1710.8	1739.2	1791.6	1824.3	1889.8	1955.2	1998.9	1998.9	1983.6	1902.9
27.5°	1905.1	1887.6	1881.1	1896.3	1907.2	1977.1	2046.9	2101.5	2099.3	2077.4	1979.2
30°	2280.4	2236.7	2166.9	2088.4	2049.1	2097.1	2162.6	2232.4	2230.2	2195.3	2073.1
32.5°	2911.0	2847.8	2681.9	2474.6	2306.6	2252.0	2313.1	2389.5	2391.7	2350.2	2223.7
35°	3794.8	3694.5	3397.7	3109.6	2725.6	2518.3	2535.7	2618.6	2644.8	2623.0	2476.8
37.5°	4645.9	4554.2	4270.6	3871.2	3349.7	2926.3	2852.1	2924.1	2954.7	2954.7	2799.8
40°	5503.5	5396.6	5145.6	4744.1	4194.2	3563.5	3297.3	3356.2	3388.9	3395.5	3192.5
42.5°	6190.9	6121.1	5929.0	5617.0	5102.0	4680.8	3938.9	3906.1	3936.7	3912.7	3648.6
45°	6666.6	6612.0	6478.9	6361.1	6110.1	5898.5	4796.5	4576.1	4595.7	4512.8	4161.4
47.5°	6764.8	6703.7	6675.3	6839.0	7017.9	7070.3	5850.5	5372.6	5352.9	5169.6	4693.9
50°	6337.1	6343.6	6448.4	6915.4	7661.7	8133.0	7072.5	6271.6	6199.6	5791.5	5189.3
52.5°	5414.0	5518.8	5782.8	6540.0	7858.1	8905.5	8294.5	7225.2	7114.0	6396.0	5560.2
55°	4235.6	4370.9	4805.2	5675.9	7447.8	9250.3	9324.5	8216.0	7962.8	6849.9	5848.3
57.5°	3148.9	3190.4	3696.6	4491.0	6476.8	8912.1	9852.6	8979.7	8654.6	7212.2	6134.1
60°	1961.8	1988.0	2522.6	3419.5	4905.6	7661.7	9852.6	9505.6	9195.8	7537.3	6396.0
62.5°	1219.8	1228.6	1429.3	2343.7	3334.4	5682.4	9444.5	9913.7	9664.9	7770.8	6620.8
65°	702.7	711.4	805.2	1324.6	2169.1	3402.0	8401.4	10033.7	9922.4	7956.3	6795.4
67.5°	512.8	517.2	554.3	744.1	1418.4	1747.9	6310.9	9551.5	9691.1	8047.9	6791.0
70°	445.2	451.7	499.7	580.5	1023.4	1073.6	3212.2	8248.7	8639.3	7917.0	6588.0
72.5°	342.6	351.3	423.3	545.5	750.7	772.5	1163.1	5870.1	6461.5	7098.7	6031.6
75°	235.7	244.4	316.4	449.5	619.7	578.3	639.4	2701.6	3408.6	4761.5	4591.3
77.5°	150.6	152.8	198.6	327.3	534.6	410.3	438.6	881.6	1237.3	2153.8	2166.9
80°	100.4	102.6	122.2	211.7	366.6	379.7	270.6	408.1	447.3	628.5	436.4
82.5°	61.1	61.1	82.9	133.1	222.6	314.2	176.8	213.9	229.1	242.2	113.5
85°	24.0	24.0	50.2	87.3	139.7	146.2	111.3	124.4	130.9	141.8	52.4
87.5°	6.5	6.5	28.4	48.0	61.1	67.6	67.6	61.1	65.5	80.7	26.2
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°	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7	1780.7
2.5°	1771.9	1765.4	1756.7	1747.9	1739.2	1732.7	1726.1	1726.1	1721.8	1715.2	1710.8
5°	1767.6	1756.7	1737.0	1721.8	1697.7	1680.3	1667.2	1656.3	1649.7	1634.5	1632.3
7.5°	1761.0	1747.9	1719.6	1689.0	1649.7	1619.2	1588.6	1566.8	1545.0	1527.5	1523.2
10°	1750.1	1734.8	1693.4	1649.7	1595.2	1538.4	1466.4	1383.5	1307.1	1263.5	1250.4
12.5°	1750.1	1730.5	1675.9	1617.0	1538.4	1398.8	1215.5	1032.2	890.3	827.1	809.6
15°	1761.0	1734.8	1662.8	1582.1	1435.9	1152.2	855.4	613.2	458.3	410.3	399.3
17.5°	1771.9	1734.8	1643.2	1534.1	1248.2	835.8	486.6	323.0	272.8	261.9	261.9
20°	1776.3	1730.5	1617.0	1444.6	997.3	519.4	290.2	242.2	222.6	216.0	216.0
22.5°	1793.8	1732.7	1597.4	1315.9	724.5	305.5	229.1	202.9	183.3	176.8	176.8
25°	1837.4	1758.8	1601.7	1152.2	464.8	231.3	194.2	168.0	148.4	139.7	139.7
27.5°	1907.2	1817.8	1625.7	962.3	292.4	198.6	163.7	135.3	120.0	111.3	111.3
30°	1985.8	1883.2	1636.6	744.1	218.2	168.0	133.1	106.9	96.0	89.5	87.3
32.5°	2123.3	1996.7	1627.9	510.6	178.9	141.8	106.9	85.1	76.4	74.2	74.2
35°	2343.7	2195.3	1610.5	320.8	148.4	113.5	85.1	69.8	63.3	61.1	58.9
37.5°	2642.6	2485.5	1558.1	211.7	122.2	89.5	69.8	58.9	52.4	50.2	50.2
40°	3007.1	2817.2	1457.7	161.5	104.7	72.0	58.9	50.2	45.8	43.6	43.6
42.5°	3423.9	3186.0	1298.4	139.7	87.3	61.1	50.2	41.5	39.3	37.1	37.1
45°	3879.9	3572.3	1078.0	124.4	74.2	50.2	41.5	37.1	32.7	32.7	30.6
47.5°	4364.4	3960.7	829.2	109.1	63.3	43.6	37.1	30.6	28.4	26.2	26.2
50°	4831.4	4307.7	582.6	93.8	52.4	37.1	30.6	26.2	24.0	21.8	21.8
52.5°	5160.9	4517.1	412.4	80.7	43.6	32.7	24.0	19.6	17.5	17.5	17.5
55°	5424.9	4648.1	288.0	67.6	37.1	28.4	19.6	15.3	15.3	13.1	13.1
57.5°	5673.7	4733.2	211.7	56.7	30.6	21.8	15.3	10.9	10.9	8.7	8.7
60°	5931.2	4779.0	161.5	45.8	26.2	17.5	10.9	8.7	6.5	6.5	6.5
62.5°	6190.9	4807.4	124.4	37.1	21.8	13.1	8.7	6.5	4.4	2.2	2.2
65°	6417.8	4816.1	96.0	28.4	17.5	8.7	6.5	2.2	0.0	0.0	0.0
67.5°	6485.5	4715.7	74.2	21.8	13.1	6.5	4.4	0.0	0.0	0.0	0.0
70°	6302.2	4449.5	56.7	17.5	10.9	4.4	2.2	0.0	0.0	0.0	0.0
72.5°	5593.0	3731.6	43.6	10.9	8.7	4.4	2.2	0.0	0.0	0.0	0.0
75°	4002.1	1990.2	30.6	8.7	6.5	2.2	0.0	0.0	0.0	0.0	0.0
77.5°	1841.8	770.3	21.8	6.5	4.4	2.2	0.0	0.0	0.0	0.0	0.0
80°	360.1	192.0	8.7	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	82.9	32.7	4.4	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	28.4	10.9	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.9	4.4	2.2	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)