

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: P237424

Luminaire Tested: **ARCH-L-AF72-110-D-U-T4W-7030-HSS**

Issue Date: 8/23/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P237424  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 8/23/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-110-D-U-T4W-7030-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 3000K, 485mA 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: 10730.3 lumens  
Efficiency: N/A  
Efficacy: 95.0 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

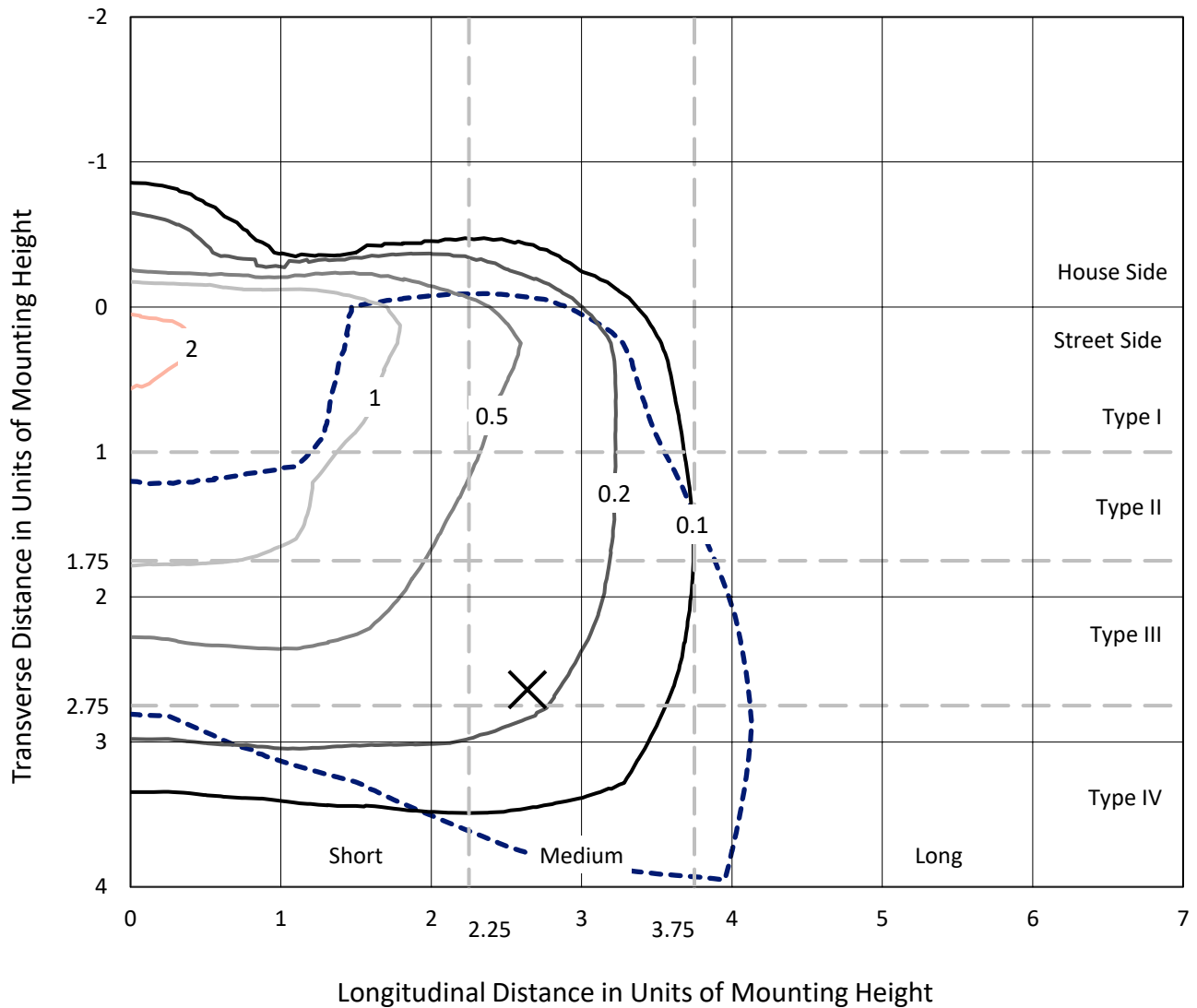
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

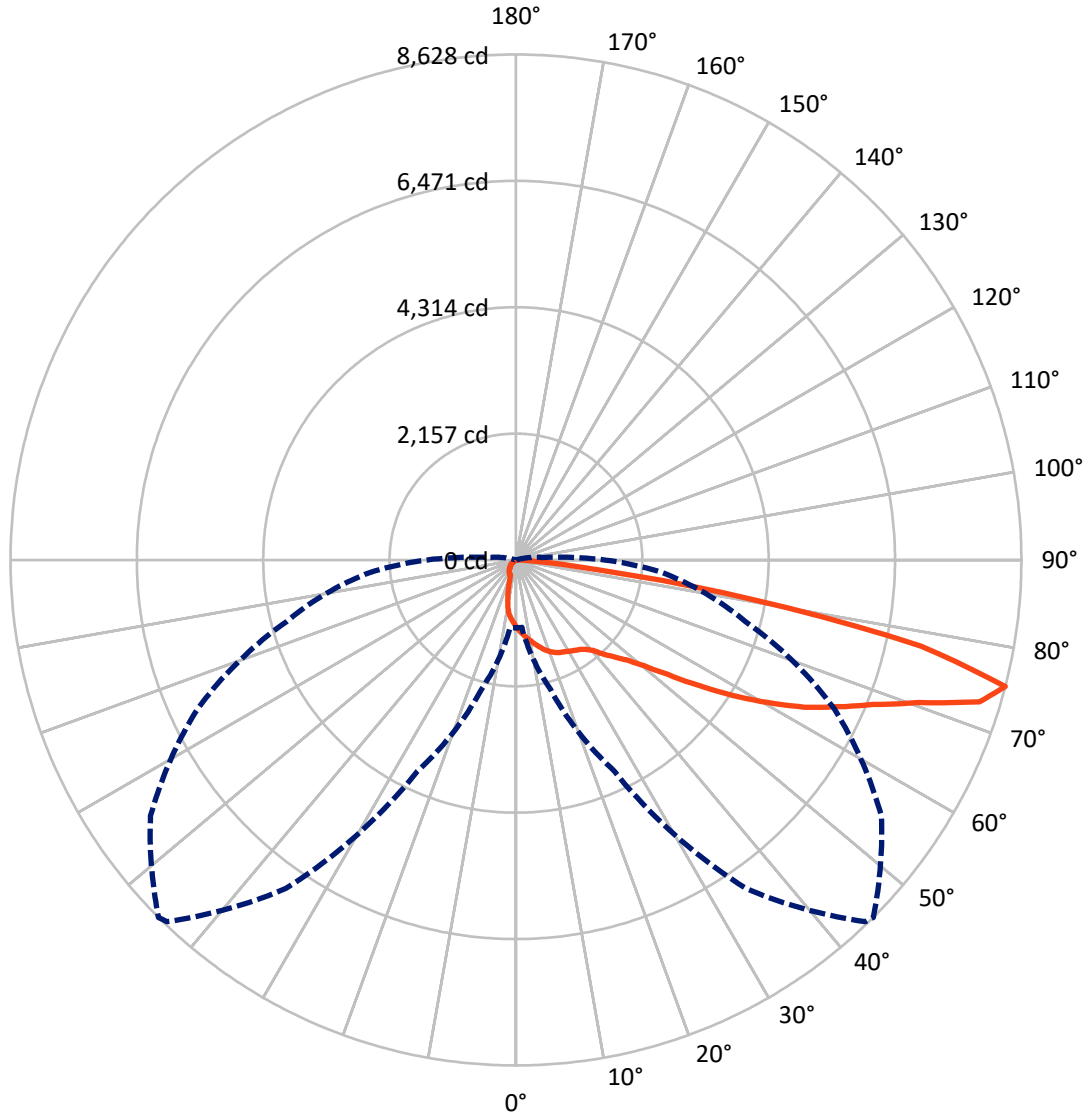
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.4 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



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

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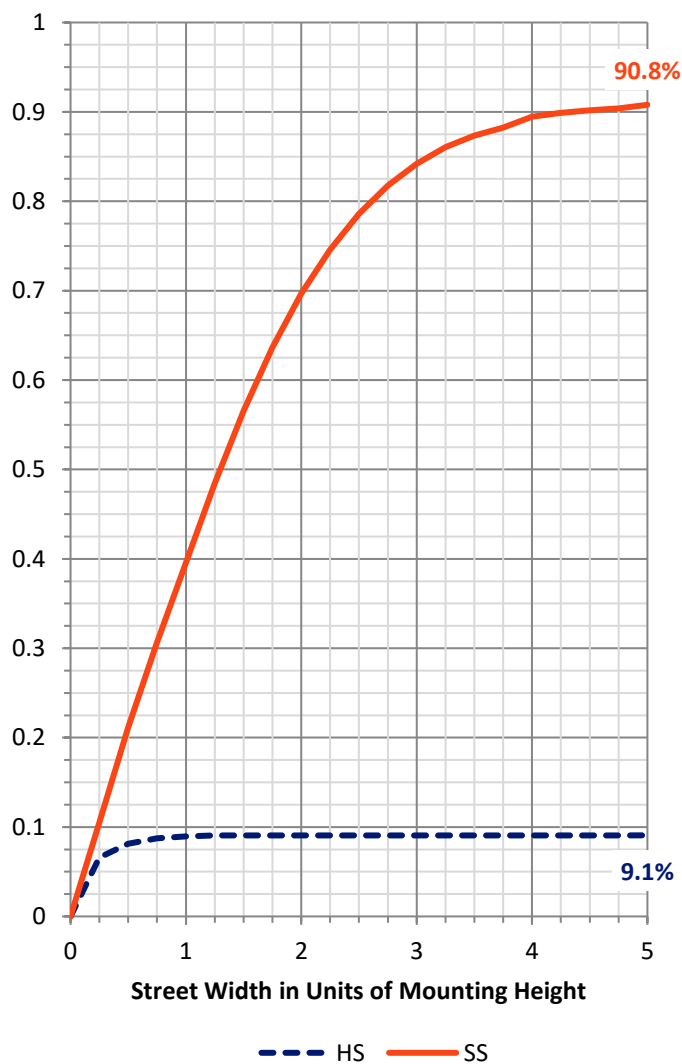
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	981.5	0.0	981.5
	% Fixture	9.1	0.0	9.1
<b>Street Side</b>	Lumens	9748.8	0.0	9748.8
	% Fixture	90.9	0.0	90.9
<b>Total</b>	Lumens	10730.3	0.0	10730.3
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.3	1.0
10°-20°	306.9	2.9
20°-30°	508.2	4.7
30°-40°	735.5	6.9
40°-50°	1204.3	11.2
50°-60°	2145.8	20.0
60°-70°	3154.7	29.4
70°-80°	2379.9	22.2
80°-90°	186.7	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°	10730.3	100.0
0°-180°	10730.3	100.0

**Coefficient of Utilization**



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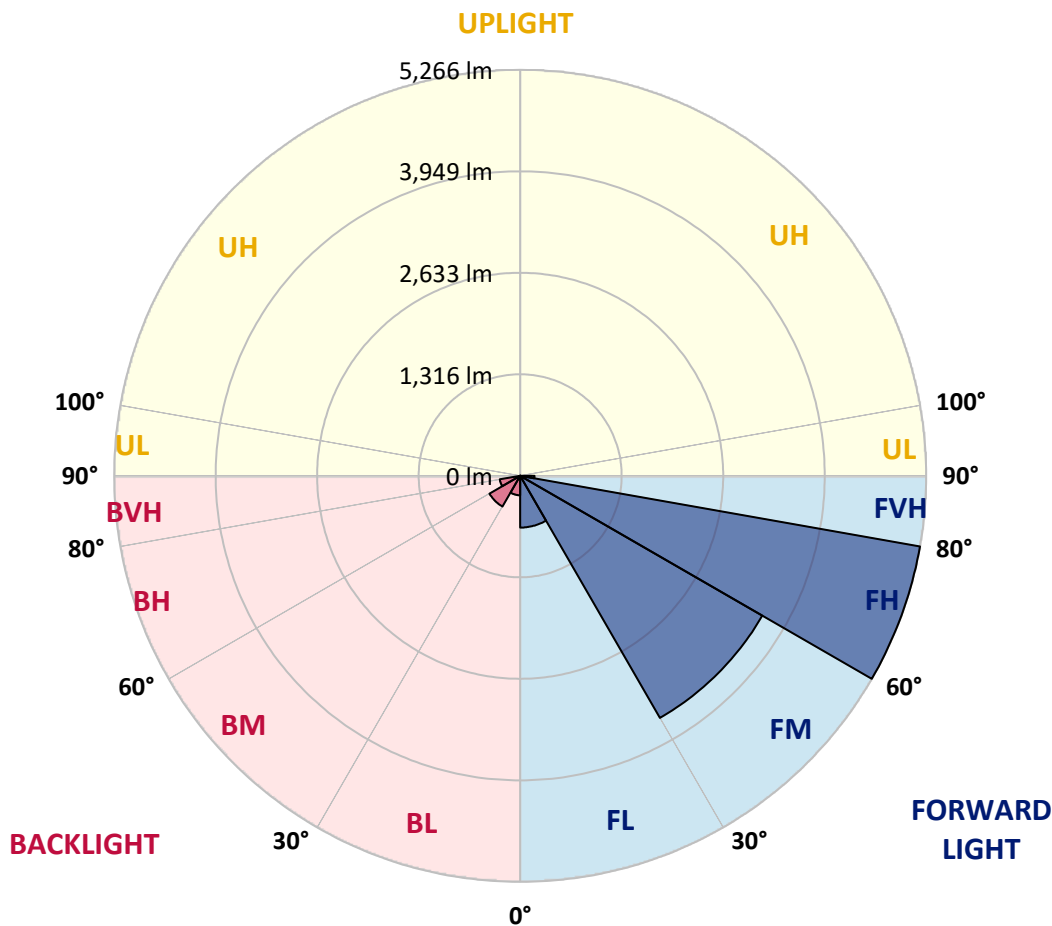
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	671.2	6.3			
FM (30°-60°)	3625.7	33.8			
FH (60°-80°)	5265.8	49.1			G3/7500
FVH (80°-90°)	186.2	1.7			G2/225
BL (0°-30°)	252.2	2.4	B1/500		
BM (30°-60°)	459.9	4.3	B1/1000		
BH (60°-80°)	268.8	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-G3**

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7
2.5°	1246.6	1246.6	1244.1	1241.6	1228.9	1216.3	1213.7	1206.1	1183.2	1168.0	1152.8
5°	1350.8	1353.2	1348.3	1335.5	1307.7	1279.8	1277.1	1256.8	1213.7	1183.2	1150.2
7.5°	1449.9	1454.9	1442.2	1419.4	1386.4	1345.7	1343.3	1305.1	1249.3	1206.1	1157.8
10°	1533.6	1533.6	1515.9	1487.9	1452.4	1409.2	1404.1	1361.0	1297.5	1244.1	1180.6
12.5°	1625.0	1622.5	1597.1	1559.0	1518.3	1477.7	1475.2	1421.9	1361.0	1292.4	1213.7
15°	1708.9	1703.7	1670.7	1635.2	1592.0	1548.9	1546.3	1493.0	1429.5	1348.3	1262.0
17.5°	1754.4	1752.0	1721.5	1686.0	1650.4	1617.4	1614.9	1559.0	1490.4	1406.6	1310.1
20°	1762.2	1764.6	1739.3	1708.9	1688.5	1670.7	1670.7	1620.0	1546.3	1457.4	1361.0
22.5°	1764.6	1772.3	1754.4	1713.8	1708.9	1711.3	1716.5	1675.8	1599.7	1515.9	1414.3
25°	1782.4	1792.6	1780.0	1731.6	1726.7	1744.4	1749.5	1731.6	1663.2	1579.4	1475.2
27.5°	1818.0	1828.1	1818.0	1757.0	1749.5	1767.2	1772.3	1782.4	1731.6	1640.2	1538.7
30°	1889.1	1891.6	1868.8	1792.6	1777.3	1800.3	1807.8	1835.8	1795.1	1698.7	1599.7
32.5°	2013.5	1988.1	1919.5	1818.0	1805.3	1830.6	1838.3	1868.8	1853.6	1754.4	1663.2
35°	2267.4	2135.4	1977.9	1853.6	1840.8	1866.2	1876.4	1919.5	1927.3	1833.3	1741.8
37.5°	2264.8	2145.6	2115.0	1922.1	1904.3	1922.1	1934.8	1988.1	2018.6	1937.2	1856.1
40°	2424.8	2374.1	2374.1	2051.6	1993.2	2018.6	2031.2	2084.5	2137.8	2074.4	1990.6
42.5°	2927.6	2894.6	2859.0	2300.5	2117.6	2188.7	2196.3	2229.3	2292.8	2272.5	2173.5
45°	3488.7	3458.3	3321.2	2721.8	2330.9	2343.6	2361.3	2414.6	2506.1	2544.2	2427.4
47.5°	3928.0	3897.5	3780.7	3229.7	2663.5	2551.8	2551.8	2655.9	2798.1	2894.6	2782.9
50°	4280.9	4245.4	4174.2	3770.5	3209.4	2851.4	2836.2	2958.0	3168.7	3318.6	3242.4
52.5°	4623.7	4519.6	4476.5	4329.2	3826.4	3285.5	3245.0	3331.4	3623.2	3808.7	3745.2
55°	4852.2	4837.0	4791.2	4842.1	4473.8	3813.7	3778.1	3796.0	4161.5	4286.0	4207.2
57.5°	5065.5	5063.0	5164.4	5400.6	5179.8	4418.0	4362.1	4334.2	4682.1	4651.6	4720.2
60°	5329.5	5283.9	5520.0	5857.7	5827.3	5007.2	4943.7	4887.7	5080.8	4994.3	5334.6
62.5°	5342.2	5329.5	5809.5	6294.4	6469.6	5606.3	5532.7	5332.1	5428.5	5329.5	5921.2
65°	4857.2	4920.7	5931.3	6525.5	7007.9	6131.9	6043.0	5730.7	5738.3	5672.3	6611.9
67.5°	4748.1	4781.0	5596.2	6774.3	7396.5	6662.6	6578.8	6190.3	6098.9	6104.0	7020.6
70°	4476.5	4527.1	5179.8	6756.5	7703.7	7370.9	7287.1	6865.8	6644.8	6398.6	6705.8
72.5°	3420.2	3506.4	4364.7	5923.7	7619.8	8297.8	8274.9	7721.4	6863.1	5875.4	5073.1
75°	1157.8	1155.3	2292.8	3978.7	6845.4	8582.1	8627.8	7614.8	5987.2	4052.4	2518.8
77.5°	248.8	251.4	472.2	1612.3	4547.5	6891.1	7066.4	5743.4	3862.0	1805.3	576.4
80°	121.9	124.4	195.5	426.5	1818.0	3864.5	4138.7	2953.0	1426.9	360.5	96.4
82.5°	60.9	63.5	101.6	225.9	672.8	1373.6	1467.6	1086.7	408.8	203.1	48.3
85°	22.8	22.8	50.8	134.6	307.2	322.5	396.1	314.8	246.3	165.1	12.7
87.5°	5.0	5.0	28.0	66.0	137.1	101.6	101.6	96.4	149.8	111.8	5.0
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°	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7	1147.7
2.5°	1145.1	1134.9	1117.1	1099.4	1086.7	1071.5	1063.8	1056.2	1053.7	1051.2	1056.2
5°	1132.5	1117.1	1084.2	1056.2	1030.9	1010.5	995.4	980.0	972.5	967.4	969.9
7.5°	1132.5	1109.6	1061.4	1018.2	977.6	934.3	891.2	858.2	832.8	817.6	820.1
10°	1145.1	1114.7	1051.2	992.8	916.5	825.2	731.3	660.2	612.0	584.0	584.0
12.5°	1173.0	1132.5	1053.7	962.3	832.8	672.8	530.7	444.3	408.8	388.5	391.0
15°	1211.1	1162.9	1066.4	921.7	715.9	500.2	370.7	314.8	314.8	319.9	322.5
17.5°	1254.3	1201.0	1076.5	860.8	566.2	358.1	292.0	287.0	294.6	307.2	307.2
20°	1297.5	1239.1	1081.6	764.3	424.0	284.4	276.8	276.8	281.9	294.6	297.0
22.5°	1350.8	1287.3	1076.5	644.9	317.4	269.1	266.6	266.6	266.6	281.9	281.9
25°	1406.6	1343.3	1056.2	518.0	269.1	259.0	256.4	253.9	253.9	266.6	269.1
27.5°	1470.1	1401.6	1008.0	396.1	253.9	248.8	246.3	241.3	241.3	251.4	251.4
30°	1533.6	1467.6	934.3	299.6	241.3	238.6	233.6	228.6	223.4	233.6	233.6
32.5°	1602.2	1536.1	837.9	238.6	223.4	223.4	220.9	213.3	208.2	213.3	215.8
35°	1693.6	1614.9	728.8	208.2	200.6	200.6	200.6	198.1	187.9	193.0	193.0
37.5°	1815.5	1724.0	601.8	193.0	182.8	177.8	177.8	177.8	170.1	172.6	172.6
40°	1970.4	1851.0	479.8	180.3	170.1	157.5	152.3	154.9	149.8	149.8	147.3
42.5°	2181.1	1988.1	360.5	170.1	159.9	142.1	131.9	129.5	124.4	121.9	121.9
45°	2483.3	2155.6	259.0	159.9	152.3	124.4	114.2	106.6	94.0	86.4	86.4
47.5°	2874.3	2346.2	193.0	149.8	144.8	109.2	96.4	81.3	63.5	58.5	58.5
50°	3351.6	2559.4	162.5	134.6	131.9	96.4	76.2	53.3	35.5	30.5	33.0
52.5°	3816.2	2760.0	144.8	119.3	116.8	83.8	55.8	28.0	15.2	15.2	15.2
55°	4207.2	2902.2	131.9	106.6	101.6	66.0	30.5	12.7	7.6	7.6	7.6
57.5°	4560.2	2983.5	119.3	94.0	81.3	45.7	12.7	5.0	5.0	2.5	2.5
60°	4882.7	3031.7	104.2	81.3	63.5	25.3	5.0	2.5	2.5	0.0	0.0
62.5°	5200.0	3067.2	88.8	66.0	48.3	10.2	2.5	2.5	0.0	0.0	0.0
65°	5441.2	3054.6	71.1	53.3	30.5	5.0	2.5	0.0	0.0	0.0	0.0
67.5°	5433.7	2881.8	53.3	40.7	15.2	2.5	0.0	0.0	0.0	0.0	0.0
70°	4859.9	2427.4	35.5	25.3	5.0	2.5	0.0	0.0	0.0	0.0	0.0
72.5°	3448.1	1556.5	22.8	15.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0
75°	1518.3	472.2	12.7	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	297.0	109.2	7.6	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	71.1	12.7	2.5	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.5	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.0	2.5	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)