

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: P399252

Luminaire Tested: **ARCH-L-PA3-110-830-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399252  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-110-830-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 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: 10476 lumens  
Efficiency: N/A  
Efficacy: 92.7 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

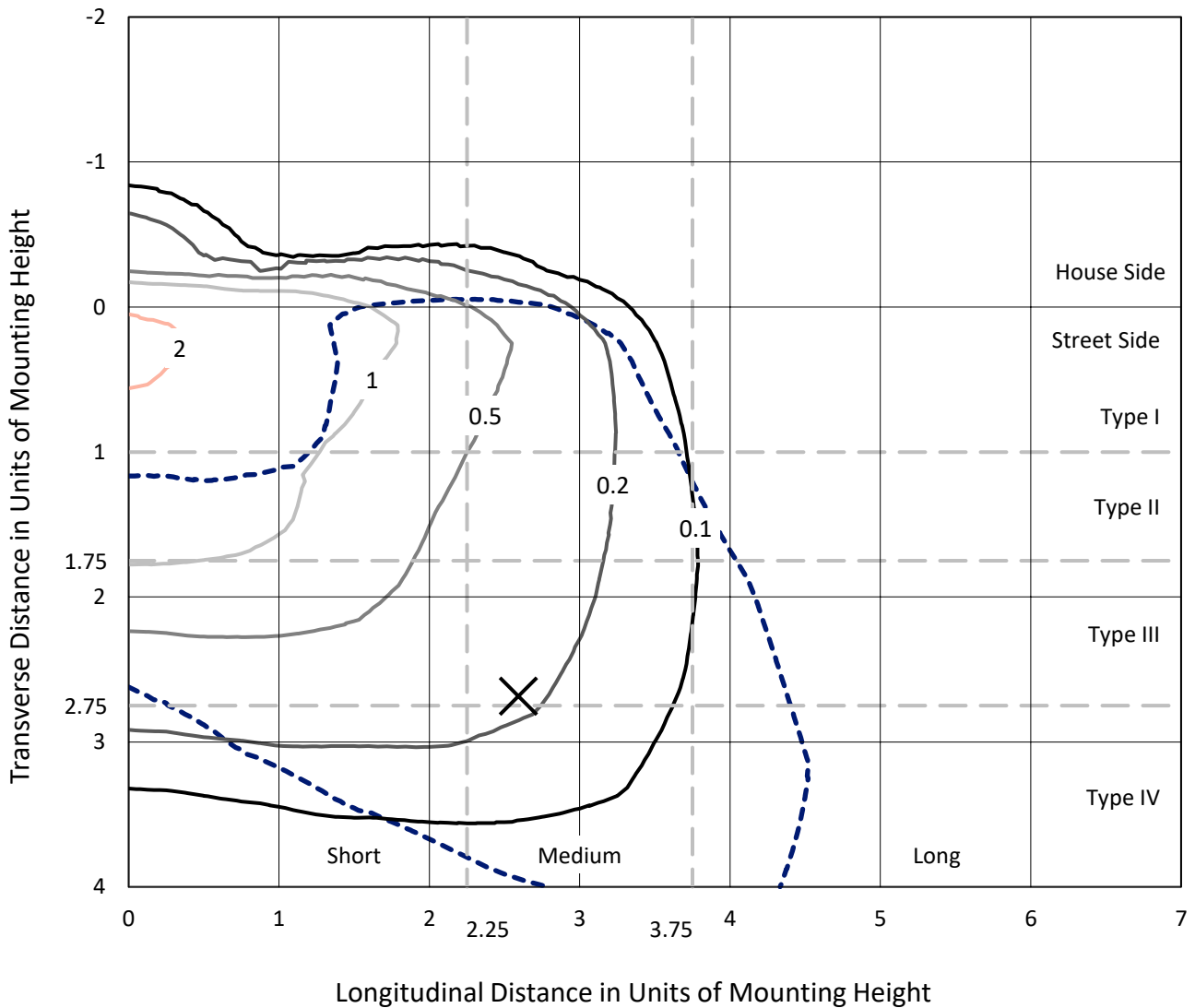
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

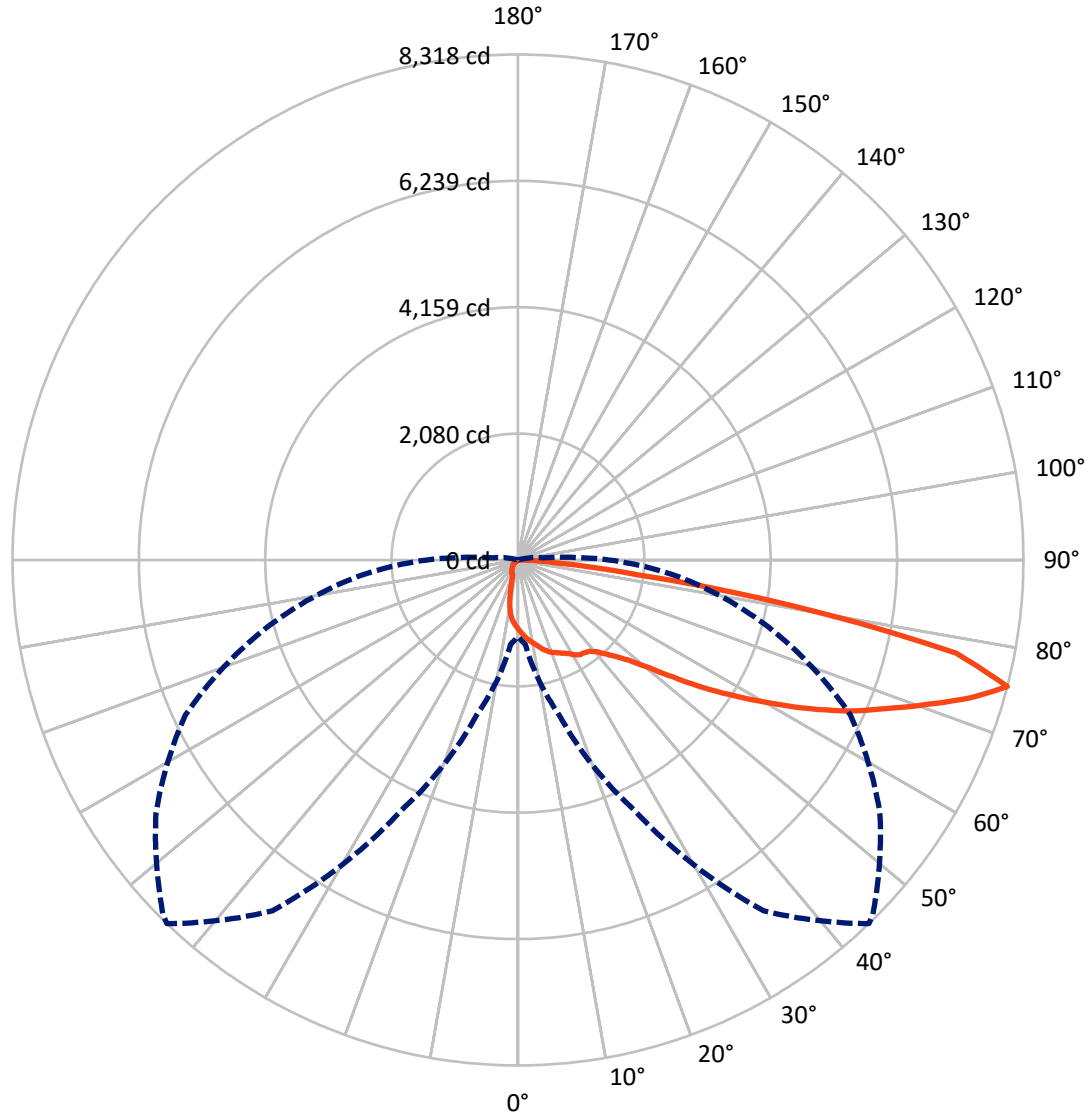
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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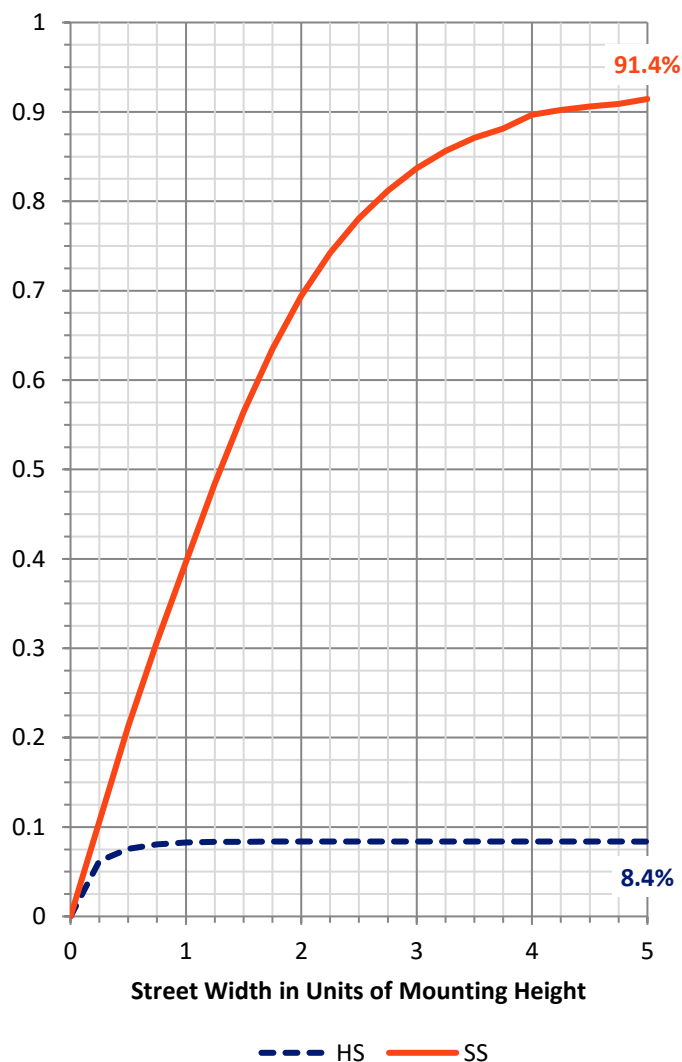
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	883.5	0.0	883.5
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	9592.5	0.0	9592.5
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	10476.0	0.0	10476.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.5	1.0
10°-20°	301.3	2.9
20°-30°	497.3	4.7
30°-40°	721.7	6.9
40°-50°	1173.2	11.2
50°-60°	2068.3	19.7
60°-70°	2972.6	28.4
70°-80°	2380.4	22.7
80°-90°	253.6	2.4
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°	10476.0	100.0
0°-180°	10476.0	100.0

**Coefficient of Utilization**



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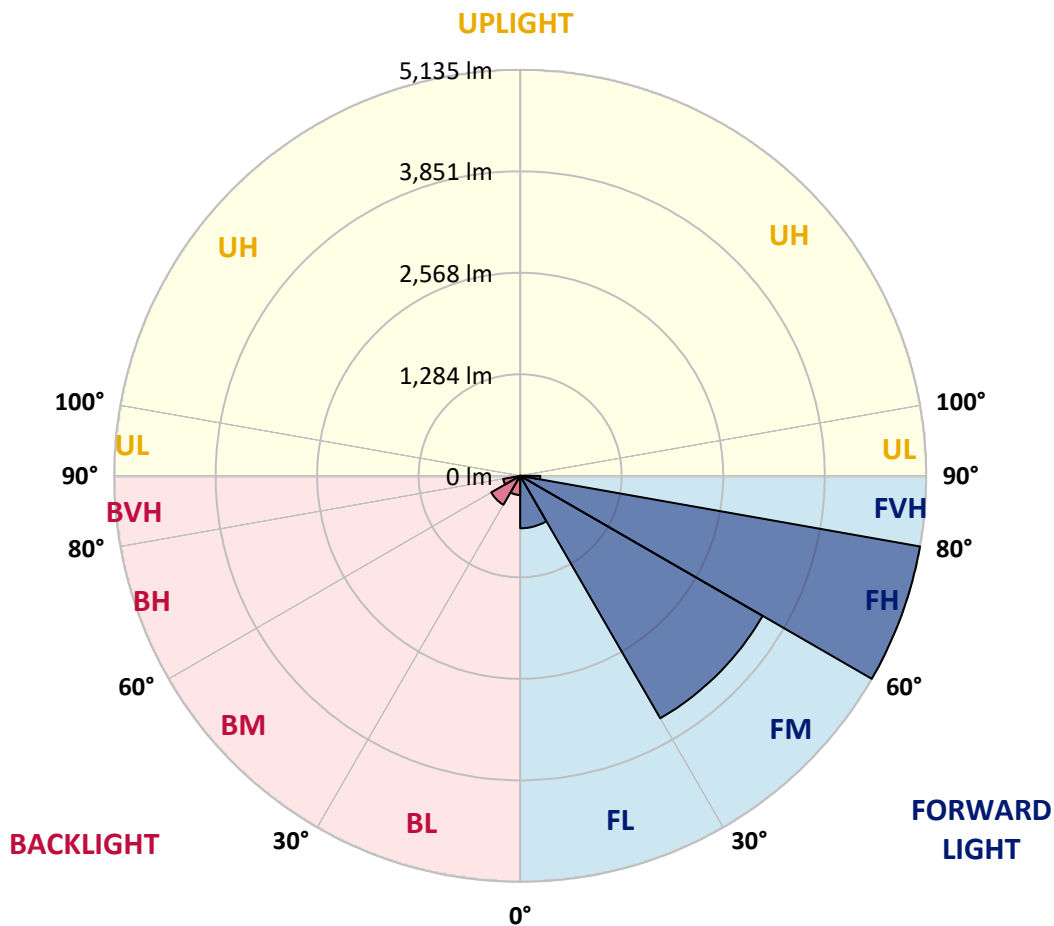
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	663.4	6.3			
FM (30°-60°)	3541.0	33.8			
FH (60°-80°)	5135.2	49.0			G3/7500
FVH (80°-90°)	253.0	2.4			G3/500
BL (0°-30°)	242.7	2.3	B1/500		
BM (30°-60°)	422.3	4.0	B1/1000		
BH (60°-80°)	217.8	2.1	B1/500		G1/500
BVH (80°-90°)	0.6	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°	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3
2.5°	1242.7	1240.8	1235.0	1225.3	1215.6	1206.0	1204.1	1188.6	1171.2	1157.7	1146.1
5°	1352.9	1350.9	1341.3	1320.0	1298.8	1273.6	1271.7	1235.0	1202.1	1165.4	1134.5
7.5°	1466.9	1463.0	1445.6	1412.8	1376.1	1337.4	1333.5	1279.4	1231.1	1182.8	1138.3
10°	1555.8	1551.9	1526.8	1488.2	1437.9	1389.6	1383.8	1327.7	1279.4	1217.6	1157.7
12.5°	1642.8	1635.0	1602.2	1559.7	1497.8	1451.4	1445.6	1387.7	1329.7	1265.9	1192.5
15°	1723.9	1714.3	1683.4	1629.2	1563.5	1519.1	1515.2	1453.4	1393.5	1320.0	1238.8
17.5°	1780.0	1776.1	1739.4	1679.5	1615.7	1579.0	1575.1	1511.3	1451.4	1374.1	1287.2
20°	1809.0	1809.0	1774.2	1708.5	1650.5	1625.4	1619.6	1559.7	1501.7	1428.2	1337.4
22.5°	1814.8	1820.6	1793.5	1722.0	1679.5	1658.2	1654.4	1602.2	1546.1	1478.5	1393.5
25°	1826.4	1826.4	1812.8	1735.5	1704.6	1698.8	1696.9	1650.5	1600.2	1532.6	1449.5
27.5°	1839.9	1839.9	1830.2	1754.9	1743.3	1741.3	1739.4	1718.1	1677.6	1598.3	1515.2
30°	1874.7	1876.6	1868.9	1793.5	1785.8	1807.0	1810.9	1799.3	1749.1	1650.5	1582.9
32.5°	1961.7	1944.3	1923.0	1820.6	1834.1	1861.2	1863.1	1839.9	1785.8	1706.5	1664.0
35°	2180.0	2077.6	1981.0	1843.8	1849.6	1876.6	1880.5	1878.6	1845.7	1778.1	1756.8
37.5°	2383.0	2238.0	2100.8	1897.9	1878.6	1907.5	1915.3	1948.1	1923.0	1876.6	1882.4
40°	2500.9	2444.8	2348.2	2046.7	1936.5	1981.0	1988.7	2039.0	2029.3	2010.0	2046.7
42.5°	2864.2	2868.1	2763.7	2268.9	2042.8	2114.3	2124.0	2164.6	2178.1	2187.8	2276.7
45°	3285.5	3299.1	3273.9	2669.0	2243.8	2267.0	2280.5	2334.7	2384.9	2446.8	2609.1
47.5°	3791.9	3780.3	3687.5	3158.0	2593.6	2464.1	2473.8	2578.2	2665.1	2800.4	3032.4
50°	4240.3	4269.3	4093.4	3614.1	3086.5	2775.3	2765.6	2868.1	3024.6	3214.0	3505.9
52.5°	4692.5	4650.0	4412.3	4066.3	3670.1	3198.6	3169.6	3225.6	3445.9	3670.1	3969.7
55°	4812.3	4816.2	4735.0	4561.1	4157.2	3712.7	3664.3	3660.5	3934.9	4087.6	4456.7
57.5°	5048.1	5057.8	5077.1	5111.9	4920.6	4226.7	4176.5	4122.4	4389.1	4478.0	4945.7
60°	5287.8	5299.4	5417.3	5604.7	5477.2	4781.4	4727.3	4599.7	4748.6	4868.4	5459.8
62.5°	5256.9	5338.0	5680.1	6053.1	6037.6	5390.2	5322.6	5015.3	5110.0	5214.3	5931.4
65°	4746.6	4833.6	5602.8	6176.8	6600.1	5991.3	5881.1	5444.3	5450.1	5575.7	6385.5
67.5°	4290.5	4385.2	5119.6	6124.6	6971.1	6530.5	6416.5	5875.3	5784.5	5993.2	6629.0
70°	4027.7	4122.4	4735.0	5962.3	7075.5	7127.7	7029.1	6368.1	6182.6	6373.9	6356.5
72.5°	3152.2	3301.0	4244.1	5653.0	7187.6	7767.4	7690.1	6992.4	6520.8	5975.8	4839.4
75°	1256.2	1393.5	2649.7	4549.5	7046.5	8318.2	8258.3	7272.6	6035.7	4267.3	2477.7
77.5°	378.8	405.9	736.3	2249.6	5166.0	7375.1	7355.7	6115.0	4271.2	1981.0	676.4
80°	125.6	139.2	226.1	620.4	2357.9	4607.5	4694.4	3896.3	1940.4	454.2	137.2
82.5°	52.2	58.0	114.0	249.3	834.9	1984.8	1955.9	1745.2	676.4	282.2	50.2
85°	13.5	17.4	52.2	143.0	305.4	684.2	719.0	585.6	382.7	233.9	15.5
87.5°	0.0	0.0	25.1	58.0	137.2	206.8	216.5	177.8	216.5	175.9	7.7
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°	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3	1140.3
2.5°	1136.4	1126.7	1109.4	1097.8	1082.3	1078.4	1070.7	1061.0	1059.1	1049.4	1051.4
5°	1117.1	1101.6	1070.7	1049.4	1024.3	1016.6	1003.1	993.4	985.7	972.1	974.1
7.5°	1113.2	1090.0	1047.5	1006.9	966.3	937.3	896.8	863.9	836.8	807.9	813.7
10°	1126.7	1097.8	1037.8	981.8	908.4	815.6	709.3	639.7	604.9	570.1	574.0
12.5°	1153.8	1119.0	1041.7	956.7	807.9	649.4	502.5	407.8	382.7	367.2	369.1
15°	1194.4	1151.9	1053.3	908.4	672.6	469.6	334.4	293.8	303.4	309.2	309.2
17.5°	1236.9	1188.6	1063.0	821.4	519.9	328.6	272.5	268.6	282.2	295.7	295.7
20°	1289.1	1227.2	1064.9	711.2	374.9	266.7	257.0	257.0	266.7	282.2	282.2
22.5°	1339.3	1269.8	1047.5	585.6	286.0	247.4	247.4	247.4	253.2	268.6	270.6
25°	1399.3	1321.9	1010.8	452.2	245.4	235.8	235.8	237.7	241.6	255.1	257.0
27.5°	1463.0	1376.1	948.9	330.5	224.2	222.3	224.2	226.1	228.1	241.6	245.4
30°	1536.5	1436.0	869.7	247.4	204.9	204.9	210.7	214.5	214.5	226.1	230.0
32.5°	1621.5	1515.2	775.0	204.9	185.5	183.6	193.3	199.1	199.1	208.7	212.6
35°	1727.8	1596.4	661.0	181.7	170.1	166.2	170.1	179.7	183.6	191.3	193.3
37.5°	1868.9	1693.0	539.2	168.1	158.5	150.7	150.7	152.7	160.4	168.1	170.1
40°	2048.6	1799.3	419.4	158.5	146.9	139.2	133.4	131.4	129.5	135.3	139.2
42.5°	2274.7	1919.1	313.1	148.8	137.2	125.6	117.9	110.2	100.5	98.6	100.5
45°	2564.6	2066.0	231.9	141.1	131.4	114.0	100.5	87.0	69.6	63.8	65.7
47.5°	2906.7	2218.7	181.7	133.4	127.6	100.5	83.1	59.9	42.5	38.7	40.6
50°	3270.1	2365.6	154.6	123.7	119.8	87.0	59.9	36.7	25.1	25.1	27.1
52.5°	3579.3	2448.7	141.1	116.0	108.2	71.5	38.7	21.3	15.5	15.5	17.4
55°	3878.9	2493.1	131.4	108.2	92.8	50.2	21.3	13.5	9.7	9.7	9.7
57.5°	4188.1	2512.5	119.8	98.6	73.4	30.9	11.6	7.7	5.8	5.8	5.8
60°	4462.5	2475.7	102.4	81.2	48.3	15.5	5.8	5.8	3.9	1.9	1.9
62.5°	4692.5	2406.2	71.5	58.0	29.0	7.7	3.9	1.9	0.0	0.0	0.0
65°	4833.6	2294.1	46.4	38.7	17.4	5.8	1.9	0.0	0.0	0.0	0.0
67.5°	4793.0	2083.4	29.0	25.1	7.7	3.9	1.9	0.0	0.0	0.0	0.0
70°	4325.3	1708.5	21.3	15.5	5.8	1.9	0.0	0.0	0.0	0.0	0.0
72.5°	3117.4	1155.7	15.5	9.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0
75°	1499.7	411.7	9.7	7.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	367.2	90.8	5.8	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	81.2	17.4	3.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	27.1	7.7	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.8	1.9	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)