

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: P399531

Luminaire Tested: **ARCH-L-PA3-150-827-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399531  
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-PA3-150-827-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 665mA 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: 12619 lumens  
Efficiency: N/A  
Efficacy: 82.5 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

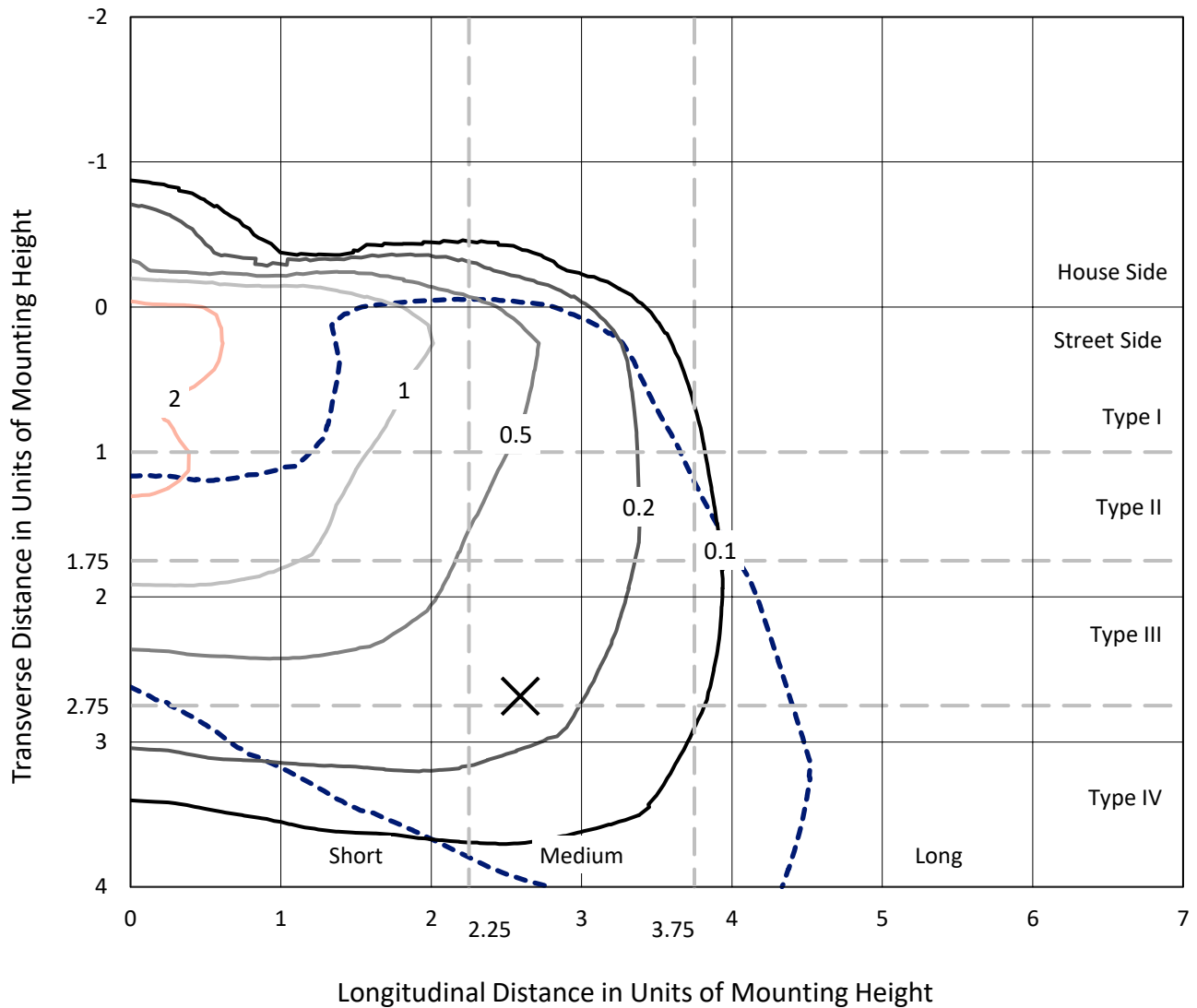
Input Watts (W): 153  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

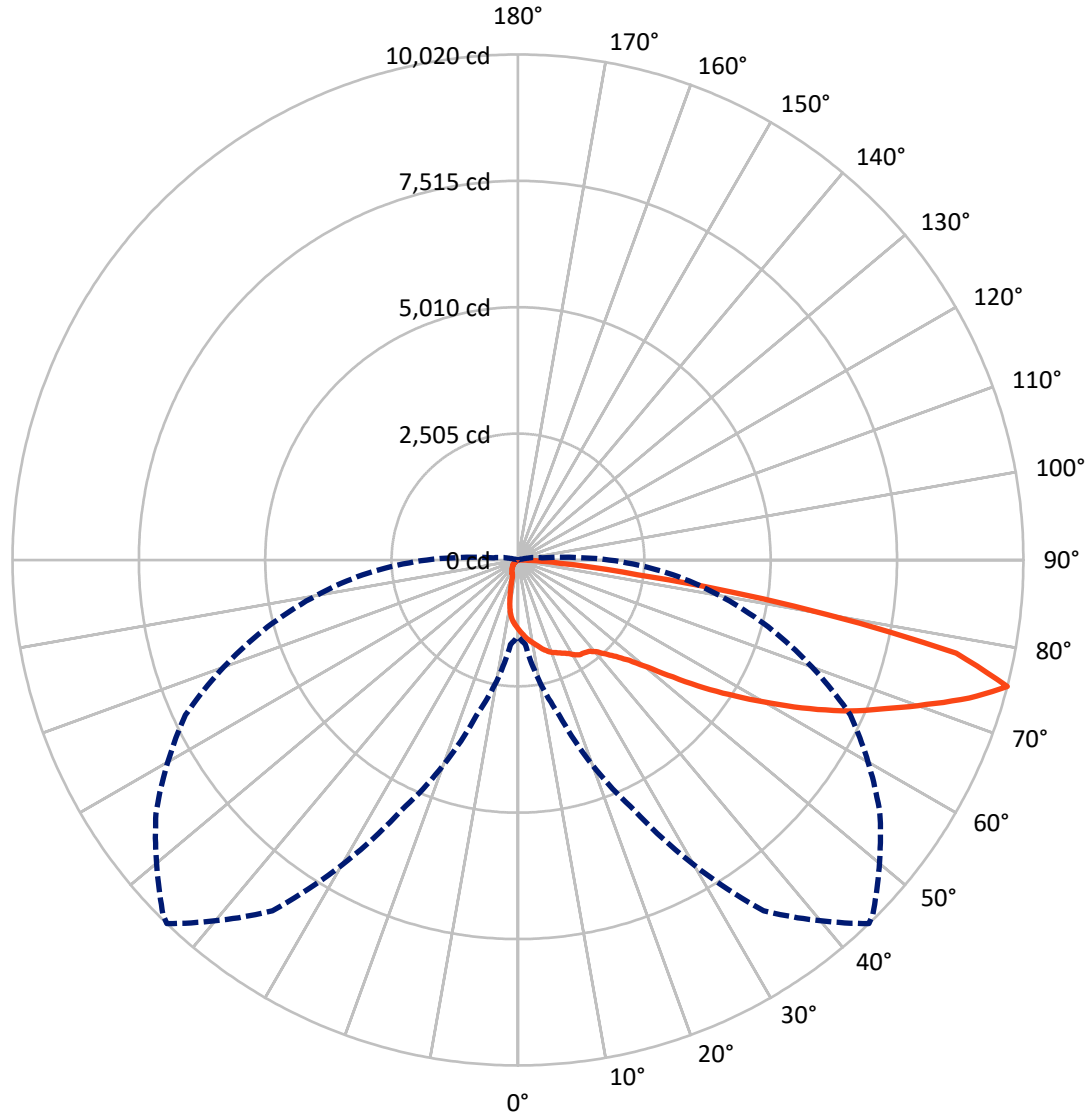
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 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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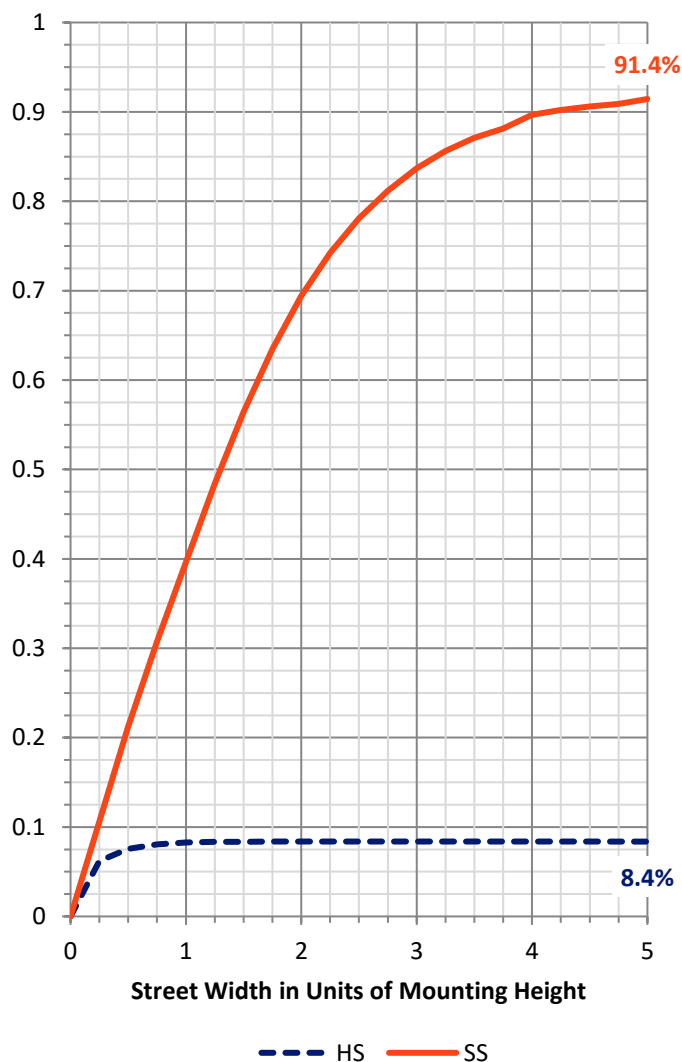
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1064.2	0.0	1064.2
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	11554.8	0.0	11554.8
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	12619.0	0.0	12619.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.5	1.0
10°-20°	363.0	2.9
20°-30°	599.0	4.7
30°-40°	869.4	6.9
40°-50°	1413.3	11.2
50°-60°	2491.4	19.7
60°-70°	3580.7	28.4
70°-80°	2867.3	22.7
80°-90°	305.5	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°	12619.0	100.0
0°-180°	12619.0	100.0

**Coefficient of Utilization**



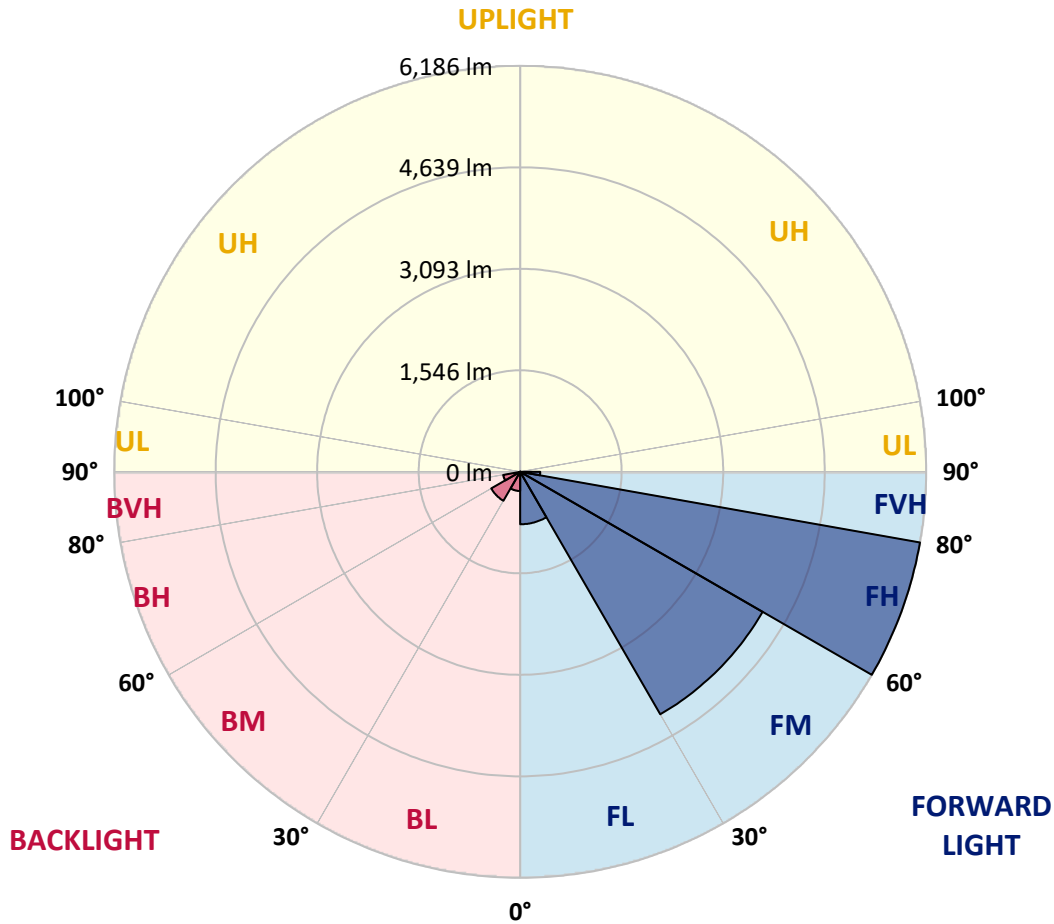
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	799.1	6.3			
FM (30°-60°)	4265.3	33.8			
FH (60°-80°)	6185.6	49.0			G3/7500
FVH (80°-90°)	304.7	2.4			G3/500
BL (0°-30°)	292.4	2.3	B1/500		
BM (30°-60°)	508.7	4.0	B1/1000		
BH (60°-80°)	262.4	2.1	B1/500		G1/500
BVH (80°-90°)	0.8	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°	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5
2.5°	1496.9	1494.6	1487.6	1476.0	1464.3	1452.7	1450.4	1431.7	1410.8	1394.5	1380.5
5°	1629.6	1627.3	1615.6	1590.0	1564.4	1534.2	1531.8	1487.6	1448.0	1403.8	1366.5
7.5°	1767.0	1762.3	1741.4	1701.8	1657.5	1611.0	1606.3	1541.1	1482.9	1424.7	1371.2
10°	1874.1	1869.4	1839.1	1792.6	1732.0	1673.8	1666.9	1599.3	1541.1	1466.7	1394.5
12.5°	1978.8	1969.5	1929.9	1878.7	1804.2	1748.3	1741.4	1671.5	1601.7	1524.9	1436.4
15°	2076.6	2065.0	2027.7	1962.5	1883.4	1829.8	1825.2	1750.7	1678.5	1590.0	1492.3
17.5°	2144.1	2139.4	2095.2	2023.0	1946.2	1902.0	1897.3	1820.5	1748.3	1655.2	1550.5
20°	2179.0	2179.0	2137.1	2058.0	1988.1	1957.9	1950.9	1878.7	1808.9	1720.4	1611.0
22.5°	2186.0	2193.0	2160.4	2074.3	2023.0	1997.4	1992.8	1929.9	1862.4	1780.9	1678.5
25°	2200.0	2200.0	2183.7	2090.6	2053.3	2046.3	2044.0	1988.1	1927.6	1846.1	1746.0
27.5°	2216.3	2216.3	2204.6	2113.8	2099.9	2097.5	2095.2	2069.6	2020.7	1925.3	1825.2
30°	2258.2	2260.5	2251.2	2160.4	2151.1	2176.7	2181.4	2167.4	2106.9	1988.1	1906.6
32.5°	2362.9	2342.0	2316.4	2193.0	2209.3	2241.9	2244.2	2216.3	2151.1	2055.6	2004.4
35°	2626.0	2502.6	2386.2	2220.9	2227.9	2260.5	2265.2	2262.8	2223.3	2141.8	2116.2
37.5°	2870.4	2695.8	2530.6	2286.1	2262.8	2297.8	2307.1	2346.6	2316.4	2260.5	2267.5
40°	3012.5	2944.9	2828.5	2465.4	2332.7	2386.2	2395.5	2456.1	2444.4	2421.1	2465.4
42.5°	3450.1	3454.8	3329.1	2733.1	2460.7	2546.9	2558.5	2607.4	2623.7	2635.3	2742.4
45°	3957.6	3973.9	3943.7	3215.0	2702.8	2730.8	2747.1	2812.2	2872.8	2947.3	3142.8
47.5°	4567.6	4553.6	4441.9	3804.0	3124.2	2968.2	2979.9	3105.6	3210.3	3373.3	3652.7
50°	5107.7	5142.6	4930.7	4353.4	3717.8	3343.0	3331.4	3454.8	3643.3	3871.5	4223.0
52.5°	5652.4	5601.2	5314.9	4898.1	4420.9	3852.9	3817.9	3885.5	4150.9	4420.9	4781.7
55°	5796.8	5801.4	5703.6	5494.1	5007.6	4472.1	4413.9	4409.3	4739.8	4923.8	5368.4
57.5°	6080.8	6092.4	6115.7	6157.6	5927.1	5091.4	5030.8	4965.7	5286.9	5394.0	5957.4
60°	6369.5	6383.4	6525.4	6751.3	6597.6	5759.5	5694.3	5540.7	5719.9	5864.3	6576.6
62.5°	6332.2	6430.0	6842.0	7291.4	7272.7	6492.8	6411.4	6041.2	6155.3	6281.0	7144.7
65°	5717.6	5822.4	6748.9	7440.3	7950.2	7216.9	7084.2	6558.0	6565.0	6716.3	7691.8
67.5°	5168.2	5282.3	6166.9	7377.5	8397.2	7866.4	7729.0	7077.2	6967.8	7219.2	7985.1
70°	4851.6	4965.7	5703.6	7181.9	8522.9	8585.7	8467.0	7670.8	7447.3	7677.8	7656.8
72.5°	3797.0	3976.3	5112.3	6809.5	8657.9	9356.3	9263.2	8422.8	7854.7	7198.2	5829.4
75°	1513.2	1678.5	3191.7	5480.2	8488.0	10019.8	9947.6	8760.3	7270.4	5140.3	2984.5
77.5°	456.3	488.9	887.0	2709.8	6222.8	8883.7	8860.4	7365.8	5144.9	2386.2	814.8
80°	151.3	167.6	272.4	747.3	2840.2	5550.0	5654.8	4693.3	2337.3	547.1	165.3
82.5°	62.9	69.8	137.4	300.3	1005.7	2390.9	2356.0	2102.2	814.8	339.9	60.5
85°	16.3	21.0	62.9	172.3	367.8	824.1	866.0	705.4	460.9	281.7	18.6
87.5°	0.0	0.0	30.3	69.8	165.3	249.1	260.7	214.2	260.7	211.8	9.3
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°	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5	1373.5
2.5°	1368.9	1357.2	1336.3	1322.3	1303.7	1299.0	1289.7	1278.1	1275.8	1264.1	1266.4
5°	1345.6	1327.0	1289.7	1264.1	1233.8	1224.5	1208.2	1196.6	1187.3	1171.0	1173.3
7.5°	1340.9	1313.0	1261.8	1212.9	1164.0	1129.1	1080.2	1040.6	1008.0	973.1	980.1
10°	1357.2	1322.3	1250.1	1182.6	1094.2	982.4	854.4	770.6	728.7	686.8	691.4
12.5°	1389.8	1347.9	1254.8	1152.4	973.1	782.2	605.3	491.2	460.9	442.3	444.7
15°	1438.7	1387.5	1268.8	1094.2	810.2	565.7	402.7	353.9	365.5	372.5	372.5
17.5°	1489.9	1431.7	1280.4	989.4	626.2	395.8	328.3	323.6	339.9	356.2	356.2
20°	1552.8	1478.3	1282.7	856.7	451.6	321.3	309.6	309.6	321.3	339.9	339.9
22.5°	1613.3	1529.5	1261.8	705.4	344.5	298.0	298.0	298.0	305.0	323.6	325.9
25°	1685.5	1592.4	1217.6	544.8	295.7	284.0	284.0	286.3	291.0	307.3	309.6
27.5°	1762.3	1657.5	1143.1	398.1	270.1	267.7	270.1	272.4	274.7	291.0	295.7
30°	1850.8	1729.7	1047.6	298.0	246.8	246.8	253.8	258.4	258.4	272.4	277.0
32.5°	1953.2	1825.2	933.5	246.8	223.5	221.2	232.8	239.8	239.8	251.4	256.1
35°	2081.2	1922.9	796.2	218.8	204.9	200.2	204.9	216.5	221.2	230.5	232.8
37.5°	2251.2	2039.3	649.5	202.5	190.9	181.6	181.6	183.9	193.2	202.5	204.9
40°	2467.7	2167.4	505.2	190.9	176.9	167.6	160.6	158.3	156.0	163.0	167.6
42.5°	2740.1	2311.7	377.1	179.3	165.3	151.3	142.0	132.7	121.1	118.7	121.1
45°	3089.3	2488.7	279.4	169.9	158.3	137.4	121.1	104.8	83.8	76.8	79.2
47.5°	3501.3	2672.6	218.8	160.6	153.6	121.1	100.1	72.2	51.2	46.6	48.9
50°	3939.0	2849.5	186.2	149.0	144.3	104.8	72.2	44.2	30.3	30.3	32.6
52.5°	4311.5	2949.6	169.9	139.7	130.4	86.1	46.6	25.6	18.6	18.6	21.0
55°	4672.3	3003.1	158.3	130.4	111.7	60.5	25.6	16.3	11.6	11.6	11.6
57.5°	5044.8	3026.4	144.3	118.7	88.5	37.2	14.0	9.3	7.0	7.0	7.0
60°	5375.4	2982.2	123.4	97.8	58.2	18.6	7.0	7.0	4.7	2.3	2.3
62.5°	5652.4	2898.4	86.1	69.8	34.9	9.3	4.7	2.3	0.0	0.0	0.0
65°	5822.4	2763.4	55.9	46.6	21.0	7.0	2.3	0.0	0.0	0.0	0.0
67.5°	5773.5	2509.6	34.9	30.3	9.3	4.7	2.3	0.0	0.0	0.0	0.0
70°	5210.1	2058.0	25.6	18.6	7.0	2.3	0.0	0.0	0.0	0.0	0.0
72.5°	3755.1	1392.2	18.6	11.6	4.7	0.0	0.0	0.0	0.0	0.0	0.0
75°	1806.5	495.9	11.6	9.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	442.3	109.4	7.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	97.8	21.0	4.7	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	32.6	9.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.6	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	7.0	2.3	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)