

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: P399459

Luminaire Tested: **ARCH-L-PA3-140-827-U-T4W-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399459  
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-PA3-140-827-U-T4W-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 2700K, 620mA 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: 11911 lumens  
Efficiency: N/A  
Efficacy: 83.3 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

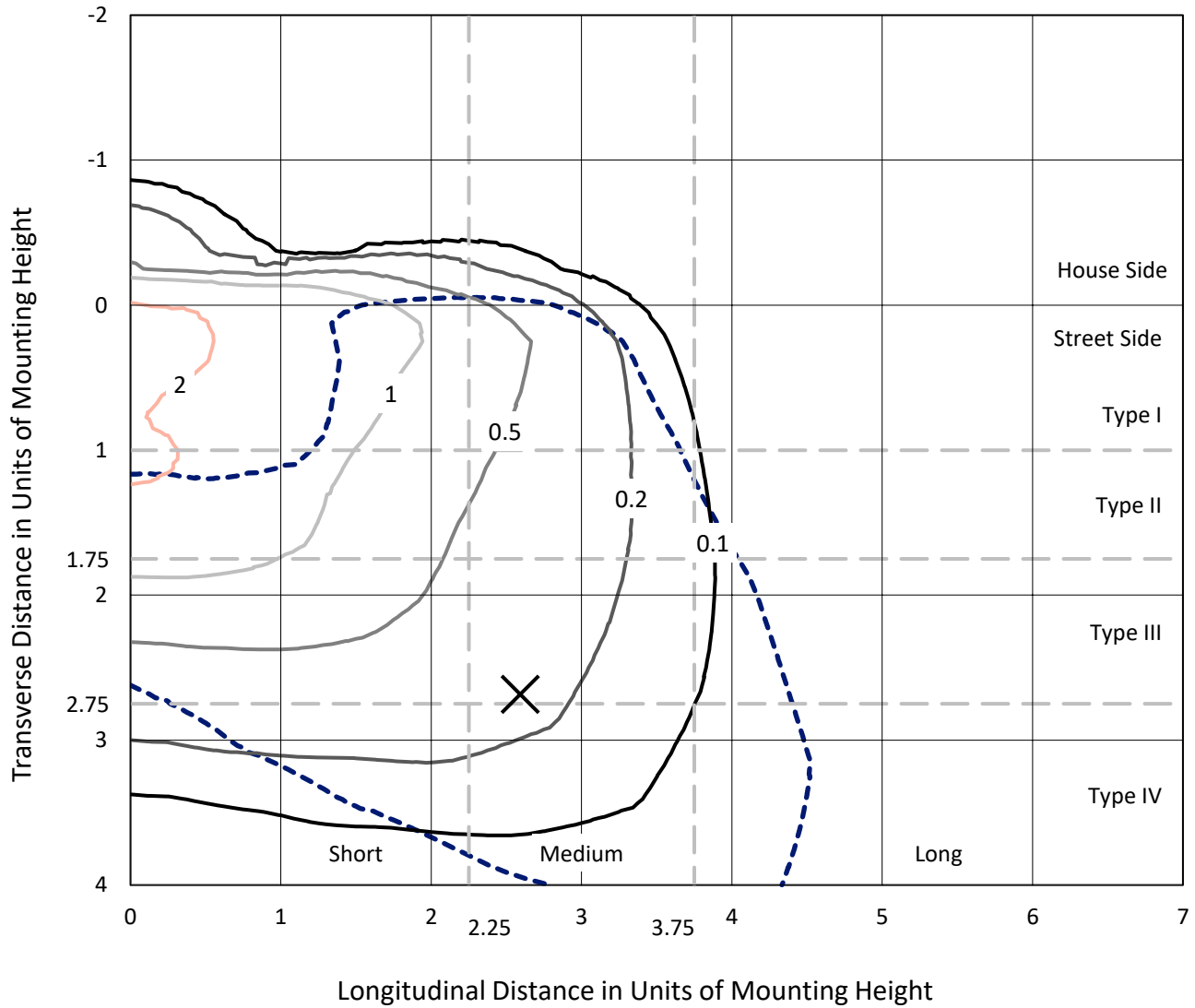
Input Watts (W): 143  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

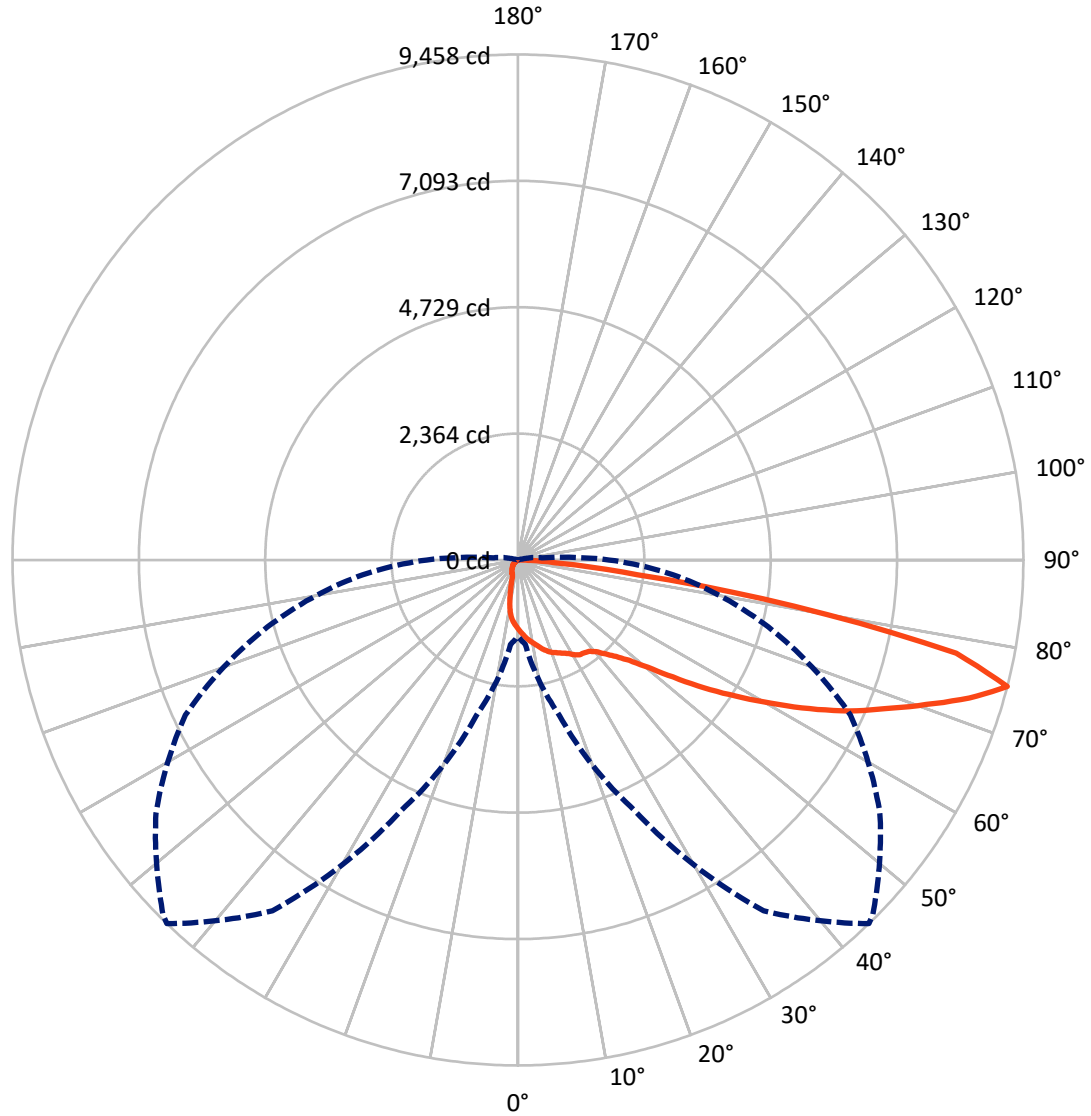
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.8 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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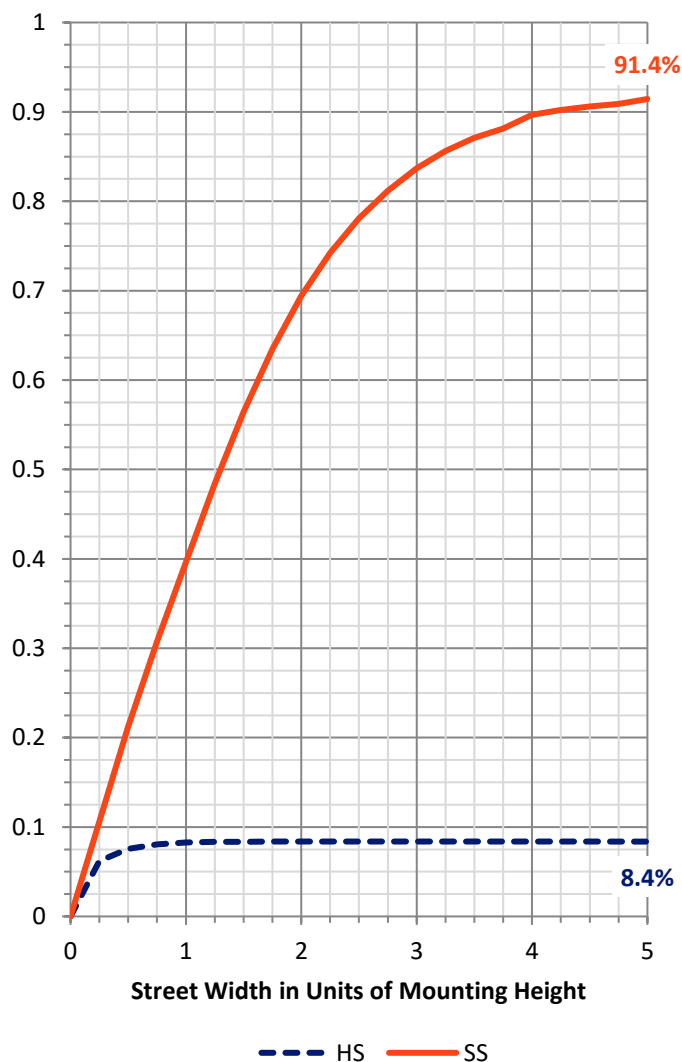
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1004.5	0.0	1004.5
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	10906.5	0.0	10906.5
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	11911.0	0.0	11911.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.3	1.0
10°-20°	342.6	2.9
20°-30°	565.4	4.7
30°-40°	820.6	6.9
40°-50°	1334.0	11.2
50°-60°	2351.6	19.7
60°-70°	3379.8	28.4
70°-80°	2706.4	22.7
80°-90°	288.4	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°	11911.0	100.0
0°-180°	11911.0	100.0

**Coefficient of Utilization**



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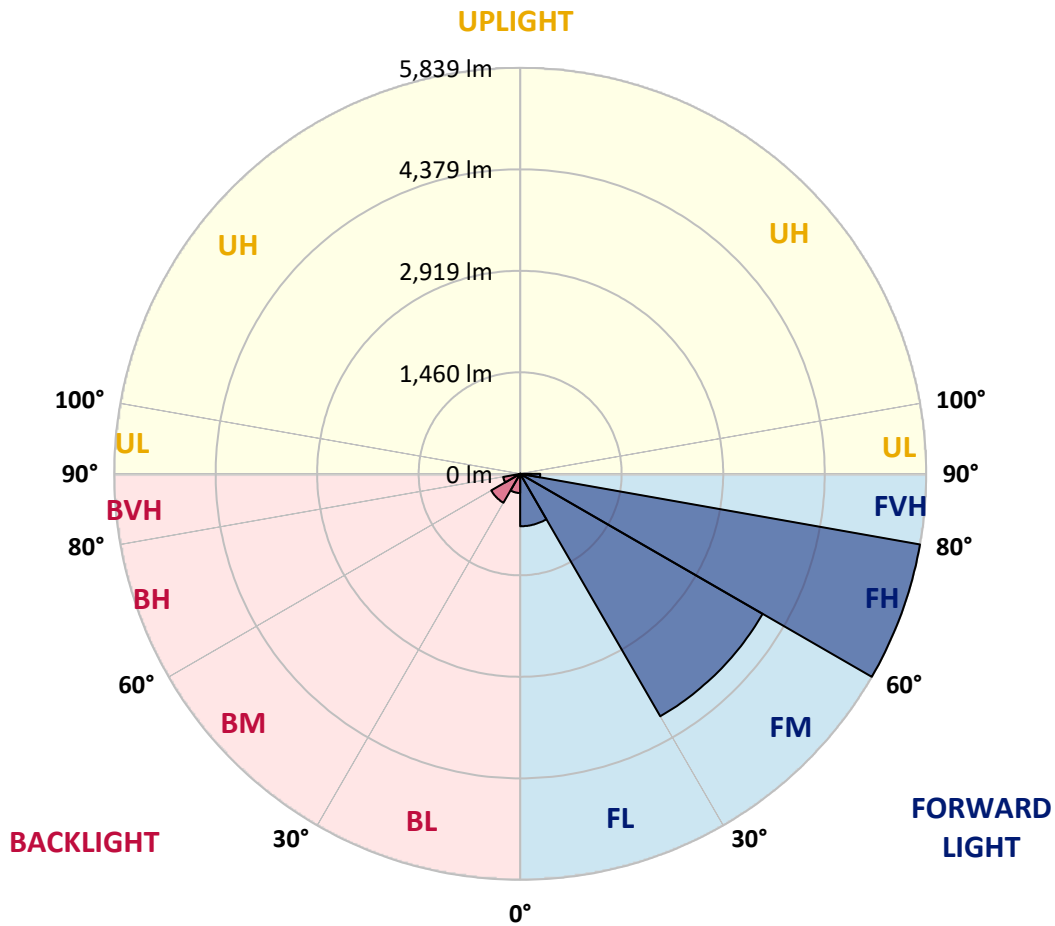
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	754.3	6.3			
FM (30°-60°)	4026.0	33.8			
FH (60°-80°)	5838.6	49.0			G3/7500
FVH (80°-90°)	287.6	2.4			G3/500
BL (0°-30°)	276.0	2.3	B1/500		
BM (30°-60°)	480.2	4.0	B1/1000		
BH (60°-80°)	247.6	2.1	B1/500		G1/500
BVH (80°-90°)	0.7	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°	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5
2.5°	1412.9	1410.7	1404.1	1393.2	1382.2	1371.2	1369.0	1351.4	1331.6	1316.2	1303.1
5°	1538.2	1536.0	1525.0	1500.8	1476.7	1448.1	1445.9	1404.1	1366.8	1325.0	1289.9
7.5°	1667.8	1663.4	1643.7	1606.3	1564.6	1520.6	1516.2	1454.7	1399.7	1344.8	1294.3
10°	1768.9	1764.5	1735.9	1692.0	1634.9	1579.9	1573.3	1509.6	1454.7	1384.4	1316.2
12.5°	1867.8	1859.0	1821.6	1773.3	1703.0	1650.2	1643.7	1577.7	1511.8	1439.3	1355.8
15°	1960.1	1949.1	1913.9	1852.4	1777.7	1727.2	1722.8	1652.4	1584.3	1500.8	1408.5
17.5°	2023.8	2019.4	1977.7	1909.5	1837.0	1795.3	1790.9	1718.4	1650.2	1562.4	1463.5
20°	2056.8	2056.8	2017.2	1942.5	1876.6	1848.0	1841.4	1773.3	1707.4	1623.9	1520.6
22.5°	2063.4	2070.0	2039.2	1957.9	1909.5	1885.4	1881.0	1821.6	1757.9	1681.0	1584.3
25°	2076.5	2076.5	2061.2	1973.3	1938.1	1931.5	1929.3	1876.6	1819.4	1742.5	1648.1
27.5°	2091.9	2091.9	2080.9	1995.2	1982.1	1979.9	1977.7	1953.5	1907.3	1817.3	1722.8
30°	2131.5	2133.7	2124.9	2039.2	2030.4	2054.6	2059.0	2045.8	1988.6	1876.6	1799.7
32.5°	2230.4	2210.6	2186.4	2070.0	2085.3	2116.1	2118.3	2091.9	2030.4	1940.3	1892.0
35°	2478.7	2362.2	2252.3	2096.3	2102.9	2133.7	2138.1	2135.9	2098.5	2021.6	1997.4
37.5°	2709.4	2544.6	2388.6	2157.8	2135.9	2168.8	2177.6	2215.0	2186.4	2133.7	2140.3
40°	2843.4	2779.7	2669.8	2327.0	2201.8	2252.3	2261.1	2318.3	2307.3	2285.3	2327.0
42.5°	3256.5	3260.9	3142.3	2579.7	2322.7	2404.0	2414.9	2461.1	2476.5	2487.5	2588.5
45°	3735.6	3751.0	3722.4	3034.6	2551.2	2577.6	2592.9	2654.5	2711.6	2781.9	2966.5
47.5°	4311.3	4298.1	4192.6	3590.6	2948.9	2801.7	2812.7	2931.3	3030.2	3184.0	3447.7
50°	4821.1	4854.1	4654.1	4109.1	3509.3	3155.5	3144.5	3260.9	3438.9	3654.3	3986.1
52.5°	5335.3	5286.9	5016.7	4623.3	4172.9	3636.7	3603.7	3667.5	3918.0	4172.9	4513.5
55°	5471.5	5475.9	5383.6	5185.9	4726.6	4221.2	4166.3	4161.9	4473.9	4647.5	5067.2
57.5°	5739.6	5750.6	5772.6	5812.1	5594.6	4805.7	4748.6	4687.1	4990.3	5091.4	5623.2
60°	6012.1	6025.3	6159.3	6372.5	6227.4	5436.4	5374.8	5229.8	5399.0	5535.3	6207.7
62.5°	5976.9	6069.2	6458.2	6882.3	6864.7	6128.6	6051.6	5702.3	5809.9	5928.6	6743.8
65°	5396.8	5495.7	6370.3	7022.9	7504.1	6811.9	6686.7	6190.1	6196.7	6339.5	7260.2
67.5°	4878.2	4985.9	5820.9	6963.6	7926.0	7425.0	7295.4	6680.1	6576.8	6814.1	7537.1
70°	4579.4	4687.1	5383.6	6779.0	8044.7	8104.0	7992.0	7240.4	7029.5	7247.0	7227.3
72.5°	3584.0	3753.2	4825.5	6427.4	8172.1	8831.4	8743.5	7950.2	7414.0	6794.4	5502.3
75°	1428.3	1584.3	3012.6	5172.7	8011.7	9457.6	9389.5	8268.8	6862.5	4851.9	2817.1
77.5°	430.7	461.5	837.2	2557.8	5873.7	8385.3	8363.3	6952.6	4856.3	2252.3	769.1
80°	142.8	158.2	257.1	705.4	2680.8	5238.6	5337.5	4430.0	2206.2	516.4	156.0
82.5°	59.3	65.9	129.6	283.5	949.3	2256.7	2223.8	1984.3	769.1	320.8	57.1
85°	15.4	19.8	59.3	162.6	347.2	777.9	817.4	665.8	435.1	265.9	17.6
87.5°	0.0	0.0	28.6	65.9	156.0	235.1	246.1	202.2	246.1	200.0	8.8
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°	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5	1296.5
2.5°	1292.1	1281.1	1261.3	1248.1	1230.5	1226.2	1217.4	1206.4	1204.2	1193.2	1195.4
5°	1270.1	1252.5	1217.4	1193.2	1164.6	1155.8	1140.5	1129.5	1120.7	1105.3	1107.5
7.5°	1265.7	1239.3	1191.0	1144.8	1098.7	1065.7	1019.6	982.2	951.5	918.5	925.1
10°	1281.1	1248.1	1180.0	1116.3	1032.8	927.3	806.4	727.3	687.8	648.2	652.6
12.5°	1311.8	1272.3	1184.4	1087.7	918.5	738.3	571.3	463.7	435.1	417.5	419.7
15°	1358.0	1309.7	1197.6	1032.8	764.7	534.0	380.2	334.0	345.0	351.6	351.6
17.5°	1406.3	1351.4	1208.6	933.9	591.1	373.6	309.8	305.4	320.8	336.2	336.2
20°	1465.7	1395.4	1210.8	808.6	426.3	303.2	292.3	292.3	303.2	320.8	320.8
22.5°	1522.8	1443.7	1191.0	665.8	325.2	281.3	281.3	281.3	287.9	305.4	307.6
25°	1590.9	1503.0	1149.2	514.2	279.1	268.1	268.1	270.3	274.7	290.1	292.3
27.5°	1663.4	1564.6	1078.9	375.8	254.9	252.7	254.9	257.1	259.3	274.7	279.1
30°	1746.9	1632.7	988.8	281.3	232.9	232.9	239.5	243.9	243.9	257.1	261.5
32.5°	1843.6	1722.8	881.2	232.9	211.0	208.8	219.7	226.3	226.3	237.3	241.7
35°	1964.5	1815.1	751.5	206.6	193.4	189.0	193.4	204.4	208.8	217.5	219.7
37.5°	2124.9	1924.9	613.1	191.2	180.2	171.4	171.4	173.6	182.4	191.2	193.4
40°	2329.2	2045.8	476.8	180.2	167.0	158.2	151.6	149.4	147.2	153.8	158.2
42.5°	2586.3	2182.0	356.0	169.2	156.0	142.8	134.0	125.3	114.3	112.1	114.3
45°	2916.0	2349.0	263.7	160.4	149.4	129.6	114.3	98.9	79.1	72.5	74.7
47.5°	3304.9	2522.6	206.6	151.6	145.0	114.3	94.5	68.1	48.3	43.9	46.1
50°	3718.0	2689.6	175.8	140.6	136.2	98.9	68.1	41.8	28.6	28.6	30.8
52.5°	4069.6	2784.1	160.4	131.8	123.1	81.3	43.9	24.2	17.6	17.6	19.8
55°	4410.2	2834.6	149.4	123.1	105.5	57.1	24.2	15.4	11.0	11.0	11.0
57.5°	4761.8	2856.6	136.2	112.1	83.5	35.2	13.2	8.8	6.6	6.6	6.6
60°	5073.8	2814.9	116.5	92.3	54.9	17.6	6.6	6.6	4.4	2.2	2.2
62.5°	5335.3	2735.8	81.3	65.9	33.0	8.8	4.4	2.2	0.0	0.0	0.0
65°	5495.7	2608.3	52.7	43.9	19.8	6.6	2.2	0.0	0.0	0.0	0.0
67.5°	5449.6	2368.8	33.0	28.6	8.8	4.4	2.2	0.0	0.0	0.0	0.0
70°	4917.8	1942.5	24.2	17.6	6.6	2.2	0.0	0.0	0.0	0.0	0.0
72.5°	3544.4	1314.0	17.6	11.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	1705.2	468.0	11.0	8.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	417.5	103.3	6.6	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	92.3	19.8	4.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	30.8	8.8	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	6.6	2.2	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)