

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: P399124

Luminaire Tested: **ARCH-L-PA3-100-727-U-T3-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399124  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-100-727-U-T3-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10217 lumens  
Efficiency: N/A  
Efficacy: 100.2 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

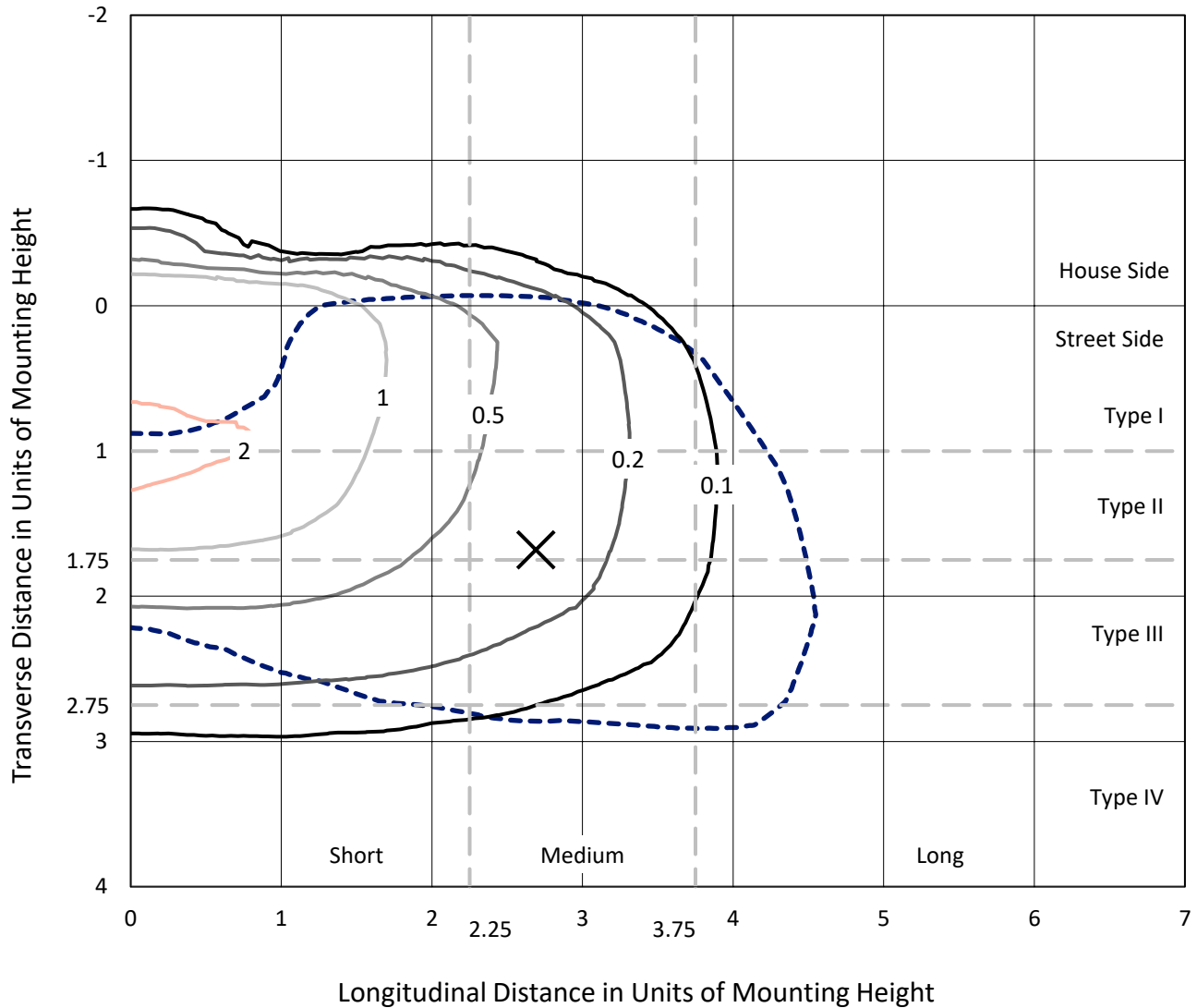
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

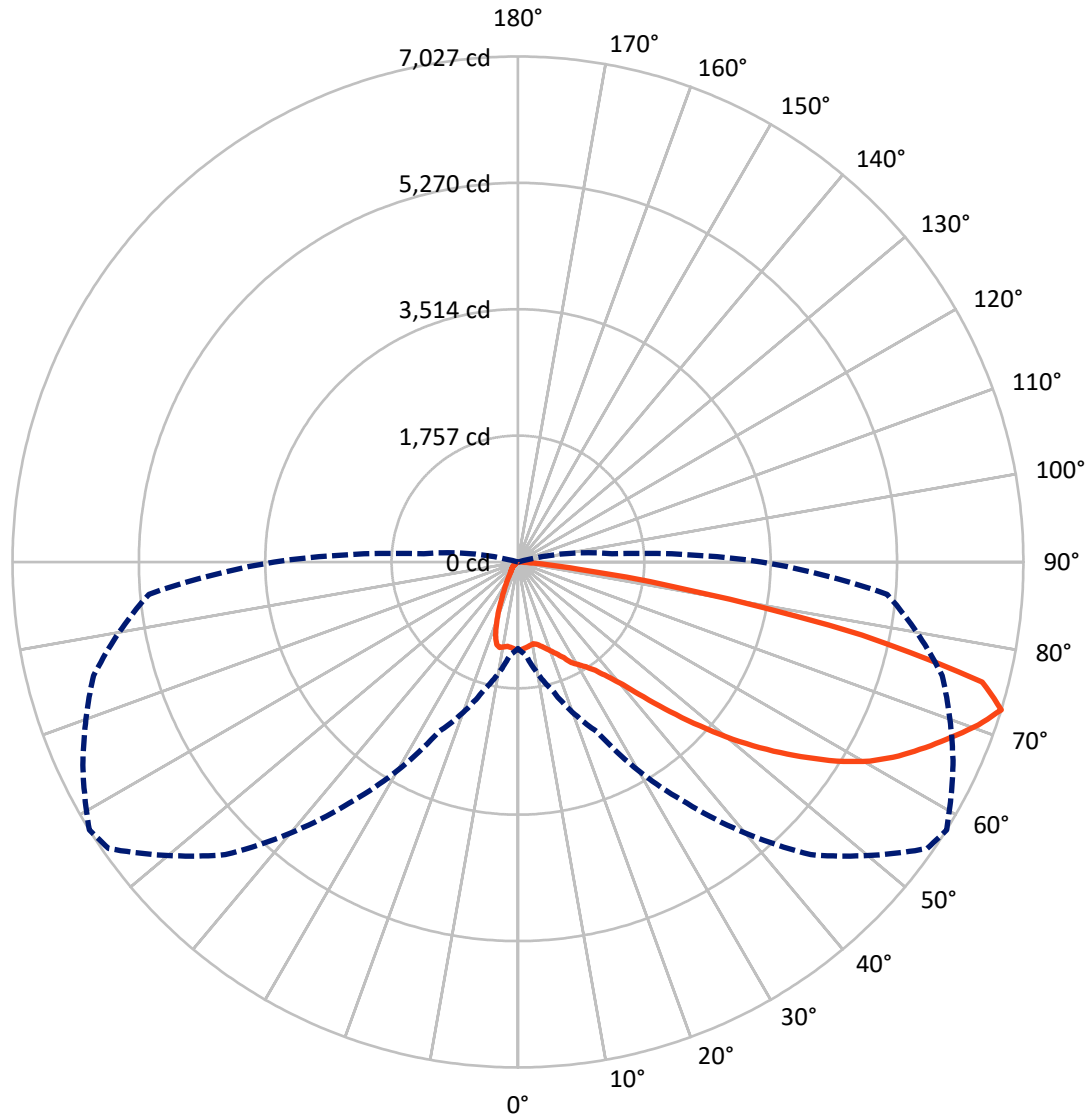
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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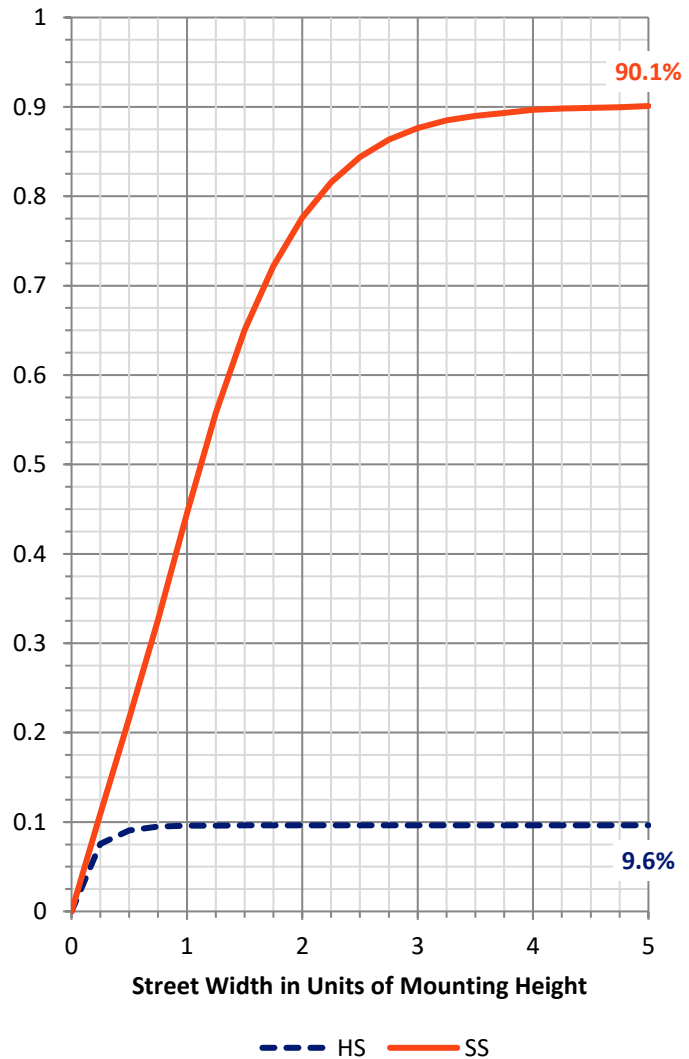
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	993.5	0.0	993.5
	% Fixture	9.7	0.0	9.7
<b>Street Side</b>	Lumens	9223.5	0.0	9223.5
	% Fixture	90.3	0.0	90.3
<b>Total</b>	Lumens	10217.0	0.0	10217.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	112.5	1.1
10°-20°	293.0	2.9
20°-30°	460.4	4.5
30°-40°	793.9	7.8
40°-50°	1510.5	14.8
50°-60°	2392.2	23.4
60°-70°	2791.4	27.3
70°-80°	1748.3	17.1
80°-90°	114.8	1.1
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°	10217.0	100.0
0°-180°	10217.0	100.0

**Coefficient of Utilization**



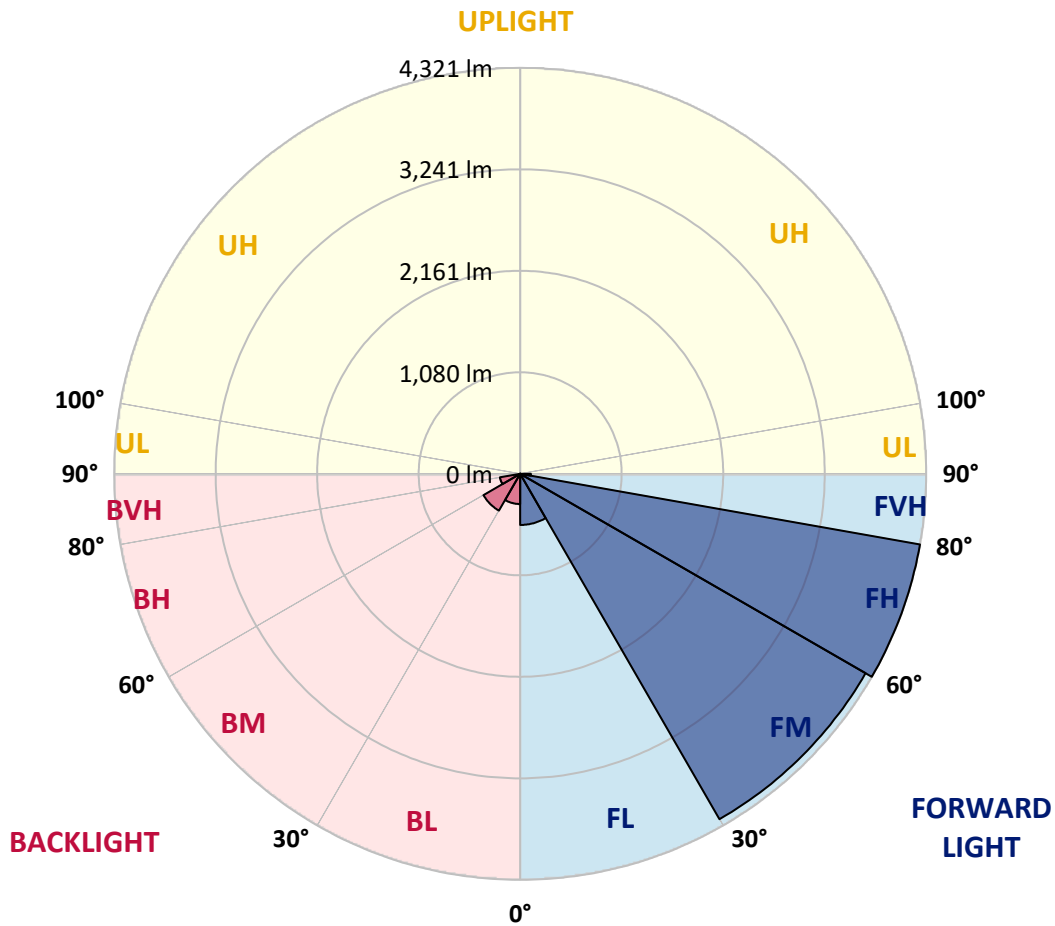
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	544.2	5.3			
FM (30°-60°)	4244.6	41.5			
FH (60°-80°)	4321.1	42.3			G2/5000
FVH (80°-90°)	113.6	1.1			G2/225
BL (0°-30°)	321.7	3.1	B1/500		
BM (30°-60°)	452.1	4.4	B1/1000		
BH (60°-80°)	218.6	2.1	B1/500		G1/500
BVH (80°-90°)	1.1	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 IV Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	58°	65°	75°	85°
0°	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0
2.5°	1220.5	1215.0	1213.2	1211.4	1213.2	1215.0	1209.5	1215.0	1211.4	1213.2	1216.8
5°	1176.6	1171.2	1169.3	1171.2	1176.6	1185.8	1189.4	1194.9	1194.9	1200.4	1202.2
7.5°	1127.3	1123.7	1121.8	1125.5	1136.5	1156.5	1167.5	1174.8	1182.1	1193.1	1204.1
10°	1099.9	1098.1	1096.3	1101.7	1112.7	1131.0	1145.6	1156.5	1184.0	1215.0	1235.1
12.5°	1081.6	1081.6	1085.3	1096.3	1110.9	1125.5	1160.2	1174.8	1216.8	1264.3	1291.8
15°	1067.0	1067.0	1072.5	1092.6	1112.7	1147.4	1198.6	1215.0	1264.3	1322.8	1359.4
17.5°	1056.1	1059.7	1063.4	1083.5	1121.8	1180.3	1240.6	1264.3	1324.6	1388.6	1428.8
20°	1057.9	1061.5	1063.4	1083.5	1138.3	1218.7	1295.4	1322.8	1392.2	1459.8	1500.0
22.5°	1068.8	1074.3	1076.2	1103.6	1167.5	1258.9	1357.5	1388.6	1463.5	1534.8	1565.8
25°	1114.5	1118.2	1107.2	1131.0	1209.5	1321.0	1437.9	1470.8	1545.7	1611.5	1637.1
27.5°	1269.8	1273.5	1213.2	1185.8	1242.4	1372.1	1536.6	1582.3	1675.4	1719.3	1722.9
30°	1606.0	1609.7	1490.9	1361.2	1321.0	1416.0	1591.4	1655.3	1775.9	1825.3	1803.3
32.5°	2039.0	2035.4	1872.8	1680.9	1507.3	1492.7	1670.0	1737.6	1869.1	1916.6	1900.2
35°	2473.9	2479.4	2340.5	2051.8	1803.3	1637.1	1770.5	1849.0	2008.0	2075.6	2046.3
37.5°	2771.7	2808.2	2747.9	2435.5	2166.9	1903.8	1933.1	2017.1	2216.3	2307.6	2245.5
40°	3191.9	3182.8	3036.6	2806.4	2568.9	2298.5	2196.2	2236.4	2464.7	2587.2	2490.3
42.5°	3756.5	3738.2	3489.7	3265.0	3000.1	2779.0	2570.7	2563.4	2749.8	2892.3	2751.6
45°	4268.1	4240.7	4070.8	3853.3	3562.8	3308.9	3027.5	2963.5	3093.3	3213.9	3049.4
47.5°	4675.5	4629.8	4509.3	4394.2	4322.9	3928.2	3506.2	3409.4	3475.1	3564.7	3332.6
50°	5157.9	5031.8	4856.4	4787.0	4935.0	4629.8	3966.6	3873.4	3869.8	3920.9	3624.9
52.5°	5377.1	5148.7	5050.1	5108.5	5369.8	5282.1	4463.6	4330.2	4277.2	4282.7	3897.2
55°	5112.2	5086.6	5139.6	5322.3	5664.0	5612.8	4940.5	4776.0	4697.4	4598.8	4158.5
57.5°	4810.7	4889.3	5099.4	5448.4	6036.7	5958.1	5410.0	5223.7	5079.3	4852.8	4449.0
60°	4533.0	4613.4	4960.6	5477.6	6241.3	6290.7	5801.0	5623.8	5410.0	5112.2	4768.7
62.5°	4111.0	4173.1	4660.9	5435.6	6151.8	6484.3	6073.2	5939.9	5740.7	5358.9	5136.0
65°	3635.9	3676.1	4158.5	5099.4	5976.4	6462.4	6298.0	6223.1	6029.4	5616.5	5499.5
67.5°	3115.2	3162.7	3564.7	4494.6	5632.9	6360.1	6509.9	6502.6	6281.5	5901.5	5762.6
70°	2515.9	2519.6	2852.1	3727.3	5033.6	6155.5	6773.0	6789.5	6522.7	6115.3	5773.6
72.5°	1204.1	1302.7	1849.0	2601.8	4090.9	5753.5	6944.8	7027.0	6674.4	6108.0	5150.6
75°	275.9	285.0	539.0	1236.9	2399.0	4416.1	6515.4	6668.9	6305.3	5282.1	3628.6
77.5°	100.5	106.0	151.6	361.8	922.7	2282.0	4662.7	4887.5	4660.9	3414.8	1715.6
80°	67.6	65.8	78.6	160.8	423.9	646.8	2384.4	2517.7	2298.5	1165.7	411.1
82.5°	34.7	36.5	54.8	89.5	285.0	224.7	796.6	866.0	712.6	233.9	76.7
85°	16.4	16.4	31.1	56.6	120.6	78.6	177.2	213.8	191.8	102.3	25.6
87.5°	16.4	16.4	29.2	36.5	62.1	32.9	43.9	54.8	51.2	54.8	9.1
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°	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0	1226.0
2.5°	1216.8	1215.0	1213.2	1216.8	1215.0	1218.7	1218.7	1222.3	1222.3	1218.7	1216.8
5°	1200.4	1196.7	1193.1	1193.1	1191.3	1194.9	1205.9	1215.0	1216.8	1211.4	1209.5
7.5°	1202.2	1202.2	1198.6	1191.3	1178.5	1178.5	1178.5	1189.4	1194.9	1191.3	1189.4
10°	1235.1	1236.9	1227.8	1211.4	1189.4	1169.3	1131.0	1074.3	1021.3	1006.7	1001.2
12.5°	1291.8	1293.6	1275.3	1246.1	1200.4	1081.6	935.5	800.3	696.1	666.9	661.4
15°	1359.4	1361.2	1328.3	1280.8	1141.9	866.0	648.6	495.1	403.8	381.9	380.0
17.5°	1428.8	1425.1	1375.8	1284.4	968.4	613.9	394.7	316.1	292.3	286.9	288.7
20°	1496.4	1485.4	1417.8	1216.8	745.5	402.0	288.7	270.4	264.9	261.3	261.3
22.5°	1558.5	1536.6	1452.5	1083.5	522.5	288.7	257.6	254.0	246.7	241.2	239.3
25°	1620.6	1589.6	1474.5	909.9	350.8	252.1	243.0	235.7	226.6	219.3	217.4
27.5°	1695.5	1651.7	1463.5	690.6	263.1	233.9	226.6	215.6	202.8	191.8	188.2
30°	1766.8	1717.5	1401.4	476.9	224.7	215.6	204.6	188.2	171.7	159.0	155.3
32.5°	1856.3	1799.7	1289.9	312.4	195.5	188.2	177.2	157.1	135.2	120.6	116.9
35°	1984.2	1920.3	1147.4	219.3	171.7	159.0	144.3	122.4	98.7	87.7	85.9
37.5°	2163.3	2077.4	968.4	177.2	151.6	133.4	111.5	89.5	73.1	63.9	62.1
40°	2382.5	2251.0	769.2	157.1	135.2	111.5	84.0	63.9	53.0	45.7	45.7
42.5°	2620.0	2413.6	566.4	144.3	118.8	91.4	62.1	45.7	38.4	34.7	32.9
45°	2864.9	2557.9	381.9	133.4	104.1	69.4	43.9	31.1	25.6	25.6	23.8
47.5°	3118.8	2654.8	246.7	120.6	87.7	51.2	29.2	21.9	18.3	18.3	18.3
50°	3371.0	2705.9	175.4	109.6	71.3	34.7	21.9	16.4	14.6	14.6	14.6
52.5°	3553.7	2673.0	140.7	95.0	54.8	25.6	16.4	12.8	11.0	11.0	11.0
55°	3712.6	2616.4	122.4	82.2	40.2	18.3	12.8	11.0	9.1	9.1	9.1
57.5°	3875.3	2543.3	109.6	69.4	29.2	12.8	9.1	7.3	7.3	7.3	7.3
60°	4023.3	2419.1	95.0	54.8	20.1	9.1	7.3	5.5	5.5	5.5	5.5
62.5°	4167.6	2313.1	82.2	42.0	14.6	7.3	3.7	3.7	1.8	1.8	1.8
65°	4249.8	2170.6	65.8	27.4	9.1	5.5	1.8	1.8	0.0	0.0	0.0
67.5°	4224.2	2000.7	45.7	16.4	5.5	3.7	1.8	0.0	0.0	0.0	0.0
70°	4047.0	1772.3	27.4	9.1	5.5	3.7	1.8	0.0	0.0	0.0	0.0
72.5°	3389.3	1311.9	16.4	7.3	3.7	1.8	0.0	0.0	0.0	0.0	0.0
75°	2263.8	602.9	9.1	5.5	1.8	1.8	0.0	0.0	0.0	0.0	0.0
77.5°	1036.0	180.9	5.5	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0
80°	208.3	47.5	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	43.9	9.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	9.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.7	1.8	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)