

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: P399248

Luminaire Tested: **ARCH-L-PA3-110-830-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P399248  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)  
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-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 485mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10041 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

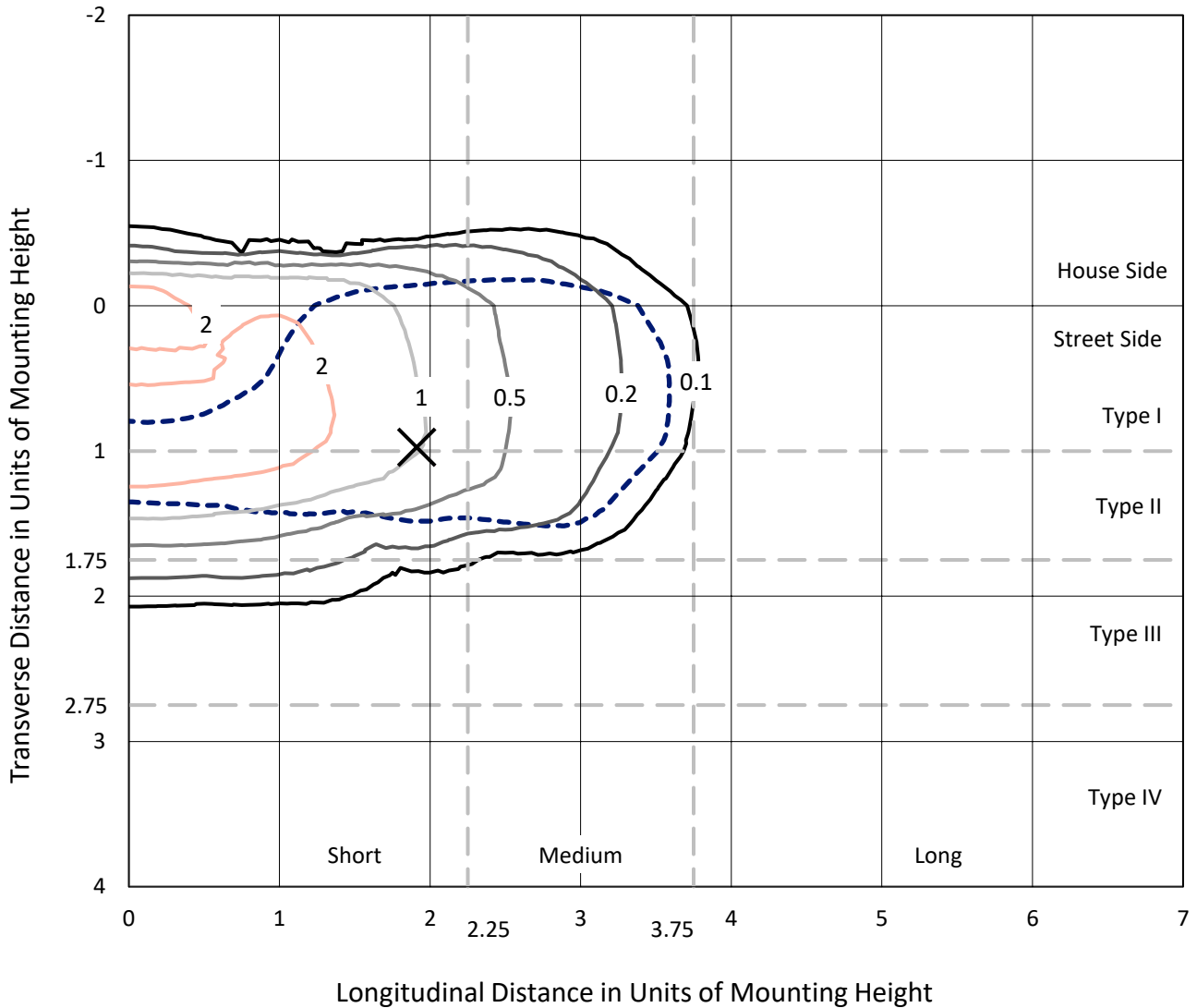
Input Watts (W): 113  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

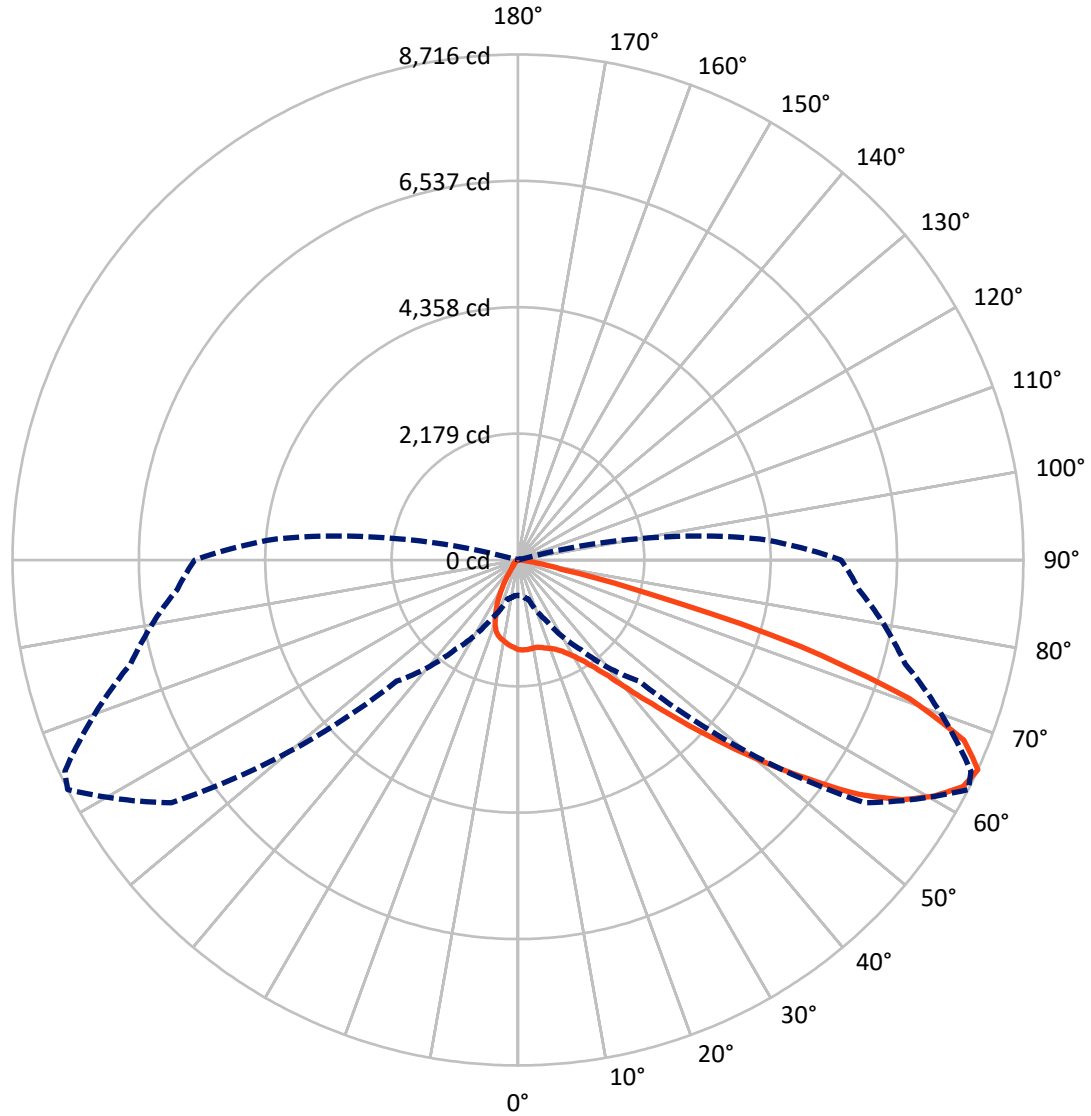
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

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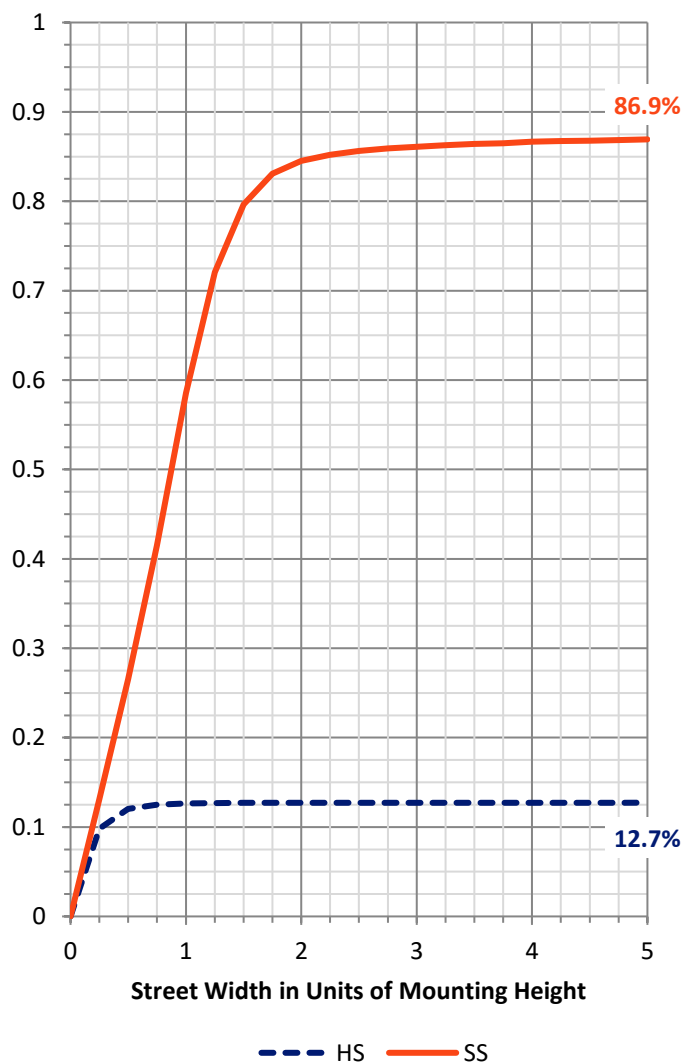
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1292.3	0.0	1292.3
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	8748.7	0.0	8748.7
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	10041.0	0.0	10041.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	141.2	1.4
10°-20°	348.2	3.5
20°-30°	516.1	5.1
30°-40°	958.2	9.5
40°-50°	2029.9	20.2
50°-60°	2806.9	28.0
60°-70°	2247.0	22.4
70°-80°	933.6	9.3
80°-90°	59.9	0.6
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°	10041.0	100.0
0°-180°	10041.0	100.0

**Coefficient of Utilization**



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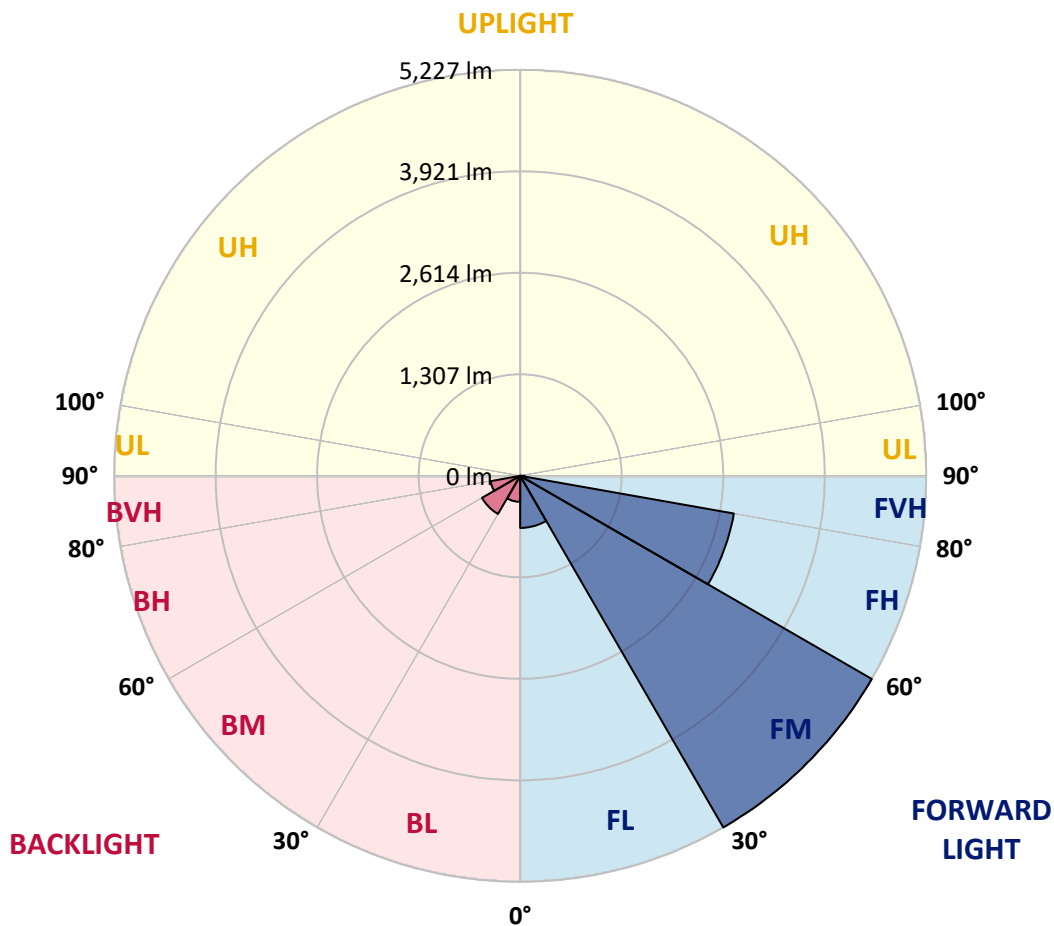
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	670.5	6.7			
FM (30°-60°)	5227.4	52.1			
FH (60°-80°)	2793.6	27.8			G2/5000
FVH (80°-90°)	57.2	0.6			G1/100
BL (0°-30°)	334.9	3.3	B1/500		
BM (30°-60°)	567.7	5.7	B1/1000		
BH (60°-80°)	387.0	3.9	B1/500		G1/500
BVH (80°-90°)	2.7	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-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8
2.5°	1573.4	1569.6	1565.8	1563.9	1563.9	1562.0	1554.4	1552.5	1548.7	1544.9	1541.1
5°	1558.2	1552.5	1550.6	1552.5	1554.4	1558.2	1554.4	1554.4	1550.6	1546.8	1539.2
7.5°	1520.3	1516.5	1518.4	1524.1	1526.0	1539.2	1541.1	1546.8	1546.8	1543.0	1537.3
10°	1474.8	1472.9	1472.9	1482.4	1491.8	1510.8	1524.1	1539.2	1541.1	1541.1	1531.7
12.5°	1440.7	1438.8	1444.5	1455.8	1474.8	1499.4	1522.2	1544.9	1548.7	1550.6	1535.4
15°	1419.8	1419.8	1427.4	1450.1	1476.7	1510.8	1537.3	1567.7	1571.5	1569.6	1548.7
17.5°	1400.9	1402.8	1417.9	1455.8	1486.2	1531.7	1563.9	1598.0	1599.9	1598.0	1563.9
20°	1393.3	1397.1	1419.8	1469.1	1503.2	1554.4	1596.1	1630.2	1632.1	1624.5	1579.0
22.5°	1414.1	1416.0	1444.5	1497.5	1529.8	1586.6	1639.7	1671.9	1673.8	1662.5	1601.8
25°	1486.2	1486.2	1510.8	1556.3	1584.7	1641.6	1698.5	1736.4	1736.4	1723.1	1653.0
27.5°	1654.9	1639.7	1634.0	1647.3	1656.8	1717.4	1778.1	1825.5	1823.6	1804.6	1719.3
30°	1980.9	1943.0	1882.3	1814.1	1780.0	1821.7	1878.6	1939.2	1937.3	1907.0	1800.8
32.5°	2528.7	2473.8	2329.7	2149.6	2003.7	1956.3	2009.4	2075.7	2077.6	2041.6	1931.6
35°	3296.5	3209.3	2951.5	2701.3	2367.6	2187.5	2202.7	2274.7	2297.5	2278.5	2151.5
37.5°	4035.8	3956.1	3709.7	3362.8	2909.8	2542.0	2477.6	2540.1	2566.7	2566.7	2432.1
40°	4780.7	4687.9	4469.9	4121.1	3643.4	3095.5	2864.3	2915.5	2943.9	2949.6	2773.3
42.5°	5377.9	5317.2	5150.4	4879.3	4431.9	4066.1	3421.6	3393.1	3419.7	3398.8	3169.5
45°	5791.1	5743.7	5628.1	5525.7	5307.7	5123.8	4166.6	3975.1	3992.2	3920.1	3614.9
47.5°	5876.4	5823.3	5798.7	5940.9	6096.3	6141.8	5082.1	4667.0	4649.9	4490.7	4077.5
50°	5504.9	5510.6	5601.5	6007.2	6655.5	7065.0	6143.7	5448.0	5385.4	5031.0	4507.8
52.5°	4703.0	4794.0	5023.4	5681.2	6826.1	7736.0	7205.2	6276.4	6179.7	5556.0	4830.0
55°	3679.4	3796.9	4174.1	4930.5	6469.7	8035.5	8100.0	7137.0	6917.1	5950.3	5080.2
57.5°	2735.4	2771.4	3211.2	3901.2	5626.2	7741.7	8558.7	7800.5	7518.0	6265.0	5328.6
60°	1704.2	1726.9	2191.3	2970.4	4261.3	6655.5	8558.7	8257.3	7988.1	6547.5	5556.0
62.5°	1059.6	1067.2	1241.6	2035.9	2896.5	4936.2	8204.2	8611.8	8395.7	6750.3	5751.3
65°	610.4	618.0	699.5	1150.6	1884.2	2955.3	7298.1	8716.0	8619.4	6911.4	5902.9
67.5°	445.5	449.3	481.5	646.4	1232.1	1518.4	5482.1	8297.1	8418.4	6991.0	5899.2
70°	386.7	392.4	434.1	504.2	889.0	932.6	2790.3	7165.4	7504.7	6877.3	5722.9
72.5°	297.6	305.2	367.7	473.9	652.1	671.0	1010.4	5099.2	5612.9	6166.4	5239.5
75°	204.7	212.3	274.9	390.5	538.4	502.3	555.4	2346.8	2960.9	4136.2	3988.4
77.5°	130.8	132.7	172.5	284.3	464.4	356.4	381.0	765.8	1074.8	1871.0	1882.3
80°	87.2	89.1	106.2	183.9	318.5	329.8	235.1	354.5	388.6	545.9	379.1
82.5°	53.1	53.1	72.0	115.6	193.4	273.0	153.5	185.8	199.0	210.4	98.6
85°	20.9	20.9	43.6	75.8	121.3	127.0	96.7	108.1	113.7	123.2	45.5
87.5°	5.7	5.7	24.6	41.7	53.1	58.8	58.8	53.1	56.9	70.1	22.7
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°	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8
2.5°	1539.2	1533.6	1526.0	1518.4	1510.8	1505.1	1499.4	1499.4	1495.6	1490.0	1486.2
5°	1535.4	1526.0	1508.9	1495.6	1474.8	1459.6	1448.2	1438.8	1433.1	1419.8	1417.9
7.5°	1529.8	1518.4	1493.7	1467.2	1433.1	1406.5	1380.0	1361.1	1342.1	1326.9	1323.1
10°	1520.3	1507.0	1471.0	1433.1	1385.7	1336.4	1273.9	1201.8	1135.5	1097.6	1086.2
12.5°	1520.3	1503.2	1455.8	1404.7	1336.4	1215.1	1055.9	896.6	773.4	718.4	703.3
15°	1529.8	1507.0	1444.5	1374.3	1247.3	1000.9	743.1	532.7	398.1	356.4	346.9
17.5°	1539.2	1507.0	1427.4	1332.6	1084.3	726.0	422.7	280.6	237.0	227.5	227.5
20°	1543.0	1503.2	1404.7	1254.9	866.3	451.2	252.1	210.4	193.4	187.7	187.7
22.5°	1558.2	1505.1	1387.6	1143.1	629.3	265.4	199.0	176.3	159.2	153.5	153.5
25°	1596.1	1527.9	1391.4	1000.9	403.8	200.9	168.7	146.0	128.9	121.3	121.3
27.5°	1656.8	1579.0	1412.2	836.0	254.0	172.5	142.2	117.5	104.3	96.7	96.7
30°	1725.0	1635.9	1421.7	646.4	189.6	146.0	115.6	92.9	83.4	77.7	75.8
32.5°	1844.4	1734.5	1414.1	443.6	155.4	123.2	92.9	73.9	66.3	64.5	64.5
35°	2035.9	1907.0	1399.0	278.7	128.9	98.6	73.9	60.7	55.0	53.1	51.2
37.5°	2295.6	2159.1	1353.5	183.9	106.2	77.7	60.7	51.2	45.5	43.6	43.6
40°	2612.2	2447.2	1266.3	140.3	91.0	62.6	51.2	43.6	39.8	37.9	37.9
42.5°	2974.2	2767.6	1127.9	121.3	75.8	53.1	43.6	36.0	34.1	32.2	32.2
45°	3370.4	3103.1	936.4	108.1	64.5	43.6	36.0	32.2	28.4	28.4	26.5
47.5°	3791.2	3440.5	720.3	94.8	55.0	37.9	32.2	26.5	24.6	22.7	22.7
50°	4196.9	3741.9	506.1	81.5	45.5	32.2	26.5	22.7	20.9	19.0	19.0
52.5°	4483.1	3923.9	358.3	70.1	37.9	28.4	20.9	17.1	15.2	15.2	15.2
55°	4712.5	4037.7	250.2	58.8	32.2	24.6	17.1	13.3	13.3	11.4	11.4
57.5°	4928.6	4111.6	183.9	49.3	26.5	19.0	13.3	9.5	9.5	7.6	7.6
60°	5152.3	4151.4	140.3	39.8	22.7	15.2	9.5	7.6	5.7	5.7	5.7
62.5°	5377.9	4176.0	108.1	32.2	19.0	11.4	7.6	5.7	3.8	1.9	1.9
65°	5575.0	4183.6	83.4	24.6	15.2	7.6	5.7	1.9	0.0	0.0	0.0
67.5°	5633.8	4096.4	64.5	19.0	11.4	5.7	3.8	0.0	0.0	0.0	0.0
70°	5474.5	3865.2	49.3	15.2	9.5	3.8	1.9	0.0	0.0	0.0	0.0
72.5°	4858.5	3241.5	37.9	9.5	7.6	3.8	1.9	0.0	0.0	0.0	0.0
75°	3476.6	1728.8	26.5	7.6	5.7	1.9	0.0	0.0	0.0	0.0	0.0
77.5°	1599.9	669.2	19.0	5.7	3.8	1.9	0.0	0.0	0.0	0.0	0.0
80°	312.8	166.8	7.6	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	72.0	28.4	3.8	3.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
85°	24.6	9.5	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.5	3.8	1.9	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)