

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: P400508

Luminaire Tested: **ARCH-L-PA3-90-740-U-T2U-HSS**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400508  
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-PA3-90-740-U-T2U-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 4000K, 400mA 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: 10736 lumens  
Efficiency: N/A  
Efficacy: 115.4 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

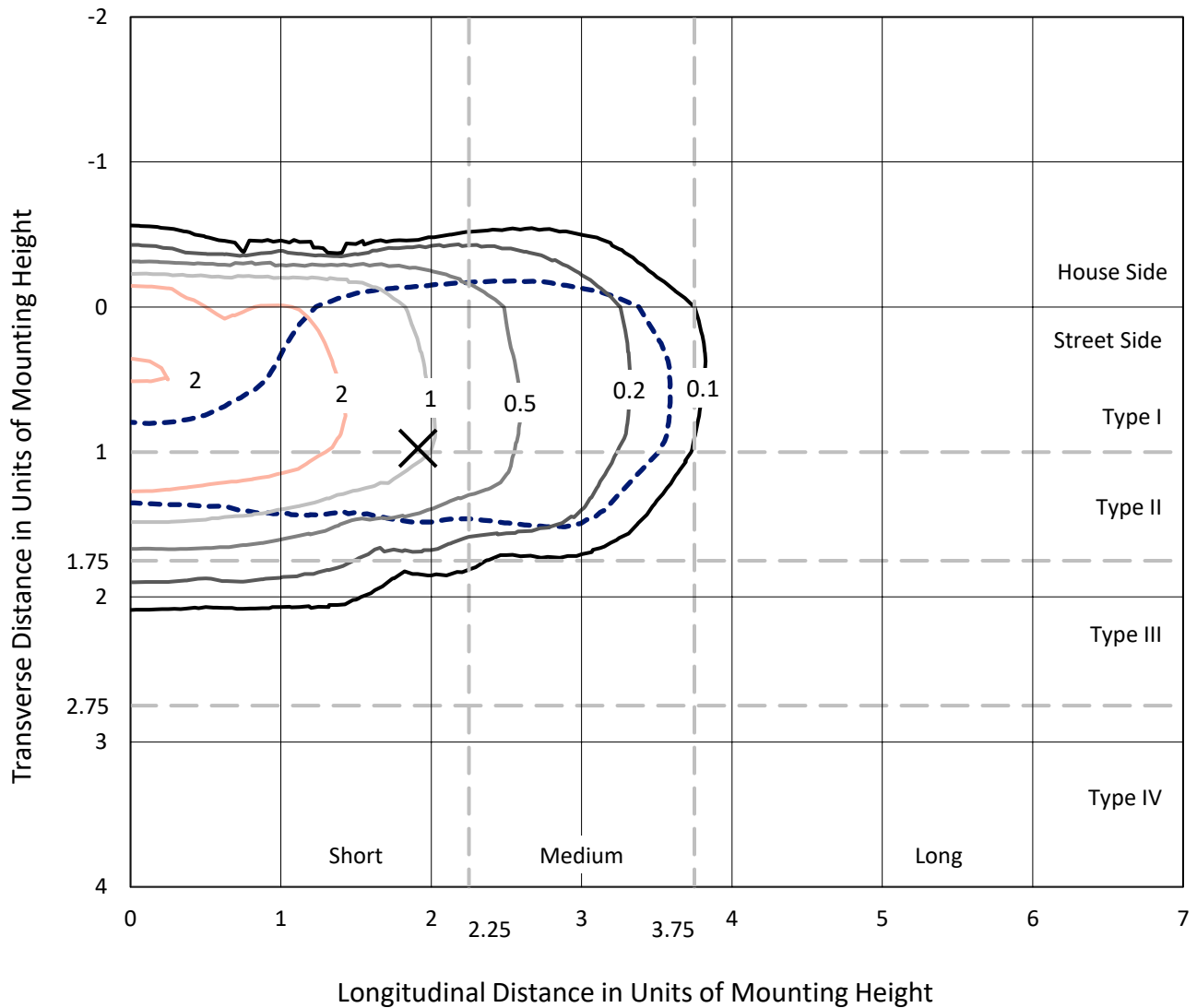
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

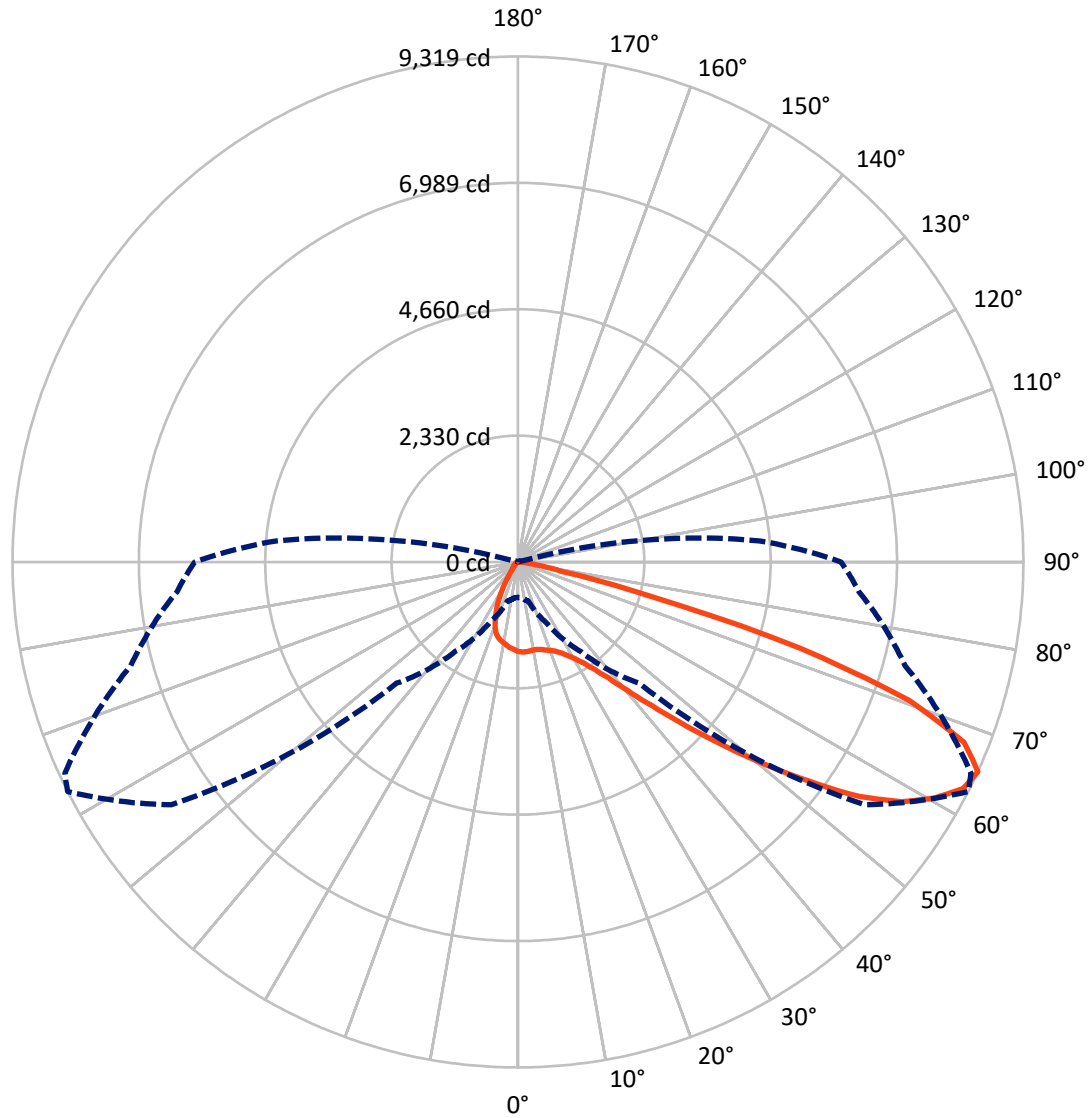
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 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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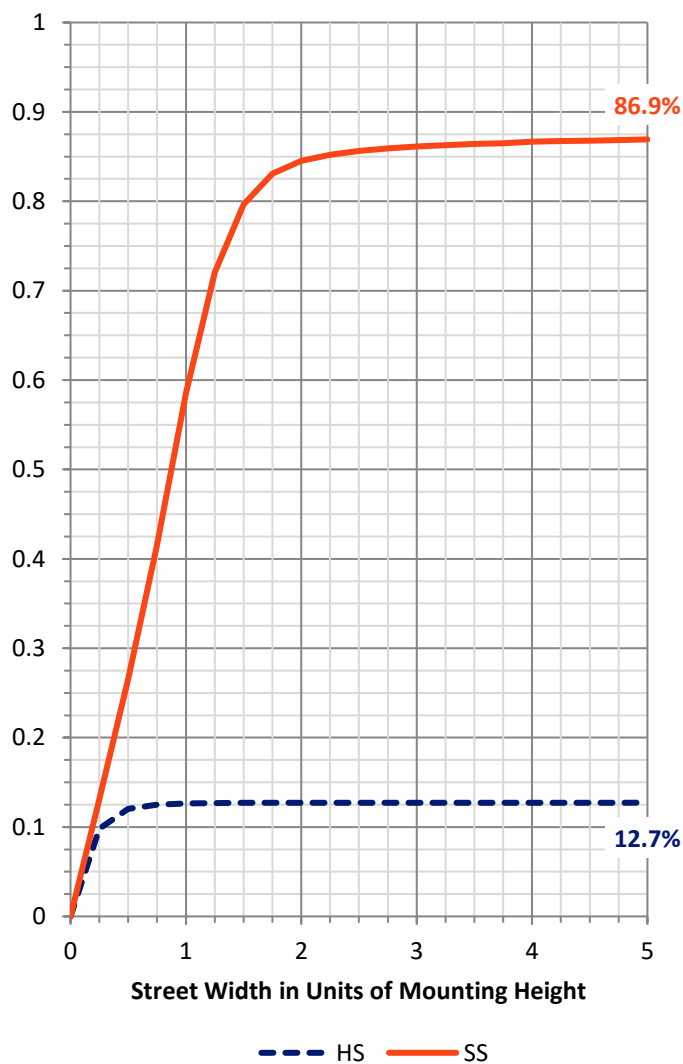
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1381.7	0.0	1381.7
	% Fixture	12.9	0.0	12.9
<b>Street Side</b>	Lumens	9354.3	0.0	9354.3
	% Fixture	87.1	0.0	87.1
<b>Total</b>	Lumens	10736.0	0.0	10736.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.9	1.4
10°-20°	372.3	3.5
20°-30°	551.8	5.1
30°-40°	1024.5	9.5
40°-50°	2170.5	20.2
50°-60°	3001.2	28.0
60°-70°	2402.5	22.4
70°-80°	998.2	9.3
80°-90°	64.1	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°	10736.0	100.0
0°-180°	10736.0	100.0

**Coefficient of Utilization**

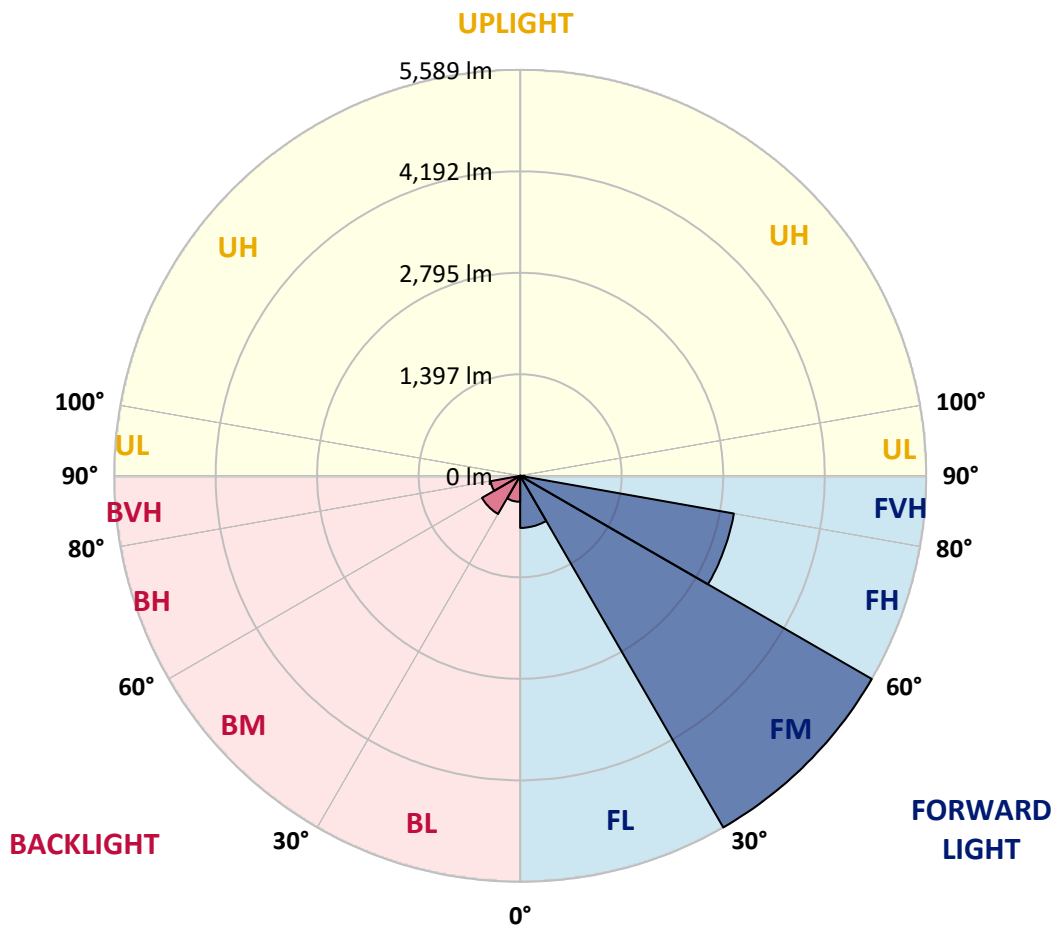


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	716.9	6.7			
FM (30°-60°)	5589.2	52.1			
FH (60°-80°)	2987.0	27.8			G2/5000
FVH (80°-90°)	61.2	0.6			G1/100
BL (0°-30°)	358.1	3.3	B1/500		
BM (30°-60°)	607.0	5.7	B1/1000		
BH (60°-80°)	413.7	3.9	B1/500		G1/500
BVH (80°-90°)	2.9	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°	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9
2.5°	1682.3	1678.2	1674.2	1672.1	1672.1	1670.1	1662.0	1660.0	1655.9	1651.9	1647.8
5°	1666.0	1660.0	1657.9	1660.0	1662.0	1666.0	1662.0	1662.0	1657.9	1653.9	1645.8
7.5°	1625.5	1621.5	1623.5	1629.6	1631.6	1645.8	1647.8	1653.9	1653.9	1649.8	1643.8
10°	1576.9	1574.8	1574.8	1585.0	1595.1	1615.4	1629.6	1645.8	1647.8	1647.8	1637.7
12.5°	1540.4	1538.4	1544.4	1556.6	1576.9	1603.2	1627.5	1651.9	1655.9	1657.9	1641.7
15°	1518.1	1518.1	1526.2	1550.5	1578.9	1615.4	1643.8	1676.2	1680.2	1678.2	1655.9
17.5°	1497.8	1499.8	1516.1	1556.6	1589.0	1637.7	1672.1	1708.6	1710.6	1708.6	1672.1
20°	1489.7	1493.8	1518.1	1570.8	1607.3	1662.0	1706.6	1743.1	1745.1	1737.0	1688.3
22.5°	1512.0	1514.0	1544.4	1601.2	1635.6	1696.4	1753.2	1787.7	1789.7	1777.5	1712.7
25°	1589.0	1589.0	1615.4	1664.0	1694.4	1755.2	1816.0	1856.6	1856.6	1842.4	1767.4
27.5°	1769.4	1753.2	1747.1	1761.3	1771.4	1836.3	1901.2	1951.8	1949.8	1929.5	1838.3
30°	2118.0	2077.5	2012.6	1939.7	1903.2	1947.8	2008.6	2073.4	2071.4	2039.0	1925.5
32.5°	2703.8	2645.0	2491.0	2298.4	2142.4	2091.7	2148.4	2219.4	2221.4	2182.9	2065.3
35°	3524.6	3431.4	3155.8	2888.2	2531.5	2339.0	2355.2	2432.2	2456.5	2436.2	2300.4
37.5°	4315.1	4230.0	3966.5	3595.6	3111.2	2718.0	2649.1	2715.9	2744.3	2744.3	2600.4
40°	5111.6	5012.3	4779.2	4406.3	3895.6	3309.8	3062.5	3117.3	3147.7	3153.7	2965.2
42.5°	5750.1	5685.2	5506.9	5217.0	4738.7	4347.5	3658.4	3628.0	3656.4	3634.1	3388.8
45°	6191.9	6141.3	6017.6	5908.2	5675.1	5478.5	4455.0	4250.2	4268.5	4191.5	3865.1
47.5°	6283.1	6226.4	6200.0	6352.1	6518.3	6566.9	5433.9	4990.0	4971.8	4801.5	4359.7
50°	5885.9	5892.0	5989.3	6423.0	7116.2	7554.0	6568.9	5825.1	5758.2	5379.2	4819.8
52.5°	5028.5	5125.8	5371.1	6074.4	7298.6	8271.5	7703.9	6710.8	6607.4	5940.6	5164.3
55°	3934.1	4059.7	4463.1	5271.8	6917.5	8591.7	8660.6	7631.0	7395.9	6362.2	5431.9
57.5°	2924.7	2963.2	3433.4	4171.2	6015.6	8277.5	9151.1	8340.4	8038.4	6698.6	5697.4
60°	1822.1	1846.4	2343.0	3176.0	4556.3	7116.2	9151.1	8828.8	8541.0	7000.6	5940.6
62.5°	1133.0	1141.1	1327.6	2176.8	3097.0	5277.8	8772.1	9207.9	8976.8	7217.5	6149.4
65°	652.6	660.7	747.9	1230.3	2014.7	3159.8	7803.3	9319.3	9216.0	7389.8	6311.5
67.5°	476.3	480.4	514.8	691.1	1317.4	1623.5	5861.6	8871.4	9001.1	7474.9	6307.5
70°	413.5	419.6	464.1	539.1	950.6	997.2	2983.5	7661.4	8024.2	7353.3	6119.0
72.5°	318.2	326.3	393.2	506.7	697.2	717.5	1080.3	5452.2	6001.4	6593.3	5602.1
75°	218.9	227.0	293.9	417.5	575.6	537.1	593.9	2509.2	3165.9	4422.5	4264.4
77.5°	139.9	141.9	184.4	304.0	496.6	381.0	407.4	818.8	1149.2	2000.5	2012.6
80°	93.2	95.3	113.5	196.6	340.5	352.7	251.3	379.0	415.5	583.7	405.4
82.5°	56.8	56.8	77.0	123.6	206.7	291.9	164.2	198.6	212.8	225.0	105.4
85°	22.3	22.3	46.6	81.1	129.7	135.8	103.4	115.5	121.6	131.7	48.6
87.5°	6.1	6.1	26.3	44.6	56.8	62.8	62.8	56.8	60.8	75.0	24.3
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°	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9	1653.9
2.5°	1645.8	1639.7	1631.6	1623.5	1615.4	1609.3	1603.2	1603.2	1599.2	1593.1	1589.0
5°	1641.7	1631.6	1613.4	1599.2	1576.9	1560.7	1548.5	1538.4	1532.3	1518.1	1516.1
7.5°	1635.6	1623.5	1597.1	1568.8	1532.3	1503.9	1475.5	1455.3	1435.0	1418.8	1414.7
10°	1625.5	1611.3	1572.8	1532.3	1481.6	1428.9	1362.0	1285.0	1214.1	1173.5	1161.4
12.5°	1625.5	1607.3	1556.6	1501.9	1428.9	1299.2	1128.9	958.7	826.9	768.2	752.0
15°	1635.6	1611.3	1544.4	1469.4	1333.6	1070.2	794.5	569.5	425.6	381.0	370.9
17.5°	1645.8	1611.3	1526.2	1424.9	1159.3	776.3	452.0	300.0	253.4	243.2	243.2
20°	1649.8	1607.3	1501.9	1341.8	926.3	482.4	269.6	225.0	206.7	200.7	200.7
22.5°	1666.0	1609.3	1483.6	1222.2	672.9	283.8	212.8	188.5	170.3	164.2	164.2
25°	1706.6	1633.6	1487.7	1070.2	431.7	214.8	180.4	156.1	137.8	129.7	129.7
27.5°	1771.4	1688.3	1510.0	893.8	271.6	184.4	152.0	125.7	111.5	103.4	103.4
30°	1844.4	1749.1	1520.1	691.1	202.7	156.1	123.6	99.3	89.2	83.1	81.1
32.5°	1972.1	1854.5	1512.0	474.3	166.2	131.7	99.3	79.0	70.9	68.9	68.9
35°	2176.8	2039.0	1495.8	297.9	137.8	105.4	79.0	64.9	58.8	56.8	54.7
37.5°	2454.5	2308.6	1447.2	196.6	113.5	83.1	64.9	54.7	48.6	46.6	46.6
40°	2793.0	2616.6	1353.9	150.0	97.3	66.9	54.7	46.6	42.6	40.5	40.5
42.5°	3180.1	2959.2	1206.0	129.7	81.1	56.8	46.6	38.5	36.5	34.5	34.5
45°	3603.7	3317.9	1001.2	115.5	68.9	46.6	38.5	34.5	30.4	30.4	28.4
47.5°	4053.6	3678.7	770.2	101.3	58.8	40.5	34.5	28.4	26.3	24.3	24.3
50°	4487.4	4000.9	541.2	87.2	48.6	34.5	28.4	24.3	22.3	20.3	20.3
52.5°	4793.4	4195.5	383.1	75.0	40.5	30.4	22.3	18.2	16.2	16.2	16.2
55°	5038.7	4317.1	267.5	62.8	34.5	26.3	18.2	14.2	14.2	12.2	12.2
57.5°	5269.7	4396.2	196.6	52.7	28.4	20.3	14.2	10.1	10.1	8.1	8.1
60°	5508.9	4438.7	150.0	42.6	24.3	16.2	10.1	8.1	6.1	6.1	6.1
62.5°	5750.1	4465.1	115.5	34.5	20.3	12.2	8.1	6.1	4.1	2.0	2.0
65°	5960.9	4473.2	89.2	26.3	16.2	8.1	6.1	2.0	0.0	0.0	0.0
67.5°	6023.7	4380.0	68.9	20.3	12.2	6.1	4.1	0.0	0.0	0.0	0.0
70°	5853.5	4132.7	52.7	16.2	10.1	4.1	2.0	0.0	0.0	0.0	0.0
72.5°	5194.7	3465.9	40.5	10.1	8.1	4.1	2.0	0.0	0.0	0.0	0.0
75°	3717.2	1848.5	28.4	8.1	6.1	2.0	0.0	0.0	0.0	0.0	0.0
77.5°	1710.6	715.5	20.3	6.1	4.1	2.0	0.0	0.0	0.0	0.0	0.0
80°	334.4	178.4	8.1	4.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	77.0	30.4	4.1	4.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	26.3	10.1	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.1	4.1	2.0	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)