

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: P265585

Luminaire Tested: **ARCH-L-AF72-100-D-U-T3-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P265585  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-100-D-U-T3-7027  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 2700K, 440mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12232.2 lumens  
Efficiency: N/A  
Efficacy: 119.9 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

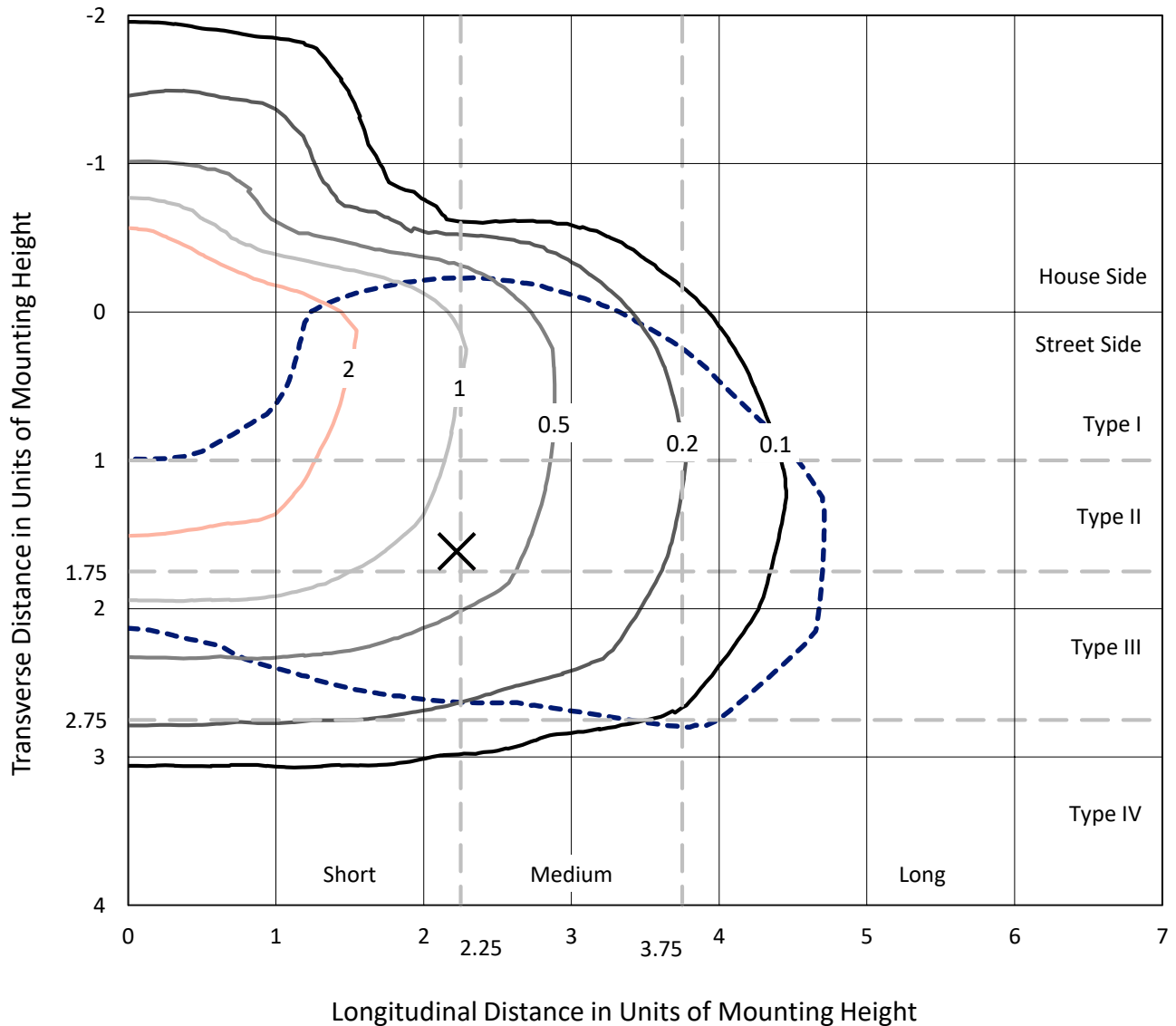
Input Watts (W): 102  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

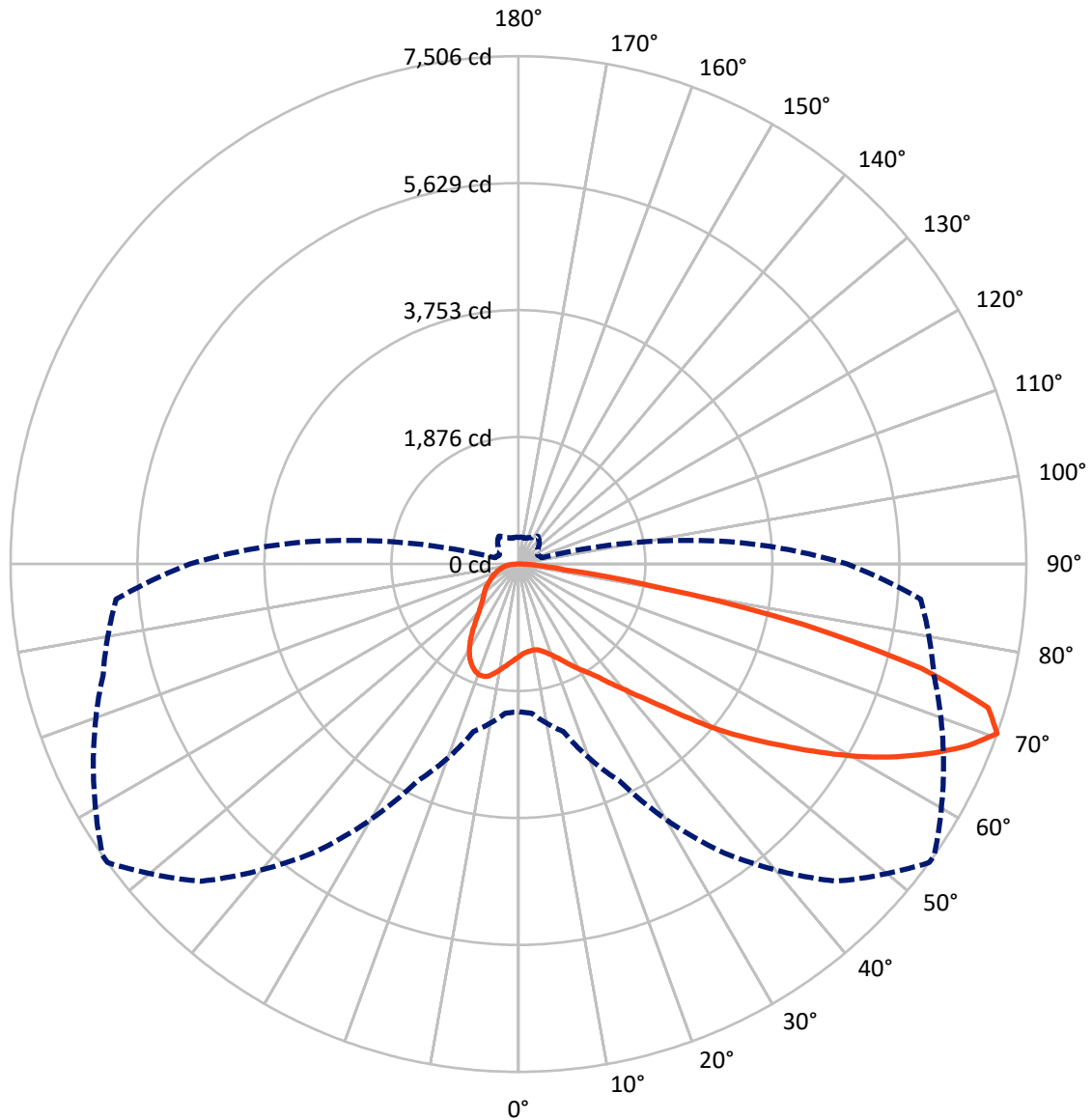
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4 fc  
 Type III - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical



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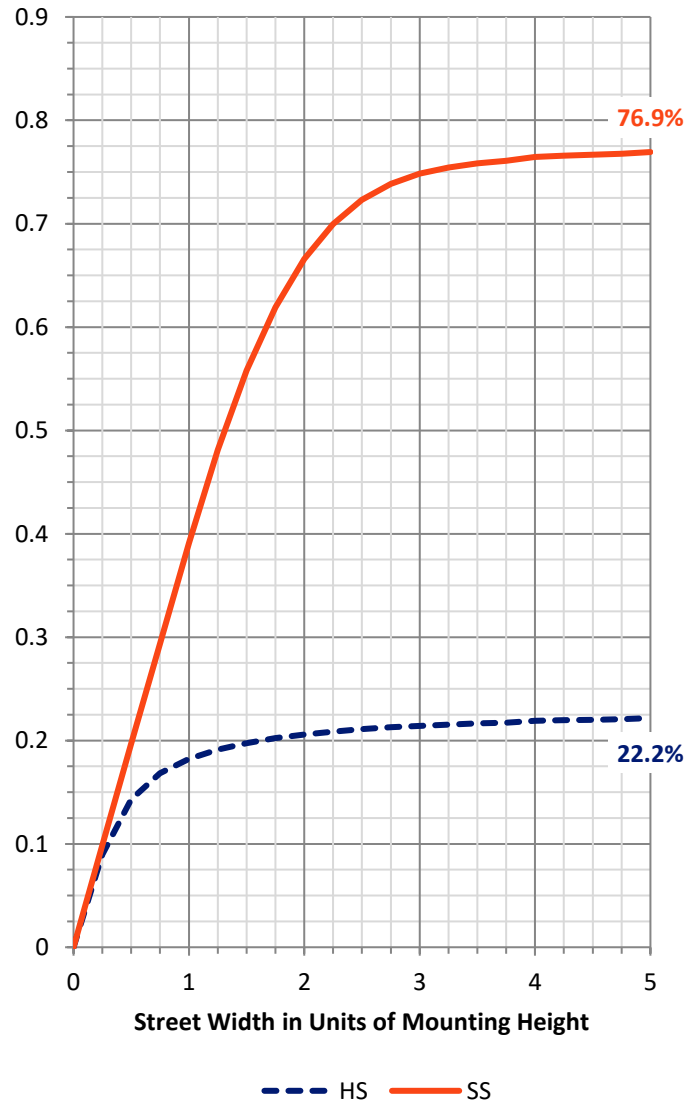
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2774.2	0.0	2774.2
	% Fixture	22.7	0.0	22.7
<b>Street Side</b>	Lumens	9458.0	0.0	9458.0
	% Fixture	77.3	0.0	77.3
<b>Total</b>	Lumens	12232.2	0.0	12232.2
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.3	1.1
10°-20°	429.1	3.5
20°-30°	745.6	6.1
30°-40°	1089.6	8.9
40°-50°	1710.0	14.0
50°-60°	2629.6	21.5
60°-70°	3212.7	26.3
70°-80°	1991.9	16.3
80°-90°	289.4	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°	12232.2	100.0
0°-180°	12232.2	100.0

**Coefficient of Utilization**



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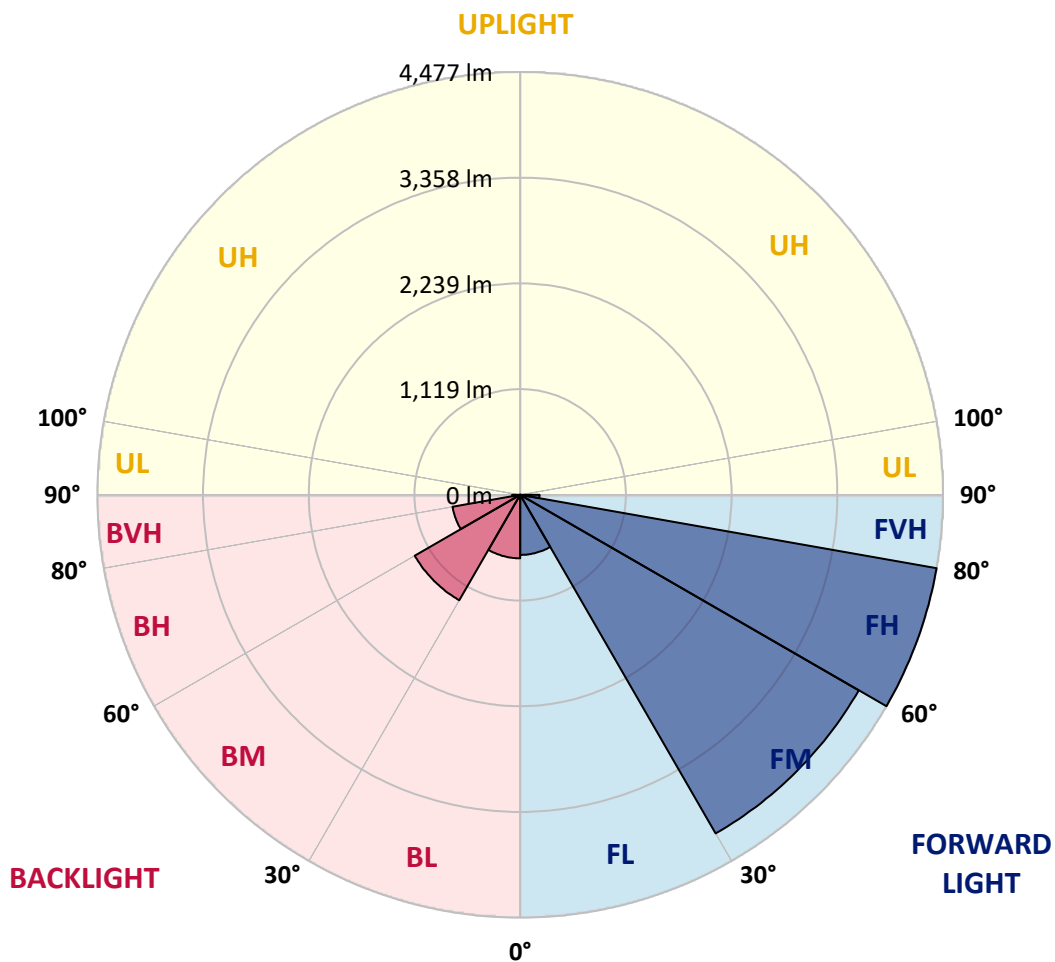
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	636.4	5.2			
FM	(30°-60°)	4140.0	33.8			
FH	(60°-80°)	4477.2	36.6			G2/5000
FVH	(80°-90°)	204.3	1.7			G2/225
BL	(0°-30°)	672.6	5.5	B2/1000		
BM	(30°-60°)	1289.1	10.5	B2/2500		
BH	(60°-80°)	727.5	5.9	B2/1000		G2/1000
BVH	(80°-90°)	85.0	0.7			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	54°	55°	65°	75°	85°
0°	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6
2.5°	1314.8	1310.3	1310.3	1317.0	1319.3	1326.0	1326.0	1328.2	1334.9	1346.1	1359.6
5°	1274.4	1272.2	1274.4	1283.4	1287.9	1301.4	1305.9	1308.0	1321.4	1339.5	1359.6
7.5°	1234.1	1231.9	1236.3	1249.8	1263.2	1283.4	1294.5	1296.9	1317.0	1341.7	1368.6
10°	1220.6	1218.6	1225.2	1236.3	1249.8	1272.2	1290.1	1292.4	1321.4	1350.6	1388.7
12.5°	1238.7	1236.3	1243.2	1254.4	1267.8	1283.4	1303.6	1305.9	1344.0	1382.0	1422.2
15°	1283.4	1283.4	1285.7	1292.4	1305.9	1319.3	1337.1	1339.5	1379.7	1424.5	1464.9
17.5°	1352.8	1348.4	1348.4	1346.1	1355.2	1361.8	1384.2	1386.4	1429.1	1469.4	1509.6
20°	1437.9	1435.8	1426.8	1415.5	1413.4	1417.9	1440.3	1442.5	1485.0	1518.7	1556.8
22.5°	1541.0	1543.3	1523.0	1498.5	1487.2	1494.1	1514.2	1516.3	1547.7	1576.9	1610.4
25°	1677.7	1670.8	1641.8	1606.0	1583.5	1583.5	1603.7	1603.7	1632.8	1650.7	1673.2
27.5°	1807.5	1794.2	1767.2	1715.8	1679.9	1686.6	1706.8	1706.8	1733.5	1740.3	1751.5
30°	1948.7	1935.2	1901.6	1836.7	1789.7	1785.1	1809.7	1807.5	1843.4	1841.2	1832.3
32.5°	2121.1	2114.4	2058.3	1975.6	1912.9	1897.1	1919.6	1921.7	1944.2	1937.5	1908.3
35°	2363.0	2360.7	2309.3	2163.7	2080.8	2051.6	2065.2	2065.2	2080.8	2062.9	2013.6
37.5°	2667.6	2672.1	2627.4	2412.3	2295.8	2246.5	2248.7	2246.5	2251.1	2230.9	2179.4
40°	2972.2	2983.5	2981.2	2721.3	2573.6	2488.5	2457.1	2452.6	2463.8	2454.9	2405.7
42.5°	3373.1	3400.1	3337.4	3102.1	2936.4	2793.1	2707.9	2696.7	2721.3	2732.6	2685.6
45°	3789.8	3780.8	3682.3	3512.1	3361.9	3178.4	3017.0	2999.1	3017.0	3050.6	3001.3
47.5°	4007.1	4000.3	3975.7	3890.6	3868.2	3657.7	3413.5	3397.7	3364.2	3411.3	3353.1
50°	4365.5	4372.1	4271.4	4262.4	4356.5	4240.0	3861.5	3825.6	3765.2	3803.2	3753.9
52.5°	4625.3	4596.2	4533.4	4611.8	4905.3	4842.6	4282.6	4266.9	4210.9	4201.9	4179.5
55°	4730.6	4730.6	4741.8	4923.2	5342.0	5259.1	4739.5	4755.2	4679.0	4616.3	4645.4
57.5°	4761.8	4775.3	4871.6	5171.7	5855.0	5584.0	5243.4	5265.9	5156.1	5030.7	5122.4
60°	4607.3	4647.7	4878.3	5312.8	6143.9	5928.9	5774.2	5781.0	5622.0	5438.2	5599.6
62.5°	4210.9	4260.1	4672.3	5371.1	6096.8	6282.7	6276.0	6291.6	6074.3	5846.0	6047.5
65°	3724.8	3774.0	4213.1	5207.7	6061.0	6535.8	6735.1	6777.7	6497.7	6190.8	6327.5
67.5°	3010.3	3075.3	3491.9	4656.6	5886.2	6744.1	7165.2	7210.1	6824.8	6370.2	6302.9
70°	2181.7	2213.0	2562.3	3539.0	5174.0	6629.9	7505.7	7503.5	6932.3	6356.6	5966.9
72.5°	1050.5	1075.1	1377.6	2197.3	3700.2	5626.4	7259.4	7301.9	6784.4	6161.7	5198.6
75°	432.3	456.9	557.7	927.3	1942.0	3718.2	6152.9	6253.6	6161.7	5530.1	4067.5
77.5°	268.9	277.8	327.1	479.3	886.9	1735.9	4307.3	4443.8	4882.8	4430.4	2685.6
80°	201.6	208.2	244.1	336.0	560.0	640.6	2139.0	2311.5	2958.7	2542.3	1216.2
82.5°	168.1	170.1	194.8	244.1	380.8	367.3	685.3	763.7	1379.7	969.8	418.9
85°	156.8	161.2	174.7	174.7	242.0	230.8	284.5	297.9	401.0	331.5	145.5
87.5°	80.7	76.1	154.6	136.6	125.5	112.0	120.9	130.0	150.0	159.0	64.9
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°	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6	1368.6
2.5°	1364.0	1370.8	1382.0	1393.2	1406.7	1422.2	1431.3	1442.5	1451.4	1446.9	1444.7
5°	1370.8	1382.0	1406.7	1429.1	1456.0	1487.2	1507.4	1529.9	1547.7	1552.2	1545.4
7.5°	1382.0	1402.2	1435.8	1476.1	1511.8	1552.2	1583.5	1615.0	1637.3	1641.8	1641.8
10°	1408.8	1431.3	1476.1	1529.9	1572.4	1615.0	1650.7	1675.3	1695.6	1704.5	1704.5
12.5°	1446.9	1473.8	1527.6	1592.5	1639.5	1679.9	1700.0	1711.2	1720.2	1729.1	1731.5
15°	1491.7	1520.8	1585.8	1655.2	1704.5	1724.7	1724.7	1722.4	1722.4	1726.9	1731.5
17.5°	1536.6	1567.9	1635.1	1708.9	1740.3	1729.1	1713.4	1706.8	1702.3	1700.0	1706.8
20°	1583.5	1615.0	1682.2	1751.5	1742.6	1695.6	1673.2	1657.5	1644.1	1637.3	1646.2
22.5°	1635.1	1664.2	1733.5	1780.7	1713.4	1641.8	1599.3	1574.5	1552.2	1538.7	1547.7
25°	1695.6	1724.7	1791.8	1789.7	1662.0	1561.2	1494.1	1453.6	1429.1	1415.5	1415.5
27.5°	1767.2	1791.8	1856.8	1767.2	1590.3	1453.6	1355.2	1317.0	1310.3	1299.0	1299.0
30°	1841.2	1861.3	1917.3	1715.8	1491.7	1312.6	1205.0	1187.1	1189.4	1178.1	1180.5
32.5°	1917.3	1937.5	1953.2	1639.5	1364.0	1153.6	1081.9	1068.4	1066.2	1057.1	1048.2
35°	2024.8	2054.0	1957.5	1536.6	1209.5	1021.4	969.8	956.4	943.0	911.6	911.6
37.5°	2188.4	2219.7	1946.4	1408.8	1050.5	918.3	871.3	853.4	831.0	799.6	788.4
40°	2412.3	2412.3	1921.7	1265.5	922.7	835.5	790.7	768.3	743.6	712.3	705.6
42.5°	2676.6	2613.9	1883.7	1119.8	828.7	779.5	739.1	714.5	685.3	649.6	645.1
45°	2985.6	2815.5	1829.9	990.0	759.2	745.9	721.2	678.7	629.4	591.4	584.5
47.5°	3285.8	2996.8	1778.5	898.1	701.0	732.4	712.3	640.6	573.4	519.6	512.9
50°	3615.0	3158.1	1718.0	821.9	656.3	723.5	701.0	584.5	510.6	472.6	468.1
52.5°	3944.4	3321.7	1653.1	741.5	618.3	705.6	674.2	544.3	508.4	456.9	450.2
55°	4291.6	3512.1	1576.9	651.8	573.4	669.6	638.3	542.0	524.2	456.9	441.2
57.5°	4629.8	3722.5	1453.6	564.5	524.2	616.0	625.0	528.7	490.6	452.4	434.5
60°	5003.7	3946.6	1249.8	490.6	481.5	571.1	607.0	499.5	452.4	439.0	430.1
62.5°	5304.0	4148.2	976.5	439.0	445.6	535.3	584.5	481.5	436.8	425.5	423.3
65°	5433.8	4152.7	701.0	394.1	409.8	501.8	562.2	466.0	423.3	418.9	416.6
67.5°	5297.1	3924.2	492.8	351.6	371.8	470.4	533.1	450.2	409.8	412.1	407.7
70°	4856.0	3442.7	360.6	311.4	336.0	436.8	501.8	430.1	394.1	398.7	392.0
72.5°	4063.0	2683.2	289.0	277.8	306.9	401.0	470.4	407.7	369.6	371.8	358.3
75°	3001.3	1778.5	242.0	248.7	273.3	367.3	430.1	378.5	342.8	333.7	324.7
77.5°	1785.1	913.8	199.3	217.3	244.1	327.1	385.3	342.8	313.6	297.9	291.2
80°	736.9	369.6	163.5	183.7	212.8	291.2	340.5	300.2	280.0	264.3	255.4
82.5°	293.4	181.4	130.0	150.0	179.2	253.1	297.9	264.3	244.1	232.9	208.2
85°	112.0	89.7	87.3	105.3	134.3	194.8	246.3	221.7	206.2	177.0	170.1
87.5°	44.7	40.3	40.3	51.6	76.1	123.2	177.0	154.6	161.2	127.6	130.0
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)