

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: P265934

Luminaire Tested: **ARCH-AF24-40-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265934
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-AF24-40-D-U-T2U-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4469.7 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

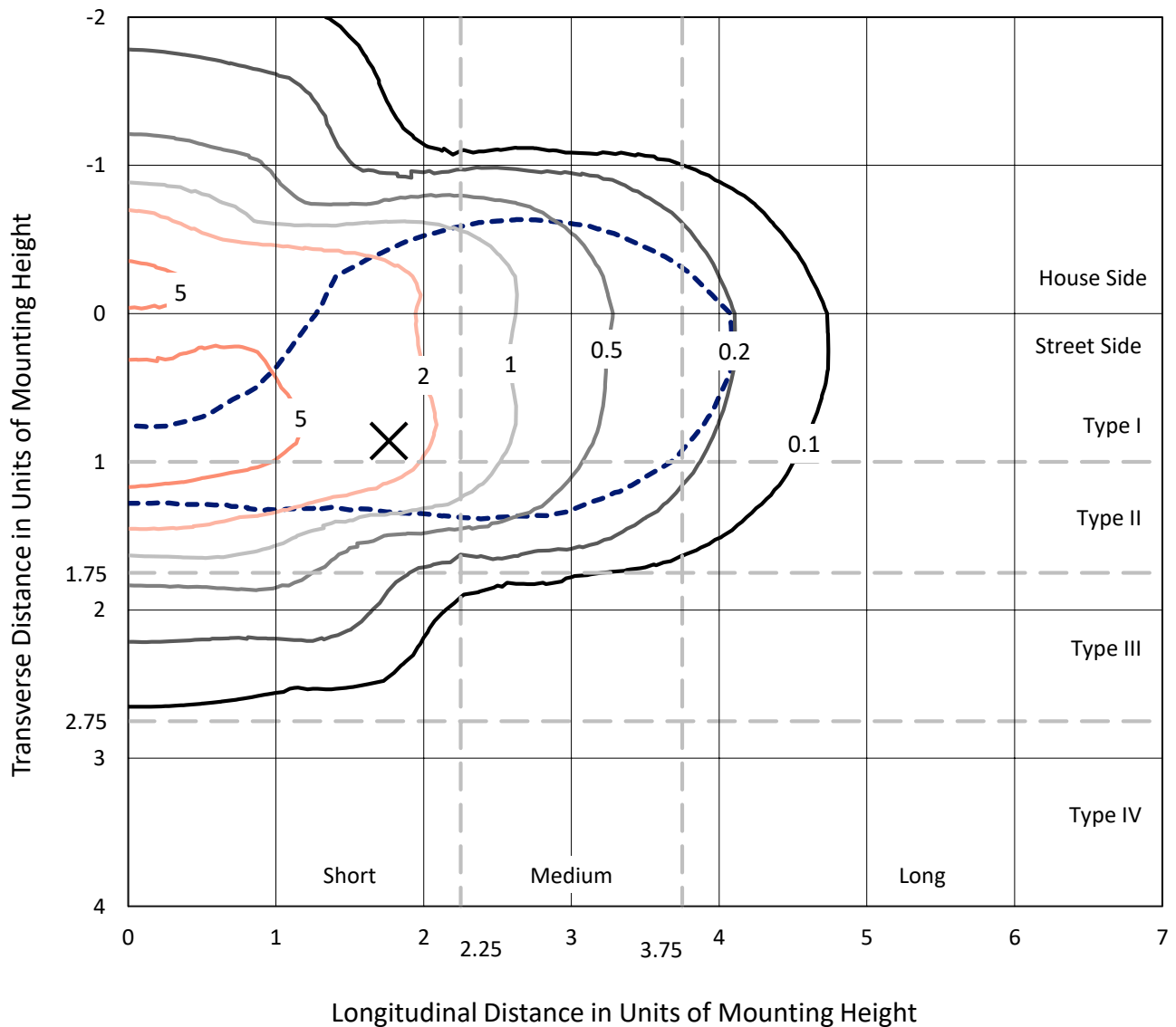
Input Watts (W): 40
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

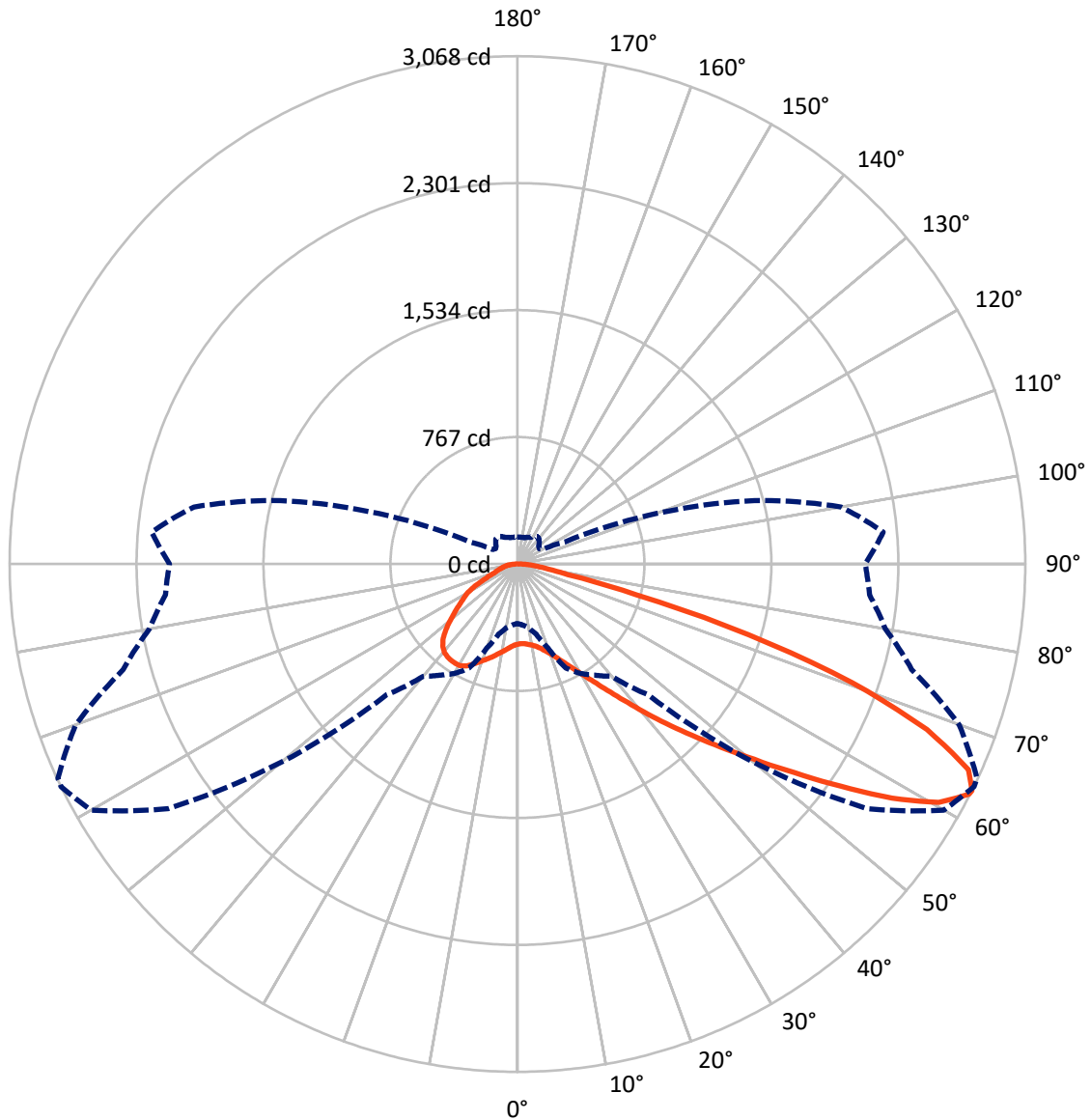


Based on 10 foot mounting height. Maximum calculated value = 7.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 64-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1313.9	0.0	1313.9
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	3155.8	0.0	3155.8
	% Fixture	70.6	0.0	70.6
Total	Lumens	4469.7	0.0	4469.7
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.3	1.1
10°-20°	161.0	3.6
20°-30°	302.2	6.8
30°-40°	506.5	11.3
40°-50°	849.7	19.0
50°-60°	1077.2	24.1
60°-70°	950.3	21.3
70°-80°	490.6	11.0
80°-90°	83.9	1.9
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°	4469.7	100.0
0°-180°	4469.7	100.0



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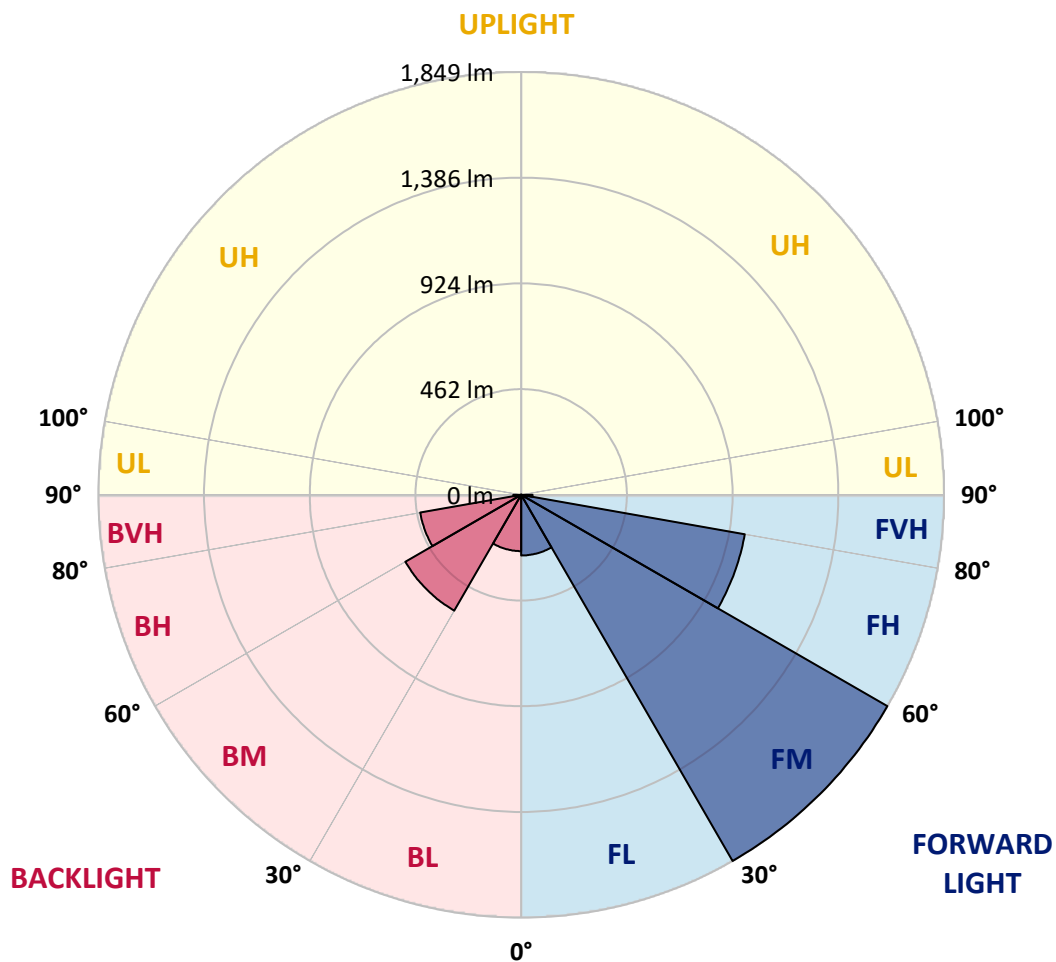
CATALOG NUMBER: ARCH-AF24-40-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	265.3	5.9			
FM	(30°-60°)	1848.5	41.4			
FH	(60°-80°)	992.5	22.2			G1/1800
FVH	(80°-90°)	49.4	1.1			G1/100
BL	(0°-30°)	246.2	5.5	B1/500		
BM	(30°-60°)	584.9	13.1	B1/1000		
BH	(60°-80°)	448.3	10.0	B1/500		G1/500
BVH	(80°-90°)	34.5	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0
2.5°	481.0	480.4	480.4	480.4	480.4	479.5	480.4	481.9	481.0	480.4	481.9
5°	482.6	481.9	481.9	481.9	482.6	481.9	482.6	484.8	483.3	483.3	484.8
7.5°	486.3	485.5	486.3	485.5	485.5	485.5	486.3	488.6	487.8	488.6	490.8
10°	490.8	490.8	490.8	490.8	490.8	490.8	492.4	493.8	494.5	495.2	498.3
12.5°	504.3	504.3	504.3	503.5	503.5	501.3	504.3	505.7	507.3	508.8	511.0
15°	532.6	532.6	531.9	528.9	528.9	524.5	525.1	526.0	526.0	527.5	528.9
17.5°	570.2	569.3	567.9	565.7	562.6	557.4	556.0	554.4	552.2	551.4	551.4
20°	622.4	621.7	618.8	612.7	609.1	600.7	594.8	588.7	586.6	582.8	582.1
22.5°	697.3	697.3	691.2	682.4	679.4	662.1	645.0	632.1	627.7	622.4	622.4
25°	787.9	787.0	778.8	768.4	755.7	737.7	716.8	699.5	688.3	676.3	671.8
27.5°	896.2	894.1	882.9	870.1	846.2	823.7	799.0	781.0	761.7	746.8	733.1
30°	1023.4	1021.3	1001.8	977.8	953.1	930.7	894.8	873.2	842.4	824.5	809.6
32.5°	1170.9	1168.7	1133.5	1110.2	1084.1	1056.3	1013.7	979.3	940.4	915.1	894.1
35°	1358.6	1349.8	1299.6	1267.4	1226.2	1198.6	1153.7	1107.3	1061.6	1025.8	995.1
37.5°	1561.4	1551.0	1506.7	1458.8	1418.6	1384.8	1321.2	1262.8	1208.9	1159.6	1121.5
40°	1773.2	1745.4	1698.3	1663.2	1635.5	1603.4	1536.7	1475.3	1390.8	1335.5	1277.8
42.5°	1919.8	1892.9	1859.9	1836.8	1823.3	1798.5	1761.1	1708.0	1632.5	1633.9	1482.2
45°	2016.2	1976.6	1954.3	1955.7	1960.9	1960.9	1954.3	1946.0	1913.1	1935.5	1808.3
47.5°	1981.9	1955.7	1941.4	1971.4	2008.8	2046.2	2089.6	2136.8	2190.6	2254.2	2097.8
50°	1779.9	1789.7	1796.3	1859.9	1940.0	2025.3	2124.9	2253.5	2403.9	2433.0	2357.4
52.5°	1457.4	1478.4	1500.8	1598.1	1703.5	1851.0	2025.3	2237.8	2439.7	2558.7	2551.2
55°	1132.0	1158.2	1206.1	1278.6	1362.4	1501.5	1717.0	2044.7	2359.7	2549.0	2664.3
57.5°	805.8	844.0	906.7	1007.8	1081.9	1160.4	1319.8	1683.3	2028.3	2380.7	2645.5
60°	535.7	553.6	594.8	720.5	845.5	927.7	1040.6	1172.4	1454.4	1940.0	2452.6
62.5°	380.1	392.0	417.5	474.3	587.3	736.3	804.3	864.9	955.3	1247.9	1969.2
63°	359.1	369.7	390.6	438.5	540.2	694.3	763.9	819.3	885.1	1116.2	1862.9
65°	297.8	302.3	313.5	336.7	391.3	519.2	632.9	666.6	677.9	717.4	1167.2
67.5°	251.3	254.4	258.2	264.8	286.6	345.7	472.1	514.6	502.1	475.1	576.8
70°	218.5	220.8	226.7	234.9	242.5	257.4	324.6	388.2	374.1	337.5	353.2
72.5°	174.4	178.0	184.8	199.1	213.9	233.4	249.9	289.6	280.6	245.3	249.1
75°	137.7	139.9	145.9	156.3	170.6	193.0	225.1	238.7	213.9	181.1	181.1
77.5°	109.2	111.5	116.7	125.0	133.8	149.7	172.0	207.2	192.2	136.2	135.5
80°	82.4	84.5	89.8	97.2	106.2	117.5	131.0	146.7	176.5	127.2	101.8
82.5°	60.5	61.4	70.3	75.5	78.5	87.6	98.8	107.7	121.2	117.5	90.5
85°	45.6	44.8	50.8	54.5	55.3	57.6	64.4	73.3	79.3	76.4	70.3
87.5°	25.4	22.5	26.2	30.0	30.0	30.7	32.2	37.4	42.7	41.1	37.4
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0
2.5°	481.9	481.9	481.0	481.0	481.9	481.9	481.0	483.3	484.8	484.8	485.5
5°	484.0	484.8	484.0	484.0	484.8	484.8	485.5	487.8	490.0	491.6	493.8
7.5°	490.8	491.6	490.8	490.8	491.6	492.4	493.8	496.9	498.3	501.3	504.9
10°	498.3	499.0	498.3	499.0	499.7	500.5	502.8	504.9	507.3	510.2	516.3
12.5°	511.8	512.6	511.0	511.8	514.0	514.0	515.4	517.0	520.7	524.5	530.4
15°	530.4	530.4	528.9	529.7	531.9	531.9	532.6	534.2	538.7	543.1	549.1
17.5°	552.2	553.6	552.8	553.6	555.2	556.0	556.0	557.4	560.4	563.3	569.3
20°	581.4	582.1	580.6	582.1	583.5	582.1	580.6	579.9	581.4	582.8	589.6
22.5°	621.0	620.2	616.4	616.4	616.4	613.5	609.8	605.3	605.3	603.0	608.2
25°	668.1	665.9	660.7	661.4	656.1	651.6	645.0	638.2	632.1	629.9	630.7
27.5°	723.5	719.1	713.8	712.3	707.1	698.8	687.6	674.8	665.1	657.6	656.1
30°	793.1	783.3	774.3	772.8	764.6	751.2	733.1	715.9	699.5	686.8	682.4
32.5°	875.4	860.3	846.2	844.6	831.2	813.2	791.5	767.6	743.6	723.5	713.8
35°	971.8	949.4	935.9	932.3	912.8	890.3	866.3	835.8	802.0	773.6	755.7
37.5°	1089.4	1066.2	1042.9	1043.7	1016.7	990.7	958.4	921.0	878.4	838.7	813.2
40°	1234.5	1201.6	1171.6	1164.9	1141.7	1105.0	1069.9	1026.6	974.1	921.8	885.1
42.5°	1410.2	1356.4	1315.3	1309.3	1278.6	1233.7	1191.2	1133.5	1080.3	1016.7	972.7
45°	1610.0	1524.1	1474.7	1465.7	1416.3	1370.6	1319.0	1257.6	1192.6	1120.7	1068.4
47.5°	1858.5	1735.7	1652.0	1637.0	1568.9	1509.1	1455.2	1387.2	1309.3	1229.2	1171.6
50°	2147.9	1966.8	1853.9	1830.7	1739.5	1669.2	1600.3	1515.0	1432.0	1348.1	1281.6
52.5°	2438.3	2243.7	2093.4	2064.9	1930.3	1836.0	1745.4	1660.2	1562.2	1479.1	1403.5
55°	2671.6	2542.3	2367.9	2328.2	2135.4	2007.4	1888.3	1791.1	1693.8	1628.0	1538.9
57.5°	2812.4	2805.6	2668.0	2613.3	2349.2	2160.0	2027.6	1916.9	1822.5	1794.9	1676.6
60°	2808.6	2982.9	2923.9	2882.8	2565.5	2316.3	2144.3	2024.5	1946.7	1978.2	1815.0
62.5°	2637.2	2990.4	3061.6	3050.3	2795.9	2442.0	2240.1	2116.5	2075.4	2169.0	1958.8
63°	2575.3	2973.2	3067.5	3063.0	2840.0	2465.9	2256.5	2134.6	2100.9	2217.6	1984.8
65°	2176.5	2822.8	2994.9	3015.2	2935.0	2548.2	2294.6	2180.1	2176.5	2326.0	2047.0
67.5°	1326.4	2385.2	2668.0	2706.9	2801.2	2574.5	2272.9	2164.5	2218.4	2341.7	2028.3
70°	567.1	1574.1	2144.3	2207.0	2437.6	2444.3	2210.8	2100.1	2208.7	2219.1	1895.2
72.5°	336.0	742.2	1459.7	1596.6	1928.8	2103.1	2068.6	1987.9	2080.7	1949.0	1613.7
75°	238.0	347.1	741.5	887.3	1343.0	1605.6	1738.0	1775.4	1771.6	1545.8	1211.3
77.5°	170.6	223.0	312.7	368.8	749.6	1031.0	1192.6	1301.9	1266.6	1034.7	746.8
80°	118.9	154.1	191.5	203.5	348.0	529.7	628.5	676.3	655.5	517.0	334.3
82.5°	86.1	101.0	123.4	131.0	175.1	244.7	291.1	256.6	246.1	190.8	144.4
85°	66.6	65.0	77.1	80.0	102.4	128.0	131.0	101.8	89.0	79.3	80.8
87.5°	47.2	40.5	41.1	42.7	53.1	68.1	66.6	42.0	35.9	38.2	43.4
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0	484.0
2.5°	487.1	487.8	489.2	490.0	491.6	491.6	493.0	493.8	495.2	496.9	497.5
5°	496.0	498.3	501.3	502.8	505.7	508.0	511.0	512.6	515.4	517.8	520.7
7.5°	509.5	513.2	517.0	521.5	526.0	529.7	532.6	536.5	541.7	545.5	547.6
10°	522.3	527.5	534.2	539.4	546.2	551.4	556.0	562.6	568.5	573.8	576.8
12.5°	538.7	545.5	552.2	560.4	569.3	576.2	582.8	591.9	600.0	605.9	609.1
15°	558.1	566.3	573.8	583.5	594.0	603.0	612.7	622.4	628.5	628.5	626.9
17.5°	578.2	585.1	594.0	605.3	619.6	630.7	635.9	637.4	635.2	629.9	626.2
20°	598.5	604.5	614.3	627.7	642.6	645.0	639.8	632.9	626.2	617.2	611.2
22.5°	615.0	623.2	638.2	653.8	654.7	641.8	627.7	616.4	605.9	595.5	584.3
25°	634.5	645.6	665.9	671.8	652.3	628.5	608.2	591.9	574.6	557.4	544.6
27.5°	658.4	674.8	695.1	677.9	639.8	605.9	578.2	553.6	531.2	507.3	493.0
30°	683.8	709.2	713.8	668.9	617.9	574.6	537.1	499.7	471.3	449.6	441.3
32.5°	714.5	747.4	720.5	653.2	588.7	531.9	481.9	436.9	413.0	399.6	395.8
35°	760.9	787.9	724.3	636.7	555.2	481.0	418.3	382.3	367.3	358.3	353.9
37.5°	827.5	826.7	723.5	616.4	516.3	425.6	367.3	342.0	329.9	322.4	314.2
40°	905.3	856.7	719.1	587.3	463.9	372.5	332.3	308.3	297.0	288.0	278.4
42.5°	982.3	876.8	706.2	544.0	398.8	334.3	306.7	285.0	273.1	263.4	249.9
45°	1049.0	885.1	681.5	484.0	340.4	304.4	290.3	271.6	257.4	242.5	231.9
47.5°	1101.3	883.7	641.8	413.7	301.6	283.5	276.8	264.1	246.9	228.2	214.8
50°	1145.5	872.3	588.1	351.6	275.3	264.8	262.7	258.8	231.1	215.5	207.2
52.5°	1185.9	855.9	530.4	309.7	253.0	243.9	248.4	244.7	225.1	211.7	203.5
55°	1241.2	844.6	473.5	277.5	226.7	224.4	228.2	233.4	221.4	208.8	199.8
57.5°	1306.2	850.7	430.2	241.6	201.9	203.5	216.2	223.7	217.7	204.3	195.3
60°	1381.1	868.7	392.0	207.2	181.7	185.5	204.3	214.8	213.9	198.3	187.7
62.5°	1464.9	887.3	331.5	181.1	164.6	170.6	190.0	203.5	205.7	192.2	179.5
63°	1481.3	888.9	315.8	175.8	161.7	168.3	186.3	200.5	203.5	190.8	178.0
65°	1521.8	875.4	254.4	161.7	149.7	157.2	175.1	187.7	193.8	182.5	172.0
67.5°	1488.1	765.4	191.5	144.4	139.9	145.2	160.8	172.8	178.0	172.8	162.4
70°	1360.9	556.6	149.7	128.6	129.4	133.2	145.2	156.3	162.4	160.8	151.2
72.5°	1096.0	315.8	125.0	115.3	117.5	122.0	130.2	140.7	145.9	145.2	138.3
75°	722.0	161.7	105.6	103.2	104.7	108.4	114.4	122.7	128.6	128.0	125.0
77.5°	357.6	112.2	90.5	91.3	92.0	95.0	99.5	107.0	110.8	111.5	110.8
80°	147.4	87.6	77.9	78.5	79.3	81.6	84.5	91.3	93.6	95.0	95.8
82.5°	88.3	66.6	62.2	63.6	64.4	66.6	68.8	74.7	77.1	79.3	79.3
85°	58.4	46.4	44.8	46.4	47.9	49.3	50.1	53.9	57.6	60.5	62.2
87.5°	31.4	27.7	26.9	27.7	27.7	29.1	30.7	34.5	38.8	42.0	43.4
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):

	160°	165°	170°	175°	180°
0°	484.0	484.0	484.0	484.0	484.0
2.5°	496.0	496.9	496.0	496.9	497.5
5°	520.7	522.3	521.5	521.5	524.5
7.5°	549.1	552.2	552.2	553.6	555.2
10°	579.9	582.8	585.1	585.1	587.3
12.5°	610.5	611.9	614.3	614.3	614.3
15°	626.2	625.5	624.7	624.0	624.0
17.5°	624.0	621.0	619.6	617.9	618.8
20°	607.6	602.3	600.7	598.5	600.0
22.5°	579.0	571.6	568.5	564.9	566.3
25°	536.5	527.5	526.0	521.5	523.7
27.5°	487.1	482.6	481.9	481.0	484.8
30°	440.7	442.1	443.0	444.4	448.2
32.5°	397.9	401.1	401.7	402.5	407.7
35°	356.1	352.3	356.1	354.7	359.1
37.5°	310.5	307.5	304.4	300.8	303.7
40°	272.4	267.1	258.2	253.6	254.4
42.5°	242.5	235.6	228.2	223.7	223.7
45°	223.0	214.8	208.0	205.1	205.1
47.5°	208.0	204.3	200.5	198.3	198.3
50°	201.9	197.4	195.3	193.8	193.8
52.5°	197.4	193.0	190.8	189.4	187.7
55°	193.8	187.0	184.8	184.1	184.1
57.5°	188.6	182.5	179.5	178.9	178.9
60°	180.3	175.8	172.8	172.0	172.0
62.5°	172.0	167.7	164.6	164.6	164.6
63°	170.6	165.4	163.1	163.1	163.1
65°	163.9	158.6	156.3	156.3	155.6
67.5°	154.9	149.7	148.1	148.1	146.7
70°	144.4	139.9	138.3	139.1	136.2
72.5°	133.8	129.4	127.2	127.2	124.1
75°	122.0	117.5	114.4	113.7	110.8
77.5°	108.4	104.7	101.8	98.8	97.2
80°	94.2	91.3	87.6	85.2	83.1
82.5°	79.3	76.4	74.1	77.1	65.8
85°	62.2	59.1	56.1	60.5	47.2
87.5°	45.6	44.1	41.1	35.9	31.4
90°	0.0	0.0	0.0	0.0	0.0

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