

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: P265952

Luminaire Tested: **ARCH-AF24-60-D-U-T2U-7027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P265952
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-AF24-60-D-U-T2U-7027
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6618.1 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

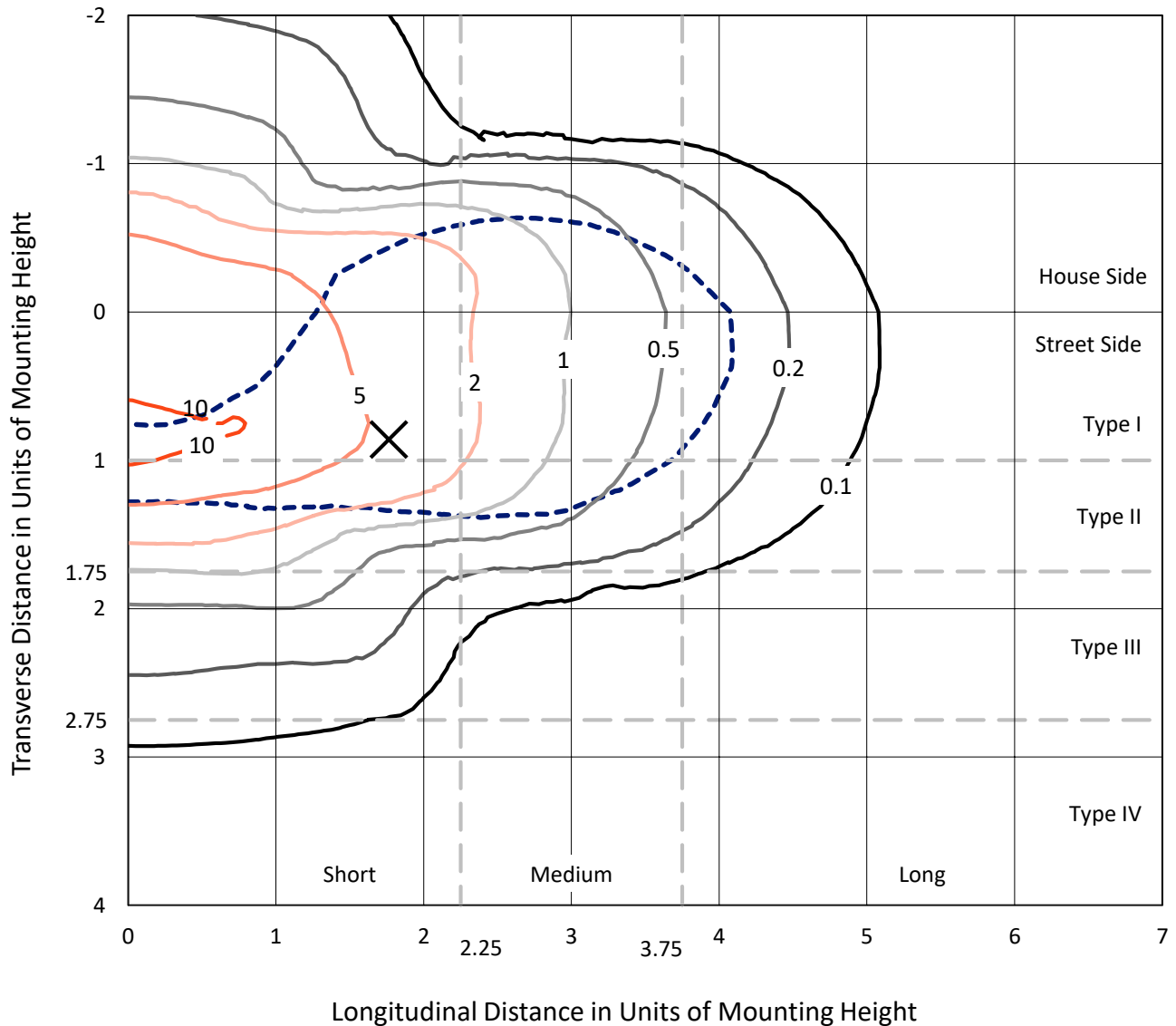
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

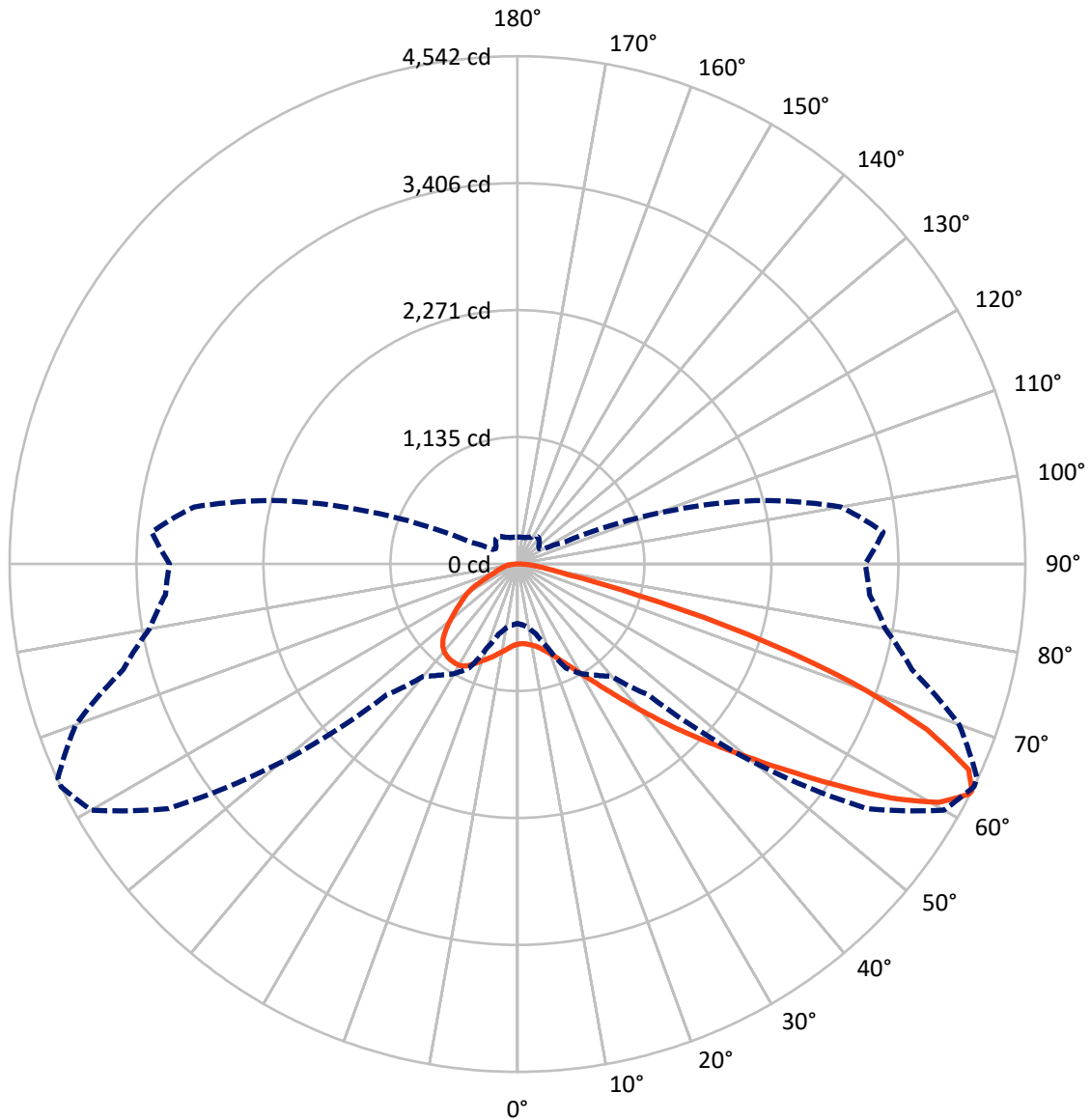


Based on 10 foot mounting height. Maximum calculated value = 11.6 fc
 Type II - Short - Semi-Cutoff

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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	1945.5	0.0	1945.5
	% Fixture	29.4	0.0	29.4
Street Side	Lumens	4672.6	0.0	4672.6
	% Fixture	70.6	0.0	70.6
Total	Lumens	6618.1	0.0	6618.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.6	1.1
10°-20°	238.4	3.6
20°-30°	447.4	6.8
30°-40°	749.9	11.3
40°-50°	1258.2	19.0
50°-60°	1595.0	24.1
60°-70°	1407.0	21.3
70°-80°	726.3	11.0
80°-90°	124.3	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°	6618.1	100.0
0°-180°	6618.1	100.0



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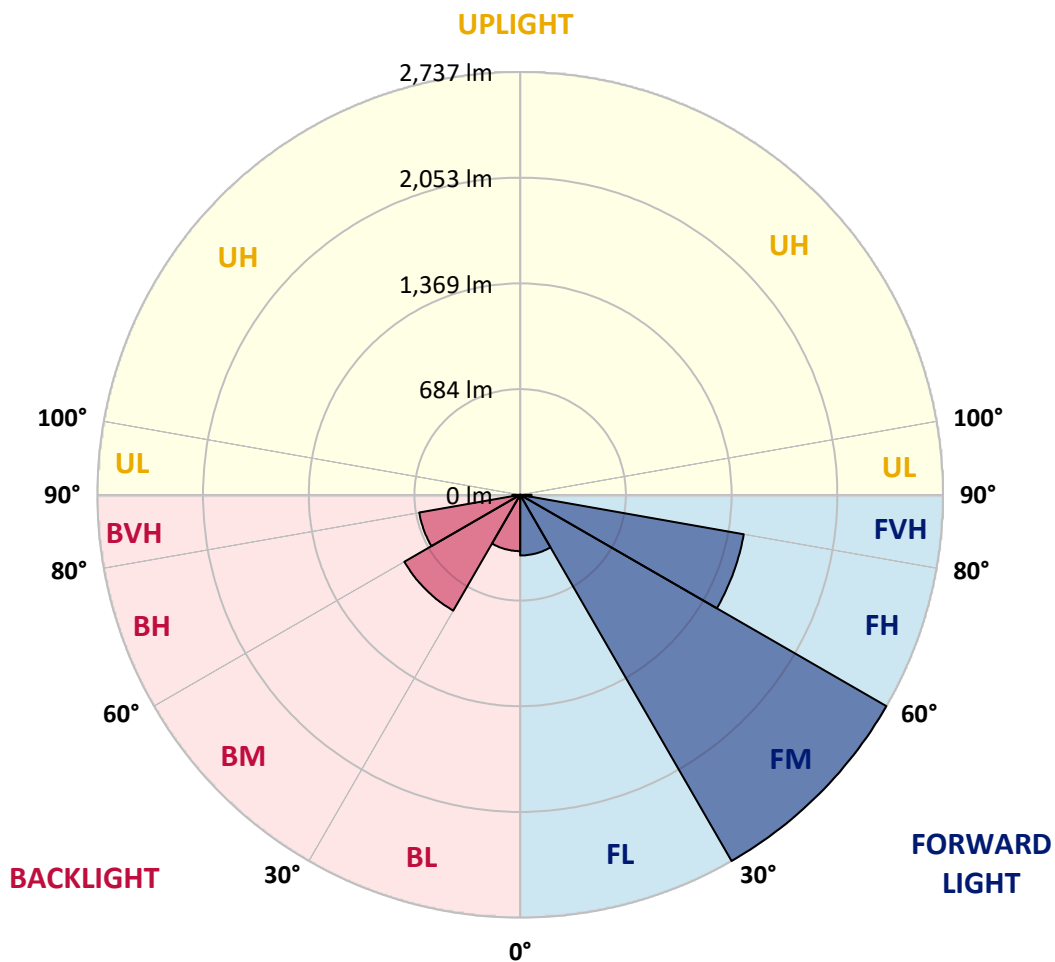
CATALOG NUMBER: ARCH-AF24-60-D-U-T2U-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	392.8	5.9			
FM	(30°-60°)	2737.1	41.4			
FH	(60°-80°)	1469.6	22.2			G1/1800
FVH	(80°-90°)	73.1	1.1			G1/100
BL	(0°-30°)	364.5	5.5	B1/500		
BM	(30°-60°)	866.0	13.1	B1/1000		
BH	(60°-80°)	663.8	10.0	B2/1000		G2/1000
BVH	(80°-90°)	51.1	0.8			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8
2.5°	712.3	711.2	711.2	711.2	711.2	710.1	711.2	713.4	712.3	711.2	713.4
5°	714.5	713.4	713.4	713.4	714.5	713.4	714.5	717.8	715.6	715.6	717.8
7.5°	720.1	719.0	720.1	719.0	719.0	719.0	720.1	723.3	722.2	723.3	726.6
10°	726.6	726.6	726.6	726.6	726.6	726.6	729.0	731.1	732.3	733.3	737.8
12.5°	746.6	746.6	746.6	745.6	745.6	742.2	746.6	748.8	751.2	753.3	756.6
15°	788.7	788.7	787.6	783.2	783.2	776.6	777.7	778.8	778.8	780.9	783.2
17.5°	844.1	843.0	840.9	837.5	833.1	825.4	823.0	821.0	817.5	816.4	816.4
20°	921.8	920.6	916.1	907.3	901.8	889.5	880.7	871.9	868.5	863.0	861.8
22.5°	1032.4	1032.4	1023.6	1010.4	1005.9	980.4	954.9	936.0	929.4	921.8	921.8
25°	1166.4	1165.5	1153.2	1137.8	1118.8	1092.2	1061.3	1035.7	1019.1	1001.4	994.9
27.5°	1327.2	1323.8	1307.3	1288.3	1253.0	1219.7	1183.1	1156.6	1127.7	1105.5	1085.6
30°	1515.5	1512.1	1483.3	1447.9	1411.3	1378.1	1324.9	1292.8	1247.3	1220.7	1198.6
32.5°	1733.6	1730.3	1678.4	1644.0	1605.2	1564.2	1501.1	1450.1	1392.6	1354.9	1323.8
35°	2011.8	1998.5	1924.2	1876.6	1815.7	1774.7	1708.1	1639.5	1571.9	1518.8	1473.4
37.5°	2312.0	2296.4	2231.1	2160.2	2100.3	2050.6	1956.4	1869.9	1790.2	1717.1	1660.5
40°	2625.4	2584.5	2514.6	2462.7	2421.7	2374.0	2275.3	2184.6	2059.4	1977.3	1892.1
42.5°	2842.5	2802.7	2753.9	2719.6	2699.6	2663.1	2607.7	2529.1	2417.2	2419.4	2194.5
45°	2985.4	2926.8	2893.5	2895.7	2903.5	2903.5	2893.5	2881.4	2832.6	2865.9	2677.5
47.5°	2934.6	2895.7	2874.8	2919.0	2974.4	3029.9	3094.0	3163.8	3243.6	3337.8	3106.2
50°	2635.4	2649.8	2659.8	2753.9	2872.5	2998.8	3146.1	3336.7	3559.4	3602.6	3490.6
52.5°	2158.0	2189.0	2222.2	2366.2	2522.4	2740.6	2998.8	3313.4	3612.5	3788.6	3777.6
55°	1676.1	1714.9	1785.8	1893.2	2017.2	2223.3	2542.4	3027.6	3494.0	3774.3	3944.8
57.5°	1193.0	1249.6	1342.6	1492.2	1601.9	1718.2	1954.2	2492.5	3003.3	3524.9	3917.1
60°	793.2	819.8	880.7	1066.7	1251.8	1373.7	1541.0	1736.0	2153.5	2872.5	3631.4
62.5°	562.8	580.5	618.2	702.4	869.6	1090.1	1190.9	1280.7	1414.7	1847.9	2915.7
63°	531.7	547.2	578.2	649.1	799.9	1028.0	1131.1	1213.0	1310.4	1652.8	2758.3
65°	440.9	447.5	464.2	498.5	579.3	768.8	937.2	987.1	1003.6	1062.3	1728.2
67.5°	372.2	376.7	382.1	392.2	424.3	511.9	699.1	762.1	743.3	703.5	854.1
70°	323.5	326.9	335.6	347.9	359.0	381.2	480.9	574.9	553.9	499.5	522.9
72.5°	258.2	263.7	273.7	294.6	316.8	345.7	370.0	428.8	415.5	363.4	368.9
75°	203.8	207.1	216.0	231.6	252.6	285.8	333.5	353.5	316.8	268.1	268.1
77.5°	161.8	165.1	172.8	185.1	198.3	221.5	254.8	306.9	284.8	201.6	200.5
80°	121.9	125.1	132.9	144.0	157.4	173.9	193.9	217.1	261.4	188.4	150.6
82.5°	89.7	90.9	104.2	111.8	116.3	129.6	146.2	159.4	179.4	173.9	134.0
85°	67.6	66.5	75.4	80.8	81.9	85.2	95.3	108.5	117.4	112.9	104.2
87.5°	37.6	33.2	38.7	44.2	44.2	45.5	47.6	55.3	63.2	60.9	55.3
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):

	55°	60°	64°	65°	70°	75°	80°	85°	90°	95°	100°
0°	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8
2.5°	713.4	713.4	712.3	712.3	713.4	713.4	712.3	715.6	717.8	717.8	719.0
5°	716.8	717.8	716.8	716.8	717.8	717.8	719.0	722.2	725.7	727.8	731.1
7.5°	726.6	727.8	726.6	726.6	727.8	729.0	731.1	735.6	737.8	742.2	747.7
10°	737.8	738.9	737.8	738.9	740.1	741.1	744.4	747.7	751.2	755.6	764.4
12.5°	757.7	758.9	756.6	757.7	761.0	761.0	763.3	765.4	771.0	776.6	785.4
15°	785.4	785.4	783.2	784.3	787.6	787.6	788.7	791.0	797.7	804.3	813.1
17.5°	817.5	819.8	818.6	819.8	821.9	823.0	823.0	825.4	829.8	834.2	843.0
20°	860.8	861.8	859.7	861.8	864.1	861.8	859.7	858.5	860.8	863.0	873.0
22.5°	919.4	918.3	912.8	912.8	912.8	908.4	902.8	896.1	896.1	892.8	900.6
25°	989.3	985.9	978.2	979.3	971.5	964.9	954.9	944.9	936.0	932.8	933.9
27.5°	1071.1	1064.6	1056.9	1054.6	1046.9	1034.7	1018.0	999.3	984.8	973.8	971.5
30°	1174.3	1159.8	1146.5	1144.4	1132.1	1112.2	1085.6	1060.2	1035.7	1016.9	1010.4
32.5°	1296.2	1273.9	1253.0	1250.7	1230.8	1204.2	1172.1	1136.5	1101.1	1071.1	1056.9
35°	1439.1	1405.8	1385.8	1380.3	1351.5	1318.3	1282.8	1237.3	1187.6	1145.5	1118.8
37.5°	1612.9	1578.6	1544.2	1545.4	1505.5	1466.8	1419.1	1363.6	1300.6	1241.8	1204.2
40°	1827.8	1779.2	1734.7	1724.8	1690.5	1636.3	1584.2	1519.9	1442.4	1364.7	1310.4
42.5°	2088.2	2008.4	1947.4	1938.6	1893.2	1826.8	1763.6	1678.4	1599.6	1505.5	1440.2
45°	2383.9	2256.5	2183.5	2170.1	2097.1	2029.5	1953.1	1862.1	1765.8	1659.4	1581.9
47.5°	2751.8	2570.1	2446.1	2423.8	2323.0	2234.4	2154.7	2053.9	1938.6	1820.1	1734.7
50°	3180.4	2912.3	2745.1	2710.7	2575.6	2471.4	2369.5	2243.2	2120.3	1996.3	1897.7
52.5°	3610.3	3322.2	3099.6	3057.6	2858.0	2718.5	2584.5	2458.2	2313.0	2190.1	2078.1
55°	3956.0	3764.3	3506.2	3447.4	3161.7	2972.2	2796.1	2652.1	2508.1	2410.5	2278.7
57.5°	4164.3	4154.2	3950.3	3869.4	3478.4	3198.1	3002.1	2838.1	2698.6	2657.5	2482.6
60°	4158.7	4416.7	4329.2	4268.3	3798.7	3429.6	3174.9	2997.6	2882.5	2929.1	2687.5
62.5°	3904.9	4427.8	4533.0	4516.5	4139.7	3615.9	3316.7	3133.9	3073.0	3211.5	2900.2
63°	3813.0	4402.4	4541.9	4535.4	4205.1	3651.3	3341.1	3160.5	3110.7	3283.5	2939.0
65°	3222.6	4179.8	4434.6	4464.3	4345.9	3773.2	3397.6	3228.1	3222.6	3444.1	3030.9
67.5°	1964.1	3531.6	3950.3	4008.0	4147.6	3811.9	3365.5	3204.9	3284.7	3467.4	3003.3
70°	839.6	2330.8	3174.9	3267.9	3609.2	3619.1	3273.6	3109.6	3270.2	3285.7	2806.0
72.5°	497.4	1098.9	2161.3	2364.0	2855.9	3114.1	3063.0	2943.3	3080.7	2885.7	2389.5
75°	352.2	514.0	1097.8	1313.9	1988.5	2377.4	2573.5	2628.8	2623.2	2288.7	1793.6
77.5°	252.6	330.1	463.0	546.1	1109.9	1526.5	1765.8	1927.6	1875.5	1532.1	1105.5
80°	176.2	228.2	283.5	301.3	515.1	784.3	930.6	1001.4	970.3	765.4	495.1
82.5°	127.4	149.6	182.7	193.9	259.3	362.2	430.9	380.0	364.4	282.4	213.7
85°	98.6	96.4	114.2	118.5	151.8	189.5	193.9	150.6	131.8	117.4	119.7
87.5°	69.8	59.7	60.9	63.2	78.6	100.8	98.6	62.1	53.2	56.6	64.3
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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8	716.8
2.5°	721.2	722.2	724.6	725.7	727.8	727.8	730.1	731.1	733.3	735.6	736.7
5°	734.5	737.8	742.2	744.4	748.8	752.2	756.6	758.9	763.3	766.7	771.0
7.5°	754.3	760.0	765.4	772.2	778.8	784.3	788.7	794.3	802.0	807.5	810.9
10°	773.3	780.9	791.0	798.8	808.7	816.4	823.0	833.1	841.9	849.6	854.1
12.5°	797.7	807.5	817.5	829.8	843.0	853.0	863.0	876.2	888.5	897.2	901.8
15°	826.4	838.6	849.6	864.1	879.6	892.8	907.3	921.8	930.6	930.6	928.3
17.5°	856.4	866.2	879.6	896.1	917.3	933.9	941.7	943.8	940.5	932.8	927.2
20°	886.3	895.2	909.5	929.4	951.6	954.9	947.2	937.2	927.2	913.9	905.0
22.5°	910.6	922.7	944.9	968.3	969.4	950.4	929.4	912.8	897.2	881.7	865.2
25°	939.4	956.1	985.9	994.9	965.9	930.6	900.6	876.2	850.8	825.4	806.5
27.5°	974.8	999.3	1029.2	1003.6	947.2	897.2	856.4	819.8	786.6	751.2	730.1
30°	1012.5	1050.2	1056.9	990.4	915.1	850.8	795.4	740.1	698.0	665.7	653.5
32.5°	1057.9	1106.7	1066.7	967.0	871.9	787.6	713.4	647.0	611.4	591.5	586.1
35°	1126.7	1166.4	1072.3	942.7	821.9	712.3	619.2	566.1	544.0	530.5	524.0
37.5°	1225.2	1224.1	1071.1	912.8	764.4	630.3	544.0	506.3	488.6	477.4	465.3
40°	1340.5	1268.4	1064.6	869.6	686.8	551.6	491.8	456.3	439.8	426.4	412.1
42.5°	1454.5	1298.3	1045.7	805.4	590.5	495.1	454.3	422.1	404.3	390.0	370.0
45°	1553.1	1310.4	1009.2	716.8	504.0	450.9	429.7	402.1	381.2	359.0	343.4
47.5°	1630.7	1308.3	950.4	612.6	446.5	419.9	409.8	391.0	365.6	337.9	317.9
50°	1696.0	1291.8	870.7	520.7	407.7	392.2	388.8	383.2	342.3	319.1	306.9
52.5°	1755.8	1267.2	785.4	458.7	374.5	361.2	367.8	362.2	333.5	313.5	301.3
55°	1837.8	1250.7	701.2	411.0	335.6	332.4	337.9	345.7	327.9	309.0	295.8
57.5°	1934.2	1259.6	637.0	357.9	299.0	301.3	320.2	331.3	322.3	302.4	289.2
60°	2045.0	1286.2	580.5	306.9	269.2	274.7	302.4	317.9	316.8	293.6	278.0
62.5°	2169.0	1313.9	490.7	268.1	243.7	252.6	281.3	301.3	304.6	284.8	265.9
63°	2193.4	1316.0	467.5	260.2	239.3	249.3	275.8	296.9	301.3	282.4	263.7
65°	2253.3	1296.2	376.7	239.3	221.5	232.7	259.3	278.0	286.9	270.3	254.8
67.5°	2203.5	1133.3	283.5	213.7	207.1	215.0	238.2	255.8	263.7	255.8	240.3
70°	2015.1	824.1	221.5	190.5	191.7	197.2	215.0	231.6	240.3	238.2	223.8
72.5°	1622.9	467.5	185.1	170.6	173.9	180.6	192.7	208.2	216.0	215.0	205.0
75°	1069.1	239.3	156.1	152.9	155.0	160.6	169.5	181.6	190.5	189.5	185.1
77.5°	529.6	166.1	134.0	135.1	136.3	140.7	147.3	158.5	163.9	165.1	163.9
80°	218.3	129.6	115.3	116.3	117.4	120.7	125.1	135.1	138.5	140.7	141.8
82.5°	130.8	98.6	91.9	94.1	95.3	98.6	101.9	110.9	114.2	117.4	117.4
85°	86.3	68.7	66.5	68.7	70.8	73.1	74.2	79.8	85.2	89.7	91.9
87.5°	46.5	41.1	39.9	41.1	41.1	43.2	45.5	50.9	57.6	62.1	64.3
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):

	160°	165°	170°	175°	180°
0°	716.8	716.8	716.8	716.8	716.8
2.5°	734.5	735.6	734.5	735.6	736.7
5°	771.0	773.3	772.2	772.2	776.6
7.5°	813.1	817.5	817.5	819.8	821.9
10°	858.5	863.0	866.2	866.2	869.6
12.5°	904.0	906.2	909.5	909.5	909.5
15°	927.2	926.2	925.1	923.8	923.8
17.5°	923.8	919.4	917.3	915.1	916.1
20°	899.6	891.7	889.5	886.3	888.5
22.5°	857.4	846.4	841.9	836.4	838.6
25°	794.3	780.9	778.8	772.2	775.4
27.5°	721.2	714.5	713.4	712.3	717.8
30°	652.4	654.8	655.9	658.0	663.6
32.5°	589.4	593.8	594.9	595.9	603.8
35°	527.3	521.7	527.3	525.1	531.7
37.5°	459.8	455.4	450.9	445.3	449.7
40°	403.2	395.4	382.1	375.5	376.7
42.5°	359.0	348.9	337.9	331.3	331.3
45°	330.1	317.9	307.9	303.5	303.5
47.5°	307.9	302.4	296.9	293.6	293.6
50°	299.0	292.5	289.2	286.9	286.9
52.5°	292.5	285.8	282.4	280.4	278.0
55°	286.9	276.9	273.7	272.5	272.5
57.5°	279.2	270.3	265.9	264.8	264.8
60°	266.9	260.2	255.8	254.8	254.8
62.5°	254.8	248.1	243.7	243.7	243.7
63°	252.6	244.8	241.6	241.6	241.6
65°	242.6	234.8	231.6	231.6	230.4
67.5°	229.2	221.5	219.4	219.4	217.1
70°	213.7	207.1	205.0	206.0	201.6
72.5°	198.3	191.7	188.4	188.4	184.0
75°	180.6	173.9	169.5	168.4	163.9
77.5°	160.6	155.0	150.6	146.2	144.0
80°	139.5	135.1	129.6	126.3	123.0
82.5°	117.4	112.9	109.7	114.2	97.5
85°	91.9	87.6	83.2	89.7	69.8
87.5°	67.6	65.3	60.9	53.2	46.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)