

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: P271344

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271344
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24459)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-T2R-7027-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12044.7 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 128
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

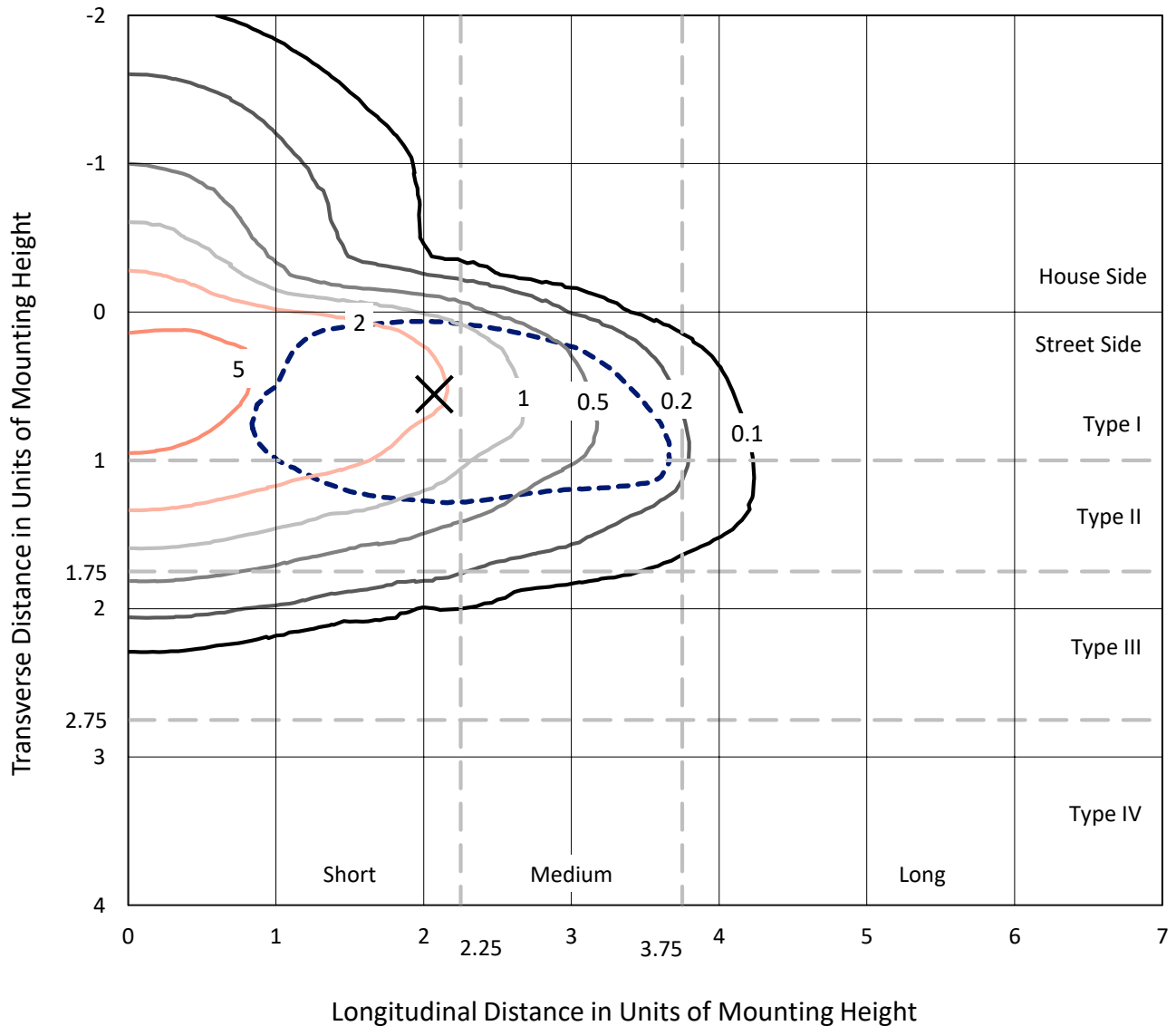


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

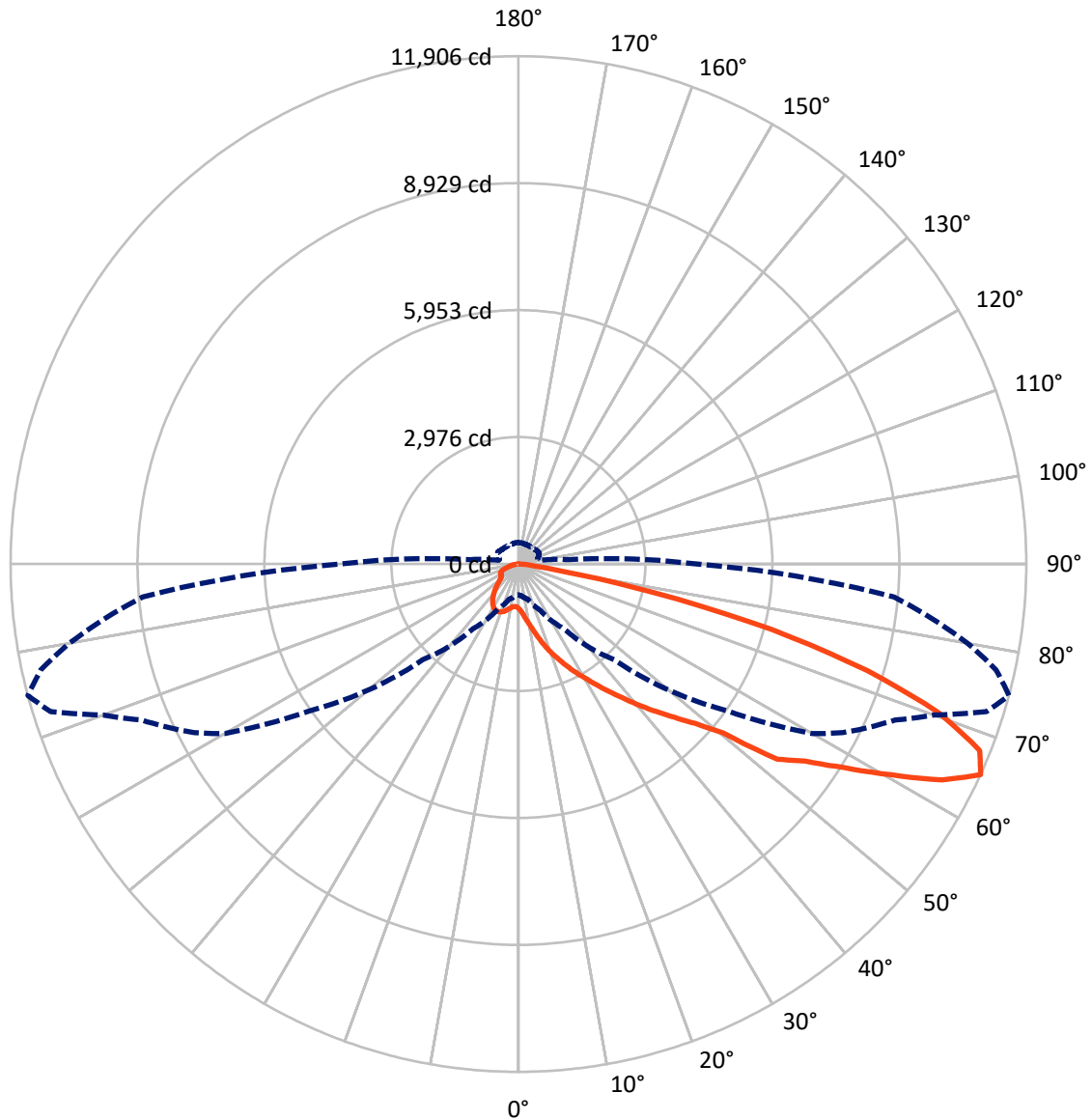


Based on 20 foot mounting height. Maximum calculated value = 7.5 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1809.9	0.0	1809.9
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	10234.8	0.0	10234.8
	% Fixture	85.0	0.0	85.0
Total	Lumens	12044.7	0.0	12044.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.2	1.0
10°-20°	470.6	3.9
20°-30°	949.7	7.9
30°-40°	1612.8	13.4
40°-50°	2249.5	18.7
50°-60°	2757.0	22.9
60°-70°	2594.0	21.5
70°-80°	1137.4	9.4
80°-90°	150.5	1.2
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°	12044.7	100.0
0°-180°	12044.7	100.0

Coefficient of Utilization



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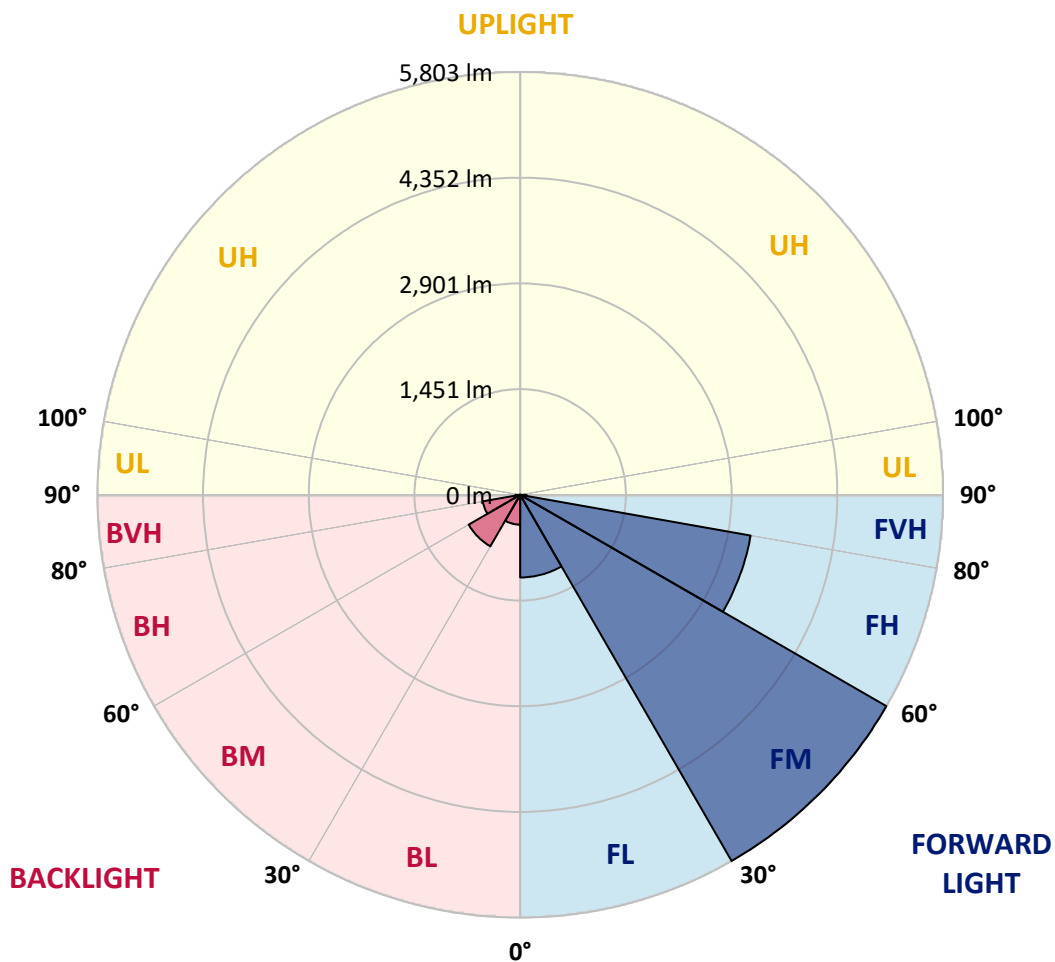
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1133.7	9.4			
FM (30°-60°)	5802.6	48.2			
FH (60°-80°)	3211.2	26.7			G2/5000
FVH (80°-90°)	87.3	0.7			G1/100
BL (0°-30°)	409.7	3.4	B1/500		
BM (30°-60°)	816.7	6.8	B1/1000		
BH (60°-80°)	520.2	4.3	B2/1000		G2/1000
BVH (80°-90°)	63.2	0.5			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°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7
2.5°	1314.1	1298.8	1300.2	1278.8	1247.4	1212.9	1184.5	1169.2	1156.3	1152.4	1131.0
5°	1718.6	1699.6	1692.5	1643.5	1570.0	1482.7	1396.1	1362.4	1334.8	1318.0	1276.5
7.5°	2049.7	2039.7	2030.4	1985.3	1912.5	1800.7	1661.1	1611.4	1565.3	1514.8	1465.0
10°	2275.0	2271.2	2267.2	2235.8	2175.3	2078.0	1927.9	1873.4	1816.0	1751.5	1686.5
12.5°	2445.0	2445.0	2448.2	2422.0	2385.3	2310.3	2173.8	2123.2	2064.9	1997.6	1923.2
15°	2559.2	2562.2	2578.3	2586.0	2566.8	2518.6	2399.1	2354.5	2299.4	2232.7	2159.3
17.5°	2635.1	2641.1	2664.9	2690.2	2714.8	2697.9	2608.9	2567.6	2517.8	2456.5	2387.5
20°	2811.2	2803.6	2804.4	2796.8	2832.7	2845.8	2796.8	2762.3	2722.5	2666.4	2603.6
22.5°	3181.3	3166.9	3129.2	3033.4	2989.7	2985.2	2956.1	2937.6	2907.1	2871.8	2809.0
25°	3664.0	3647.3	3572.9	3415.0	3284.8	3164.5	3110.9	3099.4	3079.5	3055.8	3010.5
27.5°	4162.9	4144.5	4048.8	3849.5	3679.5	3436.6	3269.6	3254.2	3235.8	3225.9	3204.3
30°	4601.9	4582.1	4487.8	4285.5	4080.2	3790.6	3483.3	3429.5	3398.2	3401.3	3389.0
32.5°	4987.4	4969.8	4864.1	4657.9	4449.5	4168.2	3760.7	3677.1	3606.7	3580.6	3589.7
35°	5310.7	5294.6	5179.0	4971.3	4761.3	4527.6	4117.7	3992.1	3877.2	3805.1	3796.6
37.5°	5500.7	5491.6	5410.3	5234.2	5025.7	4854.0	4517.7	4378.2	4208.9	4103.9	4058.0
40°	5490.0	5500.1	5486.2	5406.4	5244.8	5119.9	4934.5	4796.6	4631.1	4474.7	4381.4
42.5°	5333.7	5347.5	5409.6	5450.9	5407.3	5331.4	5298.5	5195.7	5047.1	4881.6	4752.2
45°	5119.3	5131.5	5211.8	5361.4	5486.2	5507.7	5617.2	5565.9	5440.2	5299.2	5156.7
47.5°	4790.4	4814.1	4907.7	5145.2	5442.6	5649.4	5884.6	5908.4	5835.6	5719.1	5585.8
50°	4314.6	4346.0	4477.1	4814.9	5277.1	5795.0	6282.2	6372.8	6343.7	6225.7	6090.8
52.5°	3827.3	3858.7	4033.4	4392.8	5010.3	5854.8	6673.9	6905.2	7072.3	7194.2	7217.9
55°	3320.0	3355.3	3546.9	3960.6	4654.8	5778.8	6953.5	7216.4	7385.7	7512.9	7564.2
57.5°	2747.6	2787.5	2973.0	3391.3	4152.1	5473.9	7264.7	7637.0	7889.0	8085.3	8195.5
60°	2091.1	2140.8	2333.2	2754.7	3491.7	4890.1	7403.3	7954.2	8355.0	8649.2	8824.0
62.5°	1325.5	1376.2	1576.2	2013.6	2740.0	4092.4	7011.0	7814.7	8498.2	8933.5	9253.7
65°	723.3	745.6	856.7	1186.1	1847.4	3175.2	6016.4	6964.3	7948.8	8565.7	9057.6
67.5°	542.4	545.5	557.0	637.4	983.9	2144.0	4703.9	5571.9	6665.5	7459.3	8046.9
70°	475.1	475.1	476.6	477.4	534.0	1161.6	3186.7	3985.9	4988.2	5791.2	6521.3
72.5°	426.1	421.5	419.9	410.6	418.4	595.3	1734.7	2452.7	3297.9	4198.9	4880.1
75°	367.8	367.0	367.0	357.9	362.5	419.1	752.4	1176.9	1832.1	2671.1	3341.5
77.5°	318.0	312.6	313.4	307.9	322.6	321.1	357.0	485.1	797.7	1403.0	1959.3
80°	262.0	258.3	260.5	257.5	280.5	237.5	240.6	296.5	396.2	615.2	867.4
82.5°	193.9	195.4	209.9	208.3	236.1	160.2	176.2	221.4	266.6	306.5	333.4
85°	113.4	115.7	150.9	158.6	173.2	84.4	108.1	131.8	148.7	164.7	171.7
87.5°	12.2	16.1	84.4	86.5	77.3	25.3	43.7	55.2	59.0	62.8	55.2
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7
2.5°	1124.0	1114.1	1103.4	1097.2	1086.5	1077.2	1060.4	1046.6	1031.3	1020.7	1016.1
5°	1255.8	1232.0	1206.9	1188.4	1165.5	1145.5	1107.3	1061.2	1046.6	1016.1	1008.3
7.5°	1427.4	1384.6	1341.7	1306.5	1266.6	1233.6	1169.2	1086.5	1075.8	1026.8	1016.1
10°	1628.9	1566.1	1502.5	1448.2	1389.9	1339.4	1244.3	1127.9	1116.5	1053.5	1042.8
12.5°	1854.3	1777.7	1695.7	1614.4	1545.4	1474.2	1344.8	1192.2	1173.8	1099.5	1085.1
15°	2086.5	2003.7	1908.7	1810.7	1725.6	1631.3	1468.1	1276.5	1242.8	1155.5	1135.5
17.5°	2315.6	2225.9	2126.3	2016.8	1917.2	1804.4	1601.4	1370.8	1312.6	1210.6	1185.4
20°	2537.0	2445.7	2340.9	2233.5	2109.4	1980.8	1737.9	1463.5	1374.5	1256.5	1223.8
22.5°	2738.6	2660.3	2555.4	2432.0	2306.4	2161.5	1876.5	1556.3	1429.1	1291.9	1249.7
25°	2950.8	2879.4	2775.3	2656.5	2510.1	2349.2	2019.7	1644.3	1472.7	1311.0	1259.0
27.5°	3165.3	3104.1	3005.9	2881.0	2723.9	2545.3	2165.4	1725.6	1508.0	1317.2	1254.4
30°	3394.3	3346.8	3256.4	3116.9	2958.4	2760.8	2323.9	1805.2	1530.2	1308.7	1233.6
32.5°	3611.2	3609.7	3529.3	3384.5	3213.5	2995.9	2491.0	1885.7	1541.6	1284.9	1197.6
35°	3836.5	3867.9	3807.3	3669.4	3489.3	3248.0	2675.7	1971.5	1542.4	1242.8	1150.9
37.5°	4092.4	4148.4	4121.6	3990.5	3801.3	3535.4	2892.5	2068.1	1537.8	1184.5	1082.6
40°	4383.5	4460.3	4459.5	4349.1	4146.8	3857.2	3144.5	2176.1	1527.1	1111.8	1002.1
42.5°	4716.9	4808.1	4833.4	4724.5	4520.0	4208.9	3433.5	2294.9	1510.2	1039.8	917.2
45°	5098.5	5179.0	5226.5	5125.3	4919.9	4592.0	3765.2	2429.7	1489.6	947.1	819.9
47.5°	5506.9	5600.4	5671.5	5585.0	5365.8	5028.7	4158.3	2603.6	1481.8	841.4	715.0
50°	6013.3	6109.9	6263.9	6224.9	6104.5	5833.4	4989.6	3014.4	1485.0	740.9	626.7
52.5°	7270.0	7491.4	7686.1	7599.4	7313.6	6848.6	5665.5	3242.7	1420.6	658.9	565.5
55°	7649.2	7900.6	8188.0	8151.8	7877.5	7408.6	6199.6	3433.5	1358.5	599.2	525.7
57.5°	8312.8	8609.4	9010.9	9003.3	8666.8	8138.9	6886.9	3661.9	1331.6	564.8	505.7
60°	9015.4	9393.1	9947.9	10034.5	9669.0	9119.7	7699.1	3942.2	1335.5	545.5	494.2
62.5°	9528.9	10082.8	10889.7	11148.7	10717.9	10112.7	8542.0	4222.8	1312.6	523.4	480.5
65°	9560.2	10357.8	11502.6	11905.6	11469.6	10691.9	8839.2	4167.4	1174.7	493.4	458.1
67.5°	8794.0	9832.9	11223.8	11665.7	11219.9	10334.9	8318.1	3643.4	954.7	441.3	419.9
70°	7324.4	8530.5	9974.1	10466.7	10098.1	9202.3	7239.4	2910.1	713.3	372.3	362.5
72.5°	5660.1	6785.0	8096.0	8551.9	8269.8	7482.3	5709.9	2120.9	509.6	301.9	294.3
75°	4046.4	5004.3	5955.9	6129.9	5851.6	5128.3	3704.7	1324.8	357.0	247.6	236.8
77.5°	2505.6	3128.4	3470.2	3246.6	2891.7	2403.7	1508.0	654.3	237.5	201.5	190.8
80°	1111.8	1304.9	1218.3	1085.7	857.4	704.9	460.6	290.4	153.3	155.5	149.4
82.5°	374.0	395.3	384.7	382.4	344.8	301.9	195.4	125.7	85.8	99.6	97.2
85°	182.4	190.8	191.6	198.4	172.5	134.0	52.9	49.8	36.8	53.5	56.0
87.5°	55.2	56.0	50.6	55.2	44.5	30.6	9.9	13.8	6.8	13.0	13.0
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°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7
2.5°	1007.5	1004.6	999.2	993.0	991.5	983.9	981.6	977.7	975.4	971.5	968.6
5°	998.3	993.0	986.9	980.1	980.1	969.4	964.7	960.1	960.1	953.2	950.1
7.5°	1007.5	1000.7	993.7	987.6	989.9	977.7	973.1	968.6	967.7	960.8	957.9
10°	1033.6	1026.8	1018.3	1012.2	1009.9	1000.0	994.6	987.6	983.0	978.4	973.9
12.5°	1073.5	1064.3	1053.5	1040.5	1035.1	1026.8	1018.3	1009.2	998.3	993.7	986.9
15°	1120.9	1105.6	1091.1	1075.0	1060.4	1052.0	1040.5	1026.0	1011.4	1005.4	996.1
17.5°	1160.2	1144.0	1123.3	1104.1	1078.1	1071.1	1055.1	1037.5	1013.6	1011.4	997.7
20°	1192.9	1168.4	1143.3	1120.2	1080.4	1076.6	1056.6	1035.9	1002.1	1002.1	985.4
22.5°	1211.5	1177.7	1147.9	1117.1	1067.4	1064.3	1041.3	1016.8	975.4	976.9	956.2
25°	1214.5	1173.8	1136.4	1099.5	1042.0	1036.7	1007.5	980.8	935.6	932.5	911.1
27.5°	1202.2	1154.7	1111.1	1066.6	1004.6	993.0	960.8	928.7	884.2	876.6	853.6
30°	1173.8	1117.9	1069.0	1017.6	952.5	934.1	900.3	867.4	822.2	812.2	790.8
32.5°	1128.6	1065.1	1010.7	959.3	887.3	864.3	830.7	797.7	753.9	746.3	726.4
35°	1069.0	997.7	940.2	885.8	813.8	790.0	757.8	728.6	688.8	685.8	672.0
37.5°	993.7	919.4	858.2	806.0	737.9	725.7	692.7	671.3	638.2	641.3	634.5
40°	908.7	832.9	774.7	728.6	669.6	658.9	639.1	623.0	594.6	603.0	603.8
42.5°	822.9	747.1	694.2	652.8	602.3	595.3	581.6	572.4	550.9	567.8	574.6
45°	725.7	655.1	609.9	578.5	541.0	541.0	534.0	533.4	518.7	542.4	549.5
47.5°	631.4	576.3	544.8	525.7	499.5	511.9	509.6	515.6	504.9	529.6	535.6
50°	560.2	521.7	502.6	493.4	475.1	494.2	498.7	507.3	498.0	519.5	524.2
52.5°	514.9	489.7	478.8	476.6	463.5	487.3	495.0	502.6	491.9	511.9	511.0
55°	489.7	472.8	468.9	473.5	463.5	486.5	494.2	499.5	490.4	504.2	503.4
57.5°	480.5	471.3	473.5	480.5	473.5	492.7	496.6	502.6	493.4	499.5	502.6
60°	479.6	479.6	488.9	498.0	493.4	507.3	509.6	508.8	500.4	501.2	502.6
62.5°	475.1	486.5	501.9	516.4	514.9	531.7	533.4	523.4	516.4	508.8	506.5
65°	460.6	479.6	501.9	521.7	524.9	550.9	554.0	544.1	539.4	526.3	516.4
67.5°	428.3	452.8	478.8	503.4	508.8	544.1	550.9	554.8	557.0	548.7	535.6
70°	374.0	399.1	426.1	454.4	462.1	501.2	515.6	533.4	547.1	559.4	554.8
72.5°	304.2	327.3	350.2	376.2	387.7	428.3	447.4	478.1	499.5	531.0	544.1
75°	241.4	255.2	269.0	285.0	294.3	334.1	357.9	394.6	423.7	467.4	496.6
77.5°	190.0	196.9	203.8	210.7	214.5	236.8	255.8	292.7	326.4	381.6	424.4
80°	146.3	150.1	150.9	153.3	151.8	162.5	169.3	191.6	220.7	275.2	325.6
82.5°	94.2	97.2	98.9	102.6	95.0	108.9	113.4	115.7	131.1	170.9	206.9
85°	52.9	53.5	54.3	56.0	45.3	59.0	59.7	56.0	54.3	70.4	79.7
87.5°	13.0	12.2	13.0	13.0	5.4	12.2	12.2	8.4	6.1	11.5	9.3
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):

	135°	145°	155°	165°	175°	180°
0°	1043.7	1043.7	1043.7	1043.7	1043.7	1043.7
2.5°	961.6	960.1	960.8	957.1	955.4	956.2
5°	946.3	943.2	943.2	941.0	937.9	937.9
7.5°	953.2	947.1	944.7	940.2	935.6	936.4
10°	963.9	953.2	945.6	938.5	933.2	933.2
12.5°	970.8	951.7	940.2	931.0	924.9	924.9
15°	972.3	943.2	926.3	916.5	910.3	910.3
17.5°	963.2	926.3	905.0	891.8	885.0	886.5
20°	940.2	894.9	869.6	855.8	849.0	849.7
22.5°	904.1	852.0	822.9	806.9	799.9	799.9
25°	855.0	798.5	767.1	753.9	747.7	747.7
27.5°	799.2	740.9	713.3	703.5	699.6	699.6
30°	736.3	688.1	668.2	661.2	655.1	655.1
32.5°	683.5	648.9	642.1	632.9	616.9	616.1
35°	641.3	637.4	632.1	604.6	581.6	578.5
37.5°	618.4	641.3	607.7	560.2	541.7	541.0
40°	606.0	627.6	569.3	546.3	544.1	544.1
42.5°	577.0	592.3	567.0	554.0	554.0	554.8
45°	546.3	559.4	572.4	560.9	564.8	565.5
47.5°	524.9	550.9	572.4	562.3	570.1	574.6
50°	504.9	543.3	560.9	560.9	569.3	570.1
52.5°	500.4	532.5	550.1	558.6	559.4	555.5
55°	501.2	524.2	541.7	552.5	547.8	547.8
57.5°	500.4	519.5	534.9	538.7	541.0	541.0
60°	501.2	513.4	525.7	524.2	531.7	531.7
62.5°	503.4	504.9	511.0	509.6	521.0	521.0
65°	508.8	494.2	490.4	491.9	505.7	504.9
67.5°	518.7	479.6	467.4	468.1	488.0	485.1
70°	533.4	459.8	441.3	436.8	470.4	465.1
72.5°	537.8	436.8	407.7	403.0	422.9	407.7
75°	516.4	418.4	371.5	356.3	347.9	343.2
77.5°	460.6	406.8	334.1	301.9	288.9	285.8
80°	381.6	383.0	285.0	246.8	286.6	285.8
82.5°	288.0	331.0	228.3	213.7	207.7	173.2
85°	139.4	249.0	175.4	147.1	88.2	83.5
87.5°	12.2	104.3	101.1	65.8	29.9	28.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)