

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: P198763

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198763
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-600
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8517.1 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 66
Input Voltage (V): NR
Input Current (A_{in}): 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

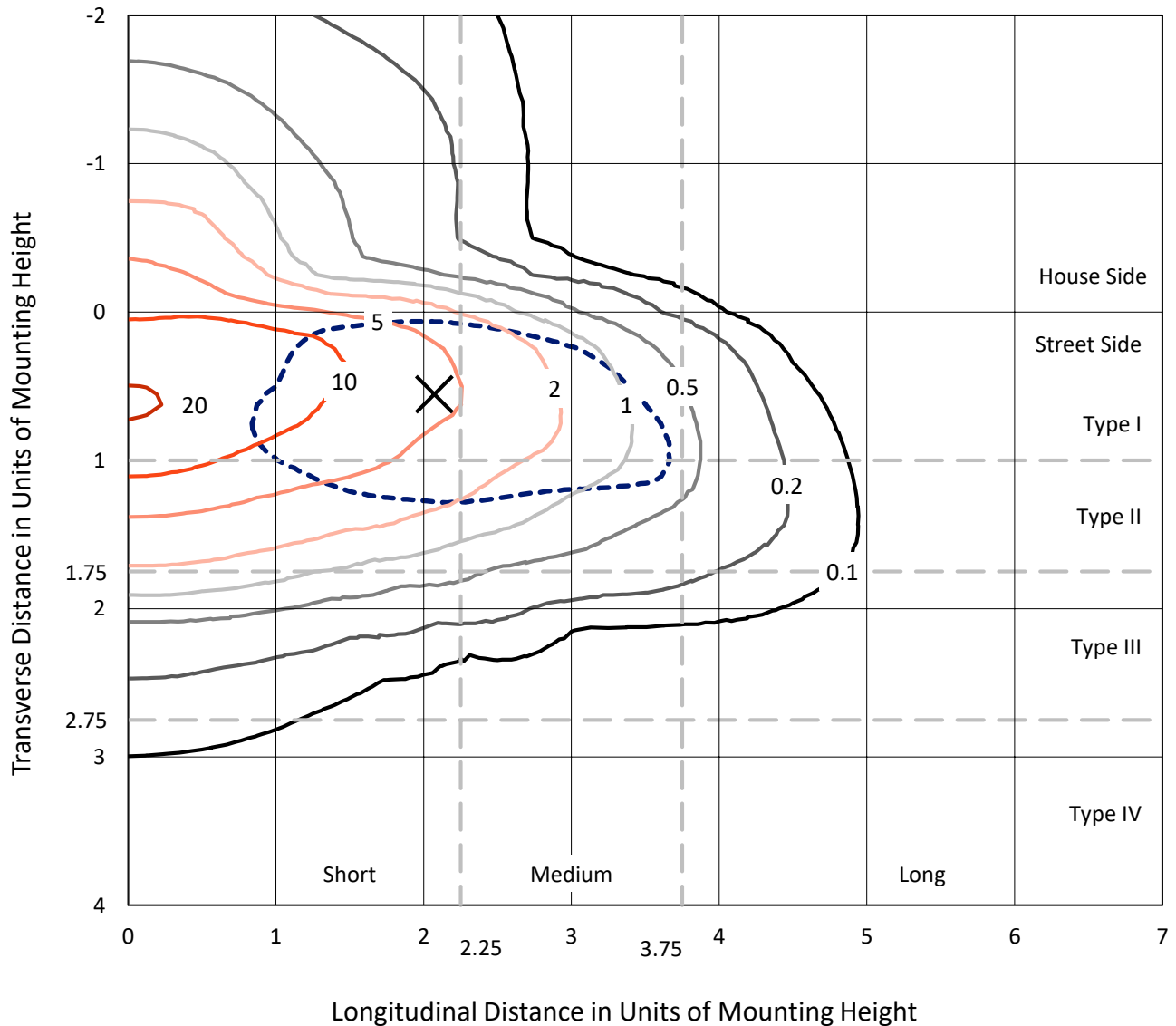


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Iso-Footcandle Lines of Horizontal Illumination

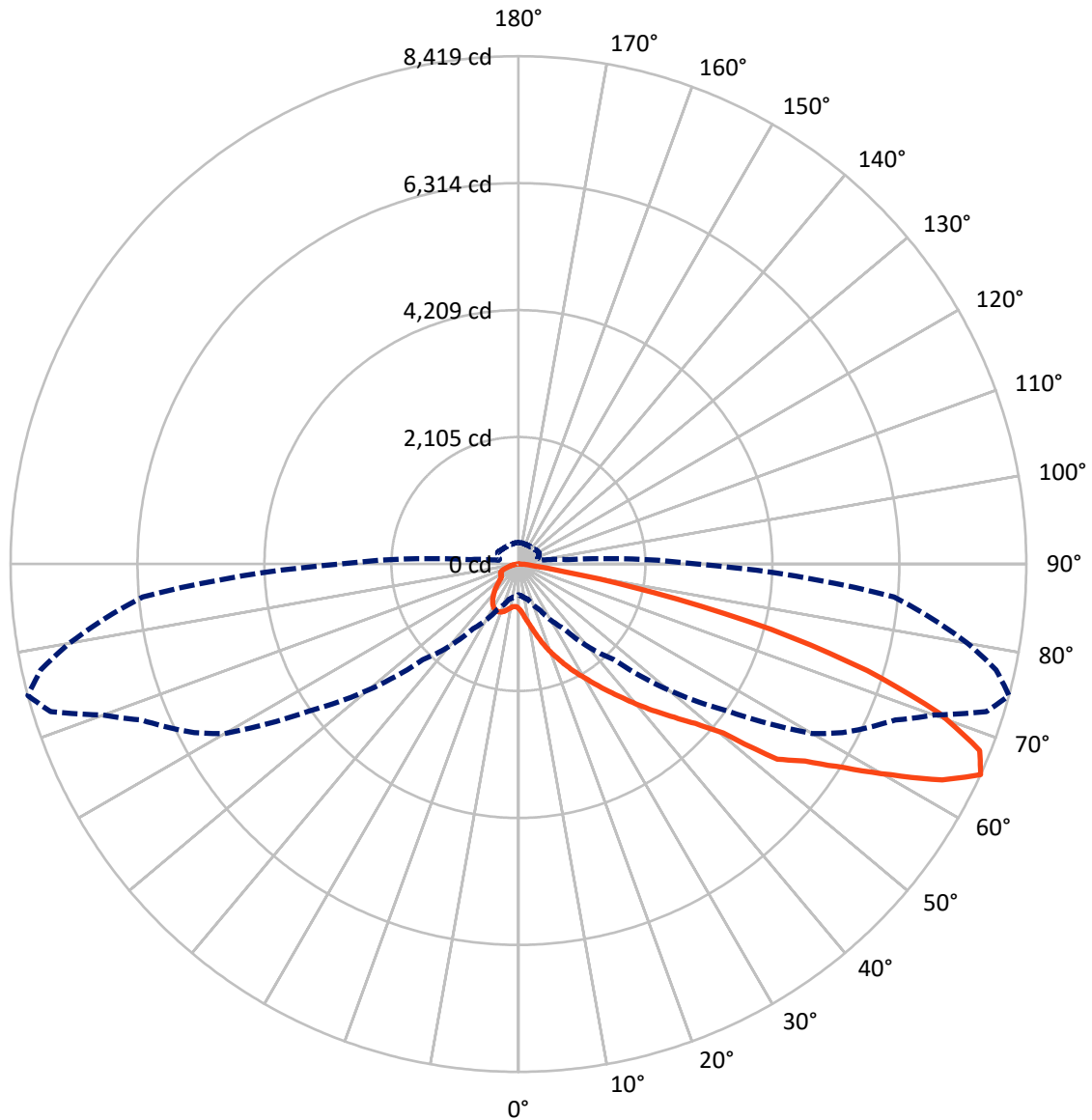
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 21.2 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	1279.8	0.0	1279.8
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	7237.3	0.0	7237.3
	% Fixture	85.0	0.0	85.0
Total	Lumens	8517.1	0.0	8517.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.1	1.0
10°-20°	332.8	3.9
20°-30°	671.5	7.9
30°-40°	1140.5	13.4
40°-50°	1590.7	18.7
50°-60°	1949.6	22.9
60°-70°	1834.3	21.5
70°-80°	804.3	9.4
80°-90°	106.4	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°	8517.1	100.0
0°-180°	8517.1	100.0

Coefficient of Utilization



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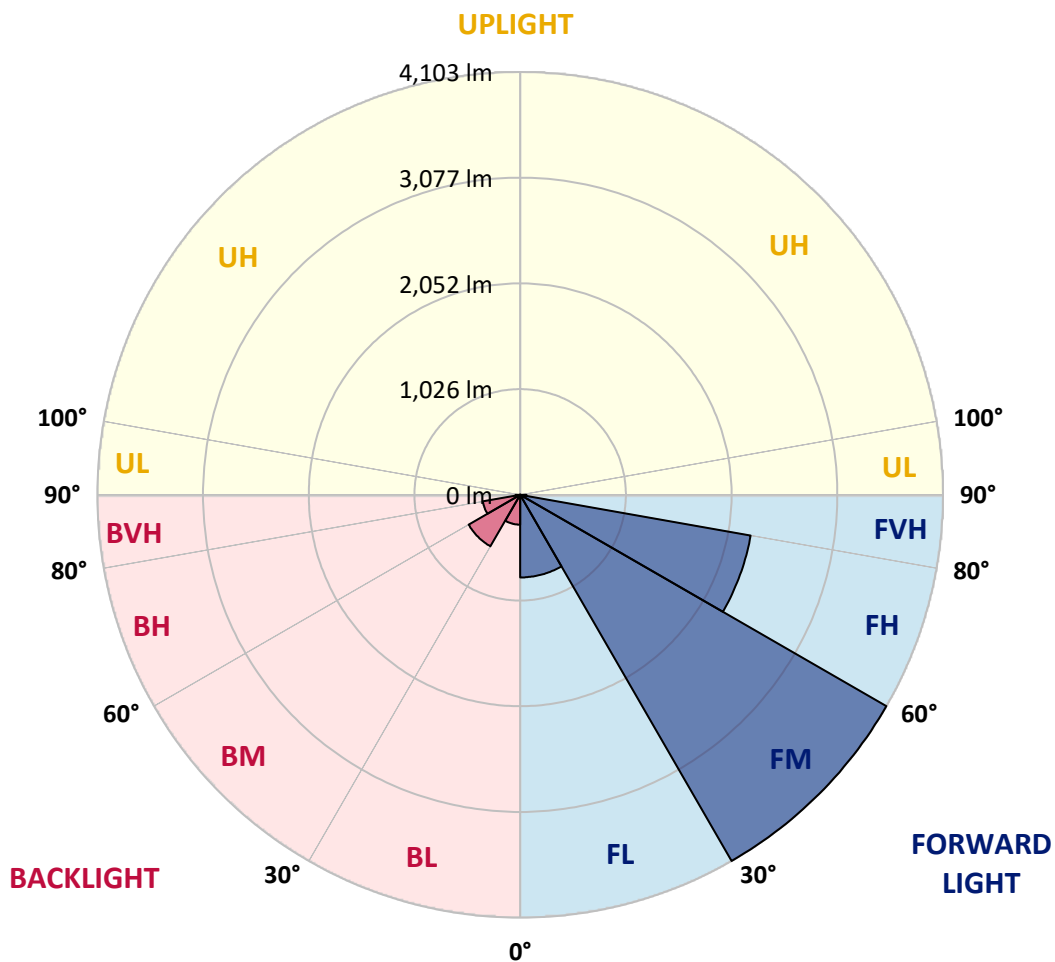
CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	801.7	9.4			
FM	(30°-60°)	4103.2	48.2			
FH	(60°-80°)	2270.7	26.7			G2/5000
FVH	(80°-90°)	61.7	0.7			G1/100
BL	(0°-30°)	289.7	3.4	B1/500		
BM	(30°-60°)	577.5	6.8	B1/1000		
BH	(60°-80°)	367.8	4.3	B1/500		G1/500
BVH	(80°-90°)	44.7	0.5			G1/100
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°	57.5°	60°	62.5°	65°
0°	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0
2.5°	929.2	918.4	919.4	904.3	882.1	857.7	837.7	826.9	817.6	814.9	799.7
5°	1215.3	1201.8	1196.9	1162.2	1110.2	1048.4	987.1	963.3	943.9	931.9	902.7
7.5°	1449.3	1442.4	1435.8	1403.8	1352.3	1273.3	1174.7	1139.5	1106.9	1071.1	1035.9
10°	1608.7	1605.9	1603.3	1581.0	1538.2	1469.4	1363.2	1324.7	1284.1	1238.6	1192.6
12.5°	1728.9	1728.9	1731.1	1712.7	1686.6	1633.6	1537.1	1501.4	1460.2	1412.5	1359.9
15°	1809.7	1811.9	1823.2	1828.6	1815.1	1781.0	1696.5	1665.0	1626.0	1578.8	1526.9
17.5°	1863.3	1867.6	1884.5	1902.3	1919.7	1907.7	1844.9	1815.6	1780.4	1737.1	1688.3
20°	1987.9	1982.5	1983.1	1977.7	2003.1	2012.3	1977.7	1953.2	1925.1	1885.5	1841.1
22.5°	2249.6	2239.3	2212.7	2145.0	2114.1	2111.0	2090.3	2077.3	2055.6	2030.8	1986.3
25°	2590.9	2579.1	2526.5	2414.9	2322.8	2237.7	2199.8	2191.7	2177.6	2160.8	2128.8
27.5°	2943.6	2930.7	2862.9	2722.1	2601.8	2430.0	2312.0	2301.1	2288.1	2281.1	2265.8
30°	3254.1	3240.1	3173.4	3030.4	2885.1	2680.3	2463.1	2425.2	2402.9	2405.2	2396.5
32.5°	3526.7	3514.2	3439.5	3293.7	3146.3	2947.5	2659.3	2600.1	2550.3	2531.9	2538.5
35°	3755.4	3744.0	3662.2	3515.3	3366.8	3201.6	2911.7	2822.8	2741.6	2690.7	2684.7
37.5°	3889.7	3883.2	3825.7	3701.1	3553.7	3432.4	3194.6	3096.0	2976.2	2902.0	2869.5
40°	3882.1	3889.2	3879.4	3823.1	3708.7	3620.4	3489.3	3391.8	3274.8	3164.2	3098.1
42.5°	3771.6	3781.3	3825.2	3854.5	3823.6	3770.0	3746.7	3674.0	3569.0	3451.9	3360.4
45°	3619.9	3628.5	3685.4	3791.1	3879.4	3894.6	3972.0	3935.8	3846.9	3747.2	3646.4
47.5°	3387.4	3404.3	3470.4	3638.3	3848.5	3994.8	4161.2	4177.9	4126.5	4044.1	3949.8
50°	3051.0	3073.1	3165.8	3404.8	3731.5	4097.7	4442.4	4506.3	4485.7	4402.3	4306.9
52.5°	2706.4	2728.6	2852.1	3106.2	3542.9	4140.0	4719.2	4882.9	5001.0	5087.1	5103.9
55°	2347.7	2372.6	2508.1	2800.6	3291.5	4086.4	4917.0	5102.8	5222.6	5312.5	5348.8
57.5°	1943.0	1971.1	2102.3	2398.1	2936.1	3870.7	5137.0	5400.3	5578.6	5717.3	5795.2
60°	1478.6	1513.9	1649.8	1947.8	2469.1	3457.9	5235.1	5624.6	5908.0	6116.0	6239.6
62.5°	937.3	973.1	1114.5	1423.8	1937.6	2893.8	4957.6	5526.0	6009.3	6317.0	6543.5
65°	511.5	527.2	605.8	838.7	1306.3	2245.3	4254.4	4924.6	5620.8	6057.0	6404.8
67.5°	383.6	385.8	393.9	450.8	695.7	1516.0	3326.2	3940.1	4713.2	5274.5	5690.2
70°	335.9	335.9	337.0	337.6	377.7	821.4	2253.5	2818.5	3527.2	4095.1	4611.4
72.5°	301.3	298.0	297.0	290.4	295.8	420.9	1226.7	1734.3	2332.0	2969.1	3450.8
75°	260.0	259.5	259.5	253.1	256.2	296.3	532.0	832.3	1295.5	1888.8	2362.8
77.5°	224.8	221.1	221.6	217.8	228.1	227.0	252.5	343.0	564.1	992.1	1385.4
80°	185.3	182.6	184.2	182.1	198.4	168.0	170.1	209.7	280.1	435.1	613.4
82.5°	137.1	138.2	148.4	147.4	166.8	113.2	124.6	156.6	188.5	216.8	235.7
85°	80.2	81.8	106.7	112.1	122.4	59.6	76.4	93.2	105.2	116.5	121.3
87.5°	8.7	11.4	59.6	61.3	54.7	17.9	30.9	39.0	41.7	44.4	39.0
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0
2.5°	794.8	787.8	780.2	775.9	768.3	761.8	749.8	740.1	729.3	721.7	718.4
5°	888.0	871.2	853.3	840.4	824.1	810.0	783.0	750.4	740.1	718.4	713.0
7.5°	1009.4	979.1	948.7	923.8	895.6	872.4	826.9	768.3	760.7	726.0	718.4
10°	1151.9	1107.4	1062.5	1024.1	982.9	947.0	879.9	797.6	789.4	745.0	737.4
12.5°	1311.2	1257.0	1199.0	1141.6	1092.8	1042.5	950.9	843.1	830.0	777.5	767.2
15°	1475.4	1416.9	1349.7	1280.3	1220.2	1153.5	1038.1	902.7	878.8	817.0	803.0
17.5°	1637.3	1574.0	1503.5	1426.1	1355.6	1275.9	1132.4	969.3	928.1	856.1	838.2
20°	1793.9	1729.5	1655.2	1579.4	1491.7	1400.6	1228.9	1034.9	972.0	888.5	865.3
22.5°	1936.4	1881.2	1806.9	1719.7	1630.9	1528.5	1326.9	1100.4	1010.5	913.5	883.7
25°	2086.5	2036.2	1962.4	1878.4	1775.0	1661.2	1428.2	1162.8	1041.4	927.0	890.2
27.5°	2238.2	2194.9	2125.6	2037.2	1926.1	1799.9	1531.2	1220.2	1066.3	931.4	887.0
30°	2400.3	2366.7	2302.8	2204.2	2091.9	1952.2	1643.4	1276.5	1082.0	925.5	872.4
32.5°	2553.6	2552.5	2495.6	2393.2	2272.4	2118.5	1761.4	1333.4	1090.2	908.6	846.9
35°	2712.9	2735.1	2692.3	2594.7	2467.5	2296.7	1892.0	1394.1	1090.7	878.8	813.8
37.5°	2893.8	2933.4	2914.4	2821.8	2687.9	2500.0	2045.4	1462.4	1087.4	837.7	765.6
40°	3099.7	3154.0	3153.3	3075.4	2932.3	2727.5	2223.6	1538.7	1079.8	786.1	708.7
42.5°	3335.4	3399.9	3417.8	3340.9	3196.2	2976.2	2427.9	1622.7	1068.0	735.2	648.6
45°	3605.3	3662.2	3695.7	3624.2	3479.0	3247.2	2662.4	1718.1	1053.3	669.7	579.7
47.5°	3894.1	3960.1	4010.5	3949.3	3794.3	3556.0	2940.5	1841.1	1047.9	594.9	505.5
50°	4252.2	4320.4	4429.4	4401.8	4316.6	4124.8	3528.3	2131.5	1050.1	524.0	443.2
52.5°	5140.7	5297.4	5434.9	5373.8	5171.6	4842.8	4006.2	2292.9	1004.5	466.0	399.9
55°	5409.0	5586.6	5789.8	5764.4	5570.4	5238.8	4383.9	2427.9	960.7	423.7	371.6
57.5°	5878.2	6087.9	6371.8	6366.3	6128.5	5755.1	4869.9	2589.3	941.6	399.4	357.6
60°	6375.0	6642.1	7034.4	7095.6	6837.2	6448.7	5444.1	2787.6	944.4	385.8	349.4
62.5°	6738.1	7129.8	7700.3	7883.5	7578.9	7150.9	6040.2	2986.0	928.1	370.1	339.7
65°	6760.3	7324.2	8133.8	8418.8	8110.5	7560.5	6250.4	2946.9	830.6	348.9	324.0
67.5°	6218.4	6953.1	7936.6	8249.2	7933.8	7308.1	5882.0	2576.3	675.1	312.1	297.0
70°	5179.2	6032.0	7052.8	7401.3	7140.6	6507.2	5119.1	2057.8	504.4	263.3	256.2
72.5°	4002.4	4797.7	5724.8	6047.2	5847.8	5290.8	4037.6	1499.7	360.3	213.5	208.1
75°	2861.3	3538.6	4211.5	4334.5	4137.8	3626.4	2619.7	936.8	252.5	175.0	167.5
77.5°	1771.8	2212.2	2453.9	2295.7	2044.8	1699.6	1066.3	462.7	168.0	142.5	134.9
80°	786.1	922.7	861.5	767.7	606.3	498.5	325.6	205.3	108.3	110.0	105.7
82.5°	264.4	279.6	272.0	270.4	243.8	213.5	138.2	88.9	60.7	70.5	68.8
85°	129.0	134.9	135.4	140.3	121.9	94.8	37.3	35.2	26.0	38.0	39.6
87.5°	39.0	39.6	35.8	39.0	31.4	21.7	7.1	9.7	4.9	9.2	9.2
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):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0	738.0
2.5°	712.5	710.3	706.6	702.2	701.1	695.7	694.1	691.3	689.8	687.0	684.9
5°	705.9	702.2	697.9	692.9	692.9	685.4	682.1	678.9	678.9	674.0	671.9
7.5°	712.5	707.6	702.8	698.4	700.0	691.3	688.1	684.9	684.4	679.4	677.3
10°	730.9	726.0	720.1	715.8	714.1	707.1	703.3	698.4	695.2	691.9	688.7
12.5°	759.1	752.6	745.0	735.8	732.0	726.0	720.1	713.6	705.9	702.8	697.9
15°	792.7	781.8	771.5	760.2	749.8	743.9	735.8	725.5	715.2	710.8	704.4
17.5°	820.3	808.9	794.3	780.7	762.3	757.5	746.0	733.7	716.8	715.2	705.4
20°	843.6	826.2	808.4	792.2	763.9	761.3	747.2	732.5	708.7	708.7	696.7
22.5°	856.6	832.8	811.6	789.9	754.7	752.6	736.3	719.0	689.8	690.8	676.2
25°	858.8	830.0	803.5	777.5	736.8	733.0	712.5	693.6	661.5	659.4	644.3
27.5°	850.1	816.5	785.6	754.2	710.3	702.2	679.4	656.6	625.2	619.8	603.5
30°	830.0	790.5	755.9	719.5	673.5	660.5	636.7	613.4	581.3	574.3	559.1
32.5°	798.1	753.1	714.6	678.3	627.4	611.2	587.4	564.1	533.2	527.7	513.6
35°	755.9	705.4	664.8	626.4	575.4	558.6	535.8	515.3	487.1	484.9	475.2
37.5°	702.8	650.2	606.8	570.0	521.8	513.1	489.8	474.6	451.3	453.5	448.7
40°	642.6	588.9	547.8	515.3	473.5	466.0	451.8	440.5	420.4	426.4	427.0
42.5°	582.0	528.3	490.9	461.7	425.9	420.9	411.2	404.8	389.5	401.5	406.3
45°	513.1	463.3	431.3	409.1	382.5	382.5	377.7	377.1	366.8	383.6	388.5
47.5°	446.4	407.4	385.2	371.6	353.2	361.9	360.3	364.7	357.0	374.4	378.7
50°	396.1	369.0	355.5	348.9	335.9	349.4	352.7	358.6	352.2	367.3	370.6
52.5°	364.1	346.3	338.6	337.0	327.8	344.6	350.1	355.5	347.8	361.9	361.4
55°	346.3	334.3	331.6	334.8	327.8	344.0	349.4	353.2	346.8	356.5	356.0
57.5°	339.7	333.2	334.8	339.7	334.8	348.4	351.1	355.5	348.9	353.2	355.5
60°	339.2	339.2	345.7	352.2	348.9	358.6	360.3	359.8	353.8	354.4	355.5
62.5°	335.9	344.0	354.9	365.2	364.1	376.0	377.1	370.1	365.2	359.8	358.1
65°	325.6	339.2	354.9	369.0	371.1	389.5	391.7	384.7	381.5	372.3	365.2
67.5°	302.9	320.2	338.6	356.0	359.8	384.7	389.5	392.3	393.9	387.9	378.7
70°	264.4	282.3	301.3	321.3	326.7	354.4	364.7	377.1	386.9	395.6	392.3
72.5°	215.1	231.4	247.7	266.1	274.2	302.9	316.4	338.1	353.2	375.5	384.7
75°	170.6	180.4	190.2	201.5	208.1	236.2	253.1	279.1	299.6	330.5	351.1
77.5°	134.4	139.2	144.1	149.0	151.7	167.5	181.0	206.9	230.8	269.9	300.1
80°	103.5	106.2	106.7	108.3	107.3	114.9	119.8	135.4	156.0	194.5	230.3
82.5°	66.6	68.8	69.9	72.6	67.2	76.9	80.2	81.8	92.7	120.8	146.3
85°	37.3	38.0	38.5	39.6	31.9	41.7	42.2	39.6	38.5	49.8	56.4
87.5°	9.2	8.7	9.2	9.2	3.8	8.7	8.7	5.9	4.3	8.1	6.5
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°	738.0	738.0	738.0	738.0	738.0	738.0
2.5°	680.0	678.9	679.4	676.7	675.7	676.2
5°	669.1	667.0	667.0	665.3	663.2	663.2
7.5°	674.0	669.7	668.1	664.8	661.5	662.1
10°	681.6	674.0	668.6	663.7	659.9	659.9
12.5°	686.5	672.9	664.8	658.3	654.0	654.0
15°	687.5	667.0	655.1	648.0	643.6	643.6
17.5°	681.1	655.1	639.9	630.6	625.8	626.9
20°	664.8	632.8	615.0	605.2	600.4	600.9
22.5°	639.3	602.5	582.0	570.5	565.7	565.7
25°	604.7	564.6	542.4	533.2	528.8	528.8
27.5°	565.1	524.0	504.4	497.4	494.7	494.7
30°	520.7	486.5	472.5	467.6	463.3	463.3
32.5°	483.3	458.9	454.1	447.5	436.2	435.6
35°	453.5	450.8	447.0	427.5	411.2	409.1
37.5°	437.2	453.5	429.6	396.1	383.1	382.5
40°	428.6	443.8	402.5	386.3	384.7	384.7
42.5°	408.0	418.8	400.9	391.7	391.7	392.3
45°	386.3	395.6	404.8	396.6	399.4	399.9
47.5°	371.1	389.5	404.8	397.7	403.1	406.3
50°	357.0	384.1	396.6	396.6	402.5	403.1
52.5°	353.8	376.5	389.0	395.0	395.6	392.8
55°	354.4	370.6	383.1	390.7	387.4	387.4
57.5°	353.8	367.3	378.2	380.9	382.5	382.5
60°	354.4	363.0	371.6	370.6	376.0	376.0
62.5°	356.0	357.0	361.4	360.3	368.5	368.5
65°	359.8	349.4	346.8	347.8	357.6	357.0
67.5°	366.8	339.2	330.5	331.0	345.1	343.0
70°	377.1	325.1	312.1	308.8	332.7	328.9
72.5°	380.3	308.8	288.3	285.0	299.1	288.3
75°	365.2	295.8	262.8	252.0	246.0	242.7
77.5°	325.6	287.7	236.2	213.5	204.3	202.1
80°	269.9	270.9	201.5	174.5	202.6	202.1
82.5°	203.8	234.1	161.4	151.2	146.8	122.4
85°	98.6	176.0	124.1	104.0	62.3	59.0
87.5°	8.7	73.7	71.5	46.6	21.2	20.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)