

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: P198766

Luminaire Tested: **XNV-AF-01-LED-U-T2R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198766  
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: XNV-AF-01-LED-U-T2R  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6483.5 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1

Input Watts (W): 58  
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

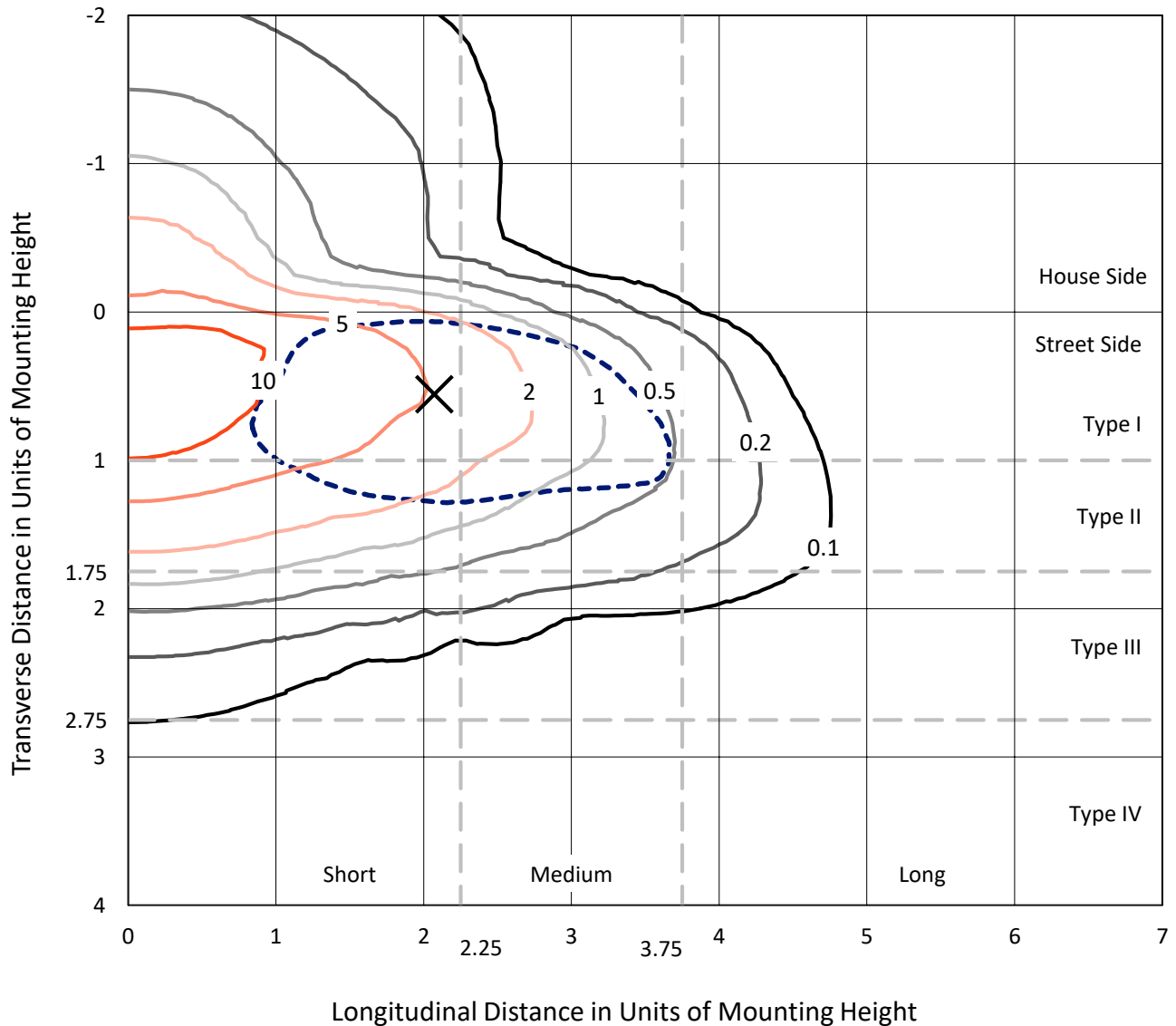


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

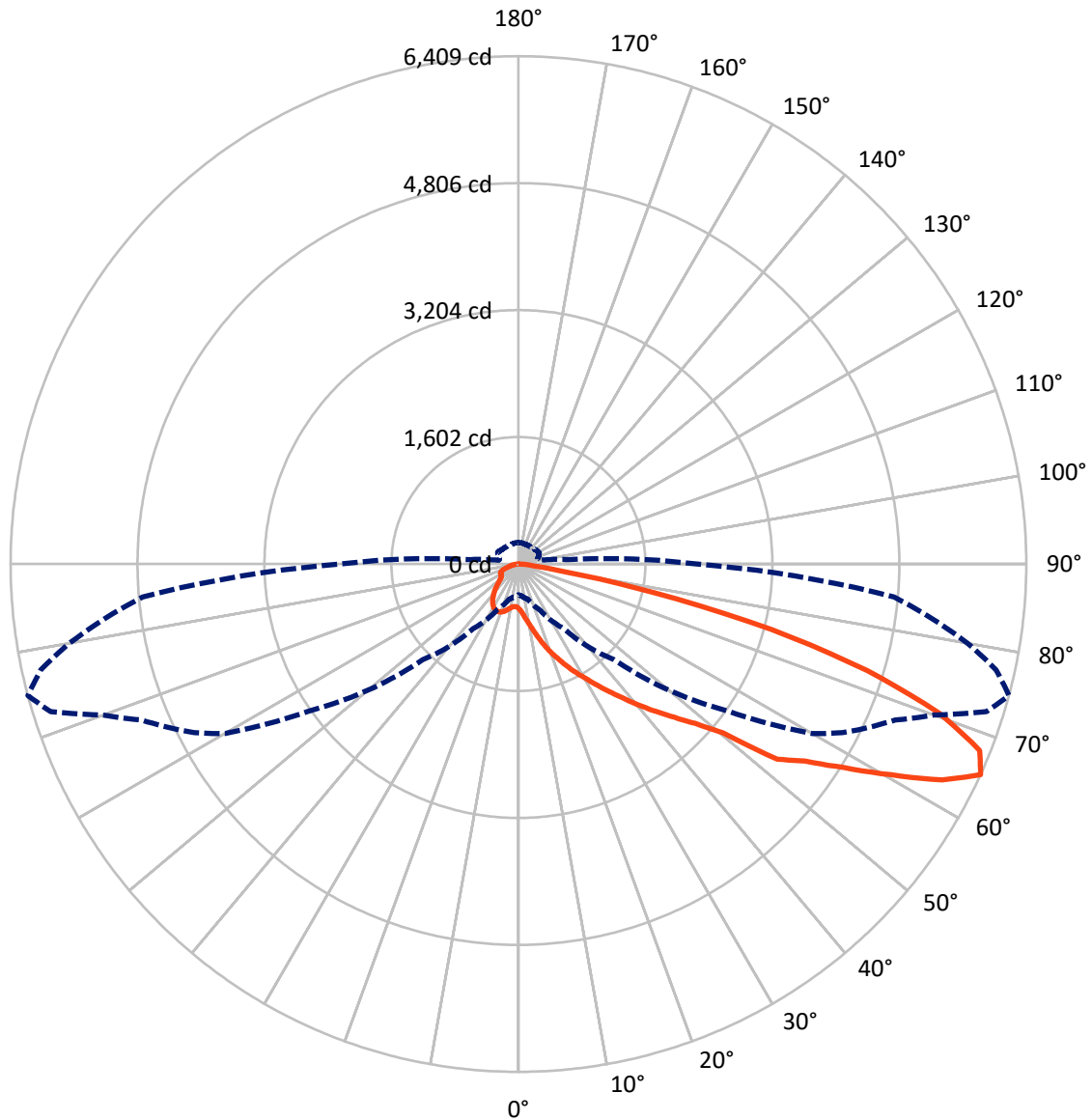


Based on 10 foot mounting height. Maximum calculated value = 16.1 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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



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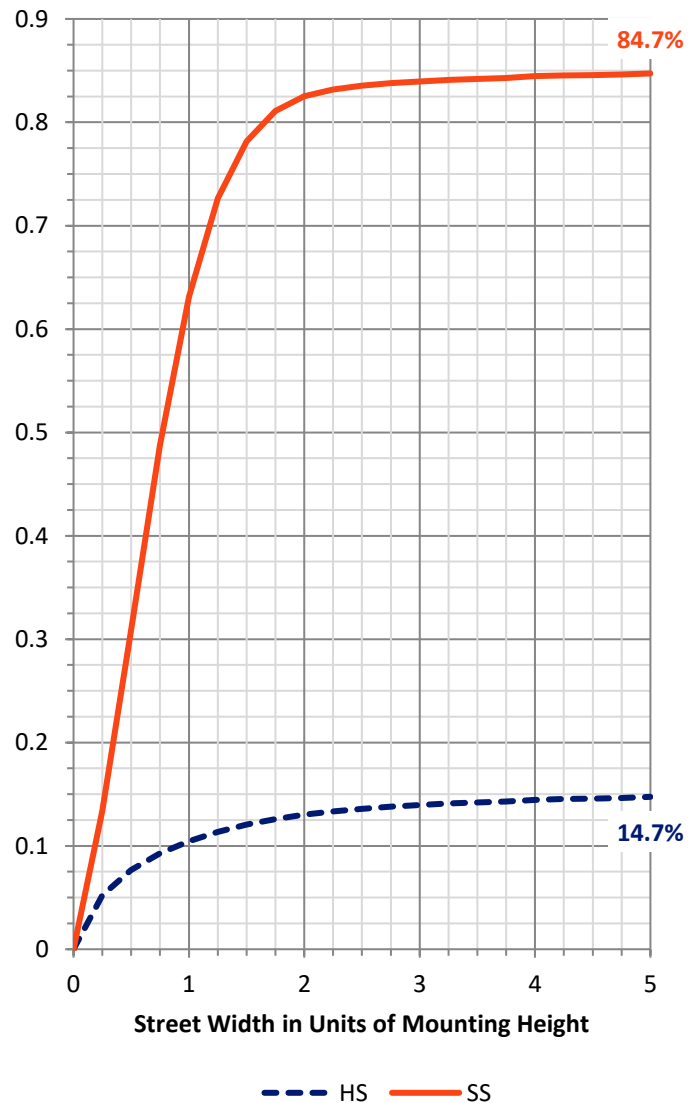
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	974.2	0.0	974.2
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	5509.2	0.0	5509.2
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	6483.5	0.0	6483.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.3	1.0
10°-20°	253.3	3.9
20°-30°	511.2	7.9
30°-40°	868.1	13.4
40°-50°	1210.9	18.7
50°-60°	1484.1	22.9
60°-70°	1396.3	21.5
70°-80°	612.3	9.4
80°-90°	81.0	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°	6483.5	100.0
0°-180°	6483.5	100.0

**Coefficient of Utilization**



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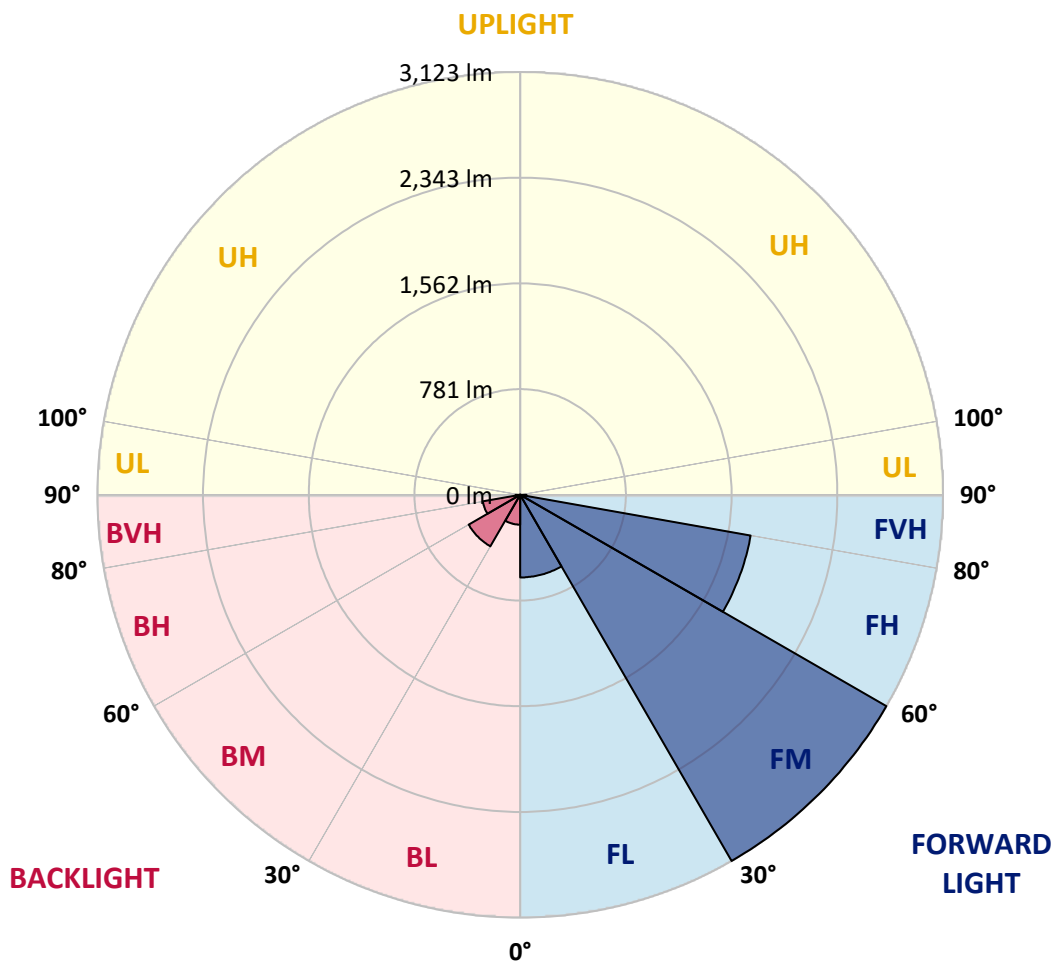
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	610.3	9.4			
FM	(30°-60°)	3123.4	48.2			
FH	(60°-80°)	1728.5	26.7			G1/1800
FVH	(80°-90°)	47.0	0.7			G1/100
BL	(0°-30°)	220.5	3.4	B1/500		
BM	(30°-60°)	439.6	6.8	B1/1000		
BH	(60°-80°)	280.0	4.3	B1/500		G1/500
BVH	(80°-90°)	34.1	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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7
2.5°	707.4	699.1	699.9	688.3	671.5	652.9	637.6	629.4	622.4	620.3	608.8
5°	925.2	914.8	911.1	884.6	845.1	798.1	751.5	733.4	718.5	709.4	687.1
7.5°	1103.3	1097.9	1093.0	1068.7	1029.5	969.2	894.2	867.4	842.6	815.4	788.6
10°	1224.6	1222.5	1220.4	1203.5	1171.0	1118.6	1037.7	1008.4	977.5	942.9	907.8
12.5°	1316.1	1316.1	1317.8	1303.8	1283.9	1243.5	1170.2	1142.8	1111.5	1075.2	1035.2
15°	1377.6	1379.2	1387.8	1392.0	1381.7	1355.7	1291.4	1267.4	1237.8	1201.9	1162.3
17.5°	1418.4	1421.7	1434.5	1448.1	1461.3	1452.2	1404.4	1382.1	1355.3	1322.3	1285.1
20°	1513.3	1509.2	1509.6	1505.5	1524.8	1531.9	1505.5	1486.9	1465.4	1435.3	1401.4
22.5°	1712.5	1704.6	1684.4	1632.8	1609.4	1606.9	1591.2	1581.3	1564.8	1545.9	1512.0
25°	1972.4	1963.2	1923.2	1838.2	1768.2	1703.4	1674.6	1668.3	1657.6	1644.8	1620.5
27.5°	2240.8	2231.0	2179.4	2072.1	1980.5	1849.8	1759.9	1751.7	1741.8	1736.4	1724.9
30°	2477.2	2466.4	2415.7	2306.9	2196.3	2040.4	1875.0	1846.1	1829.2	1830.9	1824.2
32.5°	2684.6	2675.1	2618.2	2507.3	2395.0	2243.7	2024.3	1979.3	1941.4	1927.3	1932.4
35°	2858.6	2850.0	2787.7	2675.9	2562.9	2437.2	2216.5	2148.8	2087.0	2048.3	2043.7
37.5°	2960.9	2956.0	2912.2	2817.4	2705.2	2612.8	2431.8	2356.7	2265.5	2209.1	2184.3
40°	2955.2	2960.5	2953.2	2910.2	2823.2	2755.9	2656.2	2581.9	2492.8	2408.6	2358.4
42.5°	2871.0	2878.5	2911.8	2934.1	2910.6	2869.8	2852.1	2796.8	2716.8	2627.7	2558.0
45°	2755.5	2762.2	2805.4	2885.8	2953.2	2964.7	3023.6	2996.0	2928.4	2852.5	2775.8
47.5°	2578.7	2591.4	2641.8	2769.5	2929.6	3040.9	3167.6	3180.4	3141.2	3078.5	3006.8
50°	2322.5	2339.4	2410.0	2591.9	2840.5	3119.3	3381.7	3430.4	3414.6	3351.1	3278.6
52.5°	2060.1	2077.1	2171.1	2364.6	2697.0	3151.5	3592.4	3717.0	3806.9	3872.5	3885.3
55°	1787.1	1806.1	1909.2	2131.9	2505.6	3110.7	3743.0	3884.5	3975.6	4044.0	4071.7
57.5°	1479.1	1500.5	1600.3	1825.5	2235.0	2946.5	3910.4	4110.8	4246.6	4352.1	4411.6
60°	1125.6	1152.4	1255.9	1482.8	1879.6	2632.3	3985.1	4281.6	4497.3	4655.7	4749.8
62.5°	713.5	740.7	848.4	1083.9	1474.9	2202.9	3773.9	4206.6	4574.4	4808.7	4981.2
65°	389.3	401.3	461.1	638.4	994.4	1709.1	3238.6	3748.7	4278.7	4610.7	4875.5
67.5°	292.1	293.7	299.8	343.2	529.6	1154.0	2532.0	2999.3	3587.9	4015.2	4331.5
70°	255.7	255.7	256.6	257.0	287.4	625.2	1715.4	2145.5	2685.0	3117.2	3510.4
72.5°	229.3	226.9	226.0	221.1	225.2	320.5	933.7	1320.2	1775.1	2260.2	2626.8
75°	197.9	197.5	197.5	192.6	195.1	225.6	405.0	633.5	986.1	1437.8	1798.7
77.5°	171.1	168.3	168.7	165.8	173.6	172.8	192.2	261.1	429.3	755.1	1054.7
80°	141.1	139.0	140.2	138.6	151.0	127.9	129.5	159.6	213.3	331.2	466.9
82.5°	104.3	105.2	113.0	112.2	127.1	86.2	94.8	119.2	143.5	165.0	179.4
85°	61.1	62.3	81.2	85.4	93.2	45.4	58.2	70.9	80.0	88.7	92.4
87.5°	6.6	8.7	45.4	46.6	41.6	13.6	23.5	29.7	31.7	33.9	29.7
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°	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7
2.5°	605.1	599.7	593.9	590.7	584.8	579.9	570.8	563.4	555.2	549.4	546.9
5°	676.0	663.2	649.6	639.8	627.4	616.6	596.0	571.2	563.4	546.9	542.8
7.5°	768.3	745.3	722.2	703.2	681.8	664.0	629.4	584.8	579.1	552.7	546.9
10°	876.9	843.0	808.8	779.5	748.2	721.0	669.8	607.1	601.0	567.1	561.3
12.5°	998.1	956.9	912.8	869.0	831.9	793.5	723.8	641.8	631.9	591.9	584.0
15°	1123.1	1078.5	1027.5	974.6	928.8	878.1	790.2	687.1	669.0	622.0	611.2
17.5°	1246.4	1198.2	1144.6	1085.6	1032.0	971.3	862.0	737.9	706.6	651.6	638.0
20°	1365.6	1316.5	1260.1	1202.3	1135.5	1066.2	935.4	787.8	739.9	676.4	658.7
22.5°	1474.1	1432.0	1375.5	1309.1	1241.5	1163.5	1010.1	837.7	769.3	695.4	672.7
25°	1588.3	1550.0	1493.9	1430.0	1351.2	1264.6	1087.2	885.2	792.7	705.7	677.6
27.5°	1703.8	1670.8	1618.0	1550.8	1466.3	1370.1	1165.6	928.8	811.7	709.0	675.1
30°	1827.1	1801.5	1752.9	1677.8	1592.4	1486.0	1251.0	971.7	823.7	704.5	664.0
32.5°	1943.8	1943.0	1899.7	1821.8	1729.8	1612.7	1340.9	1015.1	829.8	691.7	644.7
35°	2065.1	2082.0	2049.5	1975.2	1878.2	1748.3	1440.3	1061.2	830.2	669.0	619.5
37.5°	2202.9	2233.0	2218.6	2148.0	2046.1	1903.0	1557.0	1113.2	827.8	637.6	582.8
40°	2359.6	2400.9	2400.5	2341.0	2232.2	2076.3	1692.7	1171.4	822.0	598.4	539.5
42.5°	2539.1	2588.1	2601.7	2543.2	2433.0	2265.5	1848.2	1235.3	812.9	559.7	493.7
45°	2744.4	2787.7	2813.3	2758.9	2648.3	2471.8	2026.8	1307.8	801.8	509.7	441.3
47.5°	2964.2	3014.5	3052.9	3006.4	2888.4	2706.9	2238.3	1401.4	797.7	452.9	384.8
50°	3236.9	3288.9	3371.7	3350.7	3285.9	3139.9	2685.9	1622.6	799.3	398.8	337.4
52.5°	3913.3	4032.5	4137.2	4090.7	3936.8	3686.4	3049.6	1745.5	764.7	354.7	304.4
55°	4117.5	4252.7	4407.4	4388.0	4240.3	3988.0	3337.1	1848.2	731.3	322.5	282.9
57.5°	4474.6	4634.3	4850.4	4846.2	4665.2	4381.0	3707.1	1971.1	716.8	304.0	272.2
60°	4852.9	5056.1	5354.8	5401.4	5204.7	4908.9	4144.3	2122.0	718.9	293.7	266.1
62.5°	5129.2	5427.4	5861.7	6001.1	5769.3	5443.4	4598.0	2273.0	706.6	281.7	258.6
65°	5146.1	5575.5	6191.6	6408.6	6173.9	5755.3	4757.9	2243.3	632.3	265.7	246.6
67.5°	4733.6	5293.0	6041.5	6279.5	6039.5	5563.1	4477.6	1961.2	513.9	237.5	226.0
70°	3942.6	4591.7	5368.9	5634.0	5435.7	4953.4	3896.8	1566.4	384.0	200.5	195.1
72.5°	3046.8	3652.2	4357.9	4603.3	4451.6	4027.6	3073.6	1141.6	274.3	162.5	158.4
75°	2178.2	2693.7	3205.9	3299.5	3149.9	2760.5	1994.1	713.1	192.2	133.2	127.5
77.5°	1348.7	1684.0	1868.0	1747.5	1556.6	1293.8	811.7	352.2	127.9	108.4	102.7
80°	598.4	702.4	655.8	584.4	461.6	379.4	247.9	156.3	82.4	83.7	80.4
82.5°	201.3	212.8	207.0	205.8	185.6	162.5	105.2	67.6	46.2	53.6	52.4
85°	98.2	102.7	103.1	106.8	92.8	72.2	28.4	26.8	19.8	28.8	30.1
87.5°	29.7	30.1	27.2	29.7	23.9	16.5	5.3	7.5	3.7	7.1	7.1
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°	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7	561.7
2.5°	542.4	540.7	537.9	534.5	533.7	529.6	528.4	526.3	525.1	522.9	521.3
5°	537.5	534.5	531.2	527.5	527.5	521.7	519.2	516.8	516.8	513.1	511.5
7.5°	542.4	538.7	534.9	531.6	532.9	526.3	523.9	521.3	520.9	517.2	515.6
10°	556.4	552.7	548.1	544.8	543.6	538.3	535.3	531.6	529.2	526.7	524.3
12.5°	577.9	572.9	567.1	560.1	557.2	552.7	548.1	543.2	537.5	534.9	531.2
15°	603.4	595.2	587.3	578.7	570.8	566.3	560.1	552.3	544.4	541.1	536.2
17.5°	624.4	615.8	604.7	594.3	580.3	576.6	567.9	558.4	545.6	544.4	537.0
20°	642.2	629.0	615.4	603.0	581.5	579.5	568.8	557.6	539.5	539.5	530.4
22.5°	652.0	633.9	617.9	601.4	574.5	572.9	560.5	547.3	525.1	525.9	514.7
25°	653.8	631.9	611.6	591.9	560.9	558.0	542.4	527.9	503.6	502.0	490.4
27.5°	647.1	621.5	598.0	574.1	540.7	534.5	517.2	499.9	476.0	471.9	459.5
30°	631.9	601.8	575.4	547.7	512.7	502.8	484.7	466.9	442.5	437.2	425.6
32.5°	607.5	573.3	544.0	516.4	477.6	465.2	447.1	429.3	405.8	401.7	391.0
35°	575.4	537.0	506.1	476.8	438.0	425.2	408.0	392.2	370.8	369.2	361.7
37.5°	534.9	494.9	462.0	433.9	397.2	390.6	372.9	361.3	343.6	345.2	341.5
40°	489.2	448.4	417.0	392.2	360.5	354.7	344.0	335.3	320.1	324.6	325.0
42.5°	442.9	402.1	373.7	351.4	324.2	320.5	313.0	308.1	296.6	305.7	309.3
45°	390.6	352.6	328.3	311.4	291.2	291.2	287.4	287.0	279.3	292.1	295.7
47.5°	339.8	310.2	293.3	282.9	268.9	275.5	274.3	277.5	271.8	285.0	288.3
50°	301.5	280.9	270.6	265.7	255.7	266.1	268.5	273.0	268.1	279.7	282.1
52.5°	277.1	263.5	257.8	256.6	249.5	262.3	266.5	270.6	264.7	275.5	275.1
55°	263.5	254.5	252.5	254.9	249.5	261.9	266.1	268.9	263.9	271.4	271.0
57.5°	258.6	253.7	254.9	258.6	254.9	265.3	267.3	270.6	265.7	268.9	270.6
60°	258.2	258.2	263.1	268.1	265.7	273.0	274.3	273.8	269.3	269.8	270.6
62.5°	255.7	261.9	270.2	278.0	277.1	286.2	287.0	281.7	278.0	273.8	272.6
65°	247.9	258.2	270.2	280.9	282.5	296.6	298.2	292.9	290.3	283.4	278.0
67.5°	230.6	243.8	257.8	271.0	273.8	292.9	296.6	298.6	299.8	295.3	288.3
70°	201.3	214.9	229.3	244.6	248.7	269.8	277.5	287.0	294.5	301.1	298.6
72.5°	163.8	176.2	188.5	202.5	208.7	230.6	240.9	257.4	268.9	285.8	292.9
75°	129.9	137.4	144.7	153.4	158.4	179.8	192.6	212.4	228.1	251.5	267.3
77.5°	102.3	106.0	109.7	113.4	115.5	127.5	137.8	157.5	175.7	205.4	228.5
80°	78.8	80.8	81.2	82.4	81.6	87.5	91.1	103.1	118.8	148.0	175.3
82.5°	50.7	52.4	53.2	55.2	51.1	58.6	61.1	62.3	70.5	92.0	111.4
85°	28.4	28.8	29.3	30.1	24.3	31.7	32.1	30.1	29.3	38.0	42.9
87.5°	7.1	6.6	7.1	7.1	2.9	6.6	6.6	4.5	3.3	6.1	4.9
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):**

	135°	145°	155°	165°	175°	180°
0°	561.7	561.7	561.7	561.7	561.7	561.7
2.5°	517.6	516.8	517.2	515.2	514.3	514.7
5°	509.3	507.7	507.7	506.5	504.8	504.8
7.5°	513.1	509.7	508.5	506.1	503.6	504.0
10°	518.8	513.1	508.9	505.2	502.4	502.4
12.5°	522.5	512.3	506.1	501.1	497.9	497.9
15°	523.4	507.7	498.7	493.3	490.0	490.0
17.5°	518.4	498.7	487.1	480.1	476.4	477.2
20°	506.1	481.7	468.1	460.7	457.0	457.4
22.5°	486.7	458.7	442.9	434.3	430.6	430.6
25°	460.3	429.7	412.9	405.8	402.5	402.5
27.5°	430.2	398.8	384.0	378.6	376.5	376.5
30°	396.4	370.4	359.7	356.0	352.6	352.6
32.5°	367.9	349.3	345.7	340.6	332.0	331.6
35°	345.2	343.2	340.2	325.4	313.0	311.4
37.5°	332.9	345.2	327.0	301.5	291.6	291.2
40°	326.2	337.8	306.5	294.1	292.9	292.9
42.5°	310.6	318.9	305.2	298.2	298.2	298.6
45°	294.1	301.1	308.1	301.9	304.0	304.4
47.5°	282.5	296.6	308.1	302.7	306.9	309.3
50°	271.8	292.5	301.9	301.9	306.5	306.9
52.5°	269.3	286.6	296.1	300.6	301.1	299.0
55°	269.8	282.1	291.6	297.4	294.9	294.9
57.5°	269.3	279.7	287.9	289.9	291.2	291.2
60°	269.8	276.3	282.9	282.1	286.2	286.2
62.5°	271.0	271.8	275.1	274.3	280.5	280.5
65°	273.8	266.1	263.9	264.7	272.2	271.8
67.5°	279.3	258.2	251.5	252.1	262.7	261.1
70°	287.0	247.5	237.5	235.1	253.3	250.3
72.5°	289.5	235.1	219.4	217.0	227.7	219.4
75°	278.0	225.2	200.0	191.8	187.2	184.7
77.5°	247.9	219.0	179.8	162.5	155.5	153.9
80°	205.4	206.2	153.4	132.8	154.3	153.9
82.5°	155.1	178.2	123.0	115.1	111.8	93.2
85°	75.1	134.0	94.4	79.2	47.5	44.9
87.5°	6.6	56.1	54.4	35.5	16.1	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)