

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: P239891

Luminaire Tested: **UTLD-AF24-90-D-U-T3-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239891
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-15)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-90-D-U-T3-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7329 lumens
Efficiency: N/A
Efficacy: 78.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U4 - G3

Input Watts (W): 94
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

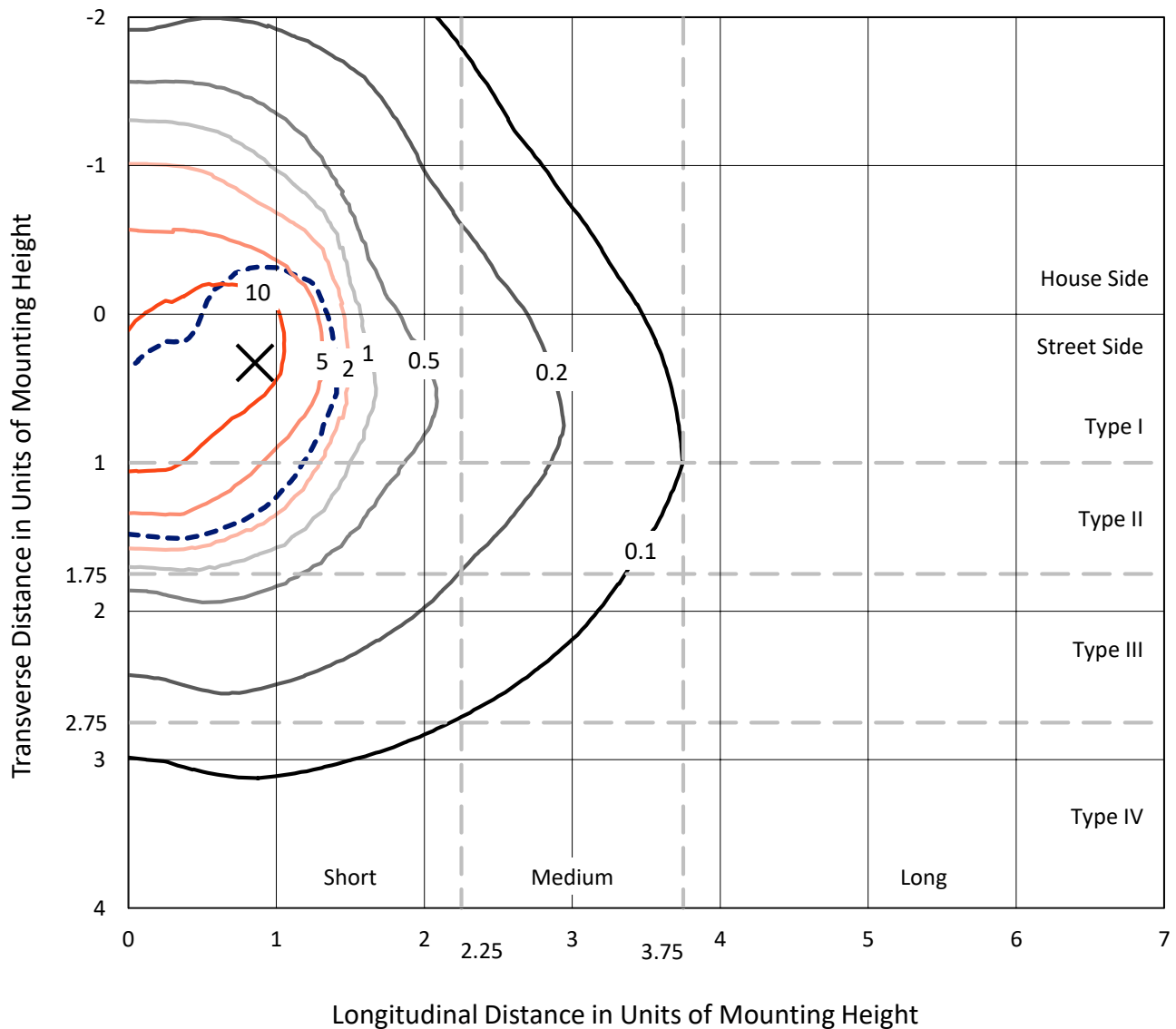


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

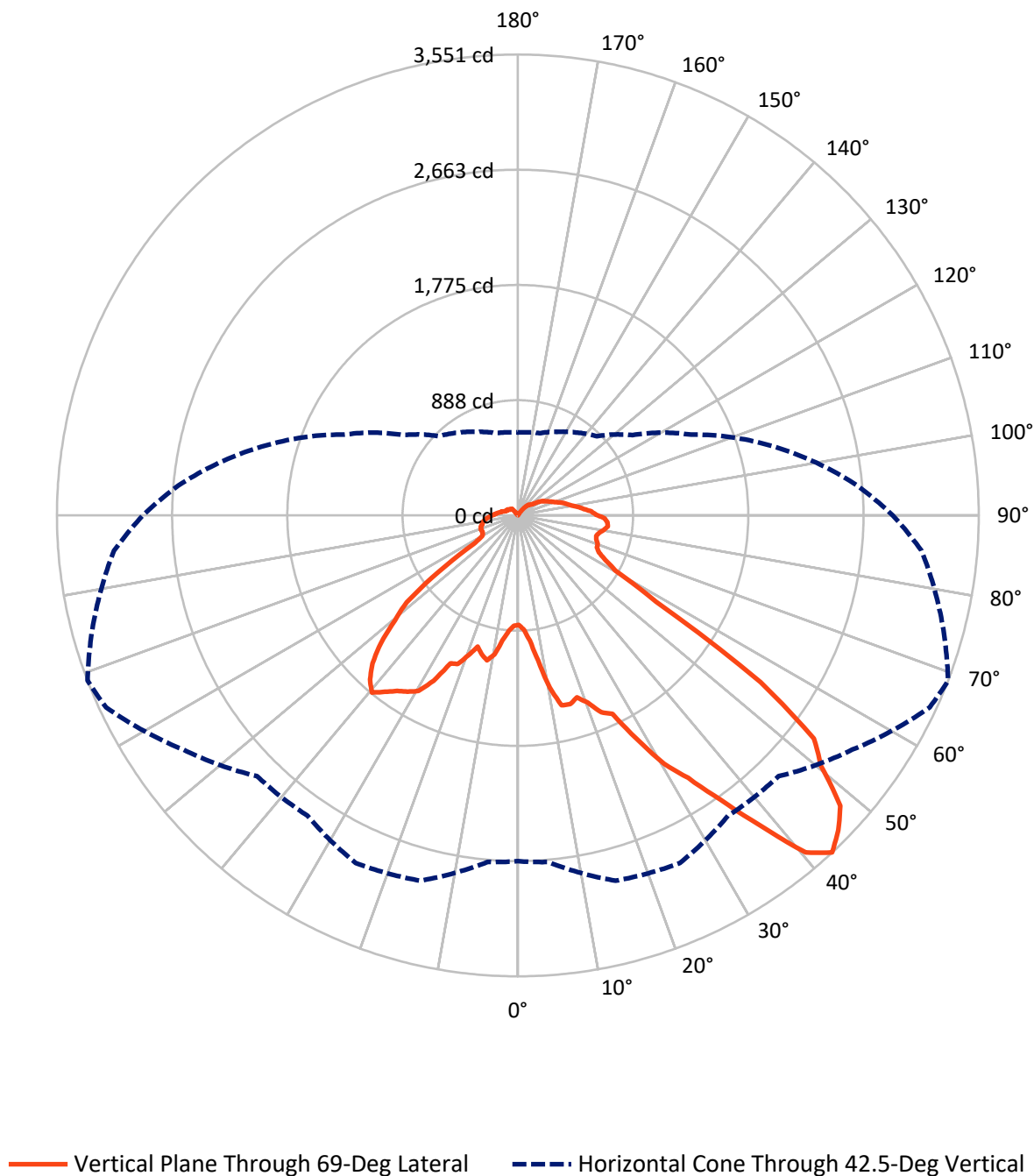


Based on 10 foot mounting height. Maximum calculated value = 17.7 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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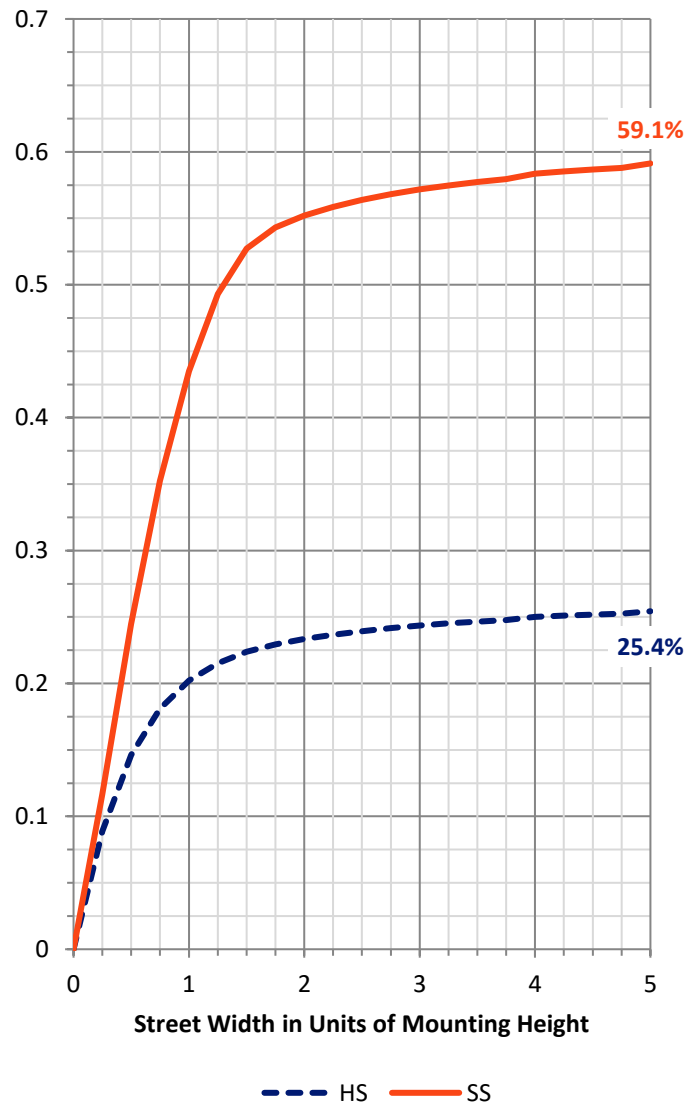
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1931.1	232.7	2163.8
	% Fixture	26.3	3.2	29.5
Street Side	Lumens	4474.8	690.4	5165.2
	% Fixture	61.1	9.4	70.5
Total	Lumens	6405.8	923.2	7329.0
	% Fixture	87.4	12.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.9	1.3
10°-20°	352.5	4.8
20°-30°	721.1	9.8
30°-40°	1212.9	16.5
40°-50°	1605.6	21.9
50°-60°	1157.8	15.8
60°-70°	454.8	6.2
70°-80°	409.8	5.6
80°-90°	399.4	5.4
90°-100°	336.8	4.6
100°-110°	239.5	3.3
110°-120°	161.4	2.2
120°-130°	105.6	1.4
130°-140°	63.1	0.9
140°-150°	16.0	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6405.8	87.4
0°-180°	7329.0	100.0

Coefficient of Utilization



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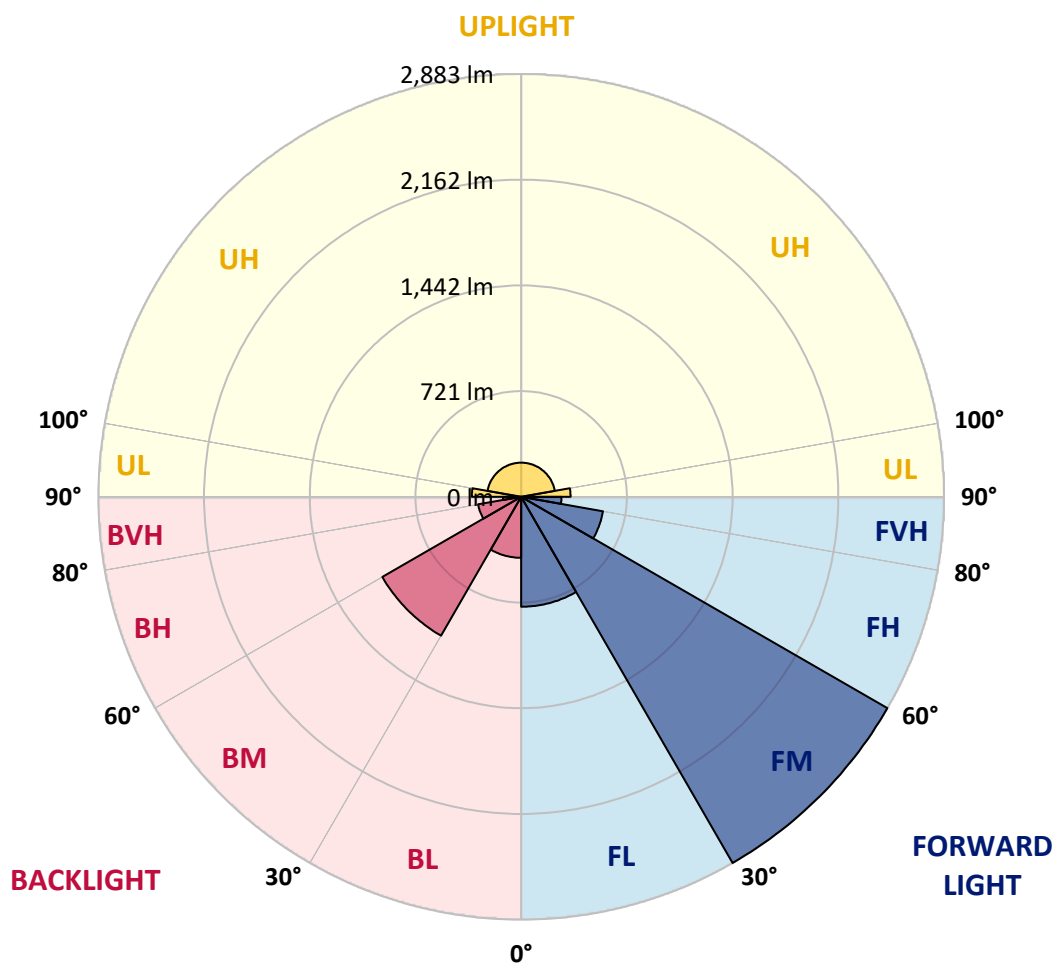
CATALOG NUMBER: UTLD-AF24-90-D-U-T3-A

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	749.6	10.2			
FM	(30°-60°)	2883.2	39.3			
FH	(60°-80°)	566.7	7.7			G0/660
FVH	(80°-90°)	275.2	3.8			G3/500
BL	(0°-30°)	415.9	5.7	B1/500		
BM	(30°-60°)	1093.1	14.9	B2/2500		
BH	(60°-80°)	297.9	4.1	B1/500		G1/500
BVH	(80°-90°)	124.2	1.7			G2/225
UL	(90°-100°)	336.8	4.6		U3/500	
UH	(100°-180°)	232.7	3.2		U3/500	

BUG Rating: B2-U4-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	69°	75°	85°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	898.2	893.2	891.2	891.2	888.2	887.2	889.2	886.2	881.2	880.2	874.3
5°	961.1	959.1	958.1	966.1	973.1	975.0	973.1	973.1	967.1	967.1	948.1
7.5°	1061.9	1058.9	1066.9	1086.8	1093.8	1114.8	1139.7	1124.8	1128.7	1117.8	1081.8
10°	1178.6	1173.7	1210.6	1237.5	1299.4	1325.3	1357.3	1354.3	1348.3	1329.3	1269.5
12.5°	1284.4	1281.4	1329.3	1427.1	1510.0	1593.8	1600.8	1531.9	1501.0	1433.1	1358.3
15°	1416.2	1419.2	1492.0	1630.7	1753.5	1787.4	1702.6	1566.9	1509.0	1439.1	1328.3
17.5°	1628.7	1638.7	1762.5	1920.2	2002.0	1865.3	1683.6	1527.9	1473.1	1397.2	1290.4
20°	1752.5	1758.5	1928.1	2141.7	2165.7	1944.1	1755.5	1587.8	1539.9	1480.0	1392.2
22.5°	1826.3	1848.3	2042.9	2304.4	2290.4	2127.7	1866.3	1707.6	1647.7	1565.9	1494.0
25°	1945.1	1961.1	2147.7	2400.2	2338.3	2187.6	1965.1	1753.5	1694.6	1634.7	1562.9
27.5°	2105.8	2120.8	2330.3	2476.0	2411.2	2267.5	2112.8	1977.0	1946.1	1936.1	1905.2
30°	2191.6	2201.6	2437.1	2559.9	2449.1	2382.2	2339.3	2230.5	2221.6	2201.6	2130.7
32.5°	2240.5	2278.4	2551.9	2622.8	2478.0	2470.1	2496.0	2429.1	2411.2	2377.2	2295.4
35°	2284.4	2303.4	2560.9	2668.7	2525.0	2521.0	2699.6	2730.5	2690.6	2620.8	2425.1
37.5°	2622.8	2631.7	2808.4	2770.5	2586.8	2608.8	2903.2	3063.9	3027.9	2941.1	2806.4
40°	2806.4	2822.4	2986.0	2907.2	2717.6	2742.5	3049.9	3383.2	3415.2	3412.2	3294.4
42.5°	2663.7	2680.6	2913.2	2955.1	2824.4	2841.3	3145.7	3500.0	3550.9	3394.2	3122.8
45°	3128.7	3141.7	3272.5	2966.1	2751.5	2816.4	3070.9	3415.2	3461.1	3415.2	3182.6
47.5°	3127.7	3111.8	3220.6	2997.0	2746.5	2702.6	2908.2	3252.5	3343.3	3238.5	2986.0
50°	2749.5	2748.5	3017.0	2888.2	2692.6	2590.8	2729.5	3002.0	3024.0	2901.2	2562.9
52.5°	2401.2	2399.2	2709.6	2643.7	2516.0	2416.2	2502.0	2773.5	2857.3	2749.5	2467.1
55°	2092.8	2178.6	2451.1	2310.4	2257.5	2158.7	2244.5	2311.4	2268.5	1969.1	1328.3
57.5°	1267.5	1362.3	1717.6	1819.4	1831.3	1760.5	1565.9	1337.3	1255.5	1003.0	598.8
60°	590.8	613.8	901.2	1096.8	1338.3	1223.6	990.0	862.3	862.3	757.5	520.0
62.5°	416.2	432.1	591.8	707.6	801.4	790.4	702.6	720.6	756.5	709.6	501.0
65°	391.2	401.2	526.9	561.9	597.8	604.8	592.8	647.7	685.6	679.6	508.0
67.5°	363.3	376.2	481.0	504.0	531.9	544.9	553.9	617.8	657.7	679.6	527.9
70°	330.3	345.3	444.1	476.0	503.0	532.9	543.9	612.8	653.7	675.6	534.9
72.5°	299.4	312.4	395.2	435.1	483.0	518.0	561.9	603.8	631.7	654.7	538.9
75°	269.5	284.4	354.3	400.2	456.1	522.0	574.9	605.8	624.8	642.7	533.9
77.5°	249.5	265.5	320.4	373.3	440.1	530.9	590.8	630.7	641.7	644.7	527.9
80°	231.5	249.5	307.4	363.3	436.1	534.9	609.8	657.7	672.7	679.6	561.9
82.5°	244.5	260.5	310.4	378.2	449.1	533.9	604.8	680.6	697.6	693.6	572.9
85°	276.4	289.4	350.3	414.2	469.1	525.0	586.8	669.7	693.6	714.6	606.8
87.5°	336.3	342.3	386.2	445.1	490.0	508.0	569.9	647.7	669.7	676.6	590.8
90°	368.3	374.3	426.1	475.0	489.0	495.0	508.0	585.8	601.8	629.7	564.9
92.5°	405.2	405.2	459.1	488.0	488.0	463.1	472.1	541.9	568.9	584.8	525.0
95°	441.1	439.1	469.1	486.0	460.1	425.1	440.1	495.0	512.0	528.9	488.0
97.5°	452.1	451.1	469.1	459.1	416.2	383.2	402.2	449.1	467.1	485.0	443.1
100°	440.1	435.1	440.1	418.2	378.2	353.3	364.3	403.2	422.2	437.1	399.2
102.5°	414.2	411.2	413.2	391.2	349.3	319.4	334.3	375.2	389.2	401.2	367.3
105°	402.2	397.2	388.2	356.3	315.4	294.4	307.4	348.3	361.3	385.2	357.3
107.5°	342.3	338.3	331.3	314.4	293.4	277.4	288.4	317.4	325.3	337.3	311.4
110°	295.4	293.4	291.4	287.4	274.5	263.5	269.5	285.4	295.4	304.4	278.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	69°	75°	85°
112.5°	285.4	282.4	280.4	273.5	256.5	244.5	248.5	266.5	272.5	275.4	247.5
115°	272.5	269.5	258.5	248.5	236.5	230.5	231.5	246.5	250.5	252.5	235.5
117.5°	241.5	238.5	231.5	227.5	220.6	217.6	222.6	230.5	231.5	232.5	217.6
120°	223.6	222.6	218.6	211.6	206.6	199.6	207.6	215.6	218.6	221.6	211.6
122.5°	203.6	201.6	197.6	188.6	188.6	184.6	183.6	188.6	189.6	197.6	192.6
125°	179.6	177.6	173.7	165.7	175.6	175.6	168.7	157.7	160.7	167.7	163.7
127.5°	160.7	158.7	154.7	150.7	164.7	169.7	157.7	137.7	139.7	141.7	138.7
130°	157.7	155.7	150.7	143.7	147.7	162.7	141.7	125.7	128.7	130.7	128.7
132.5°	154.7	153.7	146.7	137.7	132.7	146.7	122.8	118.8	121.8	124.8	122.8
135°	144.7	143.7	137.7	124.8	110.8	117.8	97.8	103.8	108.8	112.8	110.8
137.5°	128.7	127.7	122.8	109.8	90.8	84.8	74.9	88.8	92.8	97.8	97.8
140°	103.8	102.8	97.8	84.8	63.9	44.9	47.9	67.9	71.9	77.8	78.8
142.5°	75.8	73.9	68.9	56.9	35.9	15.0	26.9	40.9	45.9	51.9	55.9
145°	51.9	50.9	43.9	33.9	17.0	2.0	12.0	25.0	27.9	31.9	35.9
147.5°	32.9	32.9	27.9	19.0	5.0	2.0	3.0	13.0	16.0	20.0	23.0
150°	20.0	20.0	15.0	6.0	1.0	1.0	1.0	2.0	5.0	9.0	12.0
152.5°	5.0	5.0	3.0	2.0	1.0	0.0	1.0	1.0	1.0	1.0	2.0
155°	2.0	2.0	2.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
157.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3	843.3
2.5°	871.3	865.3	857.3	846.3	835.3	824.4	813.4	807.4	804.4	802.4	801.4
5°	943.1	930.1	909.2	880.2	844.3	823.4	808.4	790.4	778.4	774.5	771.5
7.5°	1069.9	1048.9	1007.0	945.1	901.2	839.3	786.4	752.5	727.5	713.6	713.6
10°	1239.5	1209.6	1136.7	1051.9	939.1	830.3	748.5	686.6	657.7	645.7	642.7
12.5°	1314.4	1285.4	1199.6	1100.8	981.0	854.3	750.5	676.6	641.7	627.7	629.7
15°	1276.4	1236.5	1162.7	1069.9	976.0	896.2	809.4	717.6	657.7	641.7	646.7
17.5°	1238.5	1197.6	1118.8	1016.0	924.2	871.3	810.4	748.5	691.6	668.7	664.7
20°	1349.3	1319.4	1212.6	1095.8	958.1	824.4	781.4	753.5	734.5	735.5	726.5
22.5°	1455.1	1414.2	1316.4	1179.6	1030.9	914.2	844.3	807.4	786.4	795.4	796.4
25°	1525.9	1495.0	1350.3	1186.6	1062.9	976.0	875.2	823.4	788.4	788.4	784.4
27.5°	1886.2	1809.4	1579.8	1329.3	1144.7	1001.0	879.2	819.4	775.4	762.5	764.5
30°	2074.9	1999.0	1736.5	1432.1	1238.5	1060.9	890.2	797.4	786.4	777.4	780.4
32.5°	2236.5	2124.8	1814.4	1459.1	1221.6	1069.9	914.2	802.4	749.5	740.5	744.5
35°	2316.4	2191.6	1876.2	1483.0	1229.5	1031.9	885.2	781.4	747.5	738.5	741.5
37.5°	2684.6	2498.0	1974.1	1519.0	1227.5	982.0	846.3	762.5	699.6	672.7	672.7
40°	3107.8	2833.3	2144.7	1517.0	1151.7	939.1	803.4	725.5	675.6	654.7	653.7
42.5°	2888.2	2626.7	2044.9	1472.1	1077.8	861.3	779.4	709.6	655.7	641.7	638.7
45°	2980.0	2700.6	1973.1	1346.3	967.1	799.4	722.6	673.7	611.8	579.8	578.8
47.5°	2688.6	2464.1	1826.3	1186.6	871.3	702.6	654.7	622.8	583.8	556.9	553.9
50°	2332.3	2105.8	1536.9	1051.9	742.5	622.8	589.8	573.9	534.9	504.0	506.0
52.5°	2228.5	1954.1	1339.3	918.2	638.7	542.9	526.9	509.0	470.1	434.1	438.1
55°	1104.8	915.2	814.4	713.6	535.9	472.1	465.1	454.1	415.2	384.2	385.2
57.5°	515.0	444.1	389.2	414.2	404.2	410.2	407.2	400.2	363.3	319.4	316.4
60°	461.1	395.2	330.3	313.4	332.3	358.3	356.3	334.3	287.4	235.5	229.5
62.5°	445.1	378.2	320.4	295.4	303.4	320.4	308.4	280.4	242.5	194.6	193.6
65°	453.1	382.2	319.4	288.4	294.4	301.4	284.4	264.5	241.5	208.6	208.6
67.5°	470.1	397.2	326.3	285.4	288.4	295.4	279.4	265.5	253.5	231.5	231.5
70°	475.0	404.2	330.3	286.4	283.4	289.4	278.4	265.5	258.5	240.5	239.5
72.5°	477.0	408.2	328.3	281.4	274.5	279.4	271.5	265.5	262.5	248.5	246.5
75°	468.1	404.2	318.4	270.5	263.5	265.5	263.5	262.5	266.5	257.5	254.5
77.5°	457.1	398.2	310.4	258.5	250.5	251.5	249.5	252.5	256.5	250.5	245.5
80°	480.0	415.2	311.4	249.5	234.5	229.5	230.5	233.5	238.5	225.5	218.6
82.5°	488.0	416.2	297.4	229.5	210.6	203.6	205.6	213.6	217.6	205.6	198.6
85°	518.0	435.1	287.4	211.6	189.6	182.6	184.6	189.6	187.6	173.7	167.7
87.5°	506.0	422.2	269.5	190.6	172.7	166.7	167.7	169.7	162.7	144.7	139.7
90°	489.0	407.2	249.5	167.7	152.7	150.7	148.7	145.7	133.7	114.8	109.8
92.5°	458.1	380.2	231.5	151.7	135.7	134.7	131.7	125.7	114.8	95.8	90.8
95°	432.1	356.3	214.6	138.7	121.8	117.8	117.8	111.8	99.8	83.8	81.8
97.5°	389.2	324.4	197.6	127.7	108.8	104.8	103.8	99.8	90.8	78.8	77.8
100°	352.3	293.4	179.6	115.8	97.8	93.8	91.8	89.8	82.8	75.8	75.8
102.5°	326.3	271.5	167.7	105.8	87.8	83.8	83.8	81.8	77.8	72.9	72.9
105°	319.4	266.5	162.7	96.8	77.8	75.8	76.8	76.8	73.9	70.9	70.9
107.5°	277.4	229.5	139.7	85.8	70.9	68.9	69.9	70.9	69.9	68.9	68.9
110°	247.5	208.6	129.7	80.8	66.9	63.9	63.9	63.9	63.9	64.9	65.9



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	221.6	185.6	118.8	76.8	62.9	59.9	58.9	57.9	56.9	60.9	60.9
115°	211.6	180.6	115.8	74.9	59.9	56.9	53.9	51.9	49.9	52.9	53.9
117.5°	196.6	169.7	112.8	74.9	58.9	53.9	50.9	47.9	44.9	47.9	47.9
120°	192.6	168.7	114.8	75.8	56.9	49.9	46.9	42.9	40.9	43.9	44.9
122.5°	177.6	157.7	108.8	71.9	54.9	47.9	44.9	36.9	36.9	38.9	39.9
125°	150.7	133.7	93.8	64.9	51.9	47.9	43.9	32.9	33.9	35.9	35.9
127.5°	128.7	115.8	85.8	62.9	52.9	48.9	40.9	30.9	32.9	35.9	35.9
130°	121.8	110.8	86.8	65.9	54.9	49.9	33.9	26.9	31.9	34.9	34.9
132.5°	116.8	107.8	86.8	68.9	56.9	45.9	26.9	24.0	26.9	28.9	28.9
135°	105.8	99.8	82.8	65.9	51.9	35.9	22.0	21.0	25.0	26.9	26.9
137.5°	94.8	88.8	75.8	60.9	45.9	28.9	16.0	19.0	21.0	23.0	23.0
140°	77.8	73.9	62.9	49.9	33.9	16.0	12.0	15.0	18.0	20.0	20.0
142.5°	54.9	52.9	43.9	31.9	19.0	6.0	8.0	11.0	13.0	15.0	15.0
145°	35.9	33.9	27.9	20.0	8.0	2.0	5.0	7.0	10.0	11.0	11.0
147.5°	23.0	22.0	17.0	10.0	3.0	2.0	2.0	5.0	8.0	9.0	9.0
150°	11.0	10.0	7.0	3.0	2.0	1.0	1.0	2.0	5.0	6.0	6.0
152.5°	2.0	2.0	2.0	1.0	1.0	0.0	0.0	1.0	1.0	2.0	2.0
155°	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)