

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: P240594

Luminaire Tested: **UTLD-AF24-100-D-U-T2U-TL**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240594
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-33)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-100-D-U-T2U-TL
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
AND TEXTURED LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8168.2 lumens
Efficiency: N/A
Efficacy: 85.1 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 - U3 - G3

Input Watts (W): 96
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

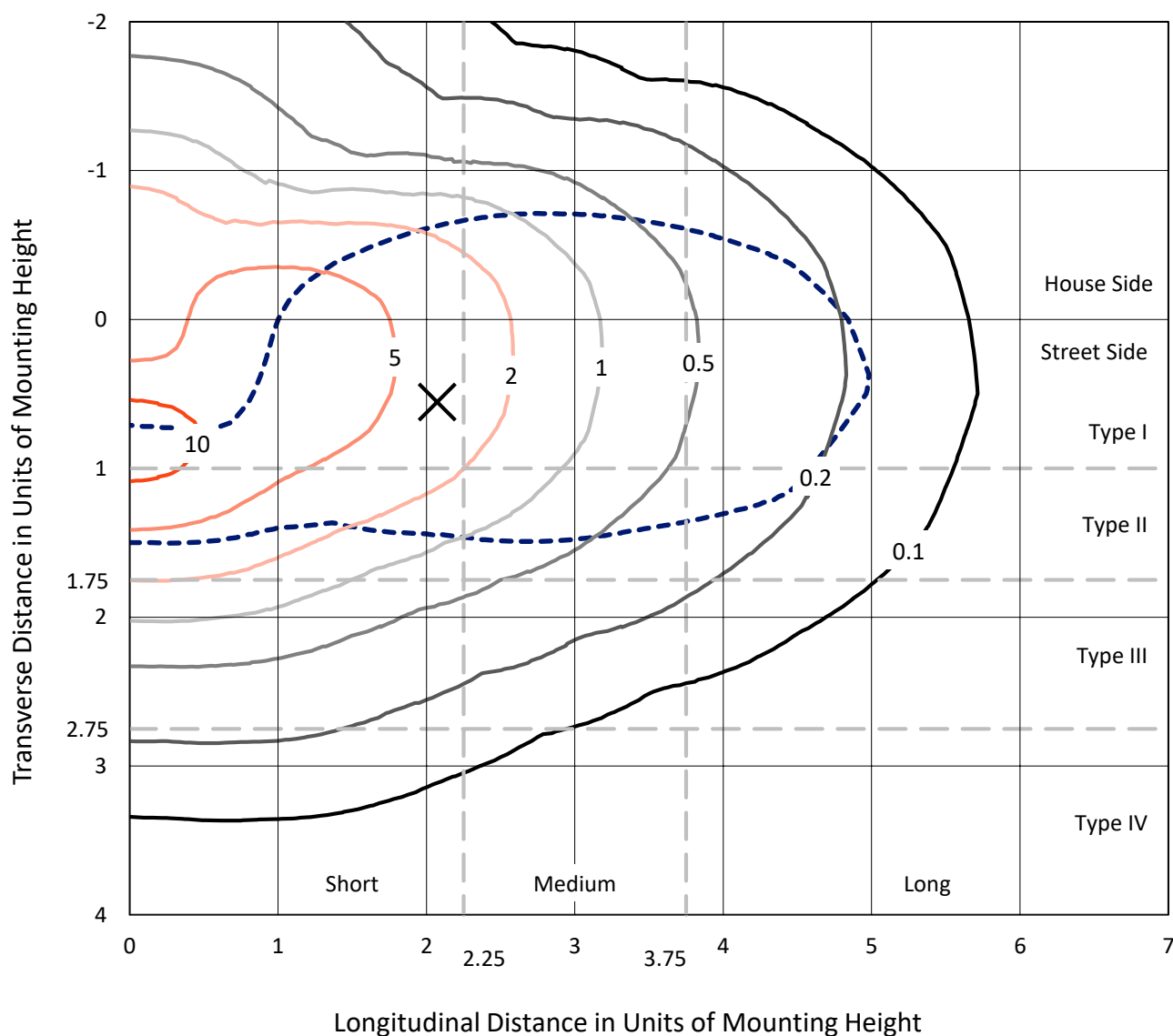


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

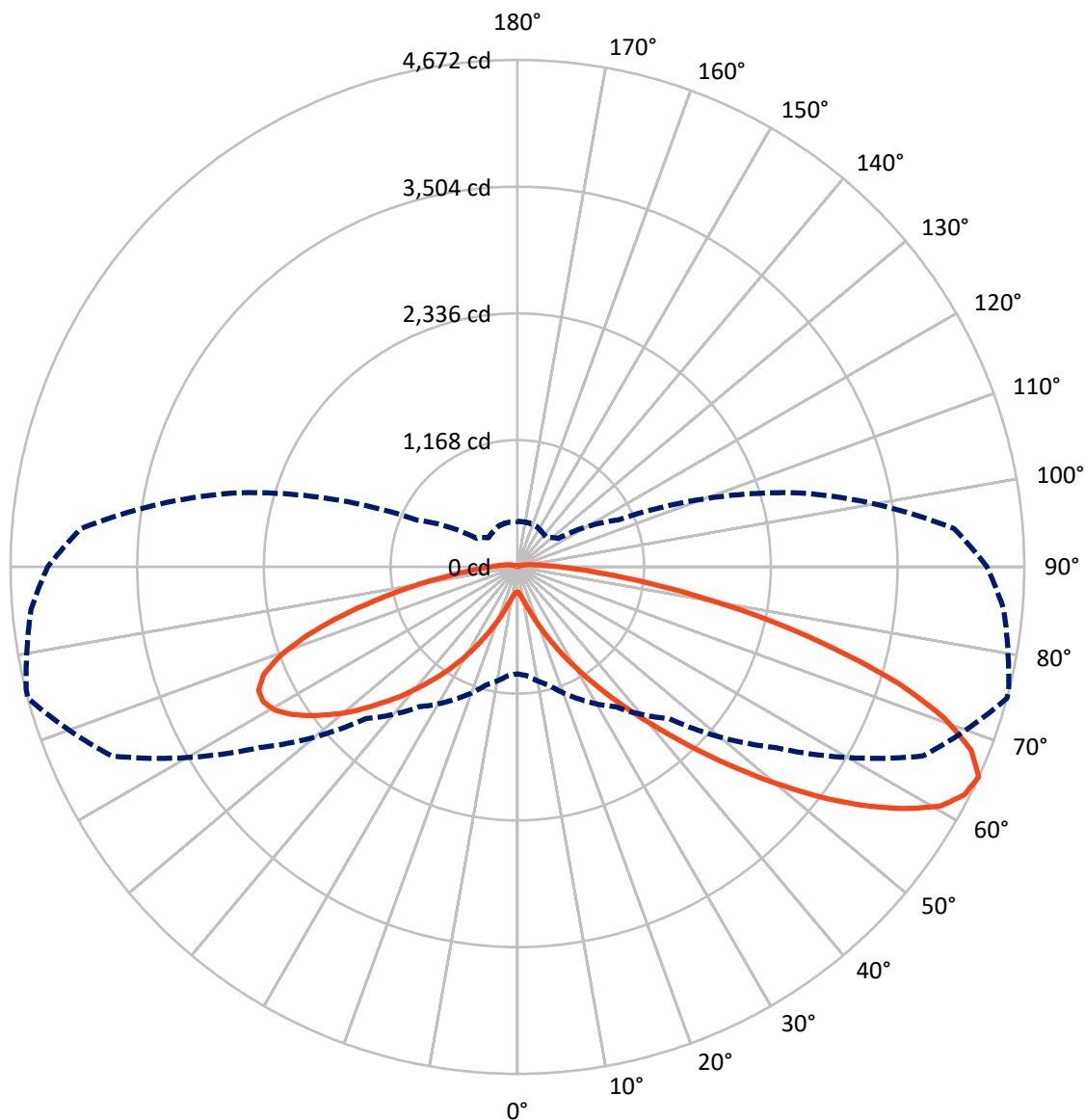


Based on 10 foot mounting height. Maximum calculated value = 12.9 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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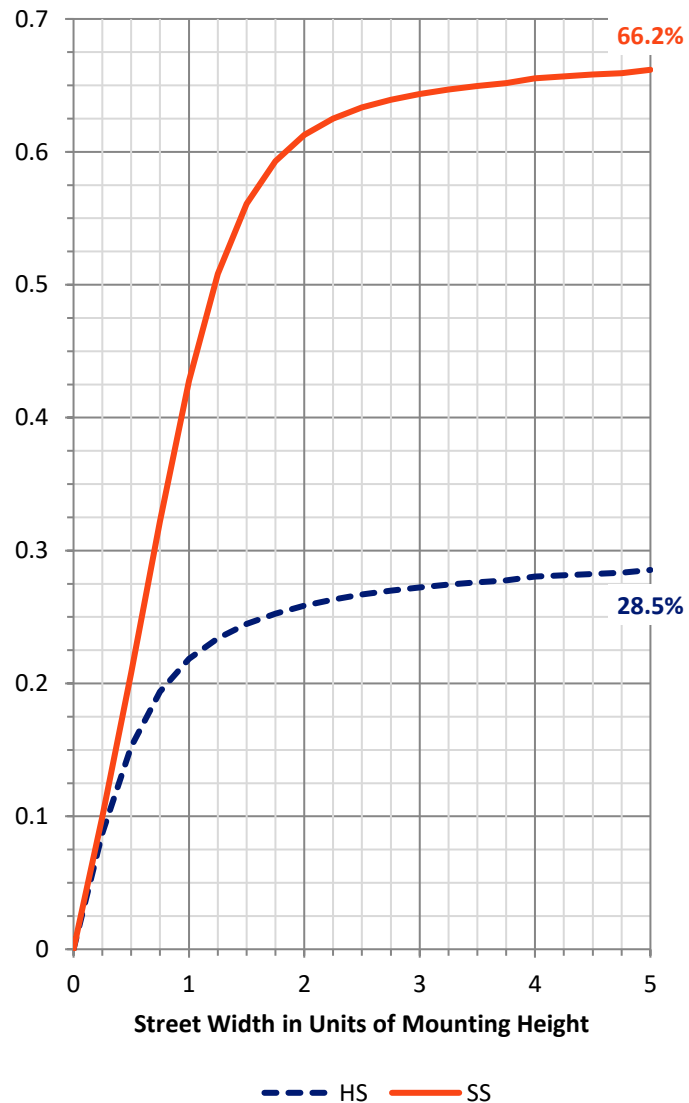
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2411.8	144.6	2556.4
	% Fixture	29.5	1.8	31.3
Street Side	Lumens	5481.7	130.1	5611.8
	% Fixture	67.1	1.6	68.7
Total	Lumens	7893.5	274.7	8168.2
	% Fixture	96.6	3.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.5	0.3
10°-20°	118.1	1.4
20°-30°	344.4	4.2
30°-40°	772.6	9.5
40°-50°	1374.9	16.8
50°-60°	1868.4	22.9
60°-70°	1814.5	22.2
70°-80°	1143.6	14.0
80°-90°	431.3	5.3
90°-100°	146.8	1.8
100°-110°	66.5	0.8
110°-120°	32.0	0.4
120°-130°	16.8	0.2
130°-140°	8.7	0.1
140°-150°	3.2	0.0
150°-160°	0.6	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	7893.5	96.6
0°-180°	8168.2	100.0

Coefficient of Utilization



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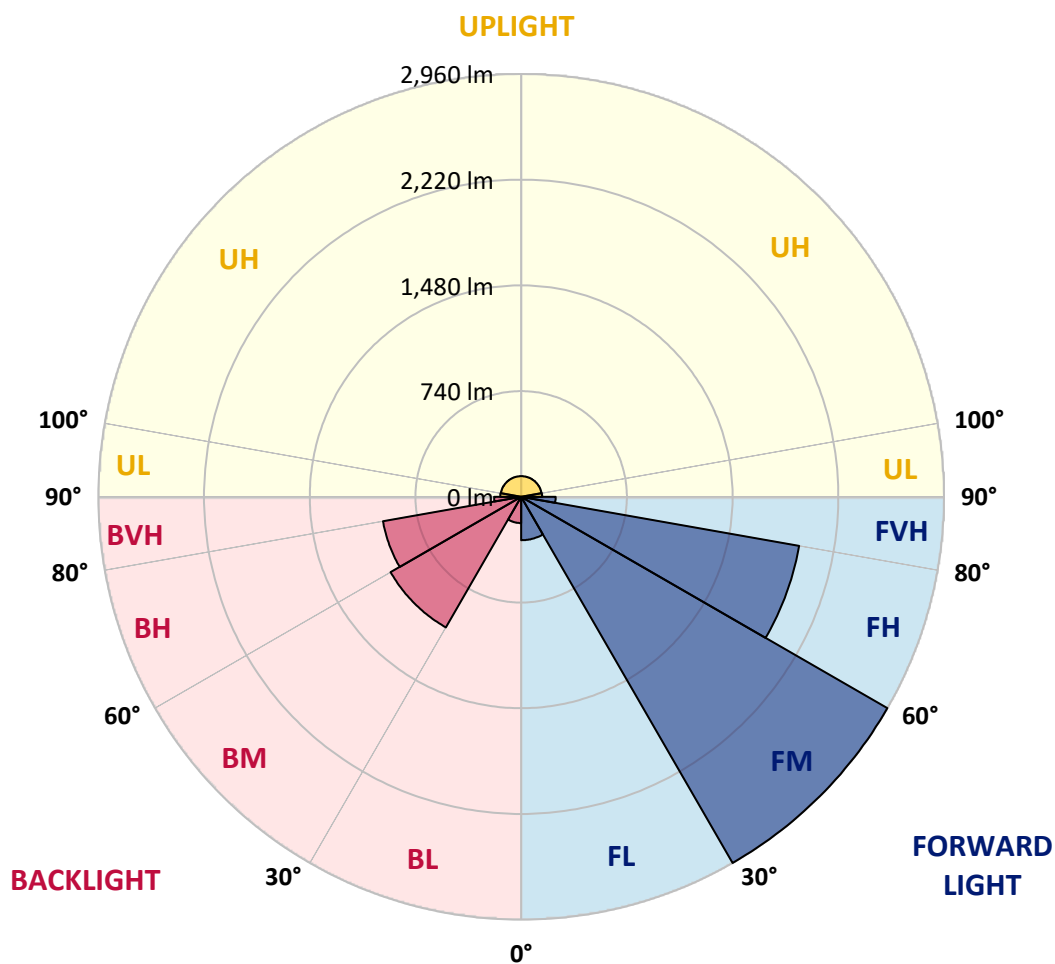
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	304.2	3.7			
FM	(30°-60°)	2960.3	36.2			
FH	(60°-80°)	1975.9	24.2			G2/5000
FVH	(80°-90°)	241.4	3.0			G3/500
BL	(0°-30°)	183.9	2.3	B1/500		
BM	(30°-60°)	1055.7	12.9	B2/2500		
BH	(60°-80°)	982.2	12.0	B2/1000		G2/1000
BVH	(80°-90°)	189.9	2.3			G2/225
UL	(90°-100°)	146.8	1.8		U3/500	
UH	(100°-180°)	144.6	1.8		U3/500	

BUG Rating: B2-U3-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2
2.5°	252.7	251.6	251.6	251.6	249.6	247.6	244.5	242.4	239.4	238.3	237.3
5°	279.3	279.3	278.2	277.2	275.2	270.1	264.9	260.9	255.7	254.7	250.6
7.5°	321.2	320.2	319.2	314.0	311.0	303.8	295.6	289.5	280.3	280.3	274.2
10°	376.4	374.4	371.3	366.2	355.0	345.8	336.6	325.3	316.1	315.1	305.9
12.5°	441.9	441.9	437.8	427.6	413.3	400.0	384.6	372.4	360.1	359.1	350.9
15°	531.9	533.0	519.7	504.3	483.9	463.4	444.0	432.7	418.4	421.5	410.2
17.5°	643.4	641.4	630.1	599.4	565.7	539.1	516.6	504.3	493.1	494.1	485.9
20°	783.6	781.5	762.1	721.2	665.9	626.0	599.4	591.3	585.1	582.1	573.9
22.5°	956.5	946.2	907.4	854.2	787.7	730.4	701.7	689.5	687.4	688.4	680.3
25°	1149.8	1145.7	1096.6	1011.7	925.8	852.1	808.1	806.1	809.2	804.0	804.0
27.5°	1385.2	1373.9	1316.6	1198.9	1076.1	988.2	937.0	931.9	946.2	942.1	936.0
30°	1660.4	1643.0	1565.2	1414.8	1257.2	1139.6	1080.2	1080.2	1095.6	1095.6	1093.5
32.5°	1947.8	1944.7	1824.0	1648.1	1461.9	1306.4	1255.2	1247.0	1262.3	1270.5	1260.3
35°	2271.1	2247.5	2108.4	1908.9	1668.5	1497.7	1434.3	1445.5	1457.8	1458.8	1442.5
37.5°	2600.4	2576.9	2417.3	2170.8	1890.5	1706.4	1640.9	1649.1	1668.5	1668.5	1647.1
40°	2882.8	2857.2	2700.7	2443.9	2136.0	1938.6	1869.0	1892.6	1905.9	1911.0	1876.2
42.5°	3105.8	3087.4	2947.2	2685.3	2372.3	2171.8	2126.8	2165.7	2179.0	2189.2	2139.1
45°	3230.6	3215.2	3118.1	2881.8	2570.8	2405.1	2413.2	2460.3	2485.9	2474.6	2420.4
47.5°	3250.0	3237.7	3183.5	3003.5	2752.9	2629.1	2706.8	2777.4	2816.3	2817.3	2725.2
50°	3129.3	3134.4	3135.4	3032.1	2855.2	2811.2	2981.0	3139.5	3169.2	3152.8	3044.4
52.5°	2895.1	2892.0	2951.3	2951.3	2873.6	2923.7	3211.1	3494.5	3535.4	3531.3	3381.0
55°	2547.2	2550.3	2660.8	2747.7	2776.4	2947.2	3399.4	3815.7	3883.3	3877.2	3711.4
57.5°	2114.5	2144.2	2280.3	2447.0	2576.9	2847.0	3486.3	4092.0	4202.5	4203.5	4003.0
60°	1694.1	1724.8	1883.4	2097.2	2285.4	2653.6	3428.0	4235.2	4477.7	4466.4	4253.6
62.5°	1294.1	1325.8	1478.3	1721.7	1940.6	2344.7	3229.6	4264.9	4623.9	4616.8	4433.7
65°	985.1	1005.6	1128.3	1342.2	1572.4	1975.4	2903.2	4123.7	4672.0	4666.9	4500.2
67.5°	736.5	745.7	862.3	1035.2	1234.7	1598.0	2452.1	3784.0	4512.4	4517.6	4424.5
70°	566.7	572.9	657.8	808.1	956.5	1249.0	1986.7	3294.0	4176.9	4190.2	4187.1
72.5°	450.1	459.3	526.8	636.3	743.7	946.2	1536.6	2664.9	3679.7	3707.3	3790.1
75°	371.3	381.6	432.7	513.5	591.3	720.2	1117.1	2045.0	3025.0	3083.3	3267.4
77.5°	306.9	317.1	360.1	423.5	471.6	550.3	818.4	1512.0	2376.4	2401.0	2644.4
80°	251.6	260.9	299.7	348.8	383.6	429.6	596.4	1061.8	1733.0	1763.7	2001.0
82.5°	200.5	208.7	244.5	284.4	313.0	344.7	441.9	727.3	1207.1	1229.6	1386.2
85°	154.5	162.6	193.3	228.1	252.7	278.2	338.6	506.4	798.9	825.5	940.1
87.5°	115.6	122.8	148.3	178.0	203.6	225.0	260.9	349.8	533.0	555.5	609.7
90°	84.9	90.0	112.5	135.0	158.6	182.1	204.6	255.7	355.0	364.2	402.0
92.5°	63.4	66.5	84.9	104.3	126.8	147.3	161.6	188.2	249.6	250.6	277.2
95°	47.1	50.1	65.5	81.8	101.3	120.7	133.0	146.3	183.1	186.2	202.5
97.5°	37.8	38.9	52.2	66.5	82.9	99.2	109.5	116.6	140.1	143.2	154.5
100°	31.7	32.7	44.0	56.3	70.6	84.9	92.1	95.1	110.5	113.5	121.7
102.5°	27.6	27.6	37.8	49.1	61.4	71.6	76.7	78.8	89.0	89.0	95.1
105°	24.6	24.6	32.7	43.0	53.2	62.4	65.5	65.5	69.6	70.6	73.7
107.5°	22.5	22.5	29.7	38.9	47.1	54.2	56.3	54.2	55.2	55.2	57.3
110°	20.5	20.5	25.6	34.8	41.9	47.1	48.1	46.0	43.0	43.0	45.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
112.5°	18.4	19.4	23.5	30.7	36.8	41.9	41.9	38.9	33.8	33.8	35.8
115°	17.4	17.4	21.5	27.6	32.7	36.8	36.8	32.7	27.6	26.6	28.6
117.5°	16.4	16.4	18.4	24.6	29.7	32.7	32.7	27.6	22.5	22.5	24.6
120°	15.3	15.3	17.4	22.5	26.6	29.7	28.6	24.6	19.4	19.4	21.5
122.5°	15.3	15.3	16.4	20.5	23.5	25.6	24.6	20.5	16.4	16.4	18.4
125°	14.3	14.3	15.3	18.4	21.5	23.5	21.5	17.4	15.3	15.3	16.4
127.5°	14.3	14.3	14.3	16.4	19.4	20.5	19.4	15.3	13.3	13.3	15.3
130°	13.3	13.3	14.3	15.3	17.4	18.4	16.4	13.3	12.3	12.3	14.3
132.5°	13.3	13.3	13.3	13.3	14.3	15.3	13.3	10.2	11.3	11.3	12.3
135°	12.3	12.3	12.3	12.3	13.3	13.3	11.3	9.2	10.2	10.2	11.3
137.5°	11.3	11.3	11.3	11.3	11.3	10.2	9.2	8.2	9.2	9.2	10.2
140°	10.2	10.2	10.2	9.2	8.2	8.2	7.2	6.1	7.2	7.2	8.2
142.5°	9.2	9.2	9.2	8.2	7.2	6.1	5.1	5.1	6.1	6.1	7.2
145°	8.2	8.2	7.2	6.1	5.1	4.1	3.1	4.1	5.1	5.1	6.1
147.5°	6.1	6.1	6.1	5.1	3.1	2.0	2.0	3.1	4.1	4.1	4.1
150°	5.1	5.1	5.1	4.1	2.0	1.0	1.0	2.0	2.0	2.0	3.1
152.5°	3.1	3.1	3.1	3.1	1.0	0.0	0.0	1.0	2.0	2.0	2.0
155°	2.0	2.0	2.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0
157.5°	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0
160°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0
162.5°	0.0	0.0	0.0	1.0	1.0	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°	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2	232.2
2.5°	236.3	235.3	233.2	231.2	229.1	227.1	225.0	224.0	222.0	222.0	222.0
5°	248.6	245.5	241.4	237.3	233.2	230.2	227.1	224.0	222.0	221.0	219.9
7.5°	271.1	267.0	259.8	253.7	246.5	240.4	235.3	231.2	229.1	228.1	228.1
10°	301.8	296.7	287.4	275.2	267.0	257.8	249.6	244.5	240.4	239.4	238.3
12.5°	342.7	337.6	322.2	308.9	293.6	279.3	270.1	263.9	260.9	259.8	259.8
15°	401.0	394.9	370.3	347.8	323.3	305.9	293.6	288.5	289.5	292.6	289.5
17.5°	473.6	464.4	435.8	399.0	362.1	335.5	324.3	325.3	329.4	332.5	331.4
20°	563.6	550.3	510.5	458.3	408.2	372.4	361.1	362.1	367.2	376.4	375.4
22.5°	669.0	648.6	597.4	526.8	456.2	415.3	394.9	397.9	409.2	418.4	418.4
25°	784.6	766.2	693.6	599.4	511.5	451.1	425.5	429.6	446.0	456.2	459.3
27.5°	921.7	893.0	803.0	680.3	563.6	482.8	451.1	453.2	473.6	486.9	489.0
30°	1068.0	1034.2	921.7	761.1	609.7	507.4	466.5	470.6	493.1	508.4	511.5
32.5°	1232.7	1192.8	1045.5	846.0	652.6	521.7	474.6	478.7	502.3	519.7	521.7
35°	1415.9	1357.6	1178.4	923.7	681.3	526.8	474.6	479.8	502.3	519.7	522.7
37.5°	1602.0	1536.6	1308.5	998.4	698.7	522.7	467.5	473.6	494.1	510.5	513.5
40°	1818.9	1735.0	1450.6	1059.8	704.8	511.5	455.2	462.4	479.8	493.1	495.1
42.5°	2066.5	1947.8	1600.0	1111.9	695.6	497.2	442.9	451.1	465.4	474.6	475.7
45°	2323.2	2180.0	1745.3	1152.9	682.3	479.8	430.7	439.9	452.1	454.2	456.2
47.5°	2600.4	2440.9	1903.8	1177.4	658.8	461.4	421.5	430.7	438.8	437.8	438.8
50°	2907.3	2710.9	2065.4	1187.6	632.2	446.0	414.3	424.5	430.7	425.5	425.5
52.5°	3207.1	3006.6	2212.7	1191.7	602.5	431.7	409.2	421.5	424.5	419.4	419.4
55°	3526.2	3279.7	2360.0	1180.5	572.9	420.4	407.1	420.4	422.5	415.3	415.3
57.5°	3820.8	3571.2	2493.0	1163.1	545.2	410.2	404.1	419.4	421.5	415.3	416.3
60°	4092.0	3818.8	2596.4	1134.5	515.6	400.0	402.0	419.4	421.5	417.4	419.4
62.5°	4257.7	3982.6	2650.6	1089.4	486.9	390.8	399.0	417.4	421.5	418.4	420.4
65°	4329.3	4040.9	2643.4	1025.0	459.3	379.5	392.8	413.3	418.4	418.4	420.4
67.5°	4275.1	3987.7	2539.1	942.1	433.7	368.3	384.6	405.1	412.2	414.3	417.4
70°	4073.6	3767.6	2329.4	837.8	406.1	356.0	374.4	393.8	402.0	406.1	408.2
72.5°	3671.5	3398.3	2031.7	733.5	377.5	340.6	359.1	377.5	386.7	391.8	391.8
75°	3161.0	2887.9	1672.6	623.0	350.9	323.3	340.6	356.0	366.2	371.3	369.3
77.5°	2543.2	2288.4	1299.2	510.5	322.2	302.8	319.2	332.5	340.6	344.7	339.6
80°	1884.4	1721.7	975.9	421.5	293.6	279.3	292.6	303.8	313.0	312.0	307.9
82.5°	1336.1	1182.5	683.3	349.8	264.9	253.7	263.9	271.1	277.2	275.2	268.0
85°	890.0	789.7	482.8	285.4	235.3	226.1	232.2	236.3	239.4	234.3	229.1
87.5°	579.0	515.6	347.8	235.3	203.6	197.4	200.5	201.5	202.5	197.4	191.3
90°	378.5	351.9	258.8	194.4	174.9	170.8	170.8	166.7	167.8	161.6	155.5
92.5°	267.0	250.6	201.5	159.6	149.4	146.3	145.3	140.1	139.1	133.0	128.9
95°	199.5	192.3	162.6	135.0	126.8	125.8	123.8	118.7	114.6	108.4	106.4
97.5°	155.5	152.4	134.0	115.6	109.5	107.4	106.4	100.2	97.2	91.0	89.0
100°	123.8	123.8	112.5	99.2	94.1	93.1	92.1	85.9	82.9	76.7	75.7
102.5°	99.2	100.2	94.1	85.9	81.8	79.8	77.7	73.7	68.5	64.4	64.4
105°	77.7	79.8	77.7	72.6	70.6	68.5	66.5	62.4	57.3	53.2	53.2
107.5°	61.4	63.4	63.4	62.4	59.3	58.3	57.3	52.2	48.1	44.0	44.0
110°	47.1	50.1	52.2	52.2	52.2	50.1	48.1	45.0	39.9	36.8	36.8



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	37.8	39.9	43.0	44.0	44.0	44.0	41.9	36.8	32.7	30.7	31.7
115°	30.7	32.7	35.8	37.8	37.8	37.8	34.8	31.7	27.6	26.6	26.6
117.5°	25.6	27.6	29.7	32.7	32.7	32.7	30.7	26.6	22.5	22.5	22.5
120°	22.5	23.5	26.6	27.6	28.6	28.6	26.6	22.5	19.4	19.4	20.5
122.5°	19.4	20.5	22.5	24.6	25.6	24.6	22.5	18.4	16.4	17.4	17.4
125°	17.4	18.4	19.4	21.5	22.5	21.5	19.4	15.3	14.3	15.3	15.3
127.5°	16.4	16.4	17.4	18.4	19.4	18.4	16.4	13.3	12.3	14.3	14.3
130°	14.3	15.3	15.3	16.4	16.4	16.4	14.3	11.3	11.3	12.3	12.3
132.5°	13.3	13.3	13.3	14.3	14.3	13.3	11.3	9.2	10.2	11.3	11.3
135°	11.3	12.3	12.3	12.3	12.3	11.3	9.2	8.2	9.2	10.2	10.2
137.5°	10.2	10.2	10.2	10.2	10.2	9.2	8.2	7.2	8.2	8.2	8.2
140°	8.2	9.2	9.2	8.2	8.2	7.2	6.1	5.1	6.1	7.2	7.2
142.5°	7.2	7.2	7.2	7.2	6.1	5.1	4.1	4.1	5.1	5.1	5.1
145°	6.1	6.1	6.1	5.1	4.1	4.1	3.1	3.1	4.1	4.1	5.1
147.5°	4.1	4.1	4.1	4.1	3.1	3.1	2.0	2.0	3.1	3.1	3.1
150°	3.1	3.1	3.1	3.1	2.0	2.0	2.0	1.0	2.0	2.0	2.0
152.5°	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0
155°	1.0	1.0	2.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
157.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
160°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
162.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	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)