

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: P240972

Luminaire Tested: **UTLD-AF24-100-D-U-T3-CL**

Issue Date: 5/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P240972  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-46)  
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-T3-CL  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
AND CLEAR LENS PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8349.4 lumens  
Efficiency: N/A  
Efficacy: 87.0 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B2 - U3 - G2

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

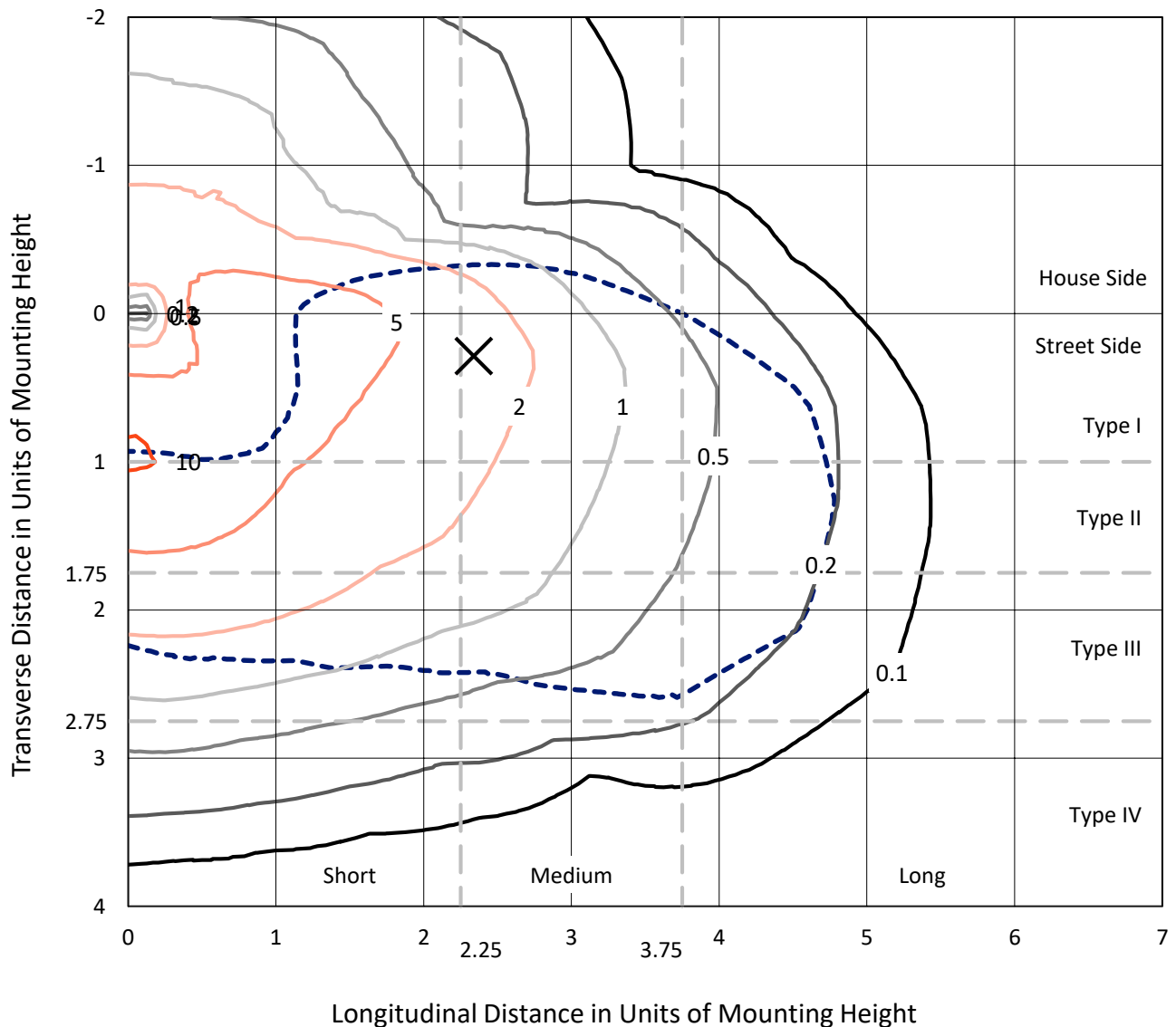


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

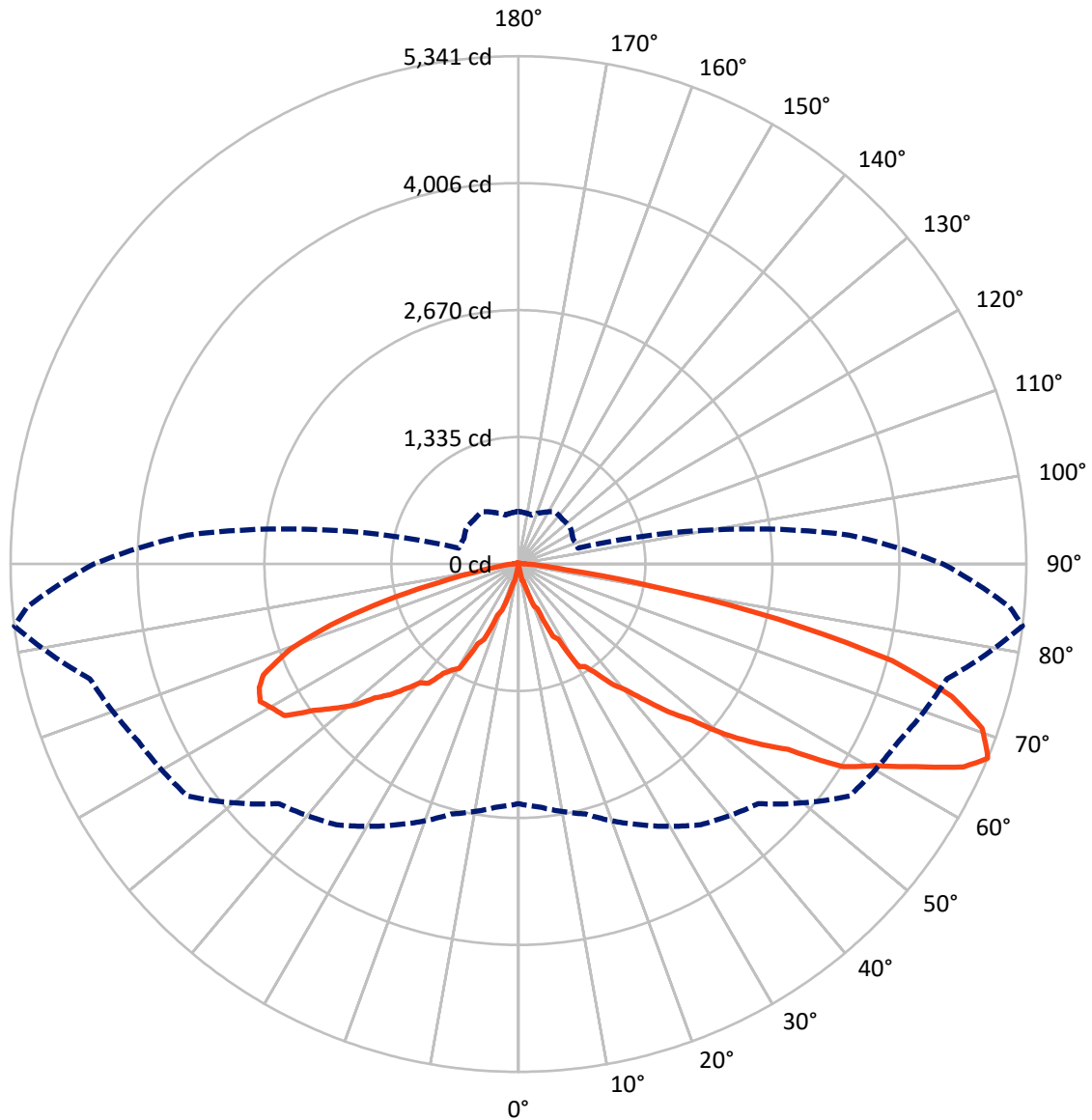


Based on 10 foot mounting height. Maximum calculated value = 10.3 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 83-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical



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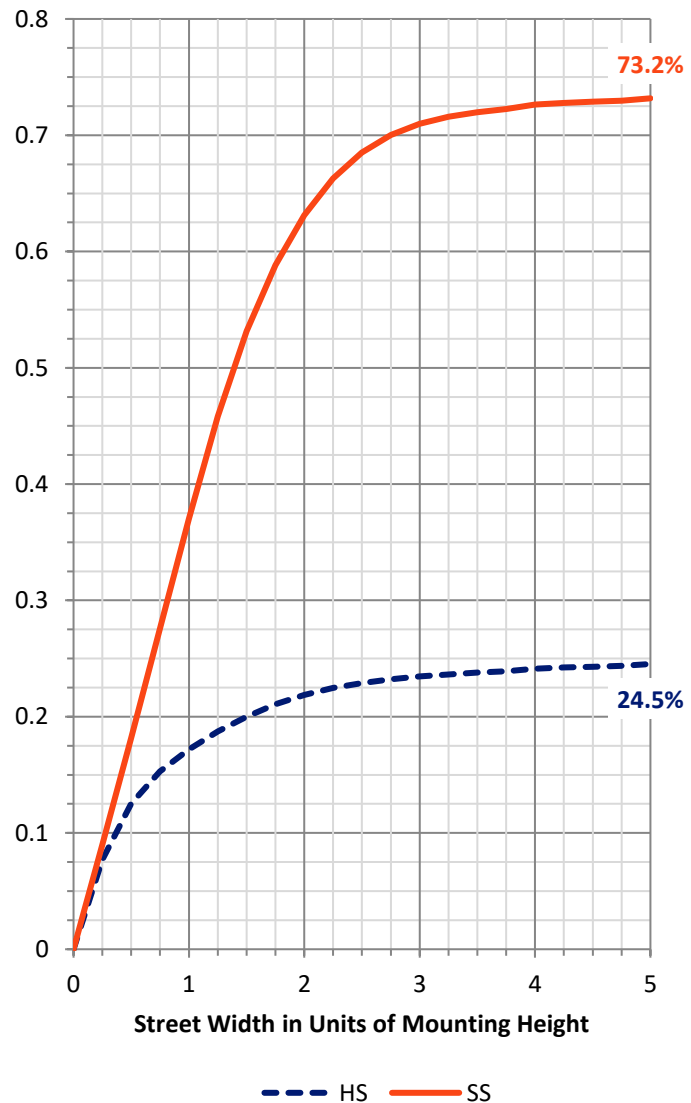
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2095.0	55.4	2150.4
	% Fixture	25.1	0.7	25.8
<b>Street Side</b>	Lumens	6152.3	46.6	6198.9
	% Fixture	73.7	0.6	74.2
<b>Total</b>	Lumens	8247.4	102.0	8349.4
	% Fixture	98.8	1.2	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5.8	0.1
10°-20°	75.5	0.9
20°-30°	303.4	3.6
30°-40°	670.1	8.0
40°-50°	1194.3	14.3
50°-60°	1916.6	23.0
60°-70°	2332.0	27.9
70°-80°	1502.7	18.0
80°-90°	246.9	3.0
90°-100°	50.8	0.6
100°-110°	23.2	0.3
110°-120°	11.7	0.1
120°-130°	8.4	0.1
130°-140°	5.2	0.1
140°-150°	2.3	0.0
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	8247.4	98.8
0°-180°	8349.4	100.0



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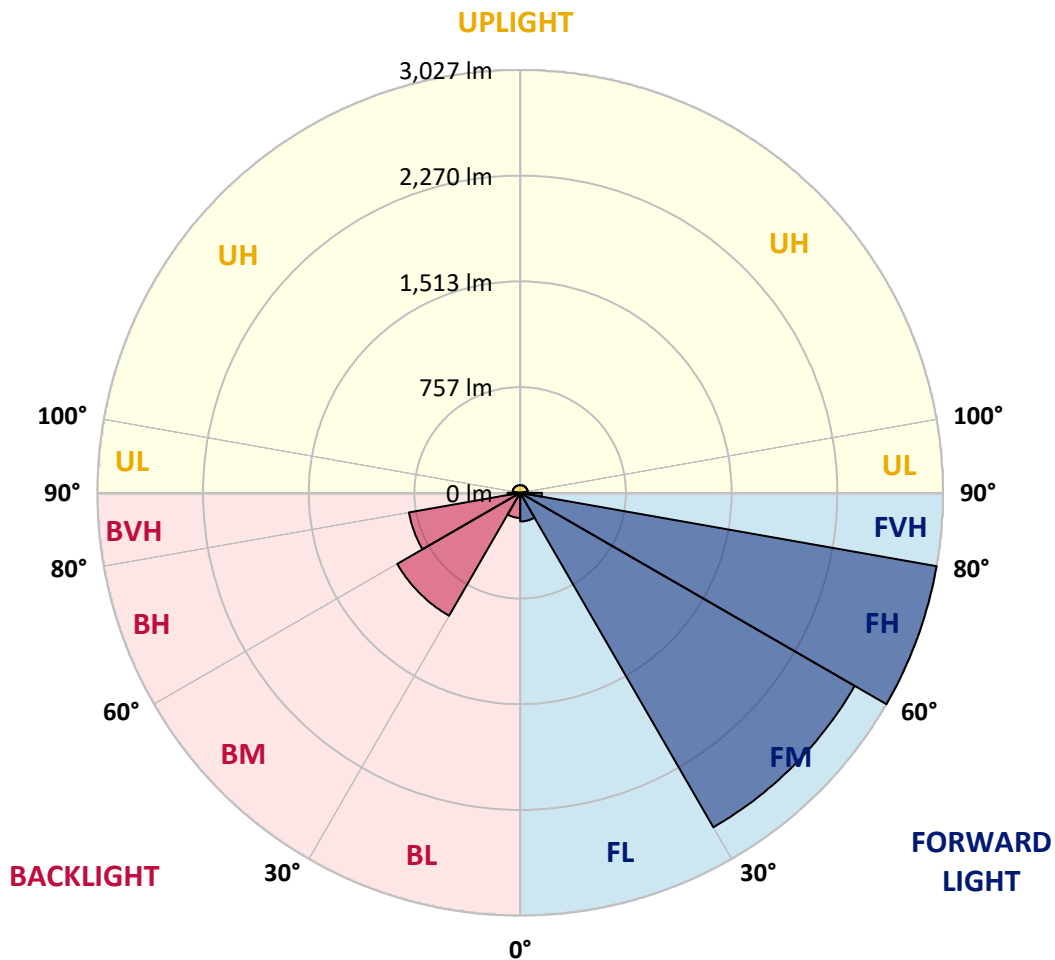
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	205.1	2.5			
FM	(30°-60°)	2764.5	33.1			
FH	(60°-80°)	3026.6	36.2			G2/5000
FVH	(80°-90°)	156.2	1.9			G2/225
BL	(0°-30°)	179.7	2.2	B1/500		
BM	(30°-60°)	1016.5	12.2	B2/2500		
BH	(60°-80°)	808.2	9.7	B2/1000		G2/1000
BVH	(80°-90°)	90.7	1.1			G1/100
UL	(90°-100°)	50.8	0.6		U3/500	
UH	(100°-180°)	55.4	0.7		U3/500	

**BUG Rating: B2-U3-G2**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	83°	85°
0°	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
2.5°	41.9	41.9	41.9	37.8	32.7	26.6	23.5	20.5	19.4	19.4	19.4
5°	93.1	97.2	93.1	92.1	82.9	101.3	40.9	27.6	20.5	18.4	18.4
7.5°	132.0	134.0	108.4	100.2	80.8	110.5	89.0	50.1	25.6	20.5	19.4
10°	229.1	197.4	167.8	165.7	155.5	116.6	79.8	71.6	39.9	30.7	31.7
12.5°	222.0	228.1	224.0	216.9	199.5	166.7	106.4	137.1	150.4	177.0	166.7
15°	272.1	268.0	237.3	239.4	227.1	241.4	215.8	228.1	214.8	187.2	195.4
17.5°	421.5	407.1	426.6	327.3	239.4	293.6	298.7	267.0	285.4	294.6	327.3
20°	481.8	461.4	485.9	416.3	396.9	333.5	318.1	483.9	451.1	473.6	477.7
22.5°	665.9	654.7	584.1	476.7	507.4	425.5	454.2	502.3	512.5	507.4	523.8
25°	839.8	838.8	830.6	733.5	541.1	603.5	524.8	572.9	739.6	841.9	851.1
27.5°	994.3	986.1	927.8	900.2	758.0	681.3	626.0	793.8	847.0	896.1	907.4
30°	1257.2	1310.4	1184.6	1024.0	917.6	784.6	841.9	837.8	1019.9	1251.1	1263.3
32.5°	1476.1	1446.5	1315.5	1180.5	1072.1	969.8	886.9	1170.3	1220.4	1283.8	1312.4
35°	1799.4	1810.6	1672.5	1316.5	1227.5	1086.4	1160.0	1270.5	1305.3	1410.6	1418.8
37.5°	1880.2	1969.2	1888.4	1578.4	1305.3	1187.6	1248.0	1390.2	1504.8	1601.9	1540.6
40°	2236.2	2191.2	2018.3	1768.7	1465.9	1329.8	1526.2	1610.1	1627.5	1741.1	1755.4
42.5°	2585.0	2604.4	2390.6	2073.5	1674.6	1545.7	1717.5	1695.0	1860.7	1959.0	2012.1
45°	2924.6	2933.8	2765.0	2364.0	2009.1	1905.8	1821.9	1918.0	2194.2	2217.8	2231.1
47.5°	3154.8	3155.8	3084.2	2681.2	2291.4	2058.2	2031.6	2134.9	2409.0	2451.0	2463.3
50°	3513.8	3504.6	3339.9	2892.9	2664.8	2359.9	2463.3	2424.4	2661.7	2813.1	2845.8
52.5°	3655.0	3609.0	3521.0	3200.8	3000.3	2698.5	2651.5	2722.1	2993.2	3130.2	3238.7
55°	3562.9	3642.7	3626.4	3396.2	3099.5	2996.2	2873.5	3138.4	3230.5	3441.2	3633.5
57.5°	3371.6	3508.7	3573.2	3487.2	3325.6	3091.4	3311.3	3271.4	3624.3	4023.3	4152.2
60°	3240.7	3325.6	3456.6	3560.9	3443.3	3357.3	3571.1	3779.8	3914.8	4303.6	4475.4
62.5°	3005.4	3086.2	3295.9	3447.3	3380.9	3409.5	3859.6	3969.0	4367.0	4691.3	4925.5
65°	2726.2	2801.9	3047.4	3205.9	3364.5	3477.0	4042.7	4254.5	4536.8	5144.4	5177.2
67°	2520.6	2564.5	2721.0	3025.9	3345.0	3564.0	4251.4	4411.0	4664.7	5340.8	5186.4
67.5°	2452.0	2495.0	2622.8	2938.9	3333.8	3577.3	4310.7	4457.0	4683.1	5320.4	5184.3
70°	1887.3	2039.8	2042.8	2344.6	2976.8	3479.1	4416.1	4615.6	4794.6	5173.1	5005.3
72.5°	1130.4	1130.4	1182.5	1479.2	2110.3	3111.8	4416.1	4560.3	4714.8	4765.9	4483.6
75°	547.3	521.7	592.3	709.9	1062.8	2099.1	3980.3	4179.8	4199.2	4060.1	3636.6
77.5°	451.1	391.8	372.4	364.2	569.8	785.6	2659.7	3263.2	3264.2	2785.5	2437.7
80°	282.3	285.4	293.6	252.7	326.3	406.1	1060.8	1987.6	1806.5	1447.5	1219.4
82.5°	199.5	206.6	209.7	187.2	228.1	190.3	352.9	838.8	730.4	504.3	427.6
85°	140.1	136.1	152.4	126.8	137.1	112.5	194.4	361.1	411.2	249.6	236.3
87.5°	83.9	83.9	102.3	85.9	94.1	80.8	117.6	177.0	204.6	141.2	132.0
90°	50.1	46.0	48.1	49.1	53.2	46.0	63.4	84.9	89.0	71.6	65.5
92.5°	37.8	37.8	40.9	38.9	48.1	41.9	55.2	66.5	80.8	61.4	57.3
95°	24.6	27.6	30.7	31.7	36.8	31.7	46.0	54.2	60.4	47.1	45.0
97.5°	22.5	24.6	26.6	26.6	30.7	25.6	37.8	48.1	48.1	36.8	33.8
100°	21.5	22.5	23.5	23.5	25.6	20.5	29.7	41.9	41.9	30.7	28.6
102.5°	19.4	20.5	19.4	18.4	21.5	16.4	24.6	36.8	29.7	23.5	24.6
105°	19.4	19.4	17.4	15.3	17.4	13.3	21.5	26.6	20.5	19.4	20.5
107.5°	18.4	18.4	14.3	13.3	14.3	11.3	17.4	18.4	16.4	18.4	19.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	83°	85°
110°	17.4	16.4	13.3	11.3	11.3	10.2	13.3	13.3	13.3	17.4	19.4
112.5°	15.3	14.3	11.3	9.2	9.2	8.2	9.2	10.2	12.3	16.4	18.4
115°	14.3	13.3	10.2	8.2	7.2	7.2	8.2	8.2	11.3	16.4	18.4
117.5°	14.3	13.3	9.2	8.2	6.1	6.1	7.2	8.2	11.3	16.4	18.4
120°	13.3	13.3	9.2	7.2	6.1	5.1	6.1	7.2	11.3	17.4	18.4
122.5°	13.3	12.3	9.2	7.2	5.1	5.1	5.1	6.1	10.2	16.4	17.4
125°	12.3	12.3	8.2	6.1	5.1	4.1	5.1	6.1	11.3	16.4	17.4
127.5°	12.3	11.3	8.2	6.1	4.1	4.1	5.1	5.1	10.2	15.3	16.4
130°	12.3	11.3	8.2	5.1	4.1	4.1	4.1	5.1	10.2	14.3	15.3
132.5°	10.2	10.2	7.2	5.1	4.1	3.1	4.1	4.1	8.2	12.3	13.3
135°	10.2	9.2	7.2	5.1	4.1	3.1	3.1	4.1	8.2	11.3	11.3
137.5°	9.2	8.2	7.2	5.1	3.1	3.1	2.0	3.1	7.2	9.2	10.2
140°	8.2	8.2	6.1	5.1	3.1	2.0	2.0	3.1	5.1	7.2	8.2
142.5°	8.2	8.2	7.2	5.1	3.1	2.0	2.0	2.0	4.1	6.1	6.1
145°	7.2	7.2	6.1	4.1	2.0	1.0	1.0	2.0	3.1	4.1	5.1
147.5°	7.2	7.2	6.1	4.1	2.0	1.0	1.0	2.0	3.1	4.1	4.1
150°	6.1	6.1	5.1	3.1	1.0	0.0	0.0	1.0	2.0	3.1	3.1
152.5°	4.1	4.1	3.1	2.0	0.0	0.0	0.0	1.0	2.0	2.0	2.0
155°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	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°	0.0	0.0	0.0	0.0	0.0	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°	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
2.5°	19.4	19.4	19.4	19.4	19.4	19.4	18.4	18.4	18.4	18.4	18.4
5°	17.4	17.4	18.4	18.4	18.4	18.4	18.4	19.4	20.5	20.5	21.5
7.5°	19.4	19.4	18.4	18.4	19.4	21.5	34.8	73.7	139.1	128.9	127.9
10°	30.7	30.7	27.6	25.6	27.6	100.2	157.5	149.4	125.8	122.8	118.7
12.5°	194.4	181.1	146.3	92.1	134.0	126.8	147.3	172.9	225.0	236.3	228.1
15°	195.4	203.6	219.9	238.3	301.8	134.0	259.8	318.1	339.6	339.6	346.8
17.5°	339.6	366.2	281.3	253.7	300.7	368.3	290.5	323.3	320.2	321.2	312.0
20°	552.4	499.2	550.3	494.1	337.6	412.2	362.1	346.8	467.5	556.5	556.5
22.5°	547.3	580.0	572.9	567.7	594.3	366.2	462.4	502.3	520.7	497.2	533.0
25°	913.5	878.7	830.6	566.7	569.8	509.4	499.2	468.5	509.4	549.3	541.1
27.5°	955.4	963.6	872.6	843.9	597.4	572.9	470.6	545.2	594.3	597.4	592.3
30°	1304.3	1320.6	1030.1	777.4	671.1	522.7	550.3	525.8	549.3	576.9	592.3
32.5°	1380.0	1355.4	1137.5	875.6	657.8	553.4	506.4	525.8	614.8	614.8	609.7
35°	1470.0	1451.6	1172.3	831.7	717.1	517.6	468.5	523.8	549.3	594.3	597.4
37.5°	1651.0	1640.8	1286.9	829.6	638.3	489.0	515.6	528.9	537.0	547.3	538.1
40°	1770.7	1692.0	1321.7	866.4	617.9	566.7	537.0	498.2	505.3	479.8	468.5
42.5°	1995.8	1863.8	1355.4	841.9	602.5	625.0	499.2	492.0	474.6	448.1	448.1
45°	2224.9	2056.1	1400.4	791.8	581.0	606.6	514.5	503.3	487.9	483.9	474.6
47.5°	2458.2	2231.1	1393.3	823.5	651.6	567.7	644.5	541.1	465.4	505.3	502.3
50°	2841.8	2515.4	1399.4	761.1	649.6	557.5	645.5	512.5	498.2	528.9	531.9
52.5°	3154.8	2708.8	1484.3	725.3	629.1	645.5	610.7	620.9	587.2	578.0	589.2
55°	3529.2	2956.3	1429.1	682.3	612.7	608.7	719.1	625.0	594.3	624.0	627.1
57.5°	3998.7	3301.1	1441.3	612.7	617.9	586.2	703.8	699.7	681.3	667.0	661.8
60°	4270.8	3411.5	1326.8	653.7	598.4	646.5	746.8	725.3	628.1	729.4	745.7
62.5°	4484.6	3583.4	1045.5	646.5	664.9	616.8	685.4	707.9	661.8	738.6	747.8
65°	4536.8	3574.2	801.0	663.9	657.8	685.4	811.2	695.6	578.0	589.2	594.3
67°	4465.2	3493.4	649.6	632.2	667.0	659.8	671.1	597.4	534.0	545.2	553.4
67.5°	4424.3	3427.9	615.8	630.1	689.5	658.8	657.8	574.9	521.7	536.0	539.1
70°	4043.7	3070.9	515.6	622.0	683.3	598.4	614.8	506.4	460.3	465.4	467.5
72.5°	3462.7	2464.3	492.0	618.9	671.1	499.2	472.6	414.3	391.8	384.6	374.4
75°	2657.6	1698.1	485.9	558.5	551.4	377.5	378.5	344.7	346.8	331.4	325.3
77.5°	1600.9	951.3	413.3	472.6	413.3	288.5	313.0	305.9	314.0	297.7	287.4
80°	767.2	464.4	326.3	347.8	291.5	226.1	267.0	278.2	280.3	256.8	245.5
82.5°	328.4	240.4	221.0	217.9	207.7	174.9	215.8	227.1	229.1	214.8	171.9
85°	193.3	163.7	152.4	146.3	144.2	108.4	154.5	183.1	183.1	151.4	130.9
87.5°	120.7	119.7	107.4	107.4	112.5	76.7	106.4	125.8	118.7	90.0	71.6
90°	57.3	61.4	64.4	65.5	76.7	43.0	68.5	72.6	68.5	49.1	34.8
92.5°	46.0	52.2	56.3	58.3	69.6	36.8	61.4	65.5	62.4	49.1	34.8
95°	37.8	47.1	56.3	55.2	58.3	28.6	54.2	59.3	57.3	43.0	29.7
97.5°	30.7	37.8	46.0	46.0	53.2	24.6	50.1	56.3	55.2	38.9	28.6
100°	27.6	33.8	40.9	39.9	47.1	19.4	45.0	49.1	48.1	31.7	25.6
102.5°	24.6	27.6	31.7	31.7	34.8	16.4	33.8	37.8	35.8	26.6	25.6
105°	22.5	23.5	22.5	21.5	22.5	14.3	21.5	24.6	21.5	20.5	20.5
107.5°	21.5	21.5	18.4	17.4	16.4	12.3	15.3	16.4	14.3	18.4	20.5



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	21.5	20.5	16.4	15.3	13.3	11.3	12.3	12.3	12.3	18.4	19.4
112.5°	20.5	20.5	15.3	13.3	12.3	10.2	10.2	9.2	11.3	18.4	20.5
115°	20.5	19.4	14.3	12.3	10.2	9.2	8.2	8.2	10.2	18.4	20.5
117.5°	20.5	19.4	14.3	11.3	10.2	8.2	7.2	7.2	10.2	18.4	20.5
120°	20.5	20.5	14.3	10.2	9.2	8.2	7.2	7.2	10.2	17.4	19.4
122.5°	19.4	19.4	13.3	10.2	8.2	7.2	6.1	6.1	10.2	17.4	18.4
125°	18.4	18.4	13.3	9.2	7.2	6.1	6.1	6.1	10.2	16.4	18.4
127.5°	17.4	17.4	12.3	8.2	6.1	6.1	5.1	5.1	10.2	16.4	17.4
130°	16.4	16.4	11.3	7.2	6.1	5.1	4.1	5.1	10.2	15.3	16.4
132.5°	14.3	14.3	10.2	6.1	5.1	4.1	4.1	4.1	9.2	14.3	15.3
135°	12.3	12.3	9.2	6.1	5.1	4.1	3.1	4.1	8.2	12.3	13.3
137.5°	11.3	11.3	8.2	5.1	4.1	3.1	3.1	4.1	8.2	11.3	12.3
140°	8.2	8.2	6.1	4.1	3.1	3.1	2.0	3.1	7.2	9.2	10.2
142.5°	6.1	6.1	5.1	4.1	3.1	2.0	2.0	3.1	6.1	8.2	8.2
145°	5.1	5.1	4.1	3.1	3.1	2.0	1.0	2.0	5.1	7.2	7.2
147.5°	4.1	4.1	4.1	3.1	2.0	1.0	1.0	1.0	3.1	5.1	5.1
150°	3.1	3.1	3.1	3.1	2.0	0.0	0.0	0.0	2.0	3.1	3.1
152.5°	2.0	2.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
155°	1.0	2.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	1.0	1.0	0.0	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)