

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: P241133

Luminaire Tested: **UTLD-AF24-90-D-U-T2U-CL**

Issue Date: 5/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241133  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-49)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 5/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-AF24-90-D-U-T2U-CL  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
AND CLEAR LENS PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8291.1 lumens  
Efficiency: N/A  
Efficacy: 88.2 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B3 - U3 - G3

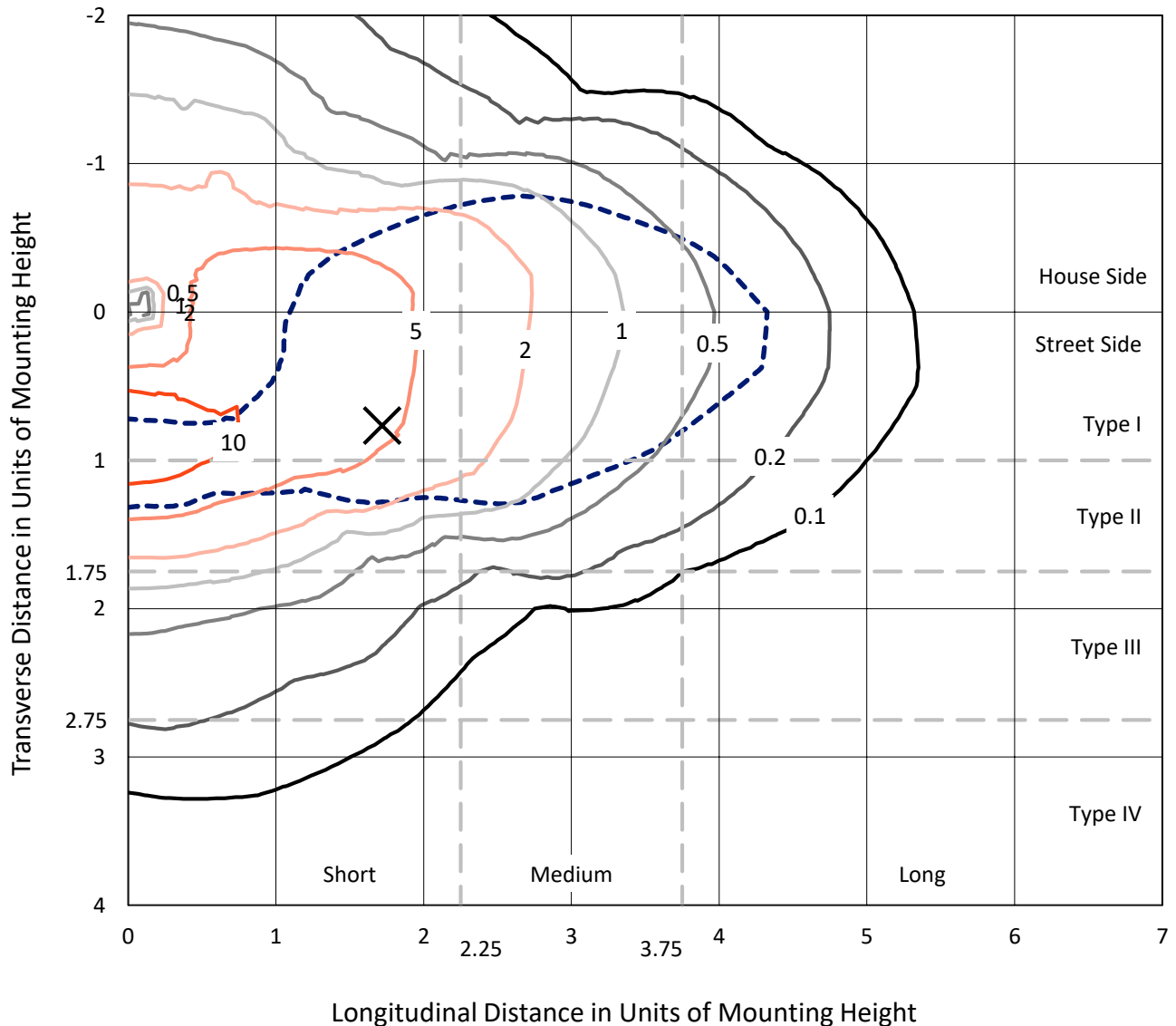
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

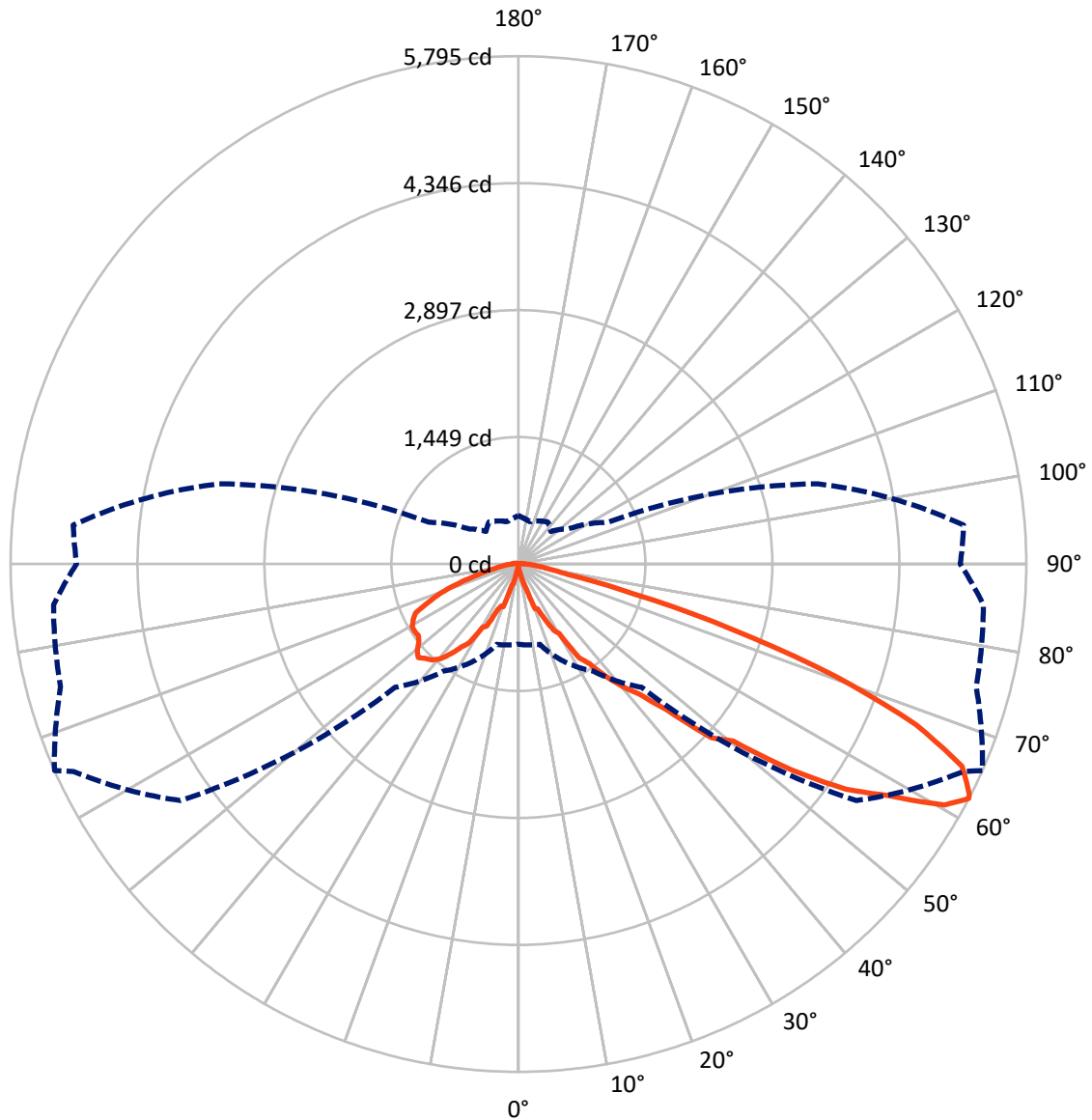
✕ Max cd  
 - - - 1/2 Max cd



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 66-Deg Lateral      - - - Horizontal Cone Through 62-Deg Vertical

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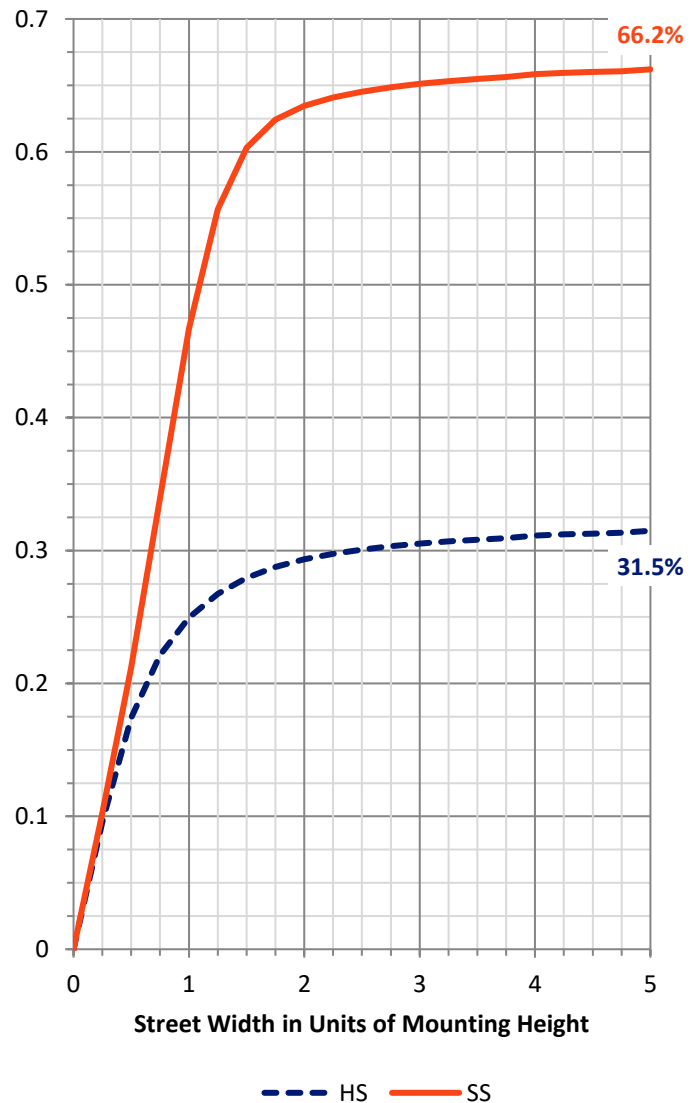
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2659.5	63.4	2722.9
	% Fixture	32.1	0.8	32.8
<b>Street Side</b>	Lumens	5521.5	46.7	5568.2
	% Fixture	66.6	0.6	67.2
<b>Total</b>	Lumens	8181.0	110.1	8291.1
	% Fixture	98.7	1.3	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.3	0.1
10°-20°	84.2	1.0
20°-30°	333.3	4.0
30°-40°	830.5	10.0
40°-50°	1583.7	19.1
50°-60°	2159.8	26.0
60°-70°	1984.0	23.9
70°-80°	1012.1	12.2
80°-90°	186.2	2.2
90°-100°	49.2	0.6
100°-110°	23.7	0.3
110°-120°	14.3	0.2
120°-130°	11.0	0.1
130°-140°	7.3	0.1
140°-150°	3.6	0.0
150°-160°	0.8	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	8181.0	98.7
0°-180°	8291.1	100.0



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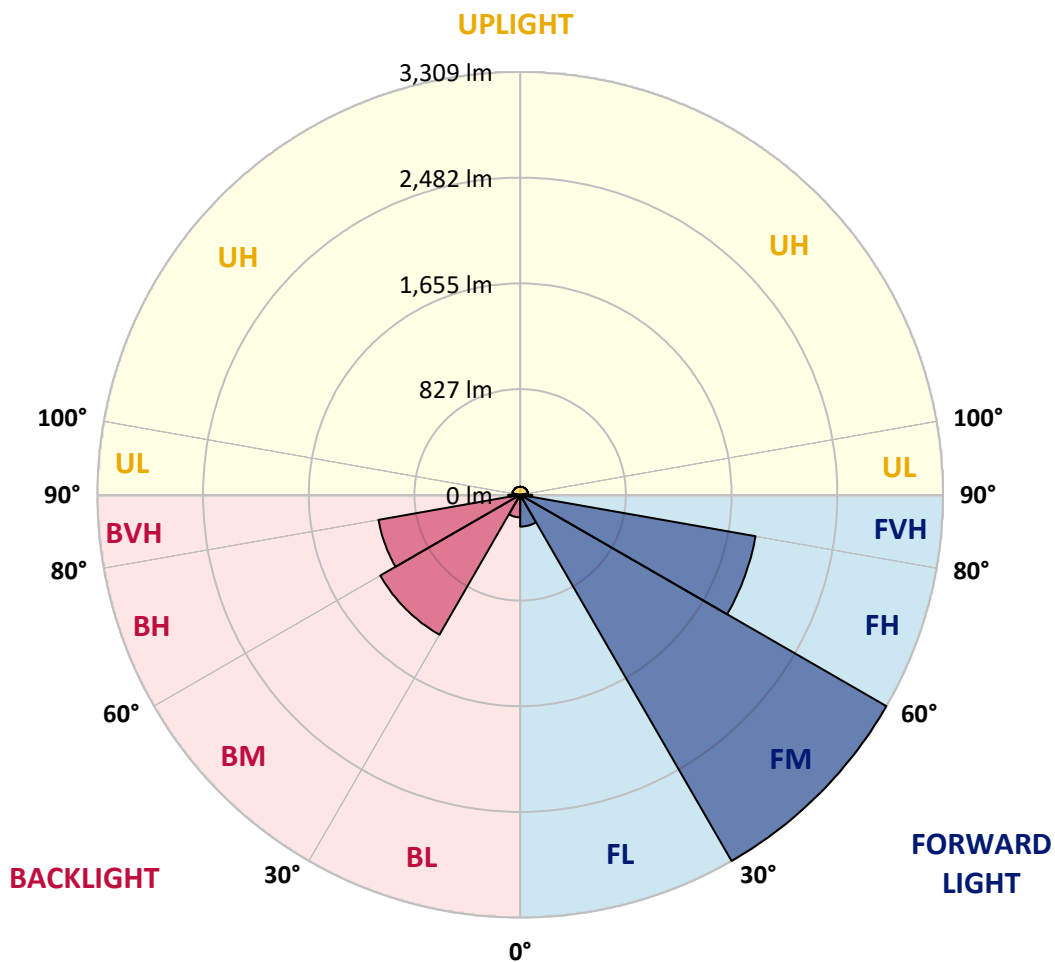
CATALOG NUMBER: UTLD-AF24-90-D-U-T2U-CL

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	248.5	3.0			
FM (30°-60°)	3309.4	39.9			
FH (60°-80°)	1870.2	22.6			G2/5000
FVH (80°-90°)	93.4	1.1			G1/100
BL (0°-30°)	176.3	2.1	B1/500		
BM (30°-60°)	1264.5	15.3	B2/2500		
BH (60°-80°)	1125.9	13.6	B3/2500		G3/2500
BVH (80°-90°)	92.8	1.1			G1/100
UL (90°-100°)	49.2	0.6		U2/50	
UH (100°-180°)	63.4	0.8		U3/500	

**BUG Rating: B3-U3-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4
2.5°	103.1	98.0	73.4	64.3	54.1	43.9	33.7	28.5	27.5	25.5	23.5
5°	103.1	103.1	106.2	112.3	124.5	113.3	119.5	42.9	40.8	27.5	22.5
7.5°	197.0	191.9	240.9	170.4	107.2	100.0	152.1	92.9	92.9	42.9	25.5
10°	266.4	265.4	325.6	208.3	191.9	232.7	103.1	106.2	106.2	73.4	35.7
12.5°	261.4	259.3	263.4	286.8	240.9	204.2	207.2	135.7	169.4	267.4	274.6
15°	367.4	386.9	366.4	280.7	257.3	256.2	330.7	251.1	255.2	294.0	215.4
17.5°	490.0	492.0	535.9	455.3	358.3	378.7	350.2	351.2	310.4	325.6	364.4
20°	533.9	524.7	549.2	509.3	509.3	453.3	357.3	506.3	544.1	511.4	505.2
22.5°	916.7	912.6	798.2	558.3	577.8	529.8	541.0	590.0	554.2	520.6	511.4
25°	1045.3	1032.1	992.2	952.4	708.4	743.2	655.3	641.1	680.9	821.7	889.1
27.5°	1390.3	1405.6	1200.4	1071.8	955.4	799.2	749.2	920.8	854.4	899.3	889.1
30°	1749.7	1741.5	1668.9	1433.2	1200.4	992.2	994.2	966.7	921.8	1059.6	1203.5
32.5°	2268.2	2294.7	1962.9	1715.9	1500.6	1207.6	1094.3	1285.1	1276.9	1237.2	1291.3
35°	2827.5	2823.4	2552.0	2144.6	1623.0	1365.8	1307.6	1420.9	1393.4	1332.1	1432.1
37.5°	3182.8	3143.0	2958.2	2608.1	1984.4	1556.7	1577.1	1659.7	1632.2	1551.6	1736.4
40°	3697.3	3653.4	3432.9	2957.2	2474.4	1886.4	2001.7	1934.4	1844.6	1830.3	1853.7
42.5°	3886.1	3888.1	3672.8	3326.7	2900.1	2358.0	2418.3	2122.2	2031.4	2183.5	2132.4
45°	3945.3	3937.1	3787.1	3527.9	3176.7	2921.4	2729.5	2464.2	2372.3	2511.1	2566.3
47.5°	3815.7	3783.0	3807.5	3517.6	3468.6	3167.5	3127.7	2939.9	2960.2	2881.7	3011.3
50°	3467.6	3419.6	3484.0	3408.4	3617.7	3433.9	3897.3	3185.9	3174.6	3316.5	3477.8
52.5°	2927.6	2891.9	3100.2	3037.9	3584.9	3724.9	4050.5	3894.3	3904.5	3917.8	3829.9
55°	2398.8	2417.2	2576.4	2539.7	3112.3	3788.1	4561.8	4475.1	4534.3	4205.7	4206.7
57.5°	1712.8	1753.7	2040.6	2062.0	2593.8	3331.9	4972.3	4833.3	4985.5	4678.3	4746.6
60°	1180.0	1204.5	1359.7	1576.1	1946.7	2766.3	4753.8	5445.9	5583.7	5159.0	5156.0
62°	915.6	925.9	949.3	1226.0	1494.4	1988.5	4705.8	5600.0	5794.9	5408.1	5324.4
62.5°	849.3	860.5	875.9	1112.7	1378.0	1807.8	4526.1	5633.7	5772.5	5439.7	5353.0
65°	679.9	685.0	650.2	740.1	973.8	1080.0	3252.2	5475.4	5564.2	5401.0	5270.2
67.5°	629.8	611.4	563.4	539.0	728.9	696.2	1770.0	4667.0	4896.7	5169.3	5033.4
70°	521.6	562.4	523.6	481.8	581.9	534.9	751.3	3776.8	3841.2	4732.4	4714.0
72.5°	399.2	428.7	459.3	454.3	448.2	430.8	499.2	2360.0	2548.9	3884.0	4364.8
75°	323.6	335.8	400.2	386.9	398.1	340.9	393.0	1121.9	1357.7	2749.0	3796.3
77.5°	260.3	268.4	311.4	300.1	329.7	266.4	313.3	508.3	575.7	1580.2	2599.9
80°	172.5	176.6	226.6	224.5	240.9	235.8	236.8	356.3	360.4	739.1	1360.7
82.5°	128.6	126.5	156.2	157.2	156.2	170.4	162.3	244.0	254.2	362.3	452.2
85°	83.7	80.6	92.9	99.0	94.9	93.9	122.4	171.4	178.6	258.3	269.4
87.5°	45.9	49.0	61.3	61.3	64.3	63.3	100.0	114.4	119.5	172.5	145.0
90°	30.6	30.6	33.7	32.6	34.7	33.7	52.1	67.4	68.4	86.7	77.5
92.5°	27.5	29.6	33.7	33.7	36.7	31.6	47.0	57.2	58.2	70.5	59.2
95°	24.4	25.5	28.5	29.6	31.6	22.5	35.7	47.0	48.0	58.2	48.0
97.5°	20.5	22.5	24.4	25.5	28.5	20.5	29.6	37.7	38.8	44.9	36.7
100°	20.5	21.5	21.5	21.5	24.4	17.4	25.5	32.6	33.7	36.7	30.6
102.5°	19.4	20.5	19.4	18.4	20.5	15.3	22.5	27.5	27.5	26.5	25.5
105°	19.4	19.4	16.4	14.3	17.4	14.3	19.4	20.5	20.5	20.5	23.5
107.5°	18.4	18.4	15.3	13.3	14.3	12.3	16.4	17.4	17.4	18.4	22.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
110°	17.4	16.4	13.3	11.3	11.3	11.3	13.3	14.3	14.3	16.4	23.5
112.5°	15.3	15.3	11.3	10.2	10.2	10.2	12.3	13.3	13.3	15.3	22.5
115°	14.3	14.3	11.3	9.2	9.2	9.2	11.3	12.3	12.3	14.3	22.5
117.5°	15.3	14.3	10.2	9.2	8.2	8.2	9.2	11.3	11.3	14.3	22.5
120°	13.3	13.3	10.2	8.2	7.2	8.2	9.2	10.2	11.3	15.3	22.5
122.5°	14.3	13.3	10.2	7.2	7.2	7.2	8.2	10.2	10.2	14.3	20.5
125°	13.3	12.3	9.2	7.2	6.1	7.2	8.2	9.2	10.2	14.3	20.5
127.5°	13.3	12.3	9.2	7.2	6.1	6.1	8.2	9.2	9.2	13.3	19.4
130°	12.3	12.3	8.2	6.1	6.1	6.1	7.2	8.2	8.2	12.3	17.4
132.5°	11.3	10.2	8.2	6.1	5.1	6.1	7.2	7.2	7.2	11.3	16.4
135°	10.2	10.2	8.2	6.1	5.1	5.1	6.1	7.2	7.2	10.2	14.3
137.5°	9.2	9.2	8.2	6.1	5.1	5.1	5.1	6.1	6.1	9.2	12.3
140°	9.2	9.2	8.2	6.1	5.1	5.1	5.1	5.1	5.1	7.2	10.2
142.5°	9.2	9.2	8.2	6.1	5.1	4.1	4.1	4.1	4.1	6.1	8.2
145°	8.2	8.2	7.2	6.1	4.1	3.1	3.1	4.1	4.1	5.1	6.1
147.5°	8.2	8.2	7.2	5.1	3.1	2.0	2.0	3.1	3.1	4.1	5.1
150°	6.1	6.1	6.1	4.1	2.0	0.0	2.0	2.0	2.0	4.1	4.1
152.5°	4.1	4.1	3.1	2.0	1.0	1.0	1.0	2.0	2.0	2.0	3.1
155°	2.0	2.0	2.0	1.0	1.0	0.0	0.0	1.0	1.0	2.0	2.0
157.5°	0.0	0.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0
160°	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0
162.5°	0.0	0.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0
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°	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4
2.5°	23.5	22.5	22.5	22.5	23.5	23.5	23.5	22.5	21.5	21.5	21.5
5°	21.5	20.5	20.5	20.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5
7.5°	23.5	21.5	21.5	20.5	20.5	21.5	23.5	34.7	60.3	84.7	99.0
10°	32.6	32.6	28.5	26.5	26.5	38.8	143.9	156.2	156.2	148.0	142.9
12.5°	296.0	233.7	206.2	72.4	59.2	120.4	137.8	129.6	179.6	209.3	221.5
15°	214.4	234.8	253.2	227.6	307.3	128.6	208.3	253.2	340.9	345.0	348.1
17.5°	360.4	388.9	280.7	245.0	286.8	380.7	311.4	322.5	322.5	322.5	323.6
20°	507.3	516.5	539.0	515.5	287.9	401.2	399.2	324.6	365.4	455.3	480.8
22.5°	539.0	557.3	530.8	514.4	608.3	374.6	412.4	516.5	522.6	498.2	510.4
25°	914.6	888.1	779.9	549.2	607.3	523.6	532.9	483.9	497.2	482.8	492.0
27.5°	907.5	893.1	806.4	792.2	638.0	619.6	495.1	558.3	593.1	615.5	611.4
30°	1267.8	1184.1	934.1	817.6	753.3	593.1	544.1	528.8	524.7	551.3	553.2
32.5°	1274.0	1261.7	1075.9	1057.5	774.8	600.3	513.4	482.8	551.3	588.0	581.9
35°	1478.1	1414.8	1230.0	1141.2	890.1	564.5	458.3	482.8	494.1	520.6	519.6
37.5°	1660.8	1641.4	1490.3	1260.7	857.4	514.4	517.5	514.4	501.2	505.2	505.2
40°	1903.7	1796.6	1661.8	1371.9	802.3	551.3	558.3	485.9	472.6	465.4	465.4
42.5°	2192.6	2010.9	1886.4	1426.0	762.5	649.2	528.8	474.6	461.4	441.0	437.9
45°	2533.5	2308.0	2121.2	1443.4	640.1	672.7	549.2	540.0	496.1	477.7	470.6
47.5°	2832.7	2651.0	2391.7	1471.9	742.2	642.1	722.7	613.5	478.7	505.2	501.2
50°	3281.8	3048.1	2581.5	1399.5	793.2	623.7	751.3	536.9	493.1	528.8	526.7
52.5°	3678.8	3456.3	2780.6	1290.2	750.2	862.6	666.6	615.5	571.6	553.2	551.3
55°	4094.4	3871.8	2915.3	1235.1	741.1	690.1	693.2	666.6	516.5	556.3	555.3
57.5°	4572.1	4449.5	3208.3	1211.7	759.4	609.4	693.2	557.3	589.0	556.3	562.4
60°	4827.3	4827.3	3378.8	1188.2	701.2	625.7	595.2	612.4	511.4	517.5	533.9
62°	5041.6	5098.8	3534.9	1126.0	699.2	524.7	584.9	541.0	500.2	530.8	551.3
62.5°	5114.1	5158.0	3582.0	1113.7	716.6	497.2	542.1	540.0	518.5	522.6	541.0
65°	5184.5	5387.7	3694.2	1036.0	659.4	469.5	463.4	512.4	449.2	429.7	430.8
67.5°	5117.2	5396.9	3656.4	834.0	534.9	403.2	409.3	427.7	405.3	398.1	402.2
70°	4871.2	4984.4	3271.6	688.0	461.4	369.5	393.0	377.7	371.5	370.5	369.5
72.5°	4534.3	4318.9	2569.3	517.5	397.1	320.5	336.9	348.1	350.2	345.0	338.9
75°	3824.8	3392.0	1676.1	387.9	317.4	271.5	307.3	316.4	324.6	310.4	305.2
77.5°	2625.4	2138.6	867.7	308.3	274.6	227.6	269.4	283.8	292.0	270.5	273.5
80°	1218.8	975.9	401.2	252.2	227.6	188.8	228.6	247.0	258.3	229.7	219.4
82.5°	411.3	375.6	241.9	195.0	186.8	143.9	184.7	206.2	209.3	190.9	162.3
85°	245.0	246.0	169.4	150.1	137.8	89.8	132.7	162.3	162.3	134.7	110.3
87.5°	140.9	158.3	129.6	114.4	103.1	61.3	99.0	111.3	109.3	85.7	61.3
90°	70.5	82.7	76.5	75.5	77.5	38.8	77.5	83.7	83.7	59.2	37.7
92.5°	52.1	63.3	68.4	64.3	65.4	29.6	62.3	63.3	62.3	45.9	29.6
95°	43.9	55.1	68.4	64.3	62.3	24.4	57.2	58.2	59.2	44.9	32.6
97.5°	34.7	41.8	53.1	52.1	56.2	20.5	52.1	52.1	50.0	36.7	27.5
100°	31.6	36.7	44.9	44.9	49.0	18.4	45.9	41.8	39.8	29.6	25.5
102.5°	26.5	29.6	34.7	33.7	36.7	17.4	33.7	32.6	30.6	25.5	24.4
105°	25.5	26.5	26.5	24.4	25.5	16.4	23.5	22.5	21.5	21.5	22.5
107.5°	24.4	24.4	22.5	20.5	20.5	15.3	17.4	16.4	17.4	22.5	23.5



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	24.4	24.4	20.5	18.4	16.4	14.3	15.3	13.3	15.3	22.5	24.4
112.5°	24.4	24.4	18.4	15.3	15.3	13.3	13.3	12.3	14.3	22.5	24.4
115°	23.5	23.5	17.4	14.3	13.3	12.3	12.3	11.3	14.3	22.5	24.4
117.5°	23.5	23.5	17.4	14.3	12.3	11.3	11.3	10.2	14.3	23.5	24.4
120°	23.5	23.5	17.4	13.3	12.3	11.3	10.2	10.2	14.3	22.5	24.4
122.5°	22.5	21.5	16.4	12.3	11.3	10.2	10.2	10.2	14.3	23.5	24.4
125°	21.5	20.5	16.4	12.3	10.2	10.2	9.2	9.2	14.3	22.5	23.5
127.5°	20.5	20.5	15.3	11.3	10.2	9.2	9.2	9.2	14.3	23.5	23.5
130°	19.4	18.4	14.3	10.2	9.2	8.2	8.2	9.2	15.3	21.5	22.5
132.5°	17.4	16.4	13.3	9.2	8.2	8.2	8.2	8.2	14.3	21.5	21.5
135°	14.3	14.3	11.3	8.2	7.2	7.2	7.2	8.2	13.3	18.4	19.4
137.5°	13.3	12.3	10.2	8.2	6.1	7.2	7.2	8.2	13.3	17.4	18.4
140°	11.3	10.2	8.2	6.1	6.1	6.1	6.1	7.2	11.3	15.3	16.4
142.5°	8.2	8.2	7.2	5.1	5.1	5.1	5.1	7.2	10.2	13.3	13.3
145°	7.2	7.2	6.1	5.1	4.1	3.1	3.1	5.1	8.2	11.3	11.3
147.5°	5.1	5.1	5.1	4.1	3.1	3.1	3.1	4.1	6.1	8.2	8.2
150°	4.1	4.1	4.1	3.1	3.1	2.0	2.0	3.1	5.1	6.1	6.1
152.5°	3.1	3.1	3.1	3.1	2.0	2.0	2.0	2.0	3.1	4.1	4.1
155°	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	2.0	2.0
157.5°	1.0	1.0	1.0	2.0	2.0	2.0	1.0	1.0	0.0	0.0	0.0
160°	1.0	1.0	1.0	2.0	2.0	2.0	1.0	1.0	0.0	0.0	0.0
162.5°	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	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)