

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: P239992

Luminaire Tested: **UTLD-AF24-20-D-U-T2U-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239992
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-18)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-20-D-U-T2U-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2071 lumens
Efficiency: N/A
Efficacy: 98.6 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: B1 - U3 - G1

Input Watts (W): 21
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

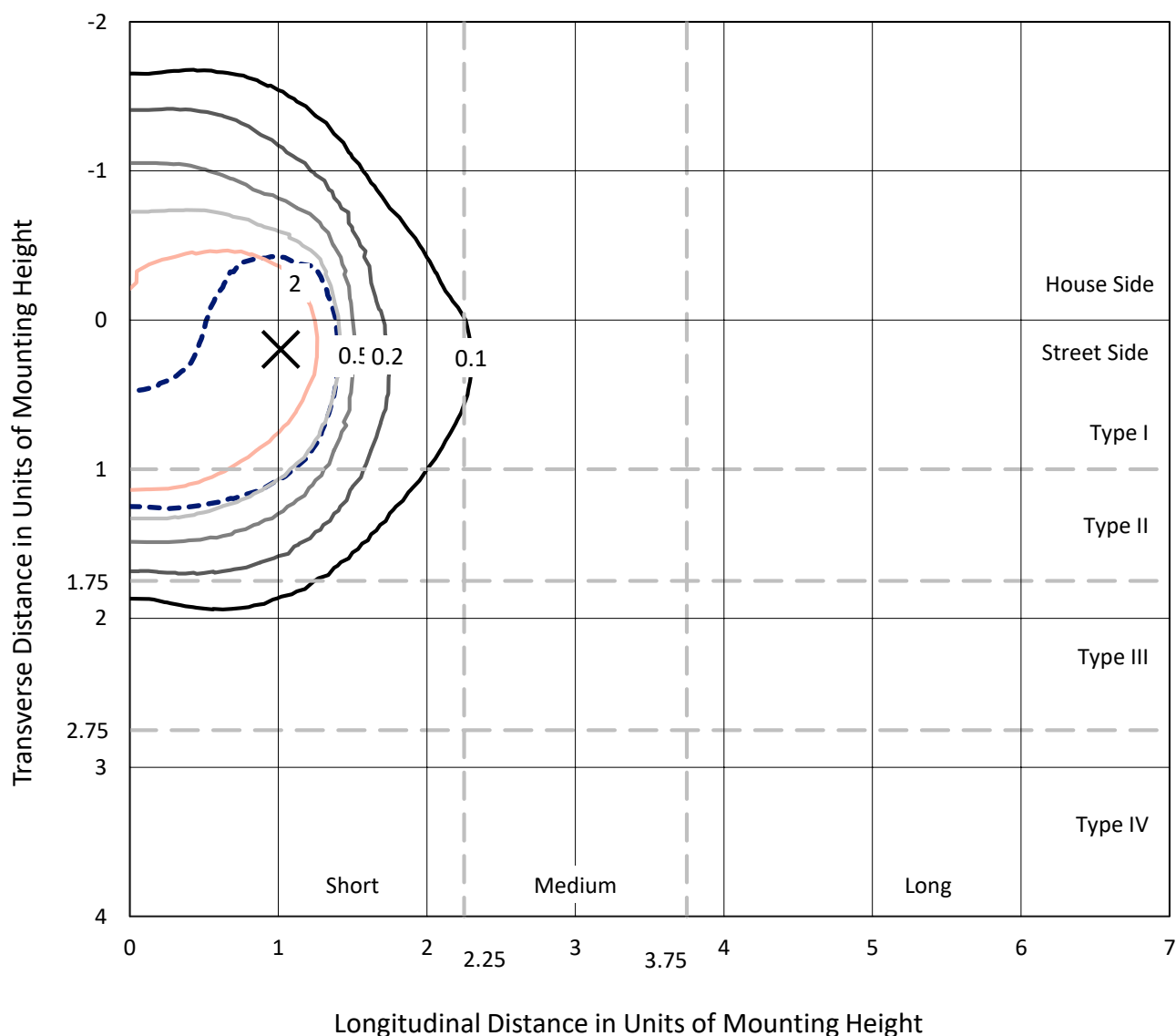


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

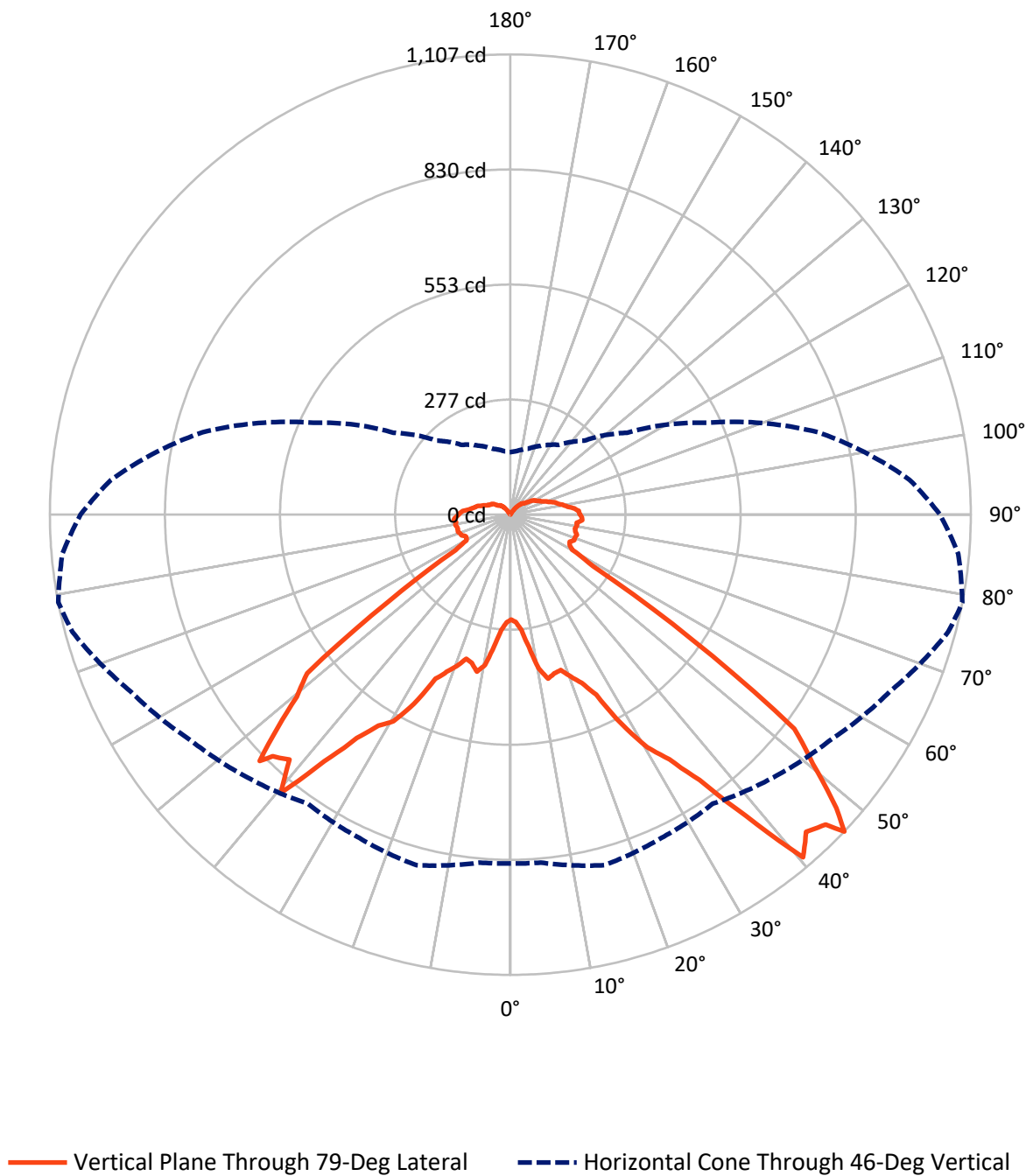


Based on 10 foot mounting height. Maximum calculated value = 4.5 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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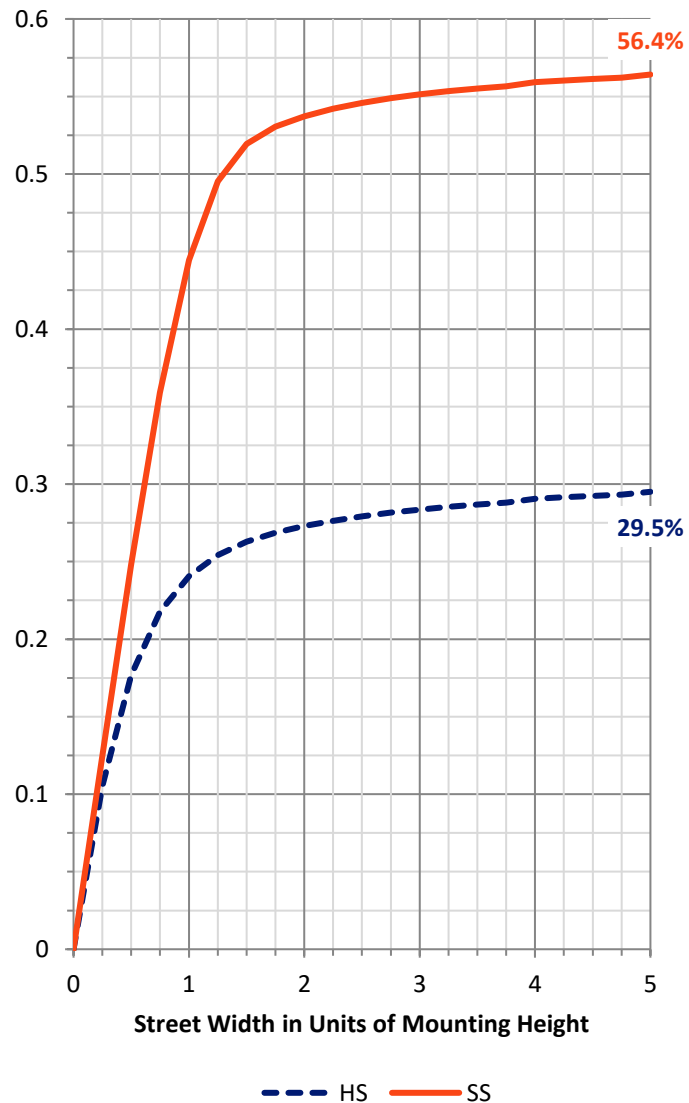
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	631.3	78.5	709.8
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	1190.9	170.3	1361.2
	% Fixture	57.5	8.2	65.7
Total	Lumens	1822.2	248.9	2071.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.2	1.3
10°-20°	98.4	4.8
20°-30°	198.8	9.6
30°-40°	363.9	17.6
40°-50°	502.9	24.3
50°-60°	321.0	15.5
60°-70°	115.0	5.6
70°-80°	103.2	5.0
80°-90°	91.8	4.4
90°-100°	84.2	4.1
100°-110°	65.5	3.2
110°-120°	45.5	2.2
120°-130°	30.4	1.5
130°-140°	18.2	0.9
140°-150°	4.8	0.2
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	1822.2	88.0
0°-180°	2071.0	100.0

Coefficient of Utilization



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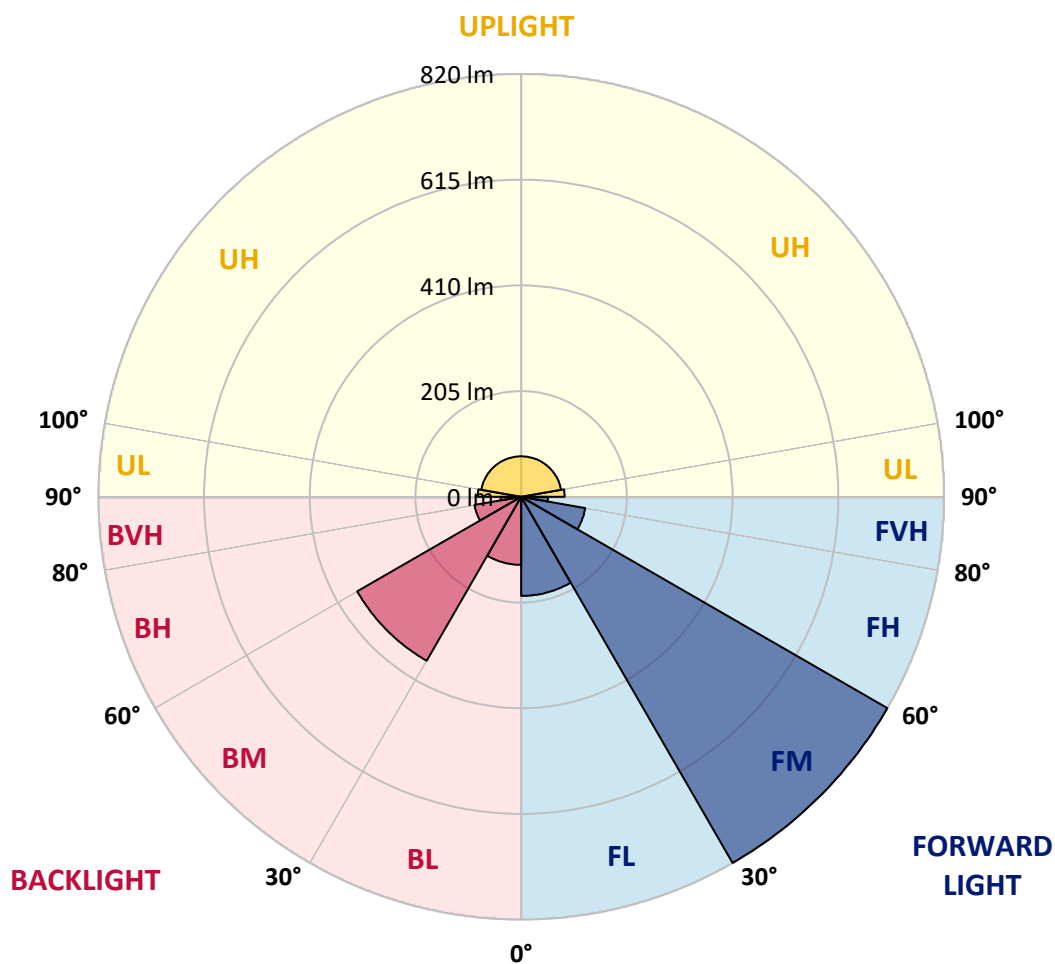
CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	192.4	9.3			
FM	(30°-60°)	820.5	39.6			
FH	(60°-80°)	126.2	6.1			G0/660
FVH	(80°-90°)	51.9	2.5			G1/100
BL	(0°-30°)	132.0	6.4	B1/500		
BM	(30°-60°)	367.3	17.7	B1/1000		
BH	(60°-80°)	92.0	4.4	B0/110		G0/110
BVH	(80°-90°)	40.0	1.9			G1/100
UL	(90°-100°)	84.2	4.1		U3/500	
UH	(100°-180°)	78.5	3.8		U3/500	

BUG Rating: B1-U3-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4
2.5°	256.6	257.4	257.1	256.6	257.7	258.3	258.3	258.0	258.3	258.8	259.9
5°	268.8	268.5	269.4	271.6	274.7	275.5	278.0	277.4	278.8	278.8	280.5
7.5°	290.2	290.5	293.3	295.5	298.8	306.1	313.0	322.2	321.9	321.4	323.6
10°	312.5	312.5	318.0	326.1	339.7	355.0	361.7	369.7	378.1	376.7	374.4
12.5°	319.4	320.5	330.2	350.3	379.7	405.9	419.2	417.5	409.2	404.5	397.0
15°	332.2	333.6	344.1	374.7	409.8	433.1	438.1	417.5	399.5	396.1	389.7
17.5°	380.3	380.3	391.1	419.2	445.6	440.3	420.6	410.9	399.2	392.8	383.6
20°	413.6	415.6	432.8	452.6	467.0	449.8	450.1	432.0	420.0	416.1	407.5
22.5°	445.9	448.7	453.7	484.5	488.7	492.0	482.0	465.6	445.6	439.2	430.3
25°	514.3	515.1	520.4	535.1	524.0	518.4	504.0	490.6	482.9	479.5	470.1
27.5°	595.4	592.9	595.2	596.3	579.3	564.0	542.9	557.1	568.2	571.3	562.9
30°	612.1	608.0	624.9	643.0	634.6	616.3	614.9	631.9	652.7	648.8	637.1
32.5°	679.4	673.0	680.8	682.7	681.3	676.1	673.8	695.2	710.3	701.6	684.7
35°	733.6	733.3	705.8	712.2	716.1	728.3	740.6	769.7	783.1	783.6	769.5
37.5°	849.5	841.2	830.9	790.3	768.9	774.5	816.7	868.4	898.5	918.2	895.7
40°	889.3	892.9	884.3	879.8	848.7	835.6	884.3	973.2	1054.7	1083.6	1080.8
42.5°	824.0	832.3	827.3	858.1	882.9	899.6	958.2	1034.4	1050.0	1042.5	1002.7
45°	878.4	878.4	865.1	845.9	854.5	908.7	955.2	1006.6	1055.2	1063.0	1041.1
46°	839.0	839.8	872.6	858.1	848.4	893.5	941.8	1006.6	1089.7	1106.7	1080.8
47.5°	766.1	764.7	825.1	829.8	836.5	873.4	926.5	1006.3	1053.3	1054.4	1022.2
50°	607.1	609.6	692.5	736.4	780.3	816.7	888.4	933.5	944.0	942.1	907.1
52.5°	492.9	499.5	543.5	598.8	651.9	721.9	805.3	847.3	870.4	855.1	822.8
55°	341.6	356.1	411.4	461.2	539.0	606.3	678.3	682.2	576.8	528.7	469.0
57.5°	211.3	214.1	263.0	333.3	391.7	444.5	445.3	346.1	269.4	234.1	194.6
60°	117.3	119.8	163.2	215.2	272.1	278.5	248.8	200.2	179.6	170.4	156.5
62.5°	87.3	89.2	117.6	149.6	172.4	181.5	167.1	163.7	164.0	159.8	150.7
65°	78.7	79.8	103.1	119.3	132.6	134.5	139.8	151.5	157.9	157.1	153.2
67.5°	71.4	72.8	94.0	105.6	113.7	123.1	127.6	145.7	162.9	165.7	162.1
70°	63.7	65.9	84.8	97.0	106.2	115.4	124.3	146.8	160.7	164.6	162.9
72.5°	55.0	57.8	73.7	86.5	96.7	106.7	122.0	141.2	160.1	167.1	168.2
75°	48.4	52.0	65.0	76.4	87.3	99.2	115.4	139.3	157.1	161.5	163.7
77.5°	43.6	47.5	57.5	68.1	78.4	91.5	110.1	138.7	154.0	159.0	162.9
80°	40.0	43.9	52.3	60.6	69.2	84.0	104.5	137.9	157.1	162.3	164.6
82.5°	37.3	40.9	48.1	55.6	62.5	75.9	100.6	136.5	156.2	160.7	161.8
85°	37.5	40.3	47.0	53.9	60.3	71.7	98.7	137.0	166.5	173.5	174.6
87.5°	39.5	41.4	48.4	56.4	63.7	75.3	102.3	135.9	165.4	171.8	174.6
90°	42.8	44.5	52.8	62.3	70.9	81.7	101.5	132.9	160.7	166.5	168.2
92.5°	53.1	54.5	63.7	73.9	81.5	85.1	98.1	137.6	161.5	164.8	164.8
95°	68.7	70.3	79.2	87.0	88.4	86.5	96.5	122.3	147.3	154.6	158.7
97.5°	85.9	86.5	91.5	92.8	88.7	84.2	94.2	114.3	133.7	138.7	139.8
100°	91.5	91.5	94.8	93.7	85.6	79.5	85.3	104.0	122.9	128.4	130.1
102.5°	92.6	93.1	96.5	92.8	82.0	72.0	75.9	93.7	111.2	117.3	120.6
105°	98.1	98.4	96.5	87.6	74.2	65.3	68.7	86.5	105.1	110.9	114.5
107.5°	91.7	90.9	85.6	77.3	68.4	62.0	65.9	78.9	93.1	97.9	100.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	75.9	75.3	73.4	70.3	64.8	60.0	62.5	74.5	88.1	91.7	94.0
112.5°	73.1	72.6	70.6	67.0	60.6	57.0	61.2	71.4	79.8	81.5	81.7
115°	70.3	69.8	65.3	61.2	56.2	54.5	57.3	66.7	74.5	76.4	78.1
117.5°	60.6	60.0	56.7	54.2	52.3	53.1	57.8	63.1	68.7	70.3	71.4
120°	53.9	53.7	52.0	50.3	49.2	49.8	54.8	60.6	66.2	67.8	68.7
122.5°	50.9	50.6	48.6	46.1	46.1	46.1	50.0	54.5	60.6	62.0	63.9
125°	44.8	44.8	42.8	40.9	43.6	44.8	45.6	45.9	50.6	52.8	53.7
127.5°	39.8	40.0	38.4	37.0	42.0	44.5	43.9	40.3	43.1	44.8	45.9
130°	39.2	39.2	37.3	35.6	38.1	43.1	41.4	37.8	41.1	42.3	42.8
132.5°	38.1	38.1	36.1	33.6	34.2	39.8	36.1	35.3	38.4	39.5	39.8
135°	35.0	35.0	33.6	30.3	28.1	33.6	29.2	30.9	33.9	34.7	35.0
137.5°	31.1	31.1	29.7	27.0	22.2	25.3	22.5	26.1	29.2	30.0	30.3
140°	25.6	25.3	24.5	21.1	16.1	14.2	15.3	20.8	23.9	24.5	25.3
142.5°	18.9	19.2	17.8	15.0	9.7	5.3	8.9	13.3	16.7	17.5	18.1
145°	13.9	13.6	12.2	9.7	5.3	0.8	4.2	8.3	10.6	11.4	12.0
147.5°	9.2	9.2	8.1	5.8	1.7	0.3	1.1	4.2	6.7	7.2	7.5
150°	6.1	6.1	4.4	1.7	0.3	0.3	0.3	0.8	2.8	3.3	3.9
152.5°	1.9	1.9	0.8	0.6	0.3	0.0	0.0	0.3	0.6	0.6	0.8
155°	0.6	0.6	0.6	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.3
157.5°	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.3	0.3	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°	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4	252.4
2.5°	260.2	259.9	259.1	258.3	256.0	253.2	250.5	248.5	247.4	246.6	246.3
5°	279.9	280.5	276.6	270.2	264.1	258.5	253.2	248.2	245.5	243.2	242.4
7.5°	321.9	322.7	315.0	305.0	289.4	270.5	254.4	243.5	235.7	231.0	230.2
10°	373.9	371.7	362.5	341.1	312.7	283.5	253.2	229.9	217.4	211.5	211.3
12.5°	395.0	392.0	381.7	363.9	334.1	296.1	258.5	227.7	209.0	201.5	201.3
15°	385.3	380.0	361.1	344.7	333.0	311.9	278.3	243.0	217.4	207.9	205.4
17.5°	377.0	371.7	355.8	332.2	310.2	301.1	284.7	255.5	228.8	215.4	212.7
20°	401.4	398.1	378.3	346.9	322.7	286.0	272.7	252.7	232.7	224.3	222.1
22.5°	423.9	422.3	397.5	364.7	332.2	306.6	279.9	265.2	245.7	239.9	237.4
25°	465.9	458.1	417.5	373.3	345.3	320.2	286.0	263.0	239.3	231.8	230.5
27.5°	564.6	546.5	487.3	420.9	364.4	324.7	285.5	251.6	225.7	216.3	215.7
30°	627.4	611.0	544.3	471.2	394.5	335.3	281.9	241.0	221.6	212.4	212.7
32.5°	665.5	643.5	568.5	475.9	401.4	340.5	284.1	237.4	211.3	199.6	199.3
35°	748.1	717.5	608.5	514.0	415.0	332.8	274.7	229.9	205.7	197.1	196.0
37.5°	865.7	831.2	683.6	544.9	420.6	322.5	262.4	221.3	192.4	180.4	179.6
40°	1035.5	984.9	787.5	582.1	416.1	314.7	249.1	208.2	184.3	176.5	174.0
42.5°	951.3	894.0	725.5	574.9	405.0	293.3	236.3	201.8	179.6	173.5	170.1
45°	1003.8	937.1	733.1	534.6	362.5	261.6	214.6	189.0	166.8	158.2	157.3
46°	1033.0	963.2	765.6	522.3	343.0	251.6	204.9	183.2	164.0	152.9	150.4
47.5°	969.6	892.1	703.9	498.4	327.5	229.1	192.1	174.0	161.0	150.7	149.0
50°	850.4	774.5	608.8	425.0	281.9	202.1	171.2	160.4	147.3	136.2	134.3
52.5°	776.1	712.5	557.4	385.6	239.3	170.4	152.9	143.4	130.1	117.0	115.4
55°	426.7	382.8	344.4	289.7	198.5	144.0	133.2	127.6	114.0	101.2	100.4
57.5°	175.7	157.9	156.5	147.6	136.5	121.2	115.1	111.8	98.1	82.6	82.0
60°	147.9	131.8	116.2	102.3	101.5	101.2	99.2	93.4	78.4	62.3	61.7
62.5°	144.0	128.2	112.9	95.9	88.7	90.9	87.3	80.1	68.7	53.1	52.5
65°	146.8	130.4	112.3	93.1	85.3	86.2	82.3	76.7	68.9	57.8	57.3
67.5°	156.2	139.3	119.0	92.0	82.6	84.2	81.5	77.3	72.8	65.9	64.5
70°	157.6	142.6	119.3	92.6	79.5	81.5	80.6	77.0	73.9	67.8	67.0
72.5°	161.8	148.2	121.8	90.6	76.2	77.0	78.1	77.0	75.1	71.4	70.1
75°	157.9	145.9	120.6	89.0	72.8	72.3	75.1	76.4	77.0	75.6	73.9
77.5°	157.1	147.1	120.9	87.8	69.8	67.6	69.8	72.0	73.1	71.7	70.3
80°	158.2	149.6	124.5	88.1	66.4	60.9	62.0	64.5	64.8	62.3	60.3
82.5°	155.7	147.3	120.6	85.1	61.2	54.2	54.5	57.0	57.3	54.2	52.0
85°	166.8	156.8	123.4	81.2	55.6	49.5	49.8	50.9	49.2	45.9	43.6
87.5°	166.5	154.6	117.9	75.1	52.0	46.7	46.4	46.1	43.4	39.5	37.5
90°	160.7	148.2	110.4	66.2	45.9	42.8	42.0	40.3	36.4	32.0	30.6
92.5°	156.8	143.4	105.4	62.5	40.3	37.5	37.0	35.3	31.4	26.7	25.9
95°	152.6	139.5	97.0	54.8	35.6	32.8	32.0	30.3	27.2	23.4	22.8
97.5°	134.5	121.8	85.6	49.8	31.7	28.6	28.1	26.7	24.2	21.4	21.1
100°	124.3	112.9	79.5	45.6	28.4	25.0	24.7	23.9	22.2	20.3	20.0
102.5°	116.2	105.1	73.7	42.3	25.3	22.2	22.0	21.7	20.8	19.5	19.5
105°	110.1	99.5	70.6	39.5	22.8	20.3	20.0	20.0	19.2	18.3	18.3
107.5°	95.9	87.0	61.4	35.0	20.8	18.6	18.6	18.6	18.1	17.5	17.8



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	90.3	82.0	58.4	32.8	20.0	17.2	17.0	17.0	16.7	17.0	17.0
112.5°	77.8	70.6	51.4	31.4	19.5	16.4	15.6	15.0	14.5	15.0	15.3
115°	74.8	68.1	49.8	30.3	18.9	15.8	14.7	13.9	12.8	13.6	13.6
117.5°	68.7	62.5	46.1	29.5	18.9	15.0	13.9	13.1	12.0	12.5	12.5
120°	65.9	60.6	46.4	30.3	19.2	14.2	13.1	11.7	10.8	11.7	11.7
122.5°	62.0	57.3	43.6	28.6	18.3	13.9	12.8	10.0	9.5	10.3	10.3
125°	52.0	48.1	37.5	25.3	17.5	13.9	12.5	8.9	8.9	9.5	9.7
127.5°	44.2	41.1	32.5	23.6	17.8	14.7	12.0	7.8	8.3	9.2	9.2
130°	41.7	39.2	32.2	24.2	18.6	15.6	9.7	7.2	7.8	8.6	8.6
132.5°	38.9	36.7	31.1	24.7	18.9	14.7	8.1	6.7	7.2	7.8	7.8
135°	34.2	32.5	28.1	22.5	17.0	11.7	6.4	5.8	6.7	7.2	7.5
137.5°	30.0	28.6	24.7	20.3	15.3	10.0	4.4	5.3	5.8	6.1	6.4
140°	24.7	23.9	20.8	16.7	11.4	5.6	3.3	4.2	4.7	5.3	5.3
142.5°	18.1	17.5	14.7	10.8	6.9	2.2	2.2	3.1	3.6	4.2	4.2
145°	12.0	11.4	9.5	6.9	3.1	0.6	1.4	2.2	3.1	3.3	3.3
147.5°	7.5	7.2	5.8	3.6	1.1	0.6	0.6	1.7	2.2	2.5	2.5
150°	3.9	3.6	2.5	1.1	0.6	0.3	0.3	0.6	1.4	1.7	1.7
152.5°	0.8	0.8	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.6
155°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
157.5°	0.3	0.3	0.3	0.3	0.3	0.3	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

(END OF REPORT)