

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: P239929

Luminaire Tested: **UTLD-AF24-20-D-U-T4W-A-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239929
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-16)
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-T4W-A-7030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 3000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1779 lumens
Efficiency: N/A
Efficacy: 84.7 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

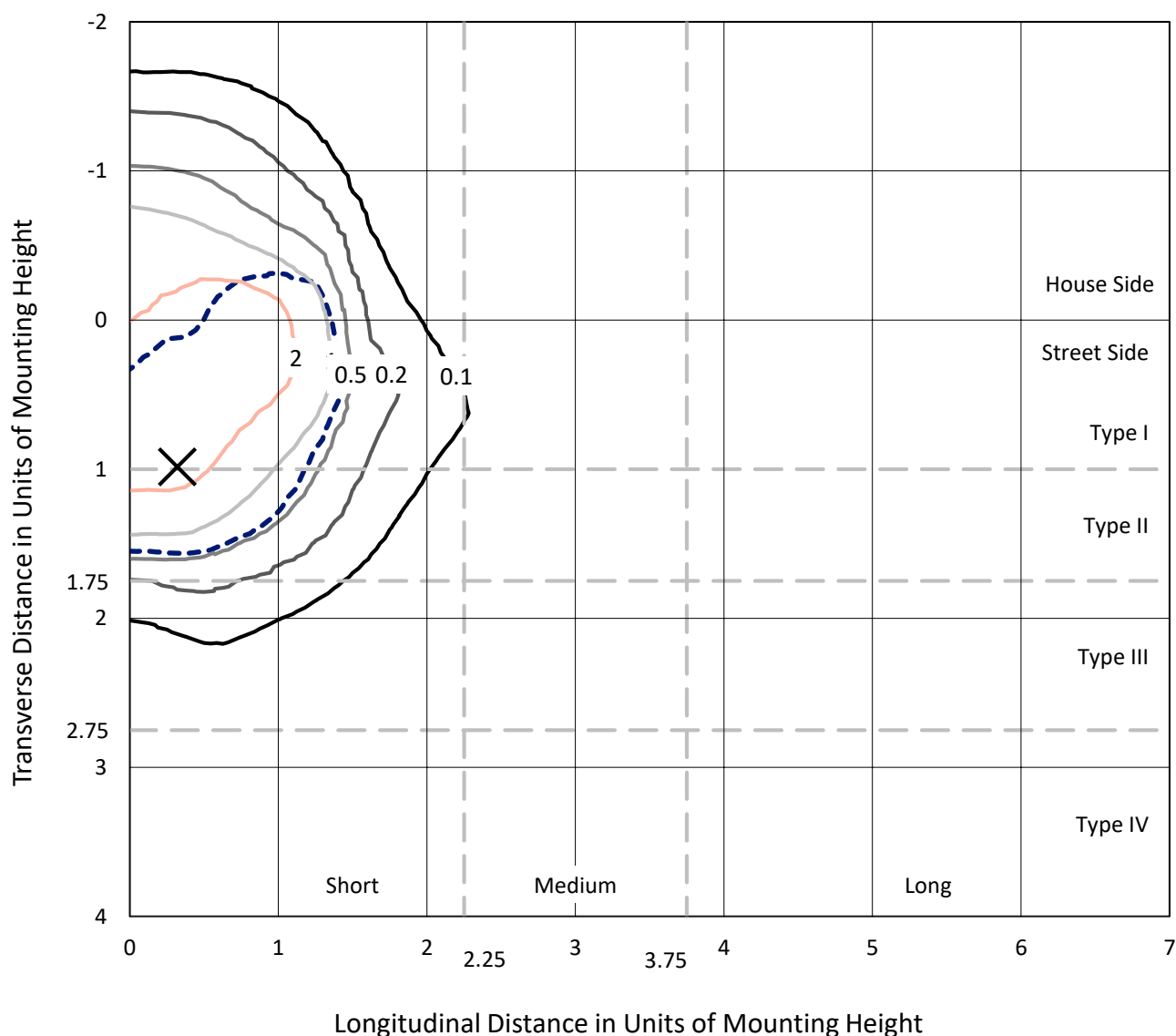


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

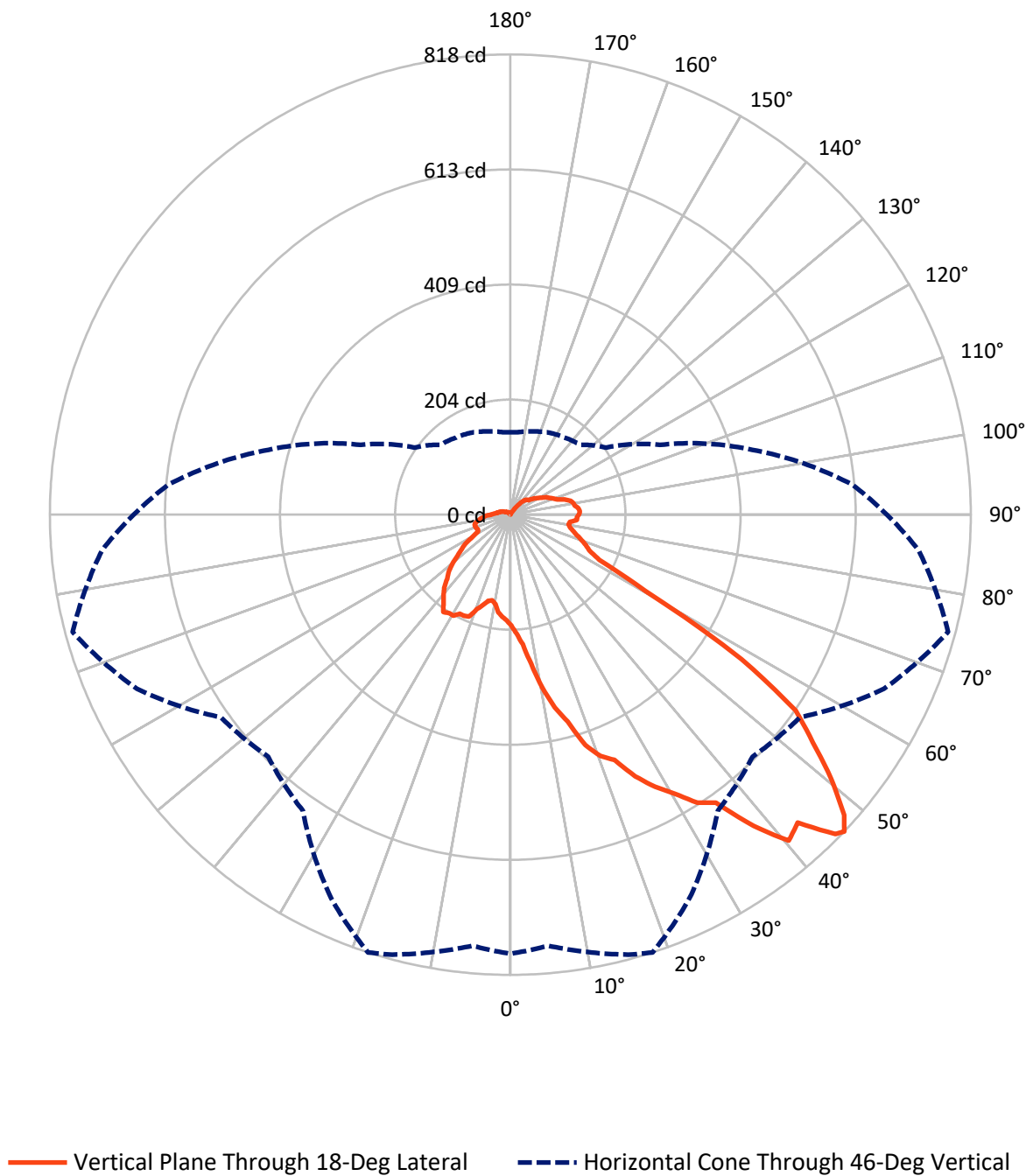


Based on 10 foot mounting height. Maximum calculated value = 4.3 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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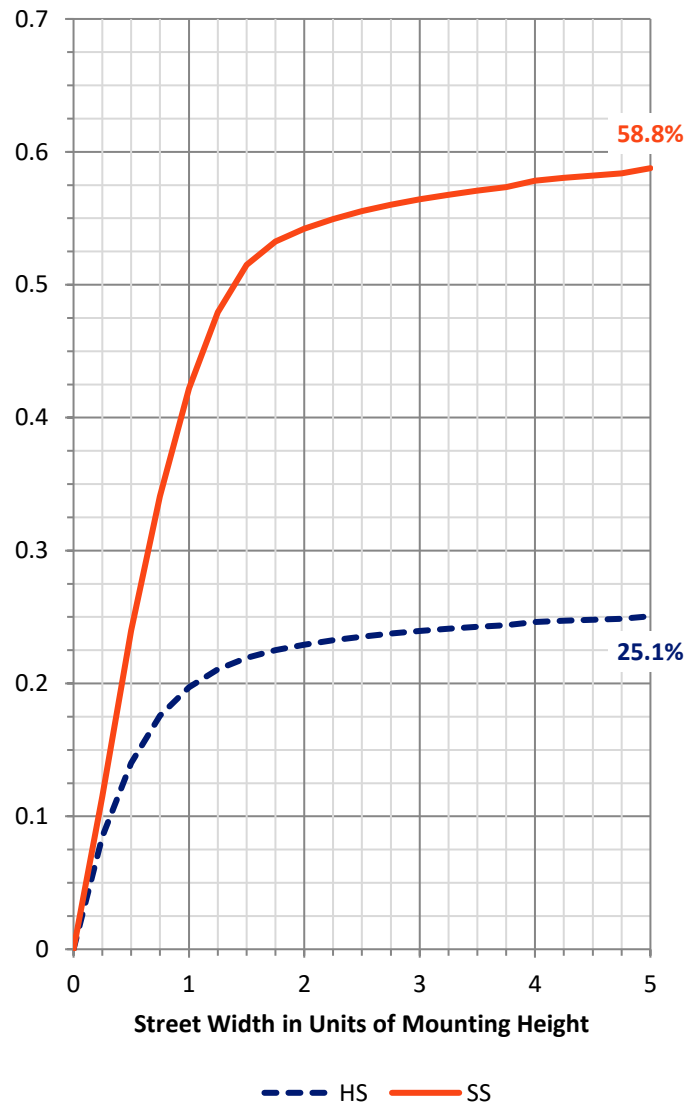
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	462.8	57.6	520.4
	% Fixture	26.0	3.2	29.3
Street Side	Lumens	1085.9	172.7	1258.6
	% Fixture	61.0	9.7	70.7
Total	Lumens	1548.7	230.3	1779.0
	% Fixture	87.1	12.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.1	1.2
10°-20°	86.1	4.8
20°-30°	175.2	9.8
30°-40°	286.7	16.1
40°-50°	373.2	21.0
50°-60°	279.3	15.7
60°-70°	116.3	6.5
70°-80°	105.8	5.9
80°-90°	104.9	5.9
90°-100°	84.4	4.7
100°-110°	60.0	3.4
110°-120°	40.5	2.3
120°-130°	26.1	1.5
130°-140°	15.4	0.9
140°-150°	3.7	0.2
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	1548.7	87.1
0°-180°	1779.0	100.0

Coefficient of Utilization



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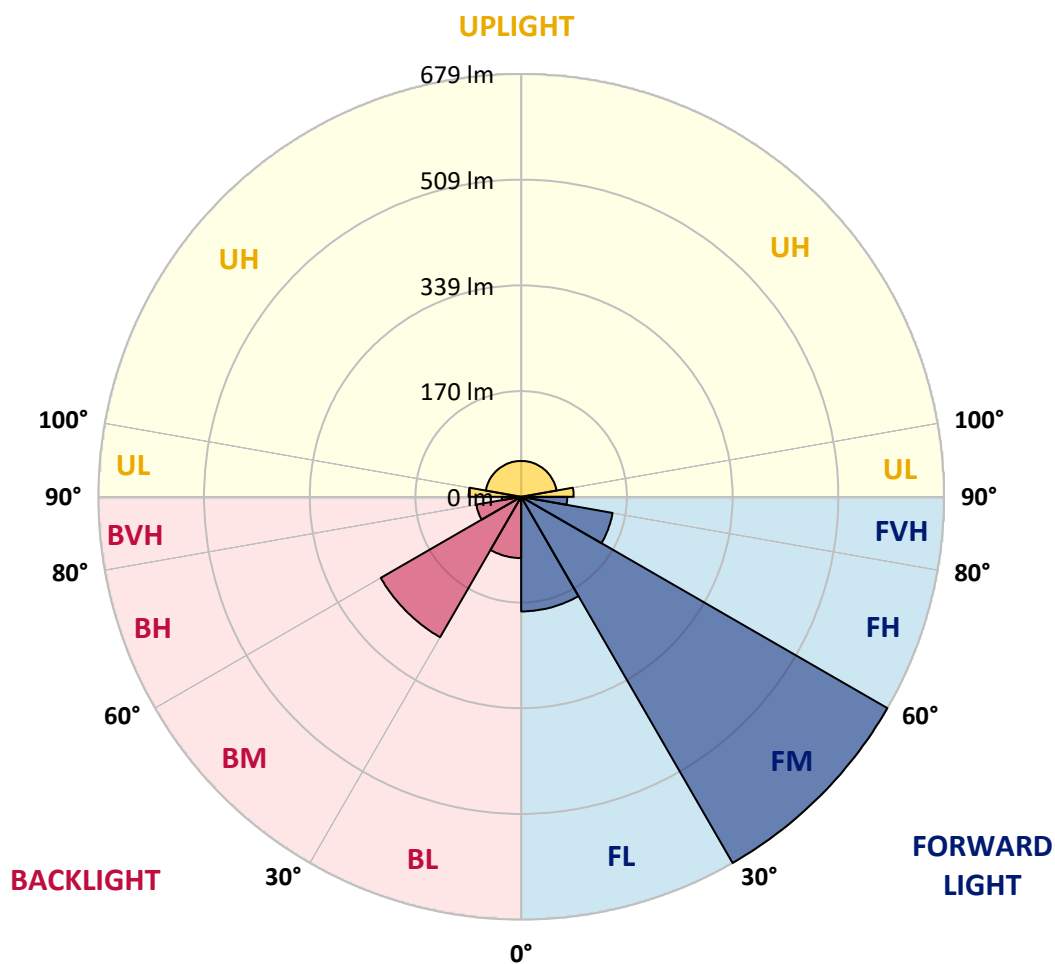
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	184.0	10.3			
FM	(30°-60°)	678.9	38.2			
FH	(60°-80°)	149.0	8.4			G0/660
FVH	(80°-90°)	74.0	4.2			G1/100
BL	(0°-30°)	98.4	5.5	B0/110		
BM	(30°-60°)	260.3	14.6	B1/1000		
BH	(60°-80°)	73.1	4.1	B0/110		G0/110
BVH	(80°-90°)	30.9	1.7			G1/100
UL	(90°-100°)	84.4	4.7		U3/500	
UH	(100°-180°)	57.6	3.2		U3/500	

BUG Rating: B1-U3-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
0°	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0
2.5°	211.8	210.8	211.3	211.3	210.1	209.6	208.4	206.9	204.9	202.7	200.7
5°	232.7	232.0	231.7	231.5	231.2	228.0	224.3	221.1	217.7	214.0	208.8
7.5°	271.3	271.1	269.6	267.9	265.4	260.0	253.4	250.2	245.5	239.8	232.0
10°	319.5	316.1	312.9	312.9	308.0	306.0	304.0	299.4	296.4	288.5	277.2
12.5°	347.1	345.4	352.0	351.5	357.9	369.5	373.4	377.4	359.4	336.5	315.4
15°	372.9	372.9	381.3	381.5	400.5	426.1	445.5	426.5	393.6	356.7	328.4
17.5°	408.3	410.6	422.6	430.7	456.3	500.3	487.1	452.1	402.9	358.9	327.2
20°	423.8	428.8	447.2	457.8	497.4	539.0	526.2	485.1	428.0	377.8	345.9
22.5°	433.4	436.9	458.5	473.5	524.2	559.4	557.4	515.8	462.0	399.2	362.3
25°	472.8	475.0	499.6	515.1	568.7	580.0	557.7	528.9	476.0	410.8	378.3
27.5°	486.1	486.3	524.2	547.6	591.6	587.7	558.6	546.6	519.8	468.4	446.5
30°	504.0	503.5	550.3	575.4	602.2	585.5	562.1	572.7	574.4	532.6	492.7
32.5°	526.2	524.2	580.0	610.1	618.7	585.0	567.7	585.7	611.8	568.5	525.7
35°	546.6	548.3	608.3	628.8	636.9	587.9	570.7	610.1	662.9	629.5	557.7
37.5°	678.0	676.0	694.9	702.1	681.6	598.0	582.0	640.3	717.8	703.3	626.3
40°	707.7	701.1	757.7	761.8	725.9	633.7	613.0	658.5	761.1	786.9	725.7
42.5°	682.6	680.9	742.6	748.3	722.5	657.8	633.4	673.3	766.0	787.2	685.3
45°	793.1	784.0	816.2	809.6	738.0	647.4	620.9	656.8	749.0	808.3	727.6
46°	780.5	769.0	809.6	817.9	752.7	642.3	608.3	627.8	732.1	804.9	728.1
47.5°	742.2	743.1	797.3	797.7	737.7	643.0	587.7	610.3	694.2	760.9	658.5
50°	647.9	636.9	735.8	739.0	681.6	615.2	566.5	576.8	656.8	697.6	593.6
52.5°	623.8	615.2	673.5	673.0	621.4	572.9	527.9	538.7	629.0	675.5	601.2
55°	573.2	570.2	619.2	615.0	578.8	520.8	488.5	495.2	521.7	503.5	299.6
57.5°	380.8	392.1	476.7	484.8	485.1	457.8	417.4	356.2	308.2	262.2	146.6
60°	155.5	168.5	262.7	275.0	293.0	343.2	302.6	238.1	199.0	206.9	126.7
62.5°	117.3	122.3	175.4	177.6	184.5	208.8	206.4	172.7	170.0	187.2	121.3
65°	109.2	113.6	155.5	154.7	151.5	158.2	157.7	149.8	152.8	174.4	120.8
67.5°	103.3	107.7	144.4	144.6	141.9	143.2	144.2	140.2	147.1	169.5	124.0
70°	97.4	102.1	132.8	133.6	135.5	140.0	141.7	138.7	144.9	163.3	123.7
72.5°	90.3	95.4	122.0	123.2	127.2	137.3	143.2	142.4	143.2	154.2	123.2
75°	87.8	93.0	112.9	115.1	120.8	136.0	151.3	146.4	141.4	148.3	120.3
77.5°	77.0	82.9	103.3	108.2	120.8	140.0	156.7	155.0	145.9	144.4	117.1
80°	74.0	79.7	99.4	104.8	118.3	143.4	162.1	162.4	157.7	149.8	120.3
82.5°	74.5	79.9	100.4	106.5	122.0	145.9	157.7	163.8	164.3	154.5	124.0
85°	87.6	92.7	112.2	118.6	132.1	145.1	154.2	158.7	163.1	163.1	136.0
87.5°	93.5	98.2	112.9	118.6	131.6	146.9	145.4	152.8	157.2	162.8	140.2
90°	98.9	101.8	117.1	122.5	129.4	141.7	137.8	135.5	139.2	145.1	131.4
92.5°	102.8	105.5	119.1	123.7	129.6	132.3	126.4	120.0	129.1	133.8	122.3
95°	110.0	112.4	119.6	121.3	120.5	123.0	113.9	111.4	115.4	120.5	113.2
97.5°	105.0	106.8	113.6	115.6	115.1	111.4	102.3	100.9	104.3	108.2	100.1
100°	105.0	107.3	112.4	113.6	110.7	101.3	92.0	91.5	93.7	95.7	88.1
102.5°	107.3	108.2	109.2	110.0	104.5	94.2	87.3	85.6	86.3	87.3	80.4
105°	101.6	101.8	102.3	100.1	95.7	87.8	80.9	78.0	80.4	83.4	77.7
107.5°	87.8	87.6	87.8	87.1	86.6	81.9	77.0	73.3	73.3	74.3	68.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
110°	81.9	82.2	81.9	81.9	79.7	76.5	71.8	67.9	65.9	66.4	61.5
112.5°	75.0	75.0	75.3	75.5	74.3	71.3	66.7	62.7	60.3	59.8	55.1
115°	75.0	74.3	72.1	71.8	69.4	65.2	61.7	56.8	55.1	55.1	52.2
117.5°	66.9	66.4	64.7	64.2	62.7	59.3	57.3	53.4	52.2	51.4	48.7
120°	59.3	59.3	58.5	58.3	56.8	54.9	50.7	49.2	48.2	49.2	47.5
122.5°	55.1	55.1	53.9	53.4	51.7	50.2	46.5	43.8	42.1	44.0	43.0
125°	50.7	50.4	48.7	48.5	45.5	45.5	43.5	40.1	35.4	37.4	36.9
127.5°	44.5	44.3	42.1	41.8	40.1	42.1	41.6	37.1	30.7	32.0	32.0
130°	42.8	42.3	40.3	39.9	38.1	37.6	39.6	32.5	28.8	30.0	29.8
132.5°	42.8	42.3	39.9	39.1	36.4	33.7	35.7	28.3	27.6	29.0	28.8
135°	38.6	38.6	36.4	34.9	32.2	27.3	27.8	21.9	24.1	26.3	26.3
137.5°	32.7	32.7	30.5	30.0	26.8	21.9	19.7	16.7	20.4	22.9	23.1
140°	25.6	25.6	23.9	22.9	20.7	14.5	9.1	10.3	15.5	17.7	18.4
142.5°	18.4	18.2	16.7	15.5	13.3	7.9	3.0	5.9	9.1	12.1	13.0
145°	12.8	12.5	10.8	10.1	8.1	3.7	0.7	2.5	5.4	7.1	8.4
147.5°	7.6	7.6	6.4	6.1	4.2	1.0	0.5	0.7	2.7	4.4	5.2
150°	4.4	4.4	3.2	2.5	1.0	0.2	0.2	0.2	0.7	2.0	2.5
152.5°	1.0	1.0	0.7	0.5	0.5	0.2	0.0	0.2	0.2	0.2	0.5
155°	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
157.5°	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
162.5°	0.2	0.2	0.0	0.0	0.2	0.0	0.2	0.0	0.2	0.2	0.2
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°	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0	197.0
2.5°	199.7	198.8	196.5	193.8	191.9	190.2	188.9	188.2	187.7	186.5	187.0
5°	207.1	205.2	200.0	195.8	191.4	187.4	184.5	182.5	181.8	180.8	180.8
7.5°	228.3	223.6	215.7	205.9	196.8	188.9	181.5	177.4	173.7	171.7	171.2
10°	269.9	263.7	246.7	226.6	206.6	188.9	174.7	164.3	159.4	157.7	157.7
12.5°	304.3	294.7	272.6	249.9	223.4	195.6	174.4	160.4	153.7	151.5	151.5
15°	314.6	302.1	276.0	253.9	230.0	206.6	187.0	166.8	154.7	151.0	149.8
17.5°	311.4	299.1	275.5	248.7	221.9	204.4	187.0	176.1	165.1	158.7	157.7
20°	331.8	320.5	295.9	265.9	233.0	193.8	182.8	180.3	177.6	173.4	173.4
22.5°	348.8	338.2	313.6	281.4	241.8	216.2	199.7	197.3	194.3	193.6	193.1
25°	361.9	350.5	316.8	279.7	250.9	232.2	211.1	202.7	195.6	193.3	192.6
27.5°	431.5	414.0	359.9	307.2	265.9	237.6	213.3	202.5	195.8	193.1	194.8
30°	472.3	453.4	394.1	325.0	283.9	249.4	217.7	204.9	206.6	208.8	210.6
32.5°	503.5	478.7	409.1	327.2	280.9	251.6	224.8	209.6	204.7	207.6	208.1
35°	534.3	504.0	428.5	341.2	284.9	243.5	219.9	211.1	209.6	213.5	212.8
37.5°	596.8	557.2	452.6	345.1	281.2	233.9	211.6	202.2	194.6	193.6	194.8
40°	678.4	625.3	476.7	343.4	263.9	222.4	201.0	190.4	184.5	180.8	178.6
42.5°	637.6	584.2	445.7	329.6	243.0	201.7	190.2	180.8	173.2	168.5	167.3
45°	682.4	630.2	453.6	301.8	219.2	183.3	173.9	167.5	156.9	152.5	151.8
46°	668.8	609.8	444.8	293.2	207.6	175.4	167.5	160.9	153.0	146.9	146.4
47.5°	619.7	550.8	418.7	270.1	199.7	162.4	156.9	153.0	148.8	141.7	140.7
50°	553.0	500.3	371.7	240.1	168.3	144.9	140.2	139.0	134.3	125.7	126.4
52.5°	547.8	496.9	346.1	220.9	149.3	126.9	125.5	121.8	117.8	110.2	110.0
55°	264.2	224.6	192.1	172.9	125.0	112.4	111.7	110.0	105.0	98.2	99.4
57.5°	125.2	109.0	94.2	99.9	98.2	98.6	99.1	98.9	93.2	83.9	85.9
60°	109.7	95.2	81.4	77.2	81.2	87.3	87.3	83.6	75.8	64.7	63.7
62.5°	105.8	91.3	78.7	73.1	75.0	78.7	76.7	70.8	63.0	52.9	52.4
65°	106.3	90.8	78.5	71.3	73.1	74.5	70.8	66.2	62.0	54.9	54.9
67.5°	108.5	92.7	79.5	70.6	71.8	72.8	69.4	65.9	63.5	58.1	58.5
70°	109.0	94.0	80.4	70.8	70.6	71.6	69.1	65.9	64.7	61.0	60.8
72.5°	109.0	95.0	79.5	69.1	68.6	69.1	67.6	65.9	65.7	63.5	63.0
75°	105.3	92.7	76.0	65.7	65.2	65.7	65.2	64.9	65.9	64.9	64.0
77.5°	101.6	90.5	73.6	63.0	62.2	62.0	61.7	62.0	63.5	62.7	61.3
80°	103.3	91.5	73.1	60.8	58.5	57.6	57.6	57.8	57.8	55.6	53.4
82.5°	106.3	93.2	70.6	56.6	52.9	51.2	51.7	53.4	54.1	52.4	50.7
85°	117.1	101.1	71.1	53.6	48.2	46.2	47.0	49.2	47.7	45.3	43.3
87.5°	121.8	103.8	69.6	49.2	44.8	44.0	44.0	45.3	44.3	40.3	38.6
90°	116.4	99.4	63.0	41.8	38.9	39.6	39.9	38.6	34.4	30.0	28.5
92.5°	109.0	93.0	58.3	38.4	34.4	34.2	33.9	33.2	30.0	25.1	24.1
95°	102.8	87.6	53.9	35.2	31.5	30.7	30.5	29.5	26.6	22.9	22.4
97.5°	89.5	76.5	49.0	32.5	28.3	27.8	27.6	26.3	23.6	20.9	20.7
100°	80.4	68.1	43.8	29.3	25.6	24.8	24.6	23.9	21.6	19.7	19.4
102.5°	73.1	62.5	40.6	26.8	22.9	21.9	21.9	21.4	20.2	18.9	18.9
105°	71.1	61.3	39.4	24.6	20.4	19.9	19.7	19.7	18.7	18.0	18.0
107.5°	62.5	53.6	33.9	21.9	18.4	18.0	18.0	18.0	17.7	17.5	17.7



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	56.3	48.5	31.2	20.4	17.2	16.5	16.5	16.5	16.5	17.0	17.0
112.5°	50.2	43.5	28.8	19.4	16.0	15.3	14.8	14.5	14.3	15.3	15.5
115°	47.5	41.6	27.6	18.4	15.3	14.5	13.5	13.0	12.3	13.0	13.3
117.5°	44.8	39.4	27.1	18.2	14.8	13.5	12.5	12.1	11.1	11.8	11.8
120°	44.0	39.1	27.6	18.4	14.3	12.5	11.8	10.6	10.1	10.6	10.8
122.5°	40.6	36.2	25.8	17.2	13.5	12.1	11.1	9.1	8.9	9.6	9.6
125°	34.4	31.0	22.4	15.5	12.8	11.8	10.8	8.1	8.4	8.9	9.1
127.5°	30.3	27.3	20.4	15.0	12.8	12.1	10.1	7.1	7.9	8.6	8.9
130°	28.3	26.1	20.4	15.5	13.3	12.3	8.4	6.6	7.4	8.1	8.1
132.5°	27.6	25.8	20.9	16.5	13.8	11.8	6.9	6.1	6.9	7.4	7.4
135°	25.3	23.9	19.9	16.0	12.5	9.3	5.4	5.4	6.4	6.9	6.9
137.5°	22.4	21.2	18.0	14.8	11.1	7.1	3.9	4.7	5.4	5.9	5.9
140°	18.0	17.2	14.8	11.6	7.9	3.9	3.0	3.7	4.4	4.9	4.9
142.5°	12.8	12.3	10.3	7.4	4.7	1.7	2.0	2.7	3.4	3.9	3.9
145°	8.4	7.9	6.4	4.7	2.0	0.5	1.2	2.0	2.7	3.0	3.0
147.5°	5.2	4.9	3.9	2.2	0.7	0.5	0.5	1.5	2.0	2.2	2.2
150°	2.7	2.5	1.7	0.7	0.2	0.2	0.2	0.5	1.2	1.5	1.7
152.5°	0.7	0.5	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.7
155°	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
157.5°	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.2	0.0	0.2	0.2	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)