

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: P239986

Luminaire Tested: **UTLD-AF24-50-D-U-T2U-A-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239986
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-AF24-50-D-U-T2U-A-7030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 3000K, 670mA 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: 4276 lumens
Efficiency: N/A
Efficacy: 79.2 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 - G2

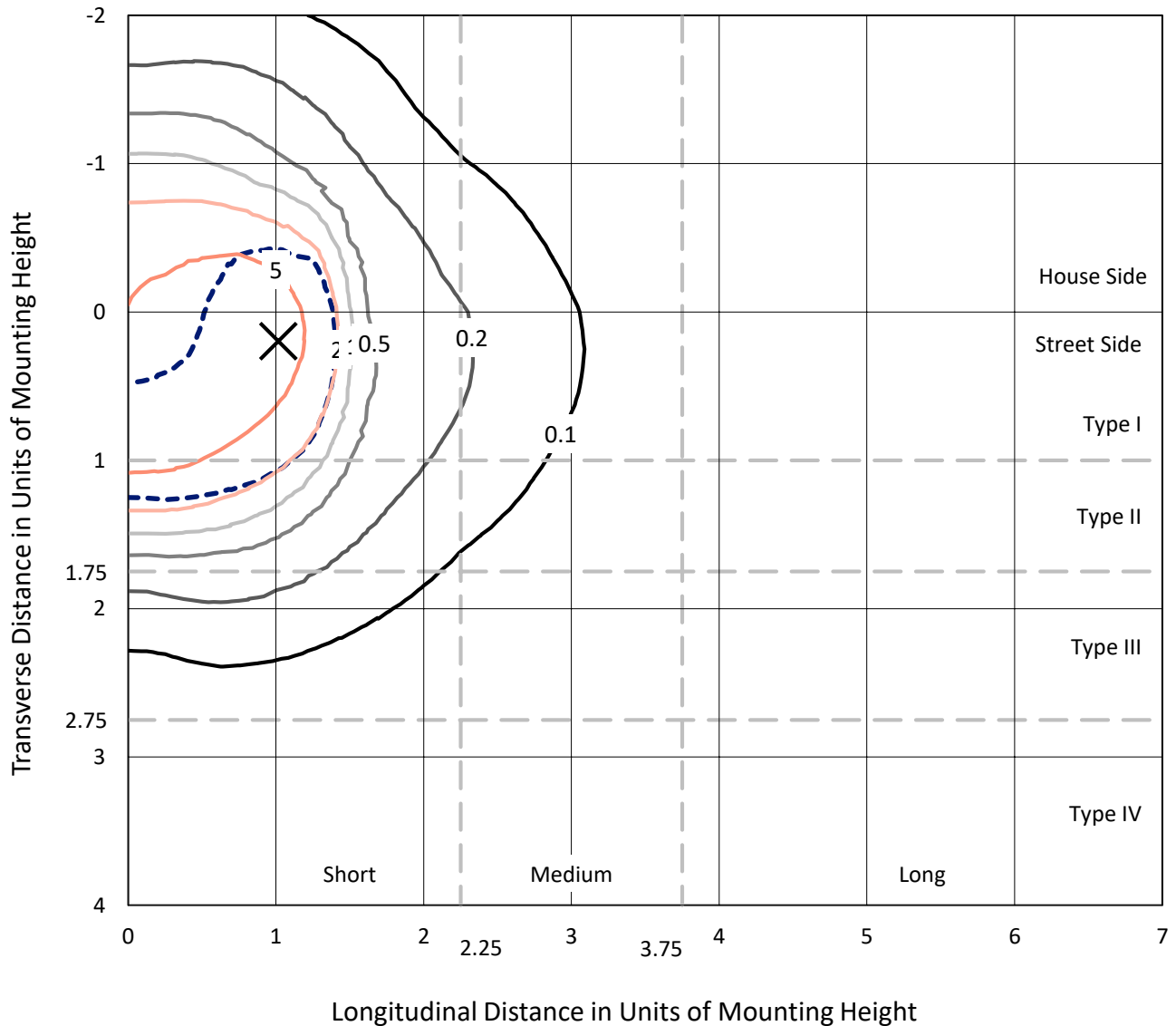
Input Watts (W): 54
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

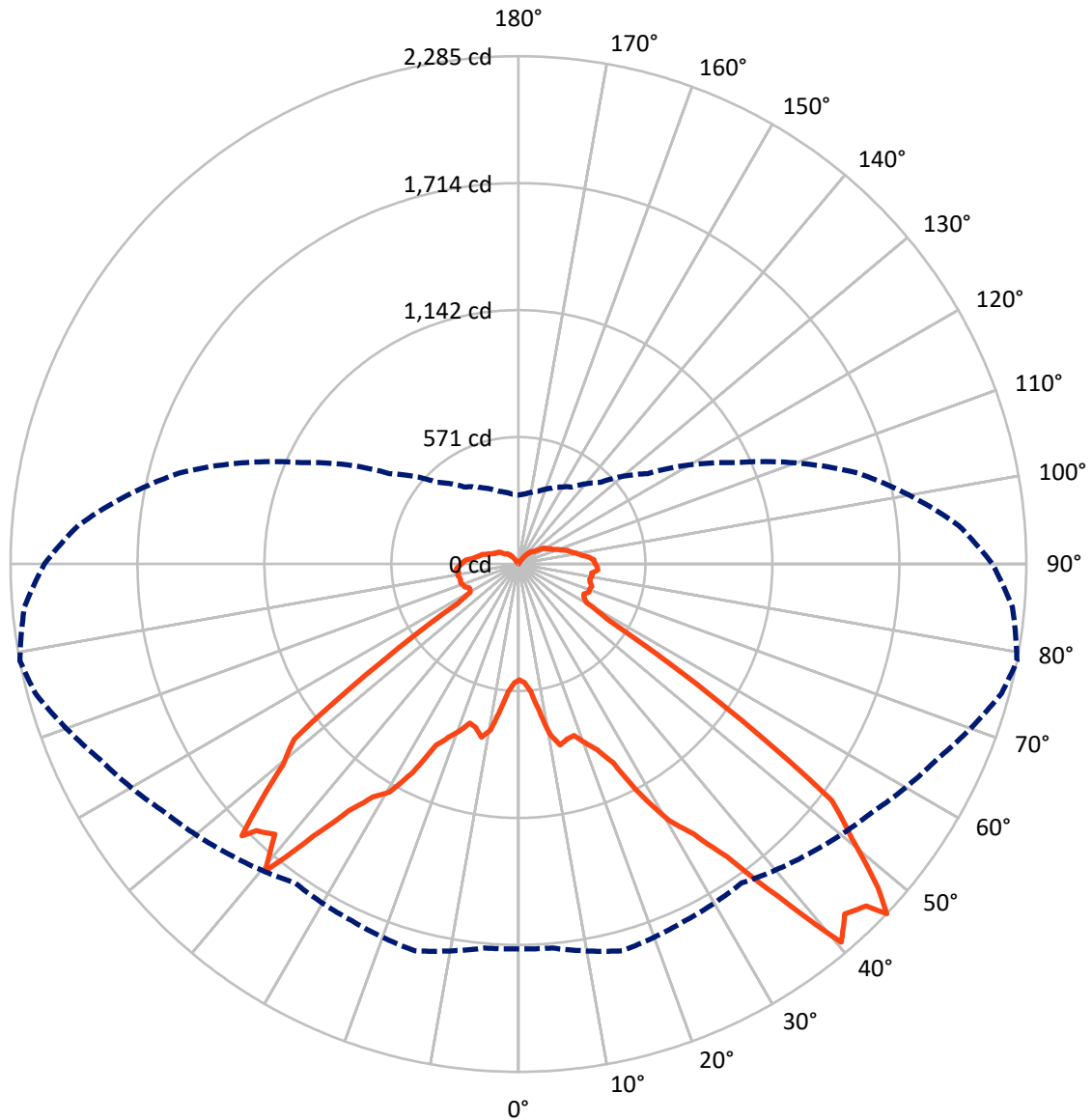
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9.4 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 46-Deg Vertical

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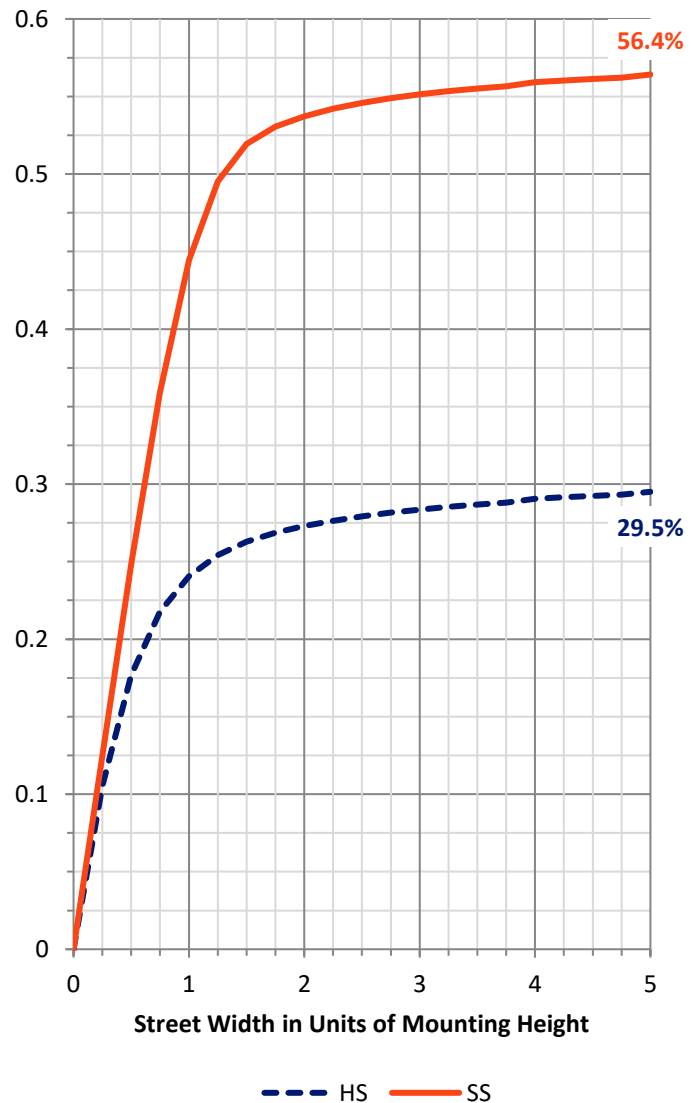
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1303.4	162.1	1465.5
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	2458.8	351.7	2810.5
	% Fixture	57.5	8.2	65.7
Total	Lumens	3762.2	513.8	4276.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	1.3
10°-20°	203.1	4.8
20°-30°	410.4	9.6
30°-40°	751.3	17.6
40°-50°	1038.3	24.3
50°-60°	662.7	15.5
60°-70°	237.4	5.6
70°-80°	213.2	5.0
80°-90°	189.5	4.4
90°-100°	173.9	4.1
100°-110°	135.2	3.2
110°-120°	93.8	2.2
120°-130°	62.8	1.5
130°-140°	37.6	0.9
140°-150°	10.0	0.2
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3762.2	88.0
0°-180°	4276.0	100.0

Coefficient of Utilization



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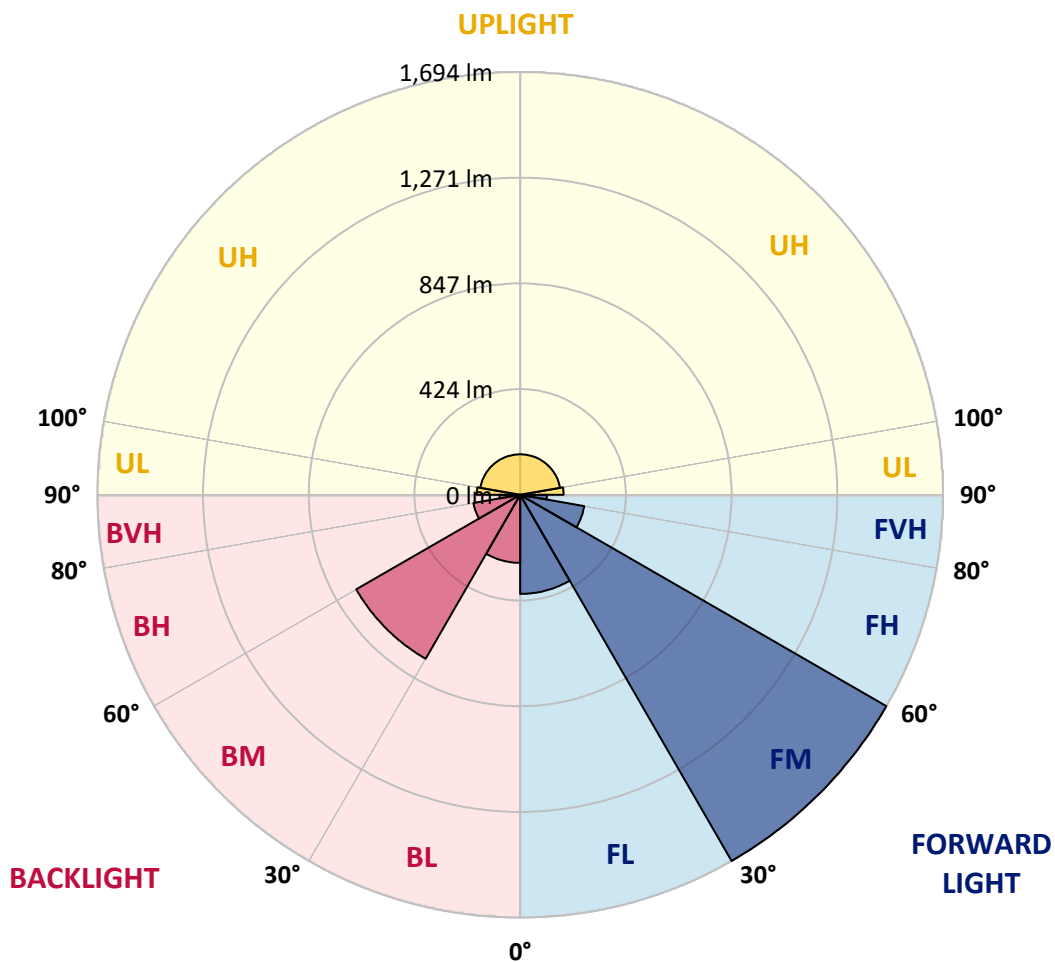
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	397.2	9.3			
FM (30°-60°)	1694.0	39.6			
FH (60°-80°)	260.5	6.1			G0/660
FVH (80°-90°)	107.1	2.5			G2/225
BL (0°-30°)	272.6	6.4	B1/500		
BM (30°-60°)	758.3	17.7	B1/1000		
BH (60°-80°)	190.0	4.4	B1/500		G1/500
BVH (80°-90°)	82.5	1.9			G1/100
UL (90°-100°)	173.9	4.1		U3/500	
UH (100°-180°)	162.1	3.8		U3/500	

BUG Rating: B1-U3-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	521.2	521.2	521.2	521.2	521.2	521.2	521.2	521.2	521.2	521.2	521.2
2.5°	529.8	531.5	530.9	529.8	532.1	533.2	533.2	532.6	533.2	534.4	536.7
5°	555.0	554.4	556.2	560.8	567.1	568.8	574.0	572.8	575.7	575.7	579.1
7.5°	599.2	599.8	605.5	610.1	617.0	631.9	646.3	665.2	664.6	663.5	668.1
10°	645.1	645.1	656.6	673.3	701.4	732.9	746.7	763.4	780.6	777.7	773.1
12.5°	659.5	661.8	681.9	723.2	784.0	838.0	865.5	862.1	844.9	835.1	819.6
15°	685.9	688.8	710.6	773.7	846.0	894.2	904.6	862.1	824.8	817.9	804.7
17.5°	785.2	785.2	807.6	865.5	920.1	909.2	868.4	848.3	824.2	811.0	792.1
20°	854.1	858.1	893.7	934.4	964.3	928.7	929.2	891.9	867.3	859.2	841.4
22.5°	920.6	926.4	936.7	1000.4	1009.0	1015.9	995.2	961.4	920.1	906.9	888.5
25°	1061.8	1063.6	1074.5	1104.9	1081.9	1070.4	1040.6	1013.0	997.0	990.1	970.6
27.5°	1229.4	1224.3	1228.9	1231.1	1196.1	1164.6	1120.9	1150.2	1173.2	1179.5	1162.3
30°	1263.9	1255.3	1290.3	1327.6	1310.4	1272.5	1269.6	1304.6	1347.7	1339.6	1315.5
32.5°	1402.8	1389.6	1405.6	1409.6	1406.8	1395.9	1391.3	1435.5	1466.5	1448.7	1413.7
35°	1514.7	1514.1	1457.3	1470.5	1478.5	1503.8	1529.0	1589.3	1616.8	1618.0	1588.7
37.5°	1754.0	1736.8	1715.6	1631.8	1587.6	1599.1	1686.3	1793.1	1855.0	1895.8	1849.3
40°	1836.1	1843.6	1825.8	1816.6	1752.3	1725.3	1825.8	2009.4	2177.6	2237.3	2231.6
42.5°	1701.2	1718.4	1708.1	1771.8	1822.9	1857.3	1978.4	2135.7	2167.9	2152.4	2070.3
45°	1813.7	1813.7	1786.2	1746.6	1764.4	1876.3	1972.1	2078.3	2178.8	2194.8	2149.5
46°	1732.2	1733.9	1801.7	1771.8	1751.7	1844.7	1944.6	2078.3	2249.9	2284.9	2231.6
47.5°	1581.8	1579.0	1703.5	1713.3	1727.0	1803.4	1913.0	2077.7	2174.7	2177.0	2110.5
50°	1253.5	1258.7	1429.7	1520.4	1611.1	1686.3	1834.4	1927.4	1949.2	1945.2	1872.8
52.5°	1017.6	1031.4	1122.1	1236.3	1345.9	1490.6	1662.8	1749.4	1797.1	1765.5	1698.9
55°	705.4	735.2	849.5	952.2	1112.9	1251.8	1400.5	1408.5	1191.0	1091.7	968.3
57.5°	436.2	442.0	543.0	688.2	808.7	917.8	919.5	714.6	556.2	483.3	401.8
60°	242.2	247.4	336.9	444.2	561.9	575.1	513.7	413.3	370.8	351.8	323.1
62.5°	180.2	184.2	242.8	308.8	355.9	374.8	345.0	338.1	338.6	330.0	311.1
65°	162.4	164.7	212.9	246.2	273.8	277.8	288.7	312.8	326.0	324.3	316.3
67.5°	147.5	150.4	194.0	218.1	234.8	254.3	263.4	300.8	336.3	342.1	334.6
70°	131.4	136.0	175.1	200.3	219.3	238.2	256.6	303.1	331.7	339.8	336.3
72.5°	113.6	119.4	152.1	178.5	199.7	220.4	252.0	291.6	330.6	345.0	347.2
75°	99.9	107.3	134.3	157.8	180.2	204.9	238.2	287.6	324.3	333.5	338.1
77.5°	90.1	98.1	118.8	140.6	161.9	188.8	227.3	286.4	318.0	328.3	336.3
80°	82.7	90.7	107.9	125.1	142.9	173.3	215.8	284.7	324.3	335.2	339.8
82.5°	76.9	84.4	99.3	114.8	129.1	156.7	207.8	281.8	322.6	331.7	334.0
85°	77.5	83.2	97.0	111.3	124.5	148.1	203.8	283.0	343.8	358.2	360.4
87.5°	81.5	85.5	99.9	116.5	131.4	155.5	211.2	280.7	341.5	354.7	360.4
90°	88.4	91.8	109.1	128.6	146.4	168.7	209.5	274.4	331.7	343.8	347.2
92.5°	109.6	112.5	131.4	152.7	168.2	175.6	202.6	284.1	333.5	340.4	340.4
95°	141.8	145.2	163.6	179.6	182.5	178.5	199.2	252.5	304.2	319.1	327.7
97.5°	177.4	178.5	188.8	191.7	183.1	173.9	194.6	235.9	276.1	286.4	288.7
100°	188.8	188.8	195.7	193.4	176.8	164.2	176.2	214.7	253.7	265.2	268.6
102.5°	191.1	192.3	199.2	191.7	169.3	148.7	156.7	193.4	229.6	242.2	249.1
105°	202.6	203.2	199.2	180.8	153.2	134.9	141.8	178.5	217.0	229.0	236.5
107.5°	189.4	187.7	176.8	159.6	141.2	128.0	136.0	163.0	192.3	202.0	207.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	156.7	155.5	151.5	145.2	133.7	124.0	129.1	153.8	181.9	189.4	194.0
112.5°	151.0	149.8	145.8	138.3	125.1	117.7	126.3	147.5	164.7	168.2	168.7
115°	145.2	144.1	134.9	126.3	115.9	112.5	118.2	137.8	153.8	157.8	161.3
117.5°	125.1	124.0	117.1	111.9	107.9	109.6	119.4	130.3	141.8	145.2	147.5
120°	111.3	110.8	107.3	103.9	101.6	102.7	113.1	125.1	136.6	140.0	141.8
122.5°	105.0	104.5	100.4	95.3	95.3	95.3	103.3	112.5	125.1	128.0	132.0
125°	92.4	92.4	88.4	84.4	90.1	92.4	94.1	94.7	104.5	109.1	110.8
127.5°	82.1	82.7	79.2	76.3	86.7	91.8	90.7	83.2	89.0	92.4	94.7
130°	80.9	80.9	76.9	73.5	78.6	89.0	85.5	78.1	84.9	87.2	88.4
132.5°	78.6	78.6	74.6	69.4	70.6	82.1	74.6	72.9	79.2	81.5	82.1
135°	72.3	72.3	69.4	62.6	58.0	69.4	60.3	63.7	70.0	71.7	72.3
137.5°	64.3	64.3	61.4	55.7	45.9	52.2	46.5	54.0	60.3	62.0	62.6
140°	52.8	52.2	50.5	43.6	33.3	29.3	31.6	43.0	49.4	50.5	52.2
142.5°	39.0	39.6	36.7	31.0	20.1	10.9	18.4	27.6	34.4	36.2	37.3
145°	28.7	28.1	25.3	20.1	10.9	1.7	8.6	17.2	21.8	23.5	24.7
147.5°	18.9	18.9	16.6	12.1	3.4	0.6	2.3	8.6	13.8	14.9	15.5
150°	12.6	12.6	9.2	3.4	0.6	0.6	0.6	1.7	5.7	6.9	8.0
152.5°	4.0	4.0	1.7	1.1	0.6	0.0	0.0	0.6	1.1	1.1	1.7
155°	1.1	1.1	1.1	0.6	0.0	0.0	0.0	0.0	0.6	0.6	0.6
157.5°	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.6	0.6	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°	521.2	521.2	521.2	521.2	521.2	521.2	521.2	521.2	521.2	521.2	521.2
2.5°	537.2	536.7	534.9	533.2	528.6	522.9	517.1	513.1	510.8	509.1	508.5
5°	578.0	579.1	571.1	557.9	545.3	533.8	522.9	512.5	506.8	502.2	500.5
7.5°	664.6	666.4	650.3	629.6	597.5	558.5	525.2	502.8	486.7	477.0	475.2
10°	772.0	767.4	748.4	704.3	645.7	585.4	522.9	474.7	448.8	436.8	436.2
12.5°	815.6	809.3	788.0	751.3	689.9	611.3	533.8	470.1	431.6	416.1	415.5
15°	795.5	784.6	745.6	711.7	687.6	644.0	574.5	501.6	448.8	429.3	424.2
17.5°	778.3	767.4	734.7	685.9	640.5	621.6	587.7	527.5	472.4	444.8	439.1
20°	828.8	821.9	781.2	716.3	666.4	590.6	563.1	521.7	480.4	463.2	458.6
22.5°	875.3	871.8	820.8	753.0	685.9	633.1	578.0	547.6	507.4	495.3	490.2
25°	962.0	945.9	862.1	770.8	712.9	661.2	590.6	543.0	494.2	478.7	475.8
27.5°	1165.7	1128.4	1006.2	869.0	752.5	670.4	589.5	519.4	466.1	446.5	445.4
30°	1295.4	1261.6	1123.8	972.9	814.5	692.2	582.0	497.6	457.4	438.5	439.1
32.5°	1374.1	1328.7	1173.8	982.6	828.8	703.1	586.6	490.2	436.2	412.1	411.5
35°	1544.5	1481.4	1256.4	1061.3	856.9	687.0	567.1	474.7	424.7	406.9	404.6
37.5°	1787.3	1716.1	1411.4	1125.0	868.4	665.8	541.8	456.9	397.2	372.5	370.8
40°	2138.0	2033.5	1626.0	1201.9	859.2	649.7	514.3	429.9	380.5	364.5	359.3
42.5°	1964.1	1845.9	1498.0	1187.0	836.3	605.5	487.9	416.7	370.8	358.2	351.3
45°	2072.6	1934.8	1513.5	1103.7	748.4	540.1	443.1	390.3	344.4	326.6	324.9
46°	2132.8	1988.8	1580.7	1078.5	708.3	519.4	423.0	378.2	338.6	315.7	310.5
47.5°	2002.0	1841.8	1453.3	1029.1	676.1	472.9	396.6	359.3	332.3	311.1	307.6
50°	1755.7	1599.1	1257.0	877.6	582.0	417.3	353.6	331.2	304.2	281.2	277.2
52.5°	1602.5	1471.1	1150.8	796.1	494.2	351.8	315.7	296.2	268.6	241.6	238.2
55°	881.0	790.3	711.1	598.1	409.8	297.3	274.9	263.4	235.3	208.9	207.2
57.5°	362.7	326.0	323.1	304.8	281.8	250.2	237.6	230.7	202.6	170.5	169.3
60°	305.3	272.1	239.9	211.2	209.5	208.9	204.9	192.9	161.9	128.6	127.4
62.5°	297.3	264.6	233.0	198.0	183.1	187.7	180.2	165.3	141.8	109.6	108.5
65°	303.1	269.2	231.9	192.3	176.2	177.9	169.9	158.4	142.3	119.4	118.2
67.5°	322.6	287.6	245.7	190.0	170.5	173.9	168.2	159.6	150.4	136.0	133.2
70°	325.4	294.4	246.2	191.1	164.2	168.2	166.4	159.0	152.7	140.0	138.3
72.5°	334.0	305.9	251.4	187.1	157.3	159.0	161.3	159.0	155.0	147.5	144.6
75°	326.0	301.3	249.1	183.7	150.4	149.2	155.0	157.8	159.0	156.1	152.7
77.5°	324.3	303.6	249.7	181.4	144.1	139.5	144.1	148.7	151.0	148.1	145.2
80°	326.6	308.8	257.1	181.9	137.2	125.7	128.0	133.2	133.7	128.6	124.5
82.5°	321.4	304.2	249.1	175.6	126.3	111.9	112.5	117.7	118.2	111.9	107.3
85°	344.4	323.7	254.8	167.6	114.8	102.2	102.7	105.0	101.6	94.7	90.1
87.5°	343.8	319.1	243.4	155.0	107.3	96.4	95.9	95.3	89.5	81.5	77.5
90°	331.7	305.9	227.9	136.6	94.7	88.4	86.7	83.2	75.2	66.0	63.1
92.5°	323.7	296.2	217.5	129.1	83.2	77.5	76.3	72.9	64.9	55.1	53.4
95°	315.1	288.1	200.3	113.1	73.5	67.7	66.0	62.6	56.2	48.2	47.1
97.5°	277.8	251.4	176.8	102.7	65.4	59.1	58.0	55.1	49.9	44.2	43.6
100°	256.6	233.0	164.2	94.1	58.5	51.7	51.1	49.4	45.9	41.9	41.3
102.5°	239.9	217.0	152.1	87.2	52.2	45.9	45.3	44.8	43.0	40.2	40.2
105°	227.3	205.5	145.8	81.5	47.1	41.9	41.3	41.3	39.6	37.9	37.9
107.5°	198.0	179.6	126.8	72.3	43.0	38.5	38.5	38.5	37.3	36.2	36.7



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	186.5	169.3	120.5	67.7	41.3	35.6	35.0	35.0	34.4	35.0	35.0
112.5°	160.7	145.8	106.2	64.9	40.2	33.9	32.1	31.0	29.8	31.0	31.6
115°	154.4	140.6	102.7	62.6	39.0	32.7	30.4	28.7	26.4	28.1	28.1
117.5°	141.8	129.1	95.3	60.8	39.0	31.0	28.7	27.0	24.7	25.8	25.8
120°	136.0	125.1	95.9	62.6	39.6	29.3	27.0	24.1	22.4	24.1	24.1
122.5°	128.0	118.2	90.1	59.1	37.9	28.7	26.4	20.7	19.5	21.2	21.2
125°	107.3	99.3	77.5	52.2	36.2	28.7	25.8	18.4	18.4	19.5	20.1
127.5°	91.3	84.9	67.2	48.8	36.7	30.4	24.7	16.1	17.2	18.9	18.9
130°	86.1	80.9	66.6	49.9	38.5	32.1	20.1	14.9	16.1	17.8	17.8
132.5°	80.4	75.8	64.3	51.1	39.0	30.4	16.6	13.8	14.9	16.1	16.1
135°	70.6	67.2	58.0	46.5	35.0	24.1	13.2	12.1	13.8	14.9	15.5
137.5°	62.0	59.1	51.1	41.9	31.6	20.7	9.2	10.9	12.1	12.6	13.2
140°	51.1	49.4	43.0	34.4	23.5	11.5	6.9	8.6	9.8	10.9	10.9
142.5°	37.3	36.2	30.4	22.4	14.3	4.6	4.6	6.3	7.5	8.6	8.6
145°	24.7	23.5	19.5	14.3	6.3	1.1	2.9	4.6	6.3	6.9	6.9
147.5°	15.5	14.9	12.1	7.5	2.3	1.1	1.1	3.4	4.6	5.2	5.2
150°	8.0	7.5	5.2	2.3	1.1	0.6	0.6	1.1	2.9	3.4	3.4
152.5°	1.7	1.7	1.1	0.6	0.6	0.6	0.6	0.6	0.6	1.1	1.1
155°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
157.5°	0.6	0.6	0.6	0.6	0.6	0.6	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)