

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: P239989

Luminaire Tested: **UTLD-AF24-80-D-U-T2U-A-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239989
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-AF24-80-D-U-T2U-A-7030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 3000K, 1050mA 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: 6085 lumens
Efficiency: N/A
Efficacy: 73.3 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: B2 - U3 - G2

Input Watts (W): 83
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

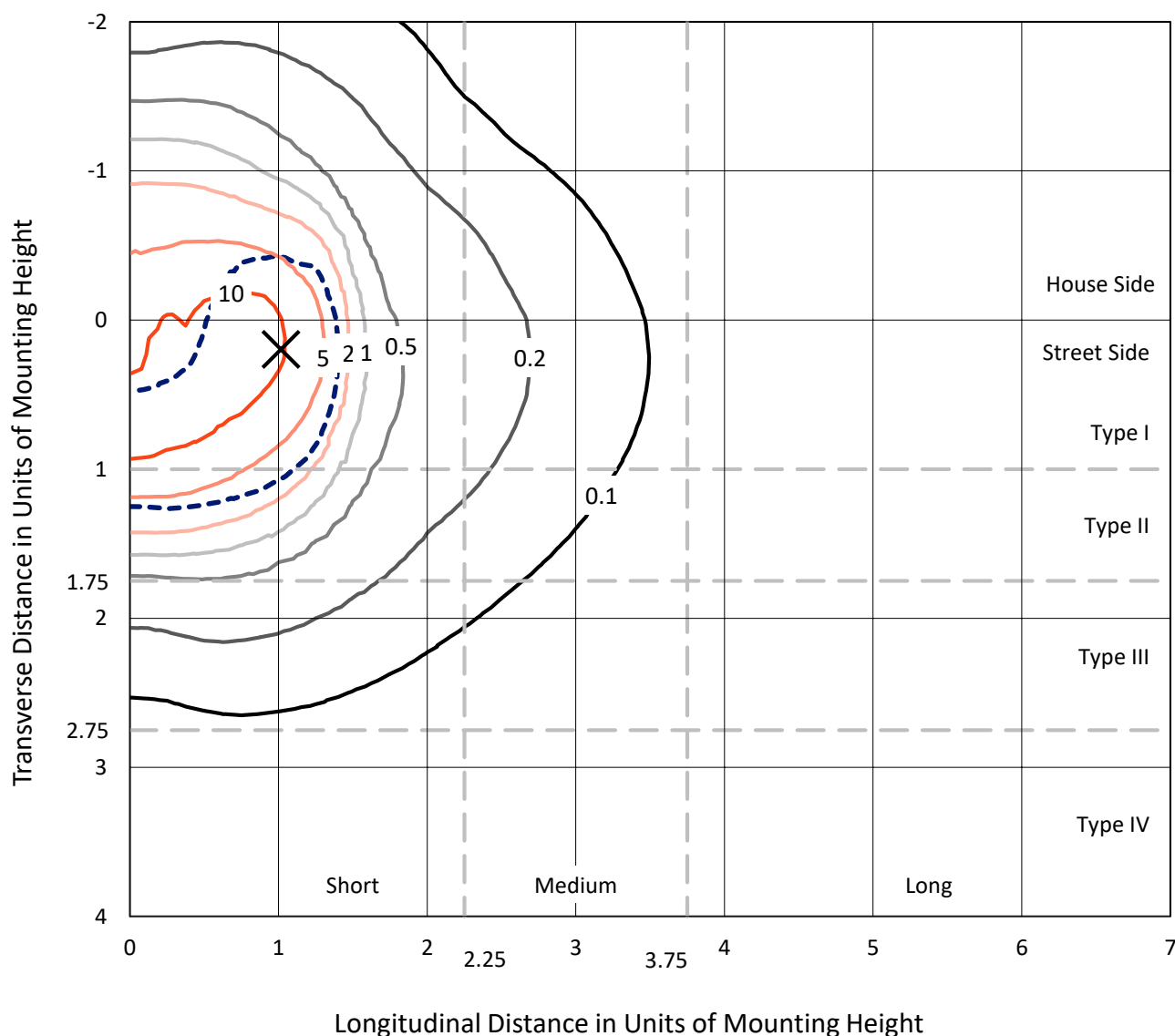


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

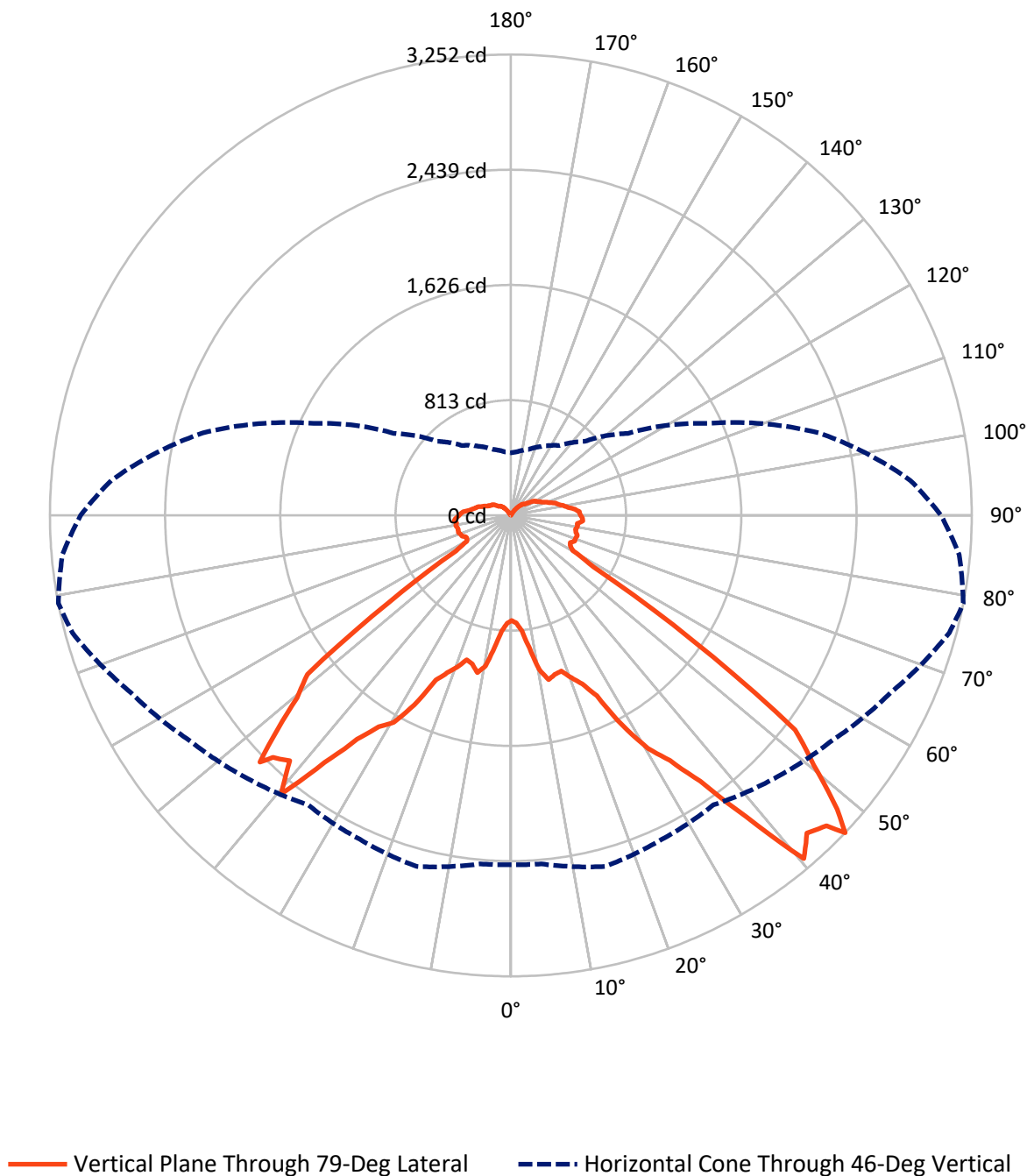


Based on 10 foot mounting height. Maximum calculated value = 13.3 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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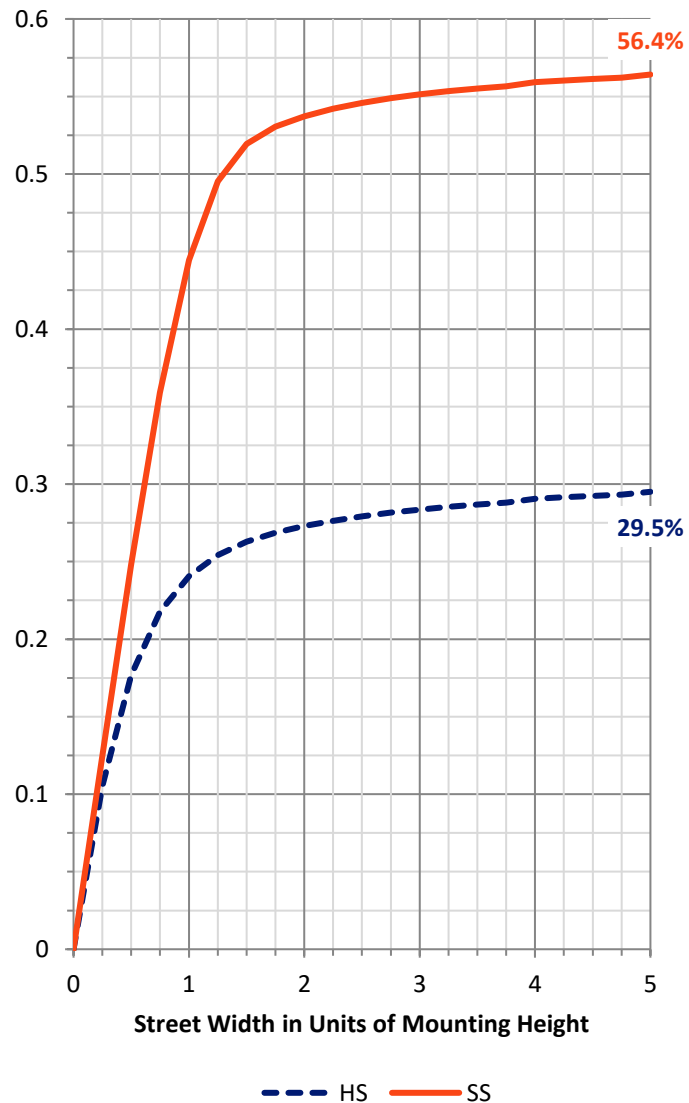
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1854.9	230.7	2085.5
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	3499.0	500.5	3999.5
	% Fixture	57.5	8.2	65.7
Total	Lumens	5353.8	731.2	6085.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.0	1.3
10°-20°	289.1	4.8
20°-30°	584.0	9.6
30°-40°	1069.2	17.6
40°-50°	1477.5	24.3
50°-60°	943.1	15.5
60°-70°	337.8	5.6
70°-80°	303.4	5.0
80°-90°	269.7	4.4
90°-100°	247.4	4.1
100°-110°	192.4	3.2
110°-120°	133.5	2.2
120°-130°	89.4	1.5
130°-140°	53.6	0.9
140°-150°	14.2	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5353.8	88.0
0°-180°	6085.0	100.0

Coefficient of Utilization



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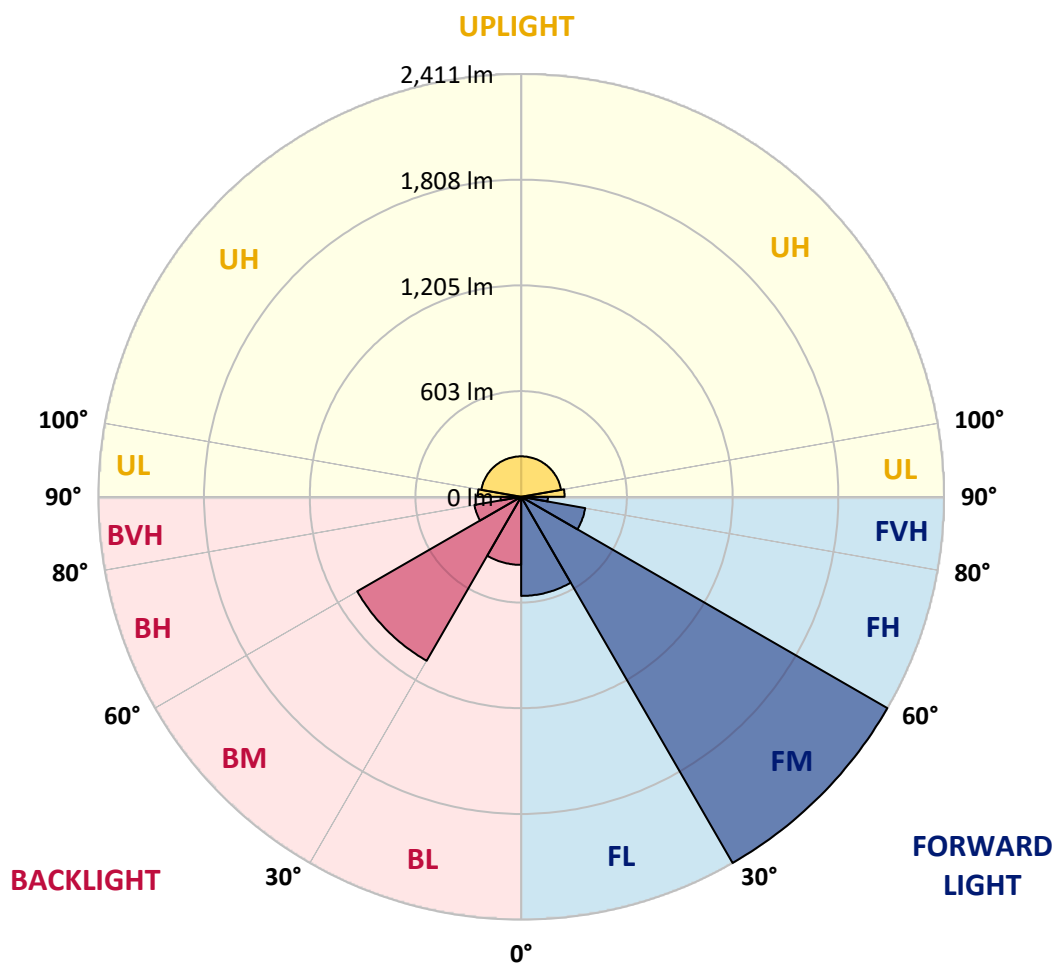
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	565.2	9.3			
FM	(30°-60°)	2410.7	39.6			
FH	(60°-80°)	370.8	6.1			G0/660
FVH	(80°-90°)	152.4	2.5			G2/225
BL	(0°-30°)	387.9	6.4	B1/500		
BM	(30°-60°)	1079.1	17.7	B2/2500		
BH	(60°-80°)	270.4	4.4	B1/500		G1/500
BVH	(80°-90°)	117.4	1.9			G2/225
UL	(90°-100°)	247.4	4.1		U3/500	
UH	(100°-180°)	230.7	3.8		U3/500	

BUG Rating: B2-U3-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	741.6	741.6	741.6	741.6	741.6	741.6	741.6	741.6	741.6	741.6	741.6
2.5°	753.9	756.3	755.5	753.9	757.2	758.8	758.8	758.0	758.8	760.4	763.7
5°	789.8	789.0	791.5	798.0	807.0	809.4	816.8	815.1	819.2	819.2	824.1
7.5°	852.7	853.5	861.7	868.2	878.0	899.3	919.7	946.6	945.8	944.2	950.7
10°	918.1	918.1	934.4	958.1	998.1	1043.0	1062.6	1086.3	1110.8	1106.7	1100.2
12.5°	938.5	941.7	970.3	1029.1	1115.7	1192.5	1231.7	1226.8	1202.3	1188.4	1166.4
15°	976.1	980.1	1011.2	1101.0	1203.9	1272.5	1287.2	1226.8	1173.7	1163.9	1145.1
17.5°	1117.4	1117.4	1149.2	1231.7	1309.3	1293.8	1235.8	1207.2	1172.9	1154.1	1127.2
20°	1215.4	1221.1	1271.7	1329.7	1372.2	1321.6	1322.4	1269.3	1234.2	1222.7	1197.4
22.5°	1310.1	1318.3	1333.0	1423.6	1435.9	1445.7	1416.3	1368.1	1309.3	1290.5	1264.4
25°	1511.0	1513.5	1529.0	1572.3	1539.6	1523.3	1480.8	1441.6	1418.7	1408.9	1381.2
27.5°	1749.5	1742.2	1748.7	1752.0	1702.2	1657.2	1595.2	1636.8	1669.5	1678.5	1654.0
30°	1798.6	1786.3	1836.1	1889.2	1864.7	1810.8	1806.7	1856.5	1917.8	1906.4	1872.1
32.5°	1996.2	1977.4	2000.3	2006.0	2001.9	1986.4	1979.9	2042.8	2086.9	2061.6	2011.7
35°	2155.5	2154.7	2073.8	2092.6	2104.0	2140.0	2175.9	2261.7	2300.9	2302.5	2260.8
37.5°	2496.1	2471.6	2441.4	2322.1	2259.2	2275.6	2399.7	2551.6	2639.8	2697.8	2631.7
40°	2612.9	2623.5	2598.2	2585.1	2493.6	2455.2	2598.2	2859.5	3098.9	3183.8	3175.6
42.5°	2420.9	2445.4	2430.7	2521.4	2594.1	2643.1	2815.4	3039.2	3085.0	3062.9	2946.1
45°	2581.0	2581.0	2541.8	2485.5	2510.8	2670.1	2806.5	2957.6	3100.5	3123.4	3058.8
46°	2465.0	2467.5	2563.9	2521.4	2492.8	2625.1	2767.3	2957.6	3201.8	3251.6	3175.6
47.5°	2251.0	2247.0	2424.2	2438.1	2457.7	2566.3	2722.3	2956.7	3094.8	3098.0	3003.3
50°	1783.8	1791.2	2034.6	2163.7	2292.7	2399.7	2610.4	2742.7	2773.8	2768.1	2665.2
52.5°	1448.2	1467.8	1596.8	1759.3	1915.4	2121.2	2366.2	2489.5	2557.3	2512.4	2417.7
55°	1003.8	1046.3	1208.8	1355.0	1583.7	1781.4	1992.9	2004.4	1694.8	1553.5	1377.9
57.5°	620.8	628.9	772.7	979.3	1150.8	1306.0	1308.5	1016.9	791.5	687.7	571.7
60°	344.7	352.0	479.5	632.2	799.6	818.4	731.0	588.1	527.6	500.7	459.8
62.5°	256.5	262.2	345.5	439.4	506.4	533.4	490.9	481.1	481.9	469.6	442.7
65°	231.1	234.4	303.0	350.4	389.6	395.3	410.8	445.1	463.9	461.5	450.0
67.5°	209.9	214.0	276.1	310.4	334.1	361.8	374.9	428.0	478.6	486.8	476.2
70°	187.0	193.6	249.1	285.1	312.0	339.0	365.1	431.3	472.1	483.5	478.6
72.5°	161.7	169.9	216.4	254.0	284.2	313.6	358.6	414.9	470.5	490.9	494.2
75°	142.1	152.7	191.1	224.6	256.5	291.6	339.0	409.2	461.5	474.5	481.1
77.5°	128.2	139.7	169.1	200.1	230.3	268.7	323.4	407.6	452.5	467.2	478.6
80°	117.6	129.1	153.6	178.1	203.4	246.7	307.1	405.1	461.5	477.0	483.5
82.5°	109.4	120.1	141.3	163.4	183.8	223.0	295.7	401.0	459.0	472.1	475.4
85°	110.3	118.4	138.0	158.5	177.2	210.7	290.0	402.7	489.3	509.7	512.9
87.5°	116.0	121.7	142.1	165.8	187.0	221.3	300.6	399.4	486.0	504.8	512.9
90°	125.8	130.7	155.2	183.0	208.3	240.1	298.1	390.4	472.1	489.3	494.2
92.5°	156.0	160.1	187.0	217.3	239.3	249.9	288.3	404.3	474.5	484.4	484.4
95°	201.7	206.6	232.8	255.7	259.7	254.0	283.4	359.4	432.9	454.1	466.4
97.5°	252.4	254.0	268.7	272.8	260.6	247.5	276.9	335.7	392.9	407.6	410.8
100°	268.7	268.7	278.5	275.3	251.6	233.6	250.8	305.5	361.0	377.4	382.3
102.5°	272.0	273.6	283.4	272.8	241.0	211.5	223.0	275.3	326.7	344.7	354.5
105°	288.3	289.1	283.4	257.3	218.1	191.9	201.7	254.0	308.7	325.9	336.5
107.5°	269.5	267.1	251.6	227.1	200.9	182.1	193.6	232.0	273.6	287.5	294.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	223.0	221.3	215.6	206.6	190.3	176.4	183.8	218.9	258.9	269.5	276.1
112.5°	214.8	213.2	207.5	196.8	178.1	167.4	179.7	209.9	234.4	239.3	240.1
115°	206.6	205.0	191.9	179.7	165.0	160.1	168.3	196.0	218.9	224.6	229.5
117.5°	178.1	176.4	166.6	159.3	153.6	156.0	169.9	185.4	201.7	206.6	209.9
120°	158.5	157.6	152.7	147.8	144.6	146.2	160.9	178.1	194.4	199.3	201.7
122.5°	149.5	148.7	142.9	135.6	135.6	135.6	147.0	160.1	178.1	182.1	187.9
125°	131.5	131.5	125.8	120.1	128.2	131.5	134.0	134.8	148.7	155.2	157.6
127.5°	116.8	117.6	112.7	108.6	123.3	130.7	129.1	118.4	126.6	131.5	134.8
130°	115.2	115.2	109.4	104.5	111.9	126.6	121.7	111.1	120.9	124.2	125.8
132.5°	111.9	111.9	106.2	98.8	100.5	116.8	106.2	103.7	112.7	116.0	116.8
135°	102.9	102.9	98.8	89.0	82.5	98.8	85.8	90.7	99.6	102.1	102.9
137.5°	91.5	91.5	87.4	79.2	65.3	74.3	66.2	76.8	85.8	88.2	89.0
140°	75.1	74.3	71.9	62.1	47.4	41.7	44.9	61.3	70.2	71.9	74.3
142.5°	55.5	56.4	52.3	44.1	28.6	15.5	26.1	39.2	49.0	51.5	53.1
145°	40.8	40.0	35.9	28.6	15.5	2.5	12.3	24.5	31.0	33.5	35.1
147.5°	27.0	27.0	23.7	17.2	4.9	0.8	3.3	12.3	19.6	21.2	22.1
150°	18.0	18.0	13.1	4.9	0.8	0.8	0.8	2.5	8.2	9.8	11.4
152.5°	5.7	5.7	2.5	1.6	0.8	0.0	0.0	0.8	1.6	1.6	2.5
155°	1.6	1.6	1.6	0.8	0.0	0.0	0.0	0.0	0.8	0.8	0.8
157.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.8	0.8	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°	741.6	741.6	741.6	741.6	741.6	741.6	741.6	741.6	741.6	741.6	741.6
2.5°	764.5	763.7	761.2	758.8	752.3	744.1	735.9	730.2	726.9	724.5	723.7
5°	822.5	824.1	812.7	793.9	775.9	759.6	744.1	729.4	721.2	714.7	712.2
7.5°	945.8	948.3	925.4	896.0	850.3	794.7	747.4	715.5	692.6	678.7	676.3
10°	1098.6	1092.0	1065.1	1002.2	918.9	833.1	744.1	675.5	638.7	621.6	620.8
12.5°	1160.6	1151.7	1121.4	1069.2	981.8	869.9	759.6	668.9	614.2	592.2	591.3
15°	1132.1	1116.5	1061.0	1012.8	978.5	916.4	817.6	713.9	638.7	611.0	603.6
17.5°	1107.6	1092.0	1045.5	976.1	911.5	884.6	836.4	750.6	672.2	633.0	624.8
20°	1179.4	1169.6	1111.6	1019.3	948.3	840.5	801.3	742.5	683.6	659.1	652.6
22.5°	1245.6	1240.7	1168.0	1071.6	976.1	900.9	822.5	779.2	722.0	704.9	697.5
25°	1368.9	1346.1	1226.8	1096.9	1014.4	940.9	840.5	772.7	703.2	681.2	677.1
27.5°	1658.9	1605.8	1431.8	1236.6	1070.8	954.0	838.8	739.2	663.2	635.5	633.8
30°	1843.5	1795.3	1599.3	1384.4	1159.0	985.0	828.2	708.1	651.0	624.0	624.8
32.5°	1955.4	1890.8	1670.3	1398.3	1179.4	1000.6	834.7	697.5	620.8	586.4	585.6
35°	2198.0	2108.1	1787.9	1510.2	1219.5	977.7	807.0	675.5	604.4	579.1	575.8
37.5°	2543.5	2442.2	2008.5	1600.9	1235.8	947.5	771.0	650.2	565.2	530.1	527.6
40°	3042.5	2893.9	2313.9	1710.3	1222.7	924.6	731.8	611.8	541.5	518.7	511.3
42.5°	2795.0	2626.8	2131.8	1689.1	1190.0	861.7	694.3	593.0	527.6	509.7	499.9
45°	2949.4	2753.4	2153.9	1570.7	1065.1	768.6	630.6	555.4	490.1	464.7	462.3
46°	3035.2	2830.1	2249.4	1534.7	1007.9	739.2	602.0	538.3	481.9	449.2	441.9
47.5°	2848.9	2621.0	2068.1	1464.5	962.2	673.0	564.4	511.3	472.9	442.7	437.8
50°	2498.5	2275.6	1788.7	1248.9	828.2	593.8	503.1	471.3	432.9	400.2	394.5
52.5°	2280.5	2093.4	1637.6	1132.9	703.2	500.7	449.2	421.5	382.3	343.9	339.0
55°	1253.8	1124.7	1012.0	851.1	583.2	423.1	391.2	374.9	334.9	297.3	294.9
57.5°	516.2	463.9	459.8	433.7	401.0	356.1	338.1	328.3	288.3	242.6	241.0
60°	434.5	387.2	341.4	300.6	298.1	297.3	291.6	274.4	230.3	183.0	181.3
62.5°	423.1	376.5	331.6	281.8	260.6	267.1	256.5	235.2	201.7	156.0	154.4
65°	431.3	383.1	330.0	273.6	250.8	253.2	241.8	225.4	202.6	169.9	168.3
67.5°	459.0	409.2	349.6	270.4	242.6	247.5	239.3	227.1	214.0	193.6	189.5
70°	463.1	419.0	350.4	272.0	233.6	239.3	236.9	226.2	217.3	199.3	196.8
72.5°	475.4	435.3	357.7	266.3	223.8	226.2	229.5	226.2	220.5	209.9	205.8
75°	463.9	428.8	354.5	261.4	214.0	212.4	220.5	224.6	226.2	222.2	217.3
77.5°	461.5	432.1	355.3	258.1	205.0	198.5	205.0	211.5	214.8	210.7	206.6
80°	464.7	439.4	365.9	258.9	195.2	178.9	182.1	189.5	190.3	183.0	177.2
82.5°	457.4	432.9	354.5	249.9	179.7	159.3	160.1	167.4	168.3	159.3	152.7
85°	490.1	460.7	362.7	238.5	163.4	145.4	146.2	149.5	144.6	134.8	128.2
87.5°	489.3	454.1	346.3	220.5	152.7	137.2	136.4	135.6	127.4	116.0	110.3
90°	472.1	435.3	324.3	194.4	134.8	125.8	123.3	118.4	107.0	93.9	89.8
92.5°	460.7	421.5	309.6	183.8	118.4	110.3	108.6	103.7	92.3	78.4	76.0
95°	448.4	410.0	285.1	160.9	104.5	96.4	93.9	89.0	80.0	68.6	67.0
97.5°	395.3	357.7	251.6	146.2	93.1	84.1	82.5	78.4	71.1	62.9	62.1
100°	365.1	331.6	233.6	134.0	83.3	73.5	72.7	70.2	65.3	59.6	58.8
102.5°	341.4	308.7	216.4	124.2	74.3	65.3	64.5	63.7	61.3	57.2	57.2
105°	323.4	292.4	207.5	116.0	67.0	59.6	58.8	58.8	56.4	53.9	53.9
107.5°	281.8	255.7	180.5	102.9	61.3	54.7	54.7	54.7	53.1	51.5	52.3



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	265.5	241.0	171.5	96.4	58.8	50.6	49.8	49.8	49.0	49.8	49.8
112.5°	228.7	207.5	151.1	92.3	57.2	48.2	45.7	44.1	42.5	44.1	44.9
115°	219.7	200.1	146.2	89.0	55.5	46.6	43.3	40.8	37.6	40.0	40.0
117.5°	201.7	183.8	135.6	86.6	55.5	44.1	40.8	38.4	35.1	36.8	36.8
120°	193.6	178.1	136.4	89.0	56.4	41.7	38.4	34.3	31.9	34.3	34.3
122.5°	182.1	168.3	128.2	84.1	53.9	40.8	37.6	29.4	27.8	30.2	30.2
125°	152.7	141.3	110.3	74.3	51.5	40.8	36.8	26.1	26.1	27.8	28.6
127.5°	129.9	120.9	95.6	69.4	52.3	43.3	35.1	22.9	24.5	27.0	27.0
130°	122.5	115.2	94.7	71.1	54.7	45.7	28.6	21.2	22.9	25.3	25.3
132.5°	114.3	107.8	91.5	72.7	55.5	43.3	23.7	19.6	21.2	22.9	22.9
135°	100.5	95.6	82.5	66.2	49.8	34.3	18.8	17.2	19.6	21.2	22.1
137.5°	88.2	84.1	72.7	59.6	44.9	29.4	13.1	15.5	17.2	18.0	18.8
140°	72.7	70.2	61.3	49.0	33.5	16.3	9.8	12.3	13.9	15.5	15.5
142.5°	53.1	51.5	43.3	31.9	20.4	6.5	6.5	9.0	10.6	12.3	12.3
145°	35.1	33.5	27.8	20.4	9.0	1.6	4.1	6.5	9.0	9.8	9.8
147.5°	22.1	21.2	17.2	10.6	3.3	1.6	1.6	4.9	6.5	7.4	7.4
150°	11.4	10.6	7.4	3.3	1.6	0.8	0.8	1.6	4.1	4.9	4.9
152.5°	2.5	2.5	1.6	0.8	0.8	0.8	0.8	0.8	0.8	1.6	1.6
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
157.5°	0.8	0.8	0.8	0.8	0.8	0.8	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)