

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: P157083

Luminaire Tested: **UTLD-F03-LED-E-U-SL3-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157083
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33669)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-F03-LED-E-U-SL3-8030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5494.6 lumens
Efficiency: N/A
Efficacy: 70.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 78.3
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



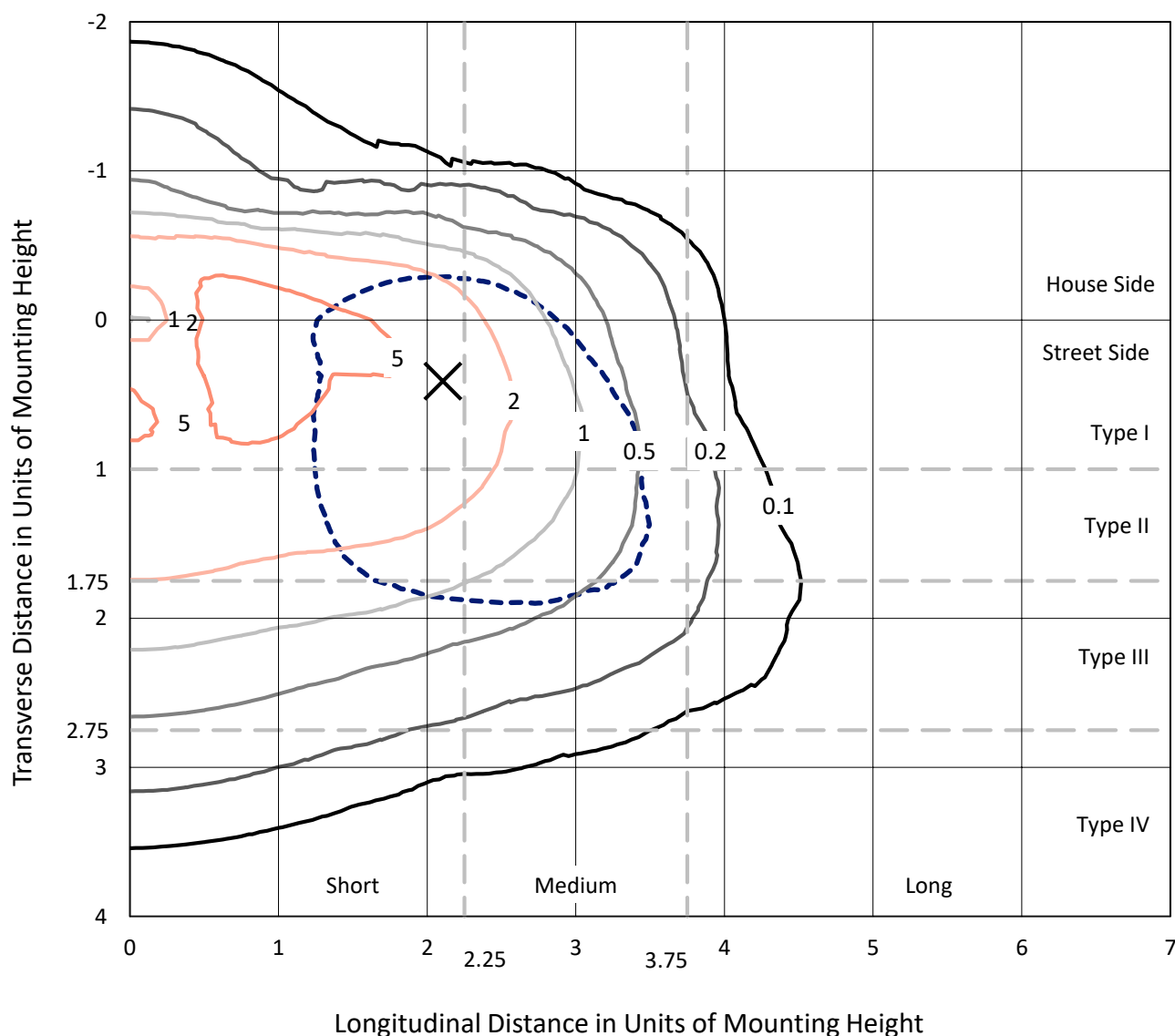
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

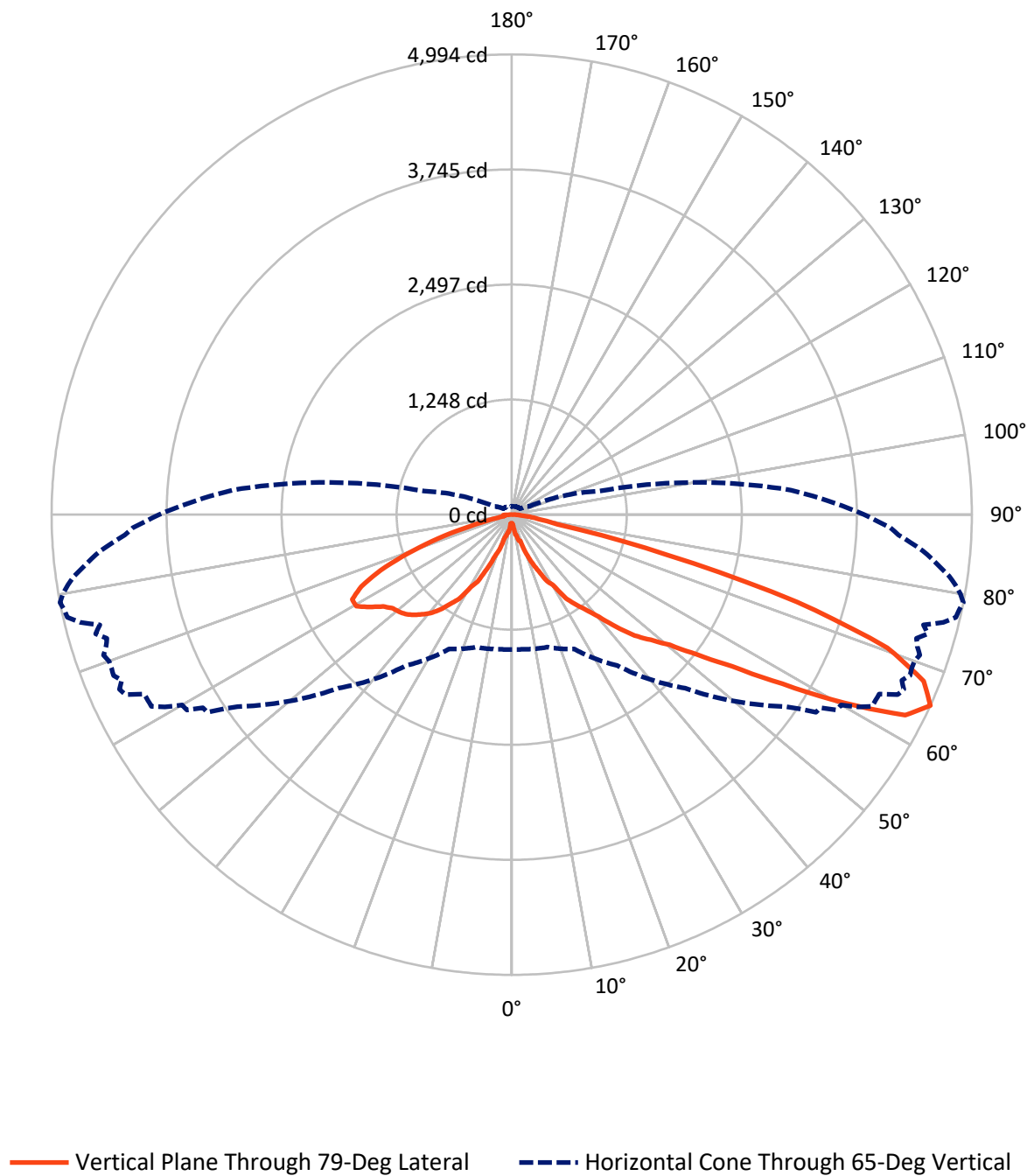


Based on 10 foot mounting height. Maximum calculated value = 6.9 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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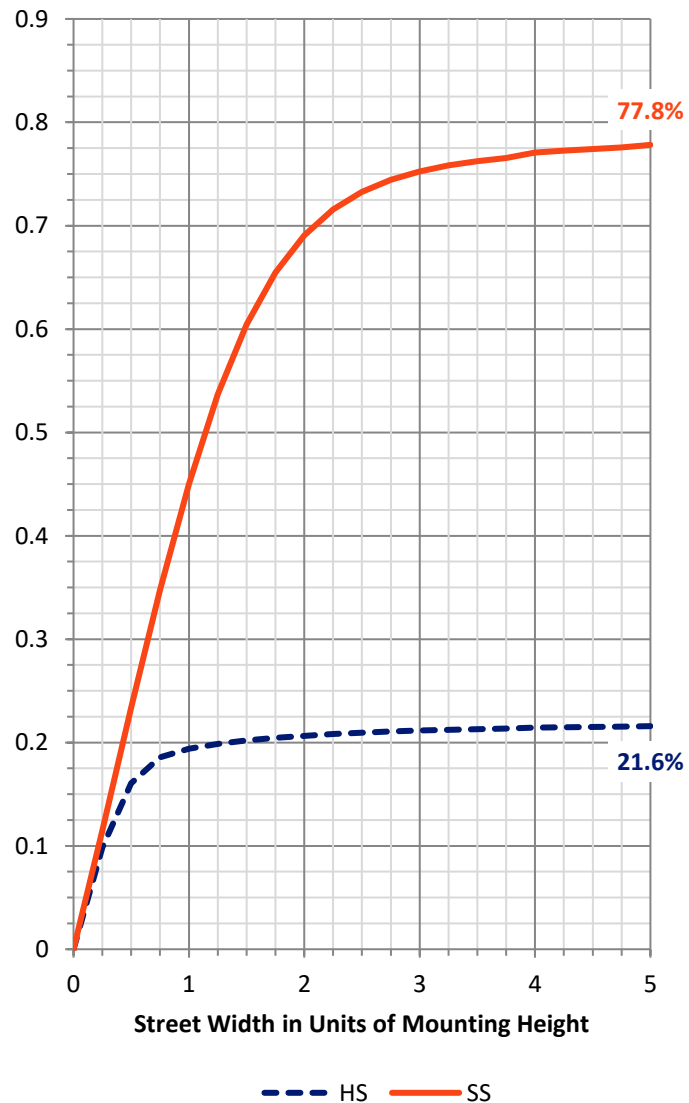
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1202.0	0.0	1202.0
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	4292.6	0.0	4292.6
	% Fixture	78.1	0.0	78.1
Total	Lumens	5494.6	0.0	5494.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.2	0.2
10°-20°	84.2	1.5
20°-30°	259.4	4.7
30°-40°	499.5	9.1
40°-50°	825.4	15.0
50°-60°	1241.5	22.6
60°-70°	1662.9	30.3
70°-80°	781.6	14.2
80°-90°	126.9	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5494.6	100.0
0°-180°	5494.6	100.0

Coefficient of Utilization



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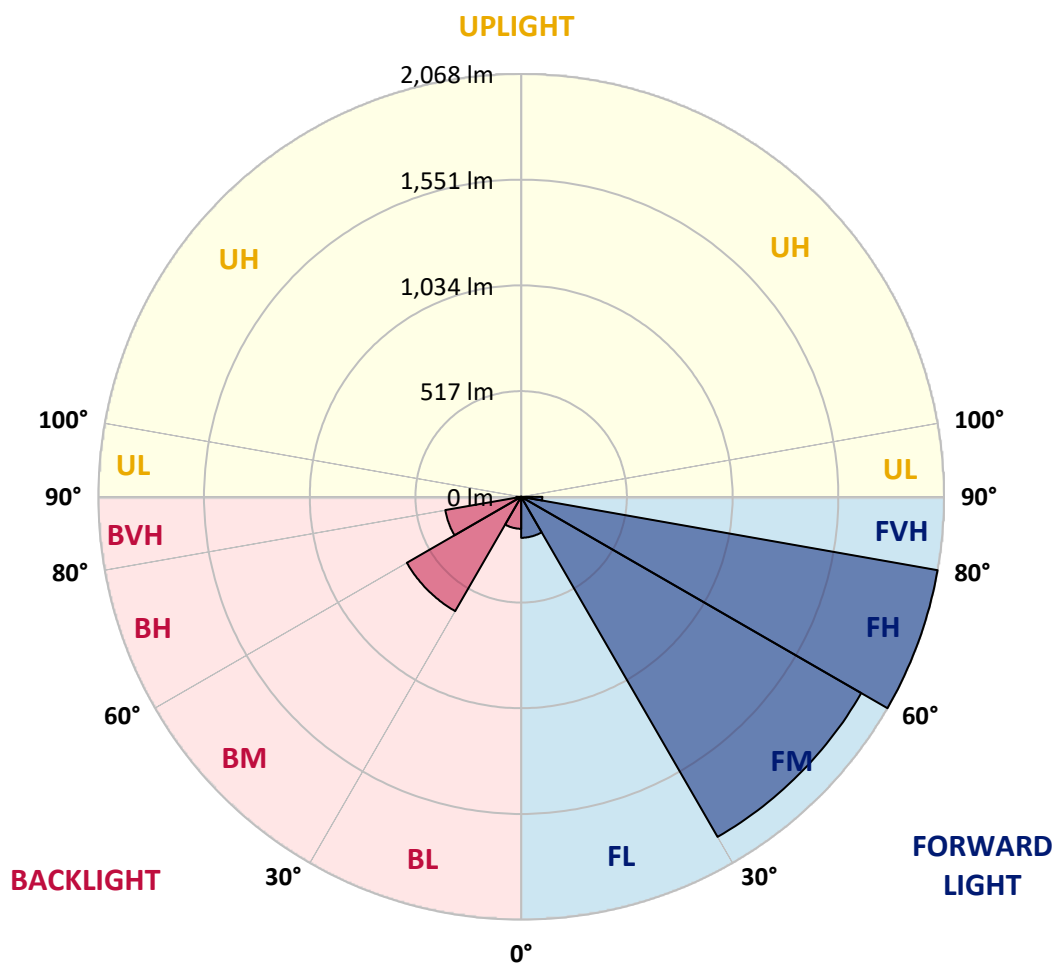
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	200.4	3.6			
FM	(30°-60°)	1920.6	35.0			
FH	(60°-80°)	2067.9	37.6			G2/5000
FVH	(80°-90°)	103.7	1.9			G2/225
BL	(0°-30°)	156.4	2.8	B1/500		
BM	(30°-60°)	645.8	11.8	B1/1000		
BH	(60°-80°)	376.6	6.9	B1/500		G1/500
BVH	(80°-90°)	23.2	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
2.5°	156.8	155.7	155.7	156.8	154.7	153.6	133.8	129.6	125.4	122.3	119.1
5°	129.6	130.6	129.6	129.6	132.7	128.5	141.1	143.2	148.4	150.5	154.7
7.5°	208.0	209.0	206.9	204.8	168.3	134.8	130.6	130.6	130.6	134.8	133.8
10°	220.5	220.5	218.4	216.3	210.1	200.7	146.3	147.4	172.4	153.6	181.8
12.5°	308.3	310.4	306.2	291.6	224.7	279.0	281.1	278.0	275.9	268.6	262.3
15°	332.3	339.7	327.1	311.4	362.7	308.3	295.8	292.6	290.5	290.5	307.3
17.5°	458.8	460.9	451.5	422.2	383.6	367.9	363.7	361.6	360.6	360.6	362.7
20°	547.6	553.9	483.9	504.8	467.2	425.4	410.7	410.7	411.8	403.4	391.9
22.5°	603.0	600.9	568.5	581.1	515.2	475.5	512.1	521.5	532.0	536.1	542.4
25°	715.9	714.9	634.4	580.0	564.4	534.0	541.4	550.8	558.1	574.8	606.2
27.5°	728.4	727.4	669.9	645.9	560.2	610.3	685.6	701.3	710.7	712.8	710.7
30°	821.5	819.4	775.5	674.1	639.6	664.7	736.8	752.5	760.8	767.1	767.1
32.5°	917.6	917.6	835.0	708.6	688.7	759.8	866.4	871.6	877.9	878.9	881.0
35°	988.7	966.7	871.6	795.3	765.0	840.3	974.0	977.2	996.0	1045.1	1059.7
37.5°	1026.3	1028.4	992.8	900.9	904.0	988.7	1196.6	1200.8	1204.0	1216.5	1234.3
40°	1086.9	1097.4	1072.3	1015.8	1040.9	1174.7	1390.0	1403.6	1415.1	1417.2	1451.6
42.5°	1148.6	1156.9	1158.0	1174.7	1196.6	1369.1	1577.1	1590.6	1588.6	1604.2	1656.5
45°	1252.0	1264.6	1285.5	1305.3	1354.5	1548.8	1763.1	1784.0	1767.3	1807.0	1840.4
47.5°	1384.8	1394.2	1429.7	1482.0	1501.8	1706.7	1957.5	1962.7	1977.3	2019.1	2031.7
50°	1501.8	1513.3	1558.2	1627.2	1651.3	1844.6	2105.9	2108.0	2132.0	2191.6	2167.5
52.5°	1590.6	1603.2	1641.9	1749.5	1787.1	1998.2	2220.8	2221.9	2263.7	2319.1	2270.0
55°	1639.8	1653.4	1679.5	1801.8	1874.9	2112.2	2356.7	2363.0	2422.5	2452.9	2415.2
57.5°	1641.9	1654.4	1684.7	1791.3	1912.5	2230.3	2544.8	2576.2	2638.9	2676.5	2676.5
60°	1623.0	1638.7	1668.0	1760.0	1948.1	2361.9	2834.3	2899.1	2999.4	3036.0	3118.6
62.5°	1573.9	1581.2	1599.0	1704.6	2000.3	2519.7	3251.3	3359.0	3507.4	3530.4	3698.6
65°	1462.1	1466.3	1488.2	1608.4	1998.2	2664.0	3629.6	3770.7	3936.9	3952.6	4113.5
67.5°	1315.8	1325.2	1341.9	1456.9	1809.1	2608.6	3662.0	3846.0	3975.6	3980.8	4115.6
70°	1089.0	1084.8	1104.7	1186.2	1457.9	2187.4	3310.9	3483.3	3571.1	3607.7	3699.7
72.5°	713.8	715.9	701.3	751.4	982.4	1540.5	2667.1	2859.4	2899.1	2988.0	3033.9
75°	401.3	393.0	408.6	450.4	553.9	927.0	1815.3	1985.7	2068.3	2141.4	2181.1
77.5°	238.3	235.1	261.3	319.8	447.3	621.8	1047.2	1131.8	1199.8	1256.2	1328.3
80°	110.8	118.1	116.0	131.7	243.5	532.0	727.4	760.8	790.1	822.5	866.4
82.5°	54.3	59.6	69.0	72.1	85.7	268.6	649.0	682.5	710.7	743.1	787.0
85°	35.5	36.6	51.2	52.3	53.3	81.5	317.7	367.9	387.7	442.1	517.3
87.5°	12.5	17.8	37.6	33.4	33.4	39.7	107.6	118.1	123.3	134.8	150.5
90°	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):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
2.5°	118.1	118.1	113.9	109.7	107.6	107.6	104.5	104.5	103.5	102.4	100.3
5°	153.6	155.7	155.7	155.7	154.7	153.6	152.6	150.5	148.4	144.2	141.1
7.5°	130.6	128.5	126.5	122.3	123.3	126.5	129.6	133.8	140.0	143.2	144.2
10°	183.9	189.2	188.1	189.2	188.1	190.2	190.2	192.3	191.3	192.3	194.4
12.5°	251.9	231.0	211.1	206.9	205.9	204.8	206.9	205.9	211.1	214.2	214.2
15°	316.7	338.6	339.7	351.2	349.1	332.3	314.6	309.4	305.2	305.2	294.7
17.5°	363.7	371.0	372.1	368.9	373.1	372.1	366.8	360.6	353.2	339.7	319.8
20°	433.7	444.2	450.4	456.7	469.3	459.8	457.8	499.6	504.8	509.0	504.8
22.5°	550.8	549.7	546.6	529.9	521.5	520.5	523.6	532.0	530.9	534.0	537.2
25°	620.8	619.7	628.1	658.4	666.8	697.1	688.7	688.7	693.9	699.2	690.8
27.5°	705.4	714.9	726.3	725.3	739.9	735.8	734.7	743.1	743.1	732.6	738.9
30°	772.3	801.6	841.3	853.8	845.5	845.5	857.0	868.5	865.3	864.3	866.4
32.5°	893.6	922.8	897.7	926.0	909.2	936.4	979.3	1008.5	1019.0	1017.9	1033.6
35°	1089.0	1094.2	1078.5	1090.0	1109.9	1115.1	1119.3	1119.3	1106.8	1127.7	1137.1
37.5°	1255.2	1229.0	1252.0	1238.4	1253.1	1269.8	1267.7	1247.9	1241.6	1276.1	1272.9
40°	1466.3	1424.5	1453.7	1446.4	1454.8	1460.0	1437.0	1423.4	1440.2	1450.6	1448.5
42.5°	1622.0	1643.9	1645.0	1641.9	1649.2	1650.2	1608.4	1614.7	1634.5	1631.4	1621.0
45°	1790.3	1826.8	1807.0	1837.3	1840.4	1799.7	1790.3	1817.4	1823.7	1813.3	1800.7
47.5°	1995.1	2019.1	1985.7	2031.7	2032.7	1986.7	2007.6	2026.5	2030.6	2009.7	2028.5
50°	2171.7	2173.8	2166.5	2202.0	2181.1	2158.1	2204.1	2214.6	2205.2	2177.0	2206.2
52.5°	2317.0	2288.8	2318.0	2367.2	2310.7	2313.9	2382.8	2374.5	2345.2	2372.4	2352.5
55°	2474.8	2449.7	2519.7	2542.7	2490.5	2538.6	2586.6	2575.1	2541.7	2597.1	2558.4
57.5°	2712.0	2718.3	2780.0	2797.7	2775.8	2882.4	2905.4	2902.3	2903.3	2939.9	2923.2
60°	3139.5	3201.2	3272.2	3326.6	3362.1	3488.6	3490.6	3492.7	3533.5	3551.3	3610.8
62.5°	3687.1	3850.2	3889.9	3955.7	4087.4	4208.6	4182.5	4185.6	4237.9	4196.1	4273.4
65°	4129.2	4302.7	4428.1	4437.5	4621.4	4658.0	4598.5	4661.2	4650.7	4650.7	4684.2
67.5°	4171.0	4349.7	4462.6	4511.7	4724.9	4715.5	4658.0	4752.1	4696.7	4743.7	4730.1
70°	3796.9	3930.6	4047.7	4152.2	4344.5	4334.0	4337.2	4466.8	4459.5	4496.0	4458.4
72.5°	3142.6	3260.7	3325.5	3515.7	3565.9	3558.6	3637.0	3647.4	3705.9	3785.4	3736.2
75°	2353.6	2430.9	2436.1	2562.6	2542.7	2518.7	2530.2	2572.0	2463.3	2394.3	2338.9
77.5°	1437.0	1454.8	1438.1	1422.4	1371.2	1321.0	1348.2	1325.2	1255.2	1210.2	1156.9
80°	905.1	927.0	935.4	985.5	971.9	1014.8	1047.2	1079.6	1089.0	1050.3	1012.7
82.5°	838.2	845.5	870.6	921.8	931.2	986.6	993.9	1013.8	979.3	957.3	889.4
85°	539.3	556.0	607.2	574.8	618.7	619.7	596.8	594.7	527.8	493.3	414.9
87.5°	165.1	169.3	189.2	190.2	215.3	219.5	226.8	219.5	196.5	165.1	136.9
90°	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):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
2.5°	99.3	98.2	97.2	97.2	97.2	96.1	96.1	96.1	96.1	95.1	95.1
5°	134.8	129.6	123.3	115.0	106.6	103.5	103.5	101.4	100.3	99.3	98.2
7.5°	144.2	143.2	143.2	143.2	141.1	139.0	136.9	127.5	108.7	100.3	99.3
10°	194.4	200.7	211.1	221.6	223.7	223.7	221.6	217.4	213.2	208.0	191.3
12.5°	213.2	213.2	210.1	206.9	211.1	220.5	229.9	234.1	233.1	231.0	229.9
15°	291.6	291.6	290.5	288.4	288.4	287.4	288.4	293.7	299.9	306.2	306.2
17.5°	319.8	317.7	318.8	321.9	309.4	306.2	305.2	299.9	298.9	303.1	306.2
20°	499.6	492.2	471.3	469.3	465.1	463.0	461.9	455.7	452.5	460.9	461.9
22.5°	533.0	542.4	536.1	567.5	516.3	518.4	551.8	570.6	570.6	567.5	562.3
25°	700.2	693.9	701.3	703.4	692.9	701.3	685.6	677.2	665.7	664.7	666.8
27.5°	741.0	758.7	761.9	791.1	808.9	800.5	832.9	819.4	807.9	798.5	806.8
30°	880.0	874.8	883.1	886.2	897.7	891.5	880.0	886.2	895.7	910.3	898.8
32.5°	1047.2	1055.6	1062.9	1065.0	1071.2	1062.9	1063.9	1084.8	1098.4	1082.7	1058.7
35°	1147.5	1147.5	1161.1	1159.0	1147.5	1151.7	1187.2	1195.6	1181.0	1170.5	1187.2
37.5°	1276.1	1274.0	1275.0	1278.2	1270.8	1310.6	1329.4	1308.5	1292.8	1325.2	1311.6
40°	1433.9	1448.5	1436.0	1438.1	1469.4	1492.4	1472.6	1456.9	1495.5	1471.5	1451.6
42.5°	1630.4	1616.8	1599.0	1635.6	1664.8	1649.2	1626.2	1665.9	1654.4	1621.0	1678.4
45°	1824.8	1807.0	1810.1	1842.5	1854.0	1821.6	1842.5	1870.7	1818.5	1872.8	1893.7
47.5°	1996.1	2004.5	2041.1	2071.4	2031.7	2041.1	2072.4	2029.6	2069.3	2110.1	2105.9
50°	2177.0	2213.5	2238.6	2233.4	2206.2	2265.8	2237.6	2221.9	2306.5	2318.0	2330.6
52.5°	2347.3	2402.7	2407.9	2375.5	2417.3	2450.8	2412.1	2520.8	2556.3	2564.7	2600.2
55°	2588.7	2638.9	2618.0	2610.7	2715.2	2691.1	2769.5	2904.3	2921.1	2954.5	2960.8
57.5°	2990.0	3027.7	3005.7	3090.4	3175.0	3160.4	3394.5	3463.5	3558.6	3577.4	3595.2
60°	3684.0	3654.7	3654.7	3836.6	3814.6	3965.1	4134.4	4153.2	4255.7	4263.0	4283.9
62.5°	4283.9	4271.3	4369.6	4422.9	4412.4	4686.2	4730.1	4791.8	4780.3	4801.2	4674.7
65°	4628.8	4593.2	4696.7	4626.7	4826.3	4948.6	4964.2	4993.5	4944.4	4874.4	4794.9
67.5°	4632.9	4639.2	4649.7	4602.6	4830.5	4838.8	4865.0	4822.1	4780.3	4599.5	4518.0
70°	4375.8	4416.6	4327.8	4412.4	4503.4	4454.2	4437.5	4325.7	4215.9	4026.8	3865.8
72.5°	3662.0	3607.7	3554.4	3618.1	3574.3	3484.4	3376.7	3237.7	3033.9	2890.8	2736.1
75°	2211.4	2110.1	2163.4	2070.3	1938.7	1902.1	1779.8	1741.1	1578.1	1370.1	1291.7
77.5°	1103.6	998.1	1011.7	932.2	831.9	749.3	622.9	510.0	406.5	314.6	257.1
80°	923.9	872.7	821.5	737.8	653.2	542.4	429.5	304.1	206.9	151.5	129.6
82.5°	795.3	780.7	680.4	599.9	505.8	411.8	290.5	200.7	129.6	100.3	93.0
85°	367.9	331.3	287.4	274.9	216.3	176.6	131.7	97.2	75.2	66.9	61.7
87.5°	132.7	113.9	105.6	90.9	79.4	72.1	67.9	65.8	65.8	65.8	62.7
90°	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):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
2.5°	95.1	95.1	94.1	94.1	94.1	94.1	94.1	93.0	93.0	93.0	95.1
5°	98.2	97.2	97.2	96.1	96.1	96.1	95.1	95.1	94.1	97.2	130.6
7.5°	99.3	100.3	100.3	100.3	100.3	100.3	99.3	99.3	99.3	110.8	128.5
10°	170.4	164.1	163.0	160.9	158.9	157.8	155.7	152.6	156.8	213.2	148.4
12.5°	223.7	199.6	180.8	177.7	175.6	172.4	172.4	164.1	171.4	203.8	158.9
15°	304.1	296.8	275.9	256.1	258.1	258.1	256.1	255.0	236.2	238.3	241.4
17.5°	313.5	329.2	340.7	314.6	290.5	274.9	279.0	301.0	270.7	259.2	309.4
20°	460.9	466.1	468.2	453.6	421.2	421.2	426.4	431.6	407.6	403.4	402.4
22.5°	552.9	559.1	554.9	561.2	552.9	547.6	537.2	525.7	513.1	463.0	495.4
25°	668.9	684.5	692.9	679.3	659.5	635.4	628.1	629.2	650.1	646.9	685.6
27.5°	817.3	808.9	798.5	807.9	816.2	790.1	780.7	771.3	766.1	845.5	752.5
30°	870.6	864.3	877.9	864.3	862.2	873.7	884.2	867.4	866.4	930.1	852.8
32.5°	1070.2	1066.0	1034.7	1047.2	1060.8	1062.9	1061.8	1079.6	1069.1	1082.7	895.7
35°	1166.3	1144.4	1174.7	1178.9	1164.2	1183.1	1183.1	1178.9	1207.1	1151.7	931.2
37.5°	1295.9	1311.6	1331.5	1337.7	1353.4	1318.9	1347.1	1352.4	1396.3	1219.6	905.1
40°	1502.9	1514.4	1526.9	1524.8	1509.1	1546.8	1510.2	1524.8	1573.9	1259.3	875.8
42.5°	1695.2	1705.6	1724.4	1723.4	1729.6	1710.8	1740.1	1729.6	1735.9	1269.8	839.2
45°	1899.0	1925.1	1907.3	1946.0	1935.5	1928.2	1946.0	1939.7	1876.0	1289.7	777.6
47.5°	2129.9	2123.6	2141.4	2141.4	2148.7	2161.3	2142.5	2147.7	1997.2	1303.2	710.7
50°	2331.6	2341.0	2358.8	2356.7	2372.4	2357.8	2375.5	2317.0	2097.5	1294.9	625.0
52.5°	2593.9	2631.6	2611.7	2622.2	2605.4	2631.6	2577.2	2550.1	2234.4	1255.2	537.2
55°	3029.8	2971.2	3008.9	2967.0	2970.2	2962.9	2893.9	2875.1	2434.0	1234.3	436.9
57.5°	3575.3	3569.0	3540.8	3488.6	3476.0	3431.1	3373.6	3306.7	2752.8	1228.0	354.3
60°	4236.8	4211.8	4124.0	4074.9	3985.0	3894.1	3843.9	3762.4	3092.5	1200.8	292.6
62.5°	4664.3	4557.7	4493.9	4376.9	4293.3	4187.7	4106.2	3954.7	3188.6	1140.2	259.2
65°	4685.2	4585.9	4477.2	4339.3	4204.5	4112.5	3965.1	3824.0	3044.4	985.5	216.3
67.5°	4383.2	4275.5	4060.2	3957.8	3826.1	3717.4	3539.8	3416.4	2676.5	791.1	171.4
70°	3776.0	3594.1	3395.5	3257.6	3145.8	3018.3	2851.0	2716.2	2136.2	582.1	132.7
72.5°	2614.8	2510.3	2327.4	2257.4	2147.7	2086.0	1997.2	1943.9	1511.2	400.3	109.7
75°	1271.9	1193.5	1083.8	1106.8	1029.4	1046.1	1057.6	996.0	835.0	226.8	95.1
77.5°	237.2	248.7	221.6	221.6	224.7	214.2	216.3	235.1	234.1	115.0	80.5
80°	121.2	119.1	115.0	112.9	107.6	104.5	100.3	98.2	95.1	82.6	70.0
82.5°	87.8	82.6	77.3	74.2	71.1	66.9	63.8	64.8	71.1	81.5	75.2
85°	56.4	54.3	50.2	49.1	48.1	47.0	48.1	50.2	67.9	97.2	74.2
87.5°	60.6	55.4	50.2	48.1	47.0	44.9	43.9	47.0	72.1	105.6	63.8
90°	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):

	125°	135°	145°	155°	165°	175°	180°
0°	94.1	94.1	94.1	94.1	94.1	94.1	94.1
2.5°	97.2	104.5	128.5	147.4	149.4	149.4	148.4
5°	146.3	101.4	94.1	96.1	92.0	93.0	92.0
7.5°	93.0	93.0	95.1	131.7	148.4	154.7	150.5
10°	110.8	147.4	149.4	155.7	156.8	155.7	154.7
12.5°	215.3	212.2	162.0	172.4	224.7	227.8	226.8
15°	232.0	229.9	280.1	232.0	240.4	242.5	240.4
17.5°	303.1	303.1	302.0	278.0	312.5	312.5	311.4
20°	358.5	373.1	362.7	348.0	306.2	307.3	307.3
22.5°	507.9	414.9	396.1	379.4	343.8	343.8	342.8
25°	523.6	466.1	416.0	363.7	333.4	364.7	361.6
27.5°	675.1	487.0	390.9	370.0	331.3	321.9	321.9
30°	664.7	514.2	436.9	337.6	319.8	306.2	299.9
32.5°	703.4	509.0	385.6	307.3	260.2	255.0	248.7
35°	681.4	482.8	330.3	244.6	199.6	190.2	190.2
37.5°	658.4	411.8	266.5	181.8	158.9	151.5	152.6
40°	580.0	331.3	185.0	140.0	140.0	141.1	141.1
42.5°	495.4	229.9	135.9	120.2	126.5	130.6	129.6
45°	389.8	154.7	109.7	110.8	119.1	122.3	122.3
47.5°	278.0	115.0	100.3	103.5	112.9	117.1	116.0
50°	189.2	98.2	94.1	99.3	108.7	110.8	110.8
52.5°	136.9	93.0	89.9	95.1	104.5	106.6	106.6
55°	113.9	90.9	87.8	92.0	100.3	102.4	103.5
57.5°	107.6	90.9	86.7	90.9	97.2	99.3	99.3
60°	107.6	92.0	88.8	90.9	94.1	96.1	97.2
62.5°	109.7	97.2	93.0	93.0	93.0	94.1	94.1
65°	113.9	106.6	100.3	97.2	93.0	89.9	90.9
67.5°	119.1	116.0	110.8	102.4	90.9	84.7	84.7
70°	123.3	125.4	123.3	106.6	88.8	78.4	77.3
72.5°	122.3	132.7	125.4	107.6	86.7	73.2	72.1
75°	115.0	123.3	108.7	97.2	81.5	69.0	66.9
77.5°	100.3	90.9	75.2	75.2	67.9	61.7	59.6
80°	80.5	60.6	50.2	53.3	51.2	38.7	33.4
82.5°	63.8	39.7	37.6	39.7	38.7	28.2	24.0
85°	52.3	27.2	27.2	30.3	27.2	20.9	15.7
87.5°	40.8	15.7	17.8	16.7	16.7	12.5	4.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)