

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: P240215

Luminaire Tested: **UTLD-AF24-90-D-U-T4W-FP**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240215
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-26)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-90-D-U-T4W-FP
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND FROSTED LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7458.3 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B2 - U4 - G4

Input Watts (W): 94
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



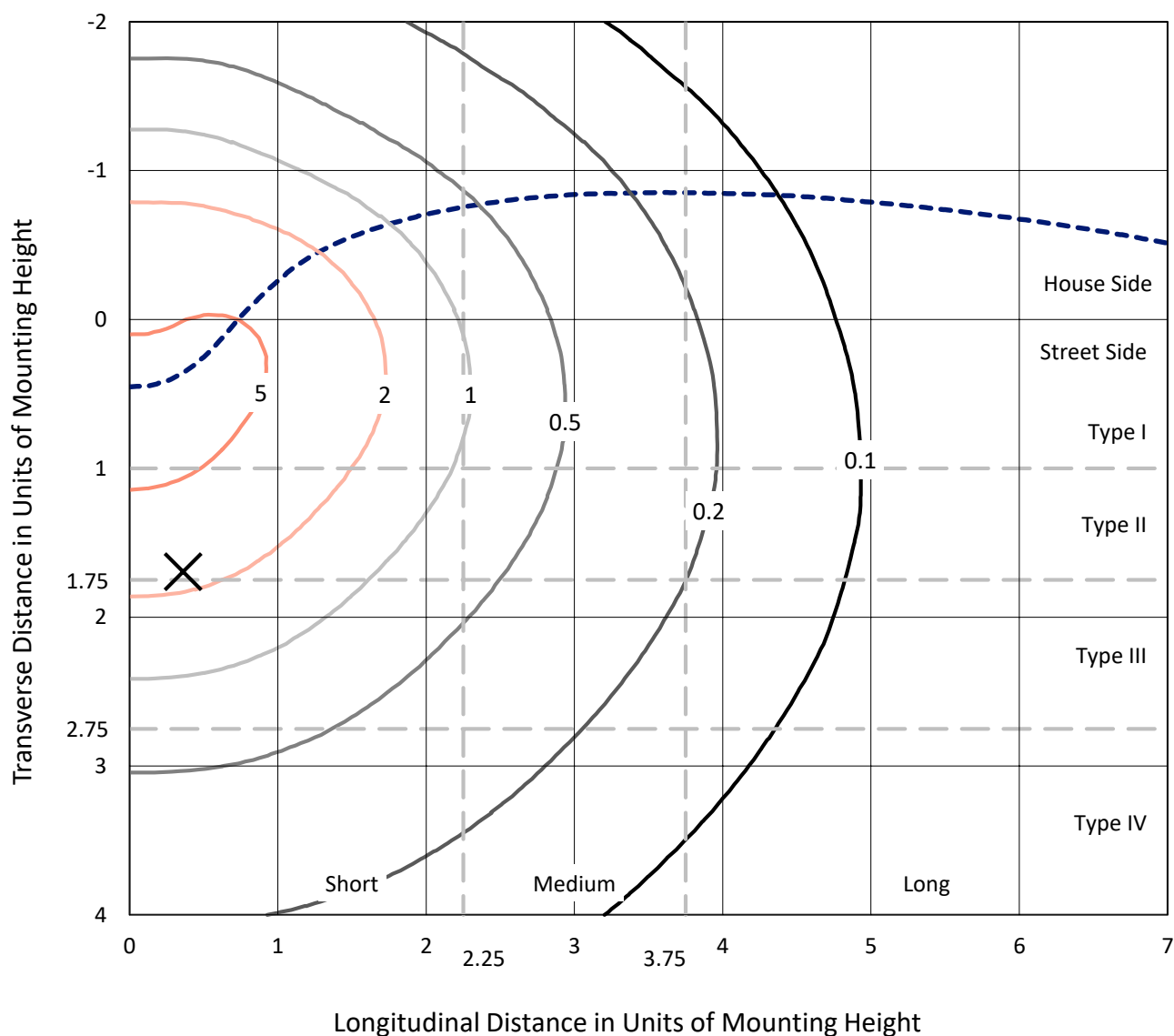
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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd

--- 1/2 Max cd

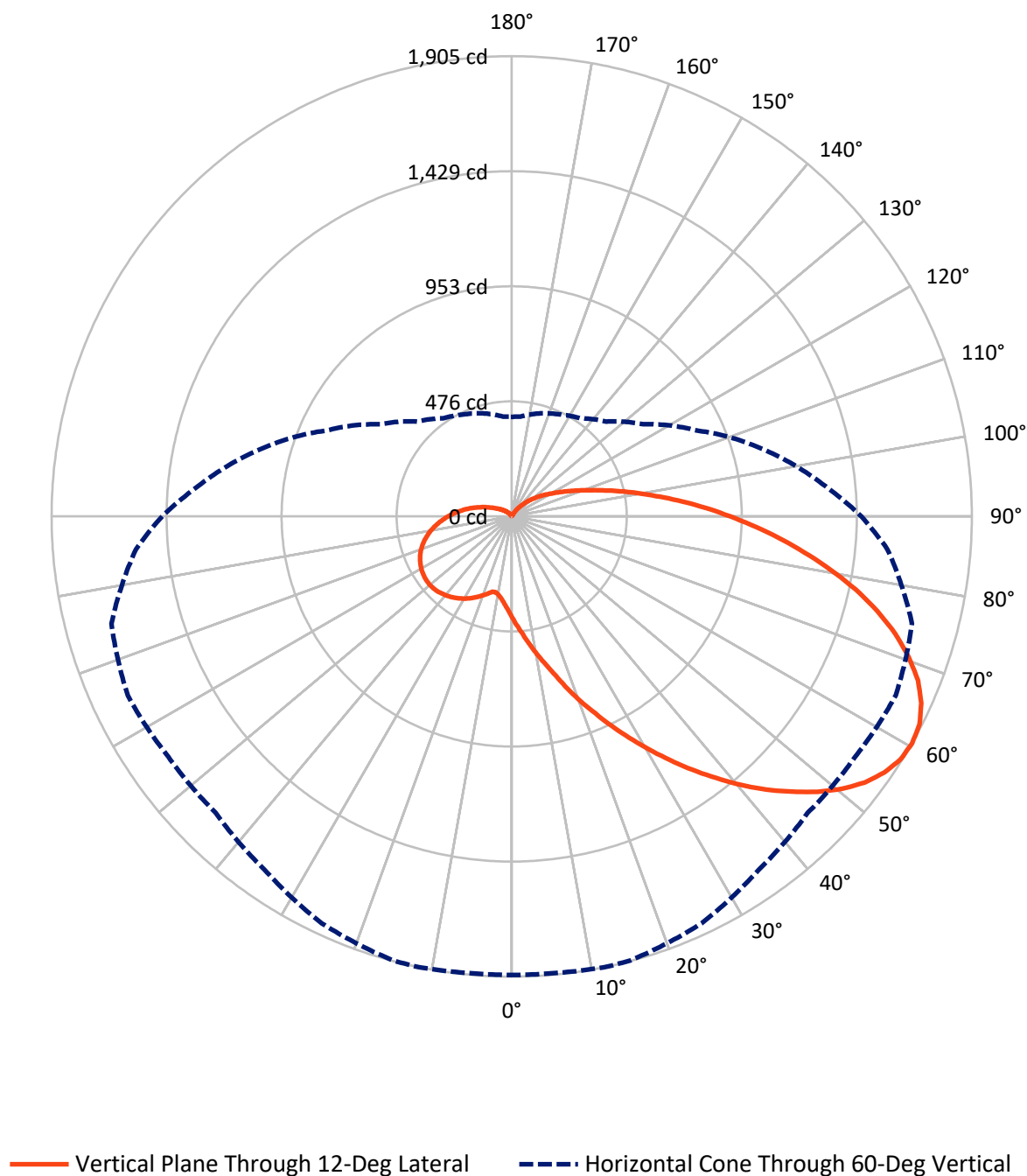


Based on 10 foot mounting height. Maximum calculated value = 7.3 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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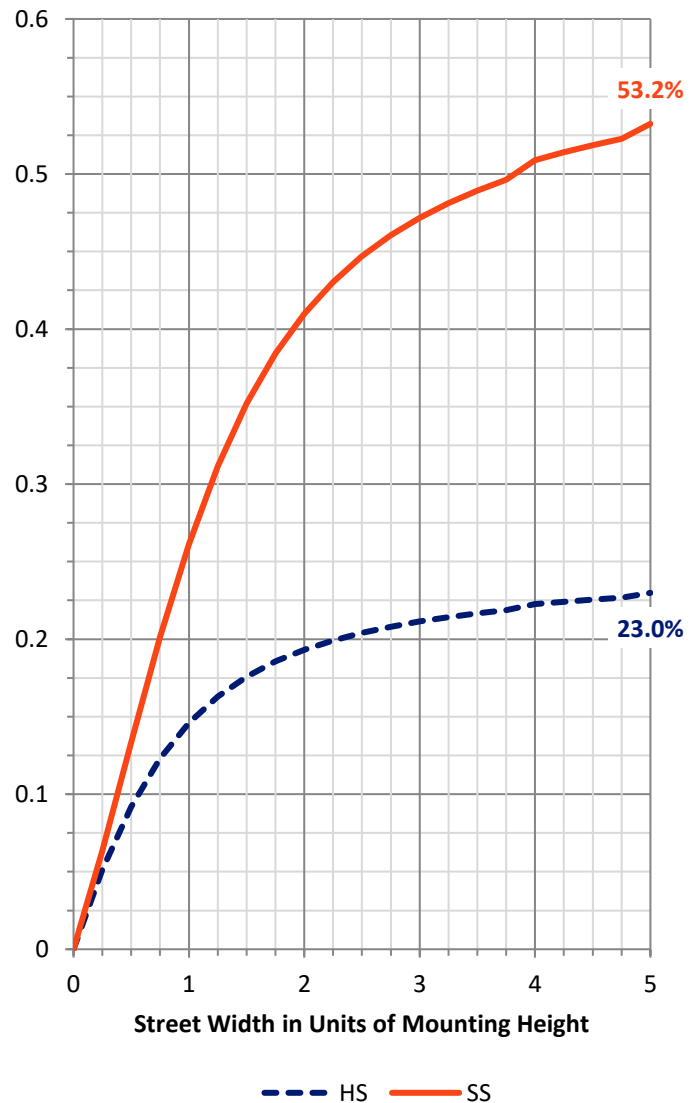
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1833.7	422.3	2256.0
	% Fixture	24.6	5.7	30.2
Street Side	Lumens	4327.3	875.1	5202.4
	% Fixture	58.0	11.7	69.8
Total	Lumens	6160.9	1297.4	7458.3
	% Fixture	82.6	17.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	41.7	0.6
10°-20°	146.3	2.0
20°-30°	313.7	4.2
30°-40°	549.2	7.4
40°-50°	827.1	11.1
50°-60°	1079.7	14.5
60°-70°	1202.5	16.1
70°-80°	1122.5	15.1
80°-90°	878.2	11.8
90°-100°	593.5	8.0
100°-110°	358.7	4.8
110°-120°	197.6	2.6
120°-130°	98.3	1.3
130°-140°	39.4	0.5
140°-150°	9.4	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6160.9	82.6
0°-180°	7458.3	100.0

Coefficient of Utilization



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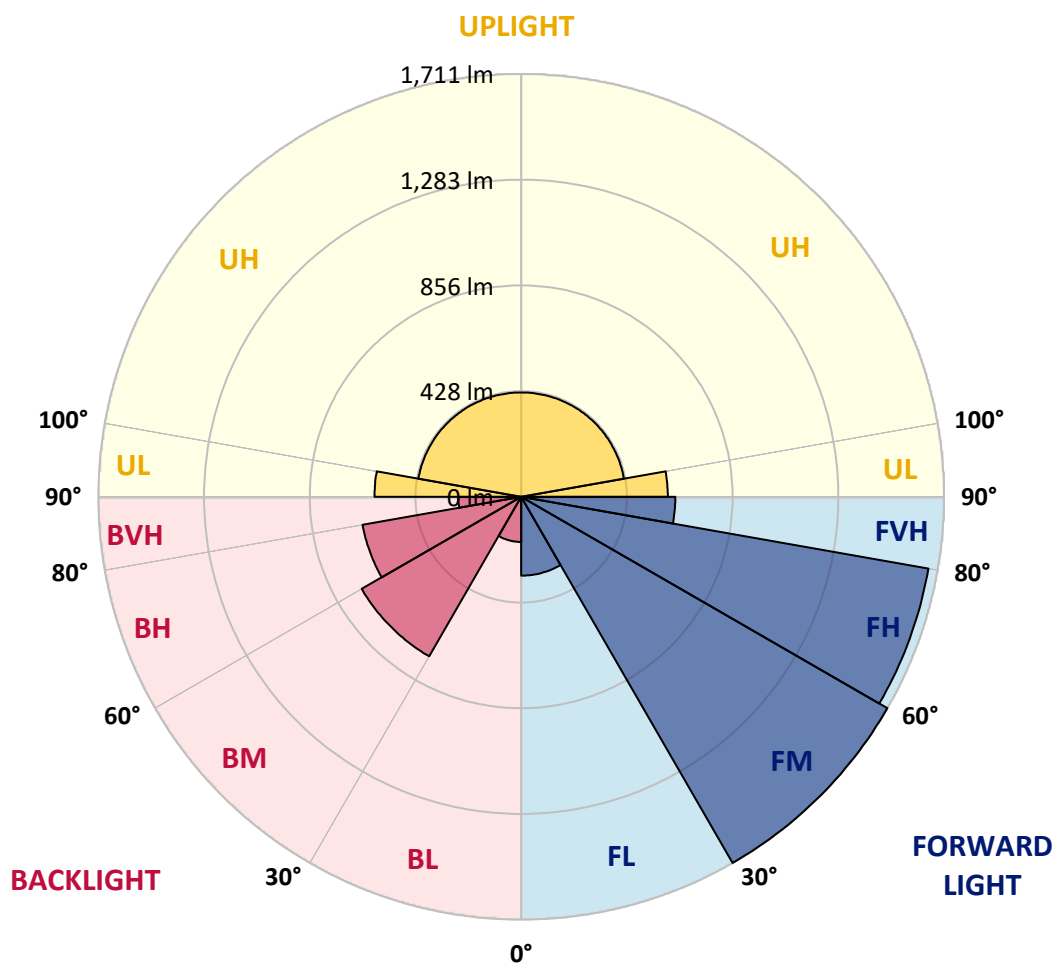
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	319.0	4.3			
FM	(30°-60°)	1711.1	22.9			
FH	(60°-80°)	1673.5	22.4			G1/1800
FVH	(80°-90°)	623.7	8.4			G4/750
BL	(0°-30°)	182.7	2.4	B1/500		
BM	(30°-60°)	744.9	10.0	B1/1000		
BH	(60°-80°)	651.5	8.7	B2/1000		G2/1000
BVH	(80°-90°)	254.6	3.4			G3/500
UL	(90°-100°)	593.5	8.0		U4/1000	
UH	(100°-180°)	422.3	5.7		U3/500	

BUG Rating: B2-U4-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
0°	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5
2.5°	457.1	455.0	455.0	453.1	453.1	449.1	446.1	441.2	436.3	430.4	425.4
5°	493.6	493.6	491.5	491.5	487.6	480.7	473.8	464.9	456.0	446.1	434.3
7.5°	536.9	535.9	535.9	533.1	528.0	518.2	508.3	495.5	481.7	464.9	449.1
10°	581.3	580.4	580.4	577.5	571.5	559.7	544.8	530.1	512.3	490.6	468.8
12.5°	634.6	630.8	628.7	627.8	617.9	607.0	588.3	570.5	546.9	522.1	495.5
15°	690.9	690.0	684.0	681.1	671.2	654.4	636.7	614.9	591.3	563.6	531.0
17.5°	754.1	754.1	750.1	746.2	735.4	712.7	690.0	669.2	645.6	611.9	575.4
20°	822.2	822.2	817.2	811.4	797.5	777.9	755.1	730.4	701.8	665.3	620.8
22.5°	894.3	892.3	885.4	881.5	864.7	842.9	825.2	796.6	763.0	721.6	670.2
25°	970.3	967.3	960.4	956.5	936.7	919.9	899.2	865.6	827.2	779.8	722.5
27.5°	1050.3	1042.3	1037.4	1031.4	1012.7	995.9	967.3	935.7	891.3	842.0	778.8
30°	1127.2	1124.2	1118.3	1110.4	1093.6	1073.9	1042.3	1007.8	964.3	910.0	839.9
32.5°	1215.1	1212.1	1202.3	1194.3	1172.6	1151.9	1119.3	1082.8	1036.5	979.2	903.2
35°	1302.9	1298.9	1288.1	1279.2	1261.5	1230.8	1192.4	1157.8	1111.4	1053.2	971.3
37.5°	1393.8	1385.8	1374.0	1368.1	1346.3	1308.9	1268.4	1230.8	1188.5	1129.2	1040.3
40°	1479.6	1475.6	1461.8	1454.9	1431.2	1384.9	1340.4	1306.8	1268.4	1206.2	1112.5
42.5°	1567.5	1560.5	1546.7	1539.8	1512.1	1458.8	1412.5	1380.9	1348.4	1287.1	1185.5
45°	1645.4	1642.4	1625.7	1621.7	1588.1	1530.9	1477.7	1450.0	1421.4	1363.1	1252.6
47.5°	1721.4	1714.6	1703.6	1698.7	1659.2	1594.1	1541.8	1518.1	1494.4	1441.1	1324.6
50°	1783.6	1782.6	1772.8	1766.8	1721.4	1650.3	1597.0	1578.3	1565.4	1514.2	1389.8
52.5°	1836.9	1835.9	1830.0	1824.1	1775.7	1701.7	1646.4	1632.6	1628.6	1581.3	1447.1
55°	1874.5	1873.4	1871.5	1865.6	1818.2	1742.2	1687.9	1677.0	1681.9	1637.5	1498.3
57.5°	1896.1	1895.1	1898.1	1893.2	1844.8	1769.8	1716.5	1713.5	1725.4	1684.9	1536.9
60°	1898.1	1898.1	1905.0	1902.1	1858.6	1784.6	1734.2	1735.2	1754.0	1715.5	1561.5
62.5°	1880.4	1880.4	1895.1	1892.2	1854.7	1783.6	1737.2	1745.2	1768.8	1732.3	1570.4
65°	1841.8	1846.7	1863.6	1863.6	1833.9	1769.8	1727.4	1739.2	1767.9	1731.3	1564.5
67.5°	1780.7	1790.5	1814.2	1816.1	1795.5	1739.2	1701.7	1718.5	1750.1	1711.6	1539.8
70°	1704.6	1718.5	1743.1	1750.1	1741.2	1694.8	1663.2	1683.0	1713.5	1675.1	1499.3
72.5°	1615.9	1628.6	1660.2	1668.1	1671.1	1634.6	1609.9	1633.6	1658.3	1616.8	1443.1
75°	1517.1	1528.0	1563.5	1571.4	1584.2	1563.5	1547.7	1566.4	1594.1	1542.8	1371.1
77.5°	1397.7	1416.4	1455.9	1464.8	1489.5	1479.6	1467.7	1490.4	1511.2	1456.9	1287.1
80°	1282.2	1305.9	1338.4	1356.2	1385.8	1384.9	1386.8	1401.6	1419.3	1360.1	1196.3
82.5°	1164.7	1181.5	1220.0	1236.7	1282.2	1293.0	1293.0	1312.8	1318.7	1252.6	1098.5
85°	1046.3	1066.0	1104.5	1121.3	1170.7	1194.3	1201.3	1211.1	1212.1	1143.0	997.9
87.5°	941.6	953.5	990.0	1010.8	1064.1	1091.7	1100.6	1112.5	1104.5	1036.5	894.3
90°	837.0	847.9	883.4	900.2	958.4	991.0	1010.8	1015.7	999.9	927.8	799.5
92.5°	739.3	750.1	783.7	803.4	860.7	895.3	914.0	918.0	900.2	827.2	707.7
95°	653.5	653.5	690.0	704.7	769.0	807.4	825.2	825.2	800.5	728.4	619.9
97.5°	572.4	574.5	603.1	621.9	681.1	721.6	740.3	741.2	706.8	638.6	545.8
100°	499.4	502.4	529.1	545.8	603.1	645.6	662.4	659.4	623.8	553.7	471.8
102.5°	439.3	439.3	462.0	475.8	530.1	572.4	588.3	582.4	545.8	478.7	411.6
105°	384.9	386.9	401.7	415.5	466.9	506.4	522.1	513.3	475.8	410.6	359.3
107.5°	341.6	340.5	350.4	360.3	408.7	446.1	459.9	449.1	409.6	351.4	311.9
110°	298.1	299.1	307.0	313.8	358.3	393.8	403.7	394.9	350.4	299.1	270.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
112.5°	263.5	263.5	269.4	275.4	307.0	341.6	353.3	340.5	298.1	253.7	235.9
115°	233.9	234.9	236.9	239.9	266.5	298.1	308.0	292.2	250.7	217.2	205.3
117.5°	208.3	208.3	209.3	212.3	229.0	257.6	264.5	247.8	212.3	185.6	180.7
120°	186.6	185.6	184.5	185.6	197.4	218.1	225.0	208.3	176.7	160.9	156.9
122.5°	165.8	165.8	163.9	164.8	167.8	183.6	188.5	172.8	149.0	139.2	138.2
125°	146.1	146.1	144.1	143.1	142.1	150.1	152.0	140.1	123.4	120.4	119.5
127.5°	127.4	128.3	125.3	124.4	120.4	121.4	122.3	111.5	101.7	102.7	103.6
130°	111.5	111.5	108.5	106.6	100.7	95.7	93.8	86.8	83.0	86.8	89.8
132.5°	96.8	94.7	92.8	90.8	81.9	75.0	71.1	65.2	67.1	73.0	76.0
135°	80.9	80.0	77.0	76.0	67.1	56.3	49.3	47.4	53.3	60.3	62.2
137.5°	66.1	66.1	63.2	61.2	51.4	40.5	33.6	33.6	40.5	47.4	51.4
140°	52.3	52.3	49.3	47.4	38.5	27.6	20.8	21.7	29.6	36.5	39.5
142.5°	39.5	39.5	36.5	35.5	27.6	17.8	11.9	13.8	20.8	26.7	29.6
145°	28.6	27.6	25.7	24.7	17.8	10.8	5.9	7.9	12.8	17.8	20.8
147.5°	18.7	18.7	16.8	15.8	10.8	5.9	1.9	4.0	7.9	10.8	13.8
150°	10.8	10.8	9.8	8.9	5.9	1.9	0.0	1.9	4.0	5.9	7.9
152.5°	5.9	5.9	4.9	4.9	1.9	1.0	0.0	0.0	1.0	3.0	3.0
155°	1.9	1.9	1.9	1.9	1.0	0.0	0.0	0.0	0.0	1.0	1.0
157.5°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5	420.5
2.5°	422.5	419.5	413.6	408.7	403.7	397.8	394.9	391.9	389.8	387.9	387.9
5°	428.4	422.5	411.6	400.8	390.9	382.0	374.1	368.2	365.2	363.2	362.2
7.5°	441.2	432.3	414.6	397.8	383.0	369.2	358.3	349.4	344.5	341.6	340.5
10°	458.0	445.2	422.5	399.8	380.0	362.2	347.4	336.6	329.7	326.7	324.8
12.5°	480.7	464.9	435.3	406.6	381.0	359.3	340.5	328.7	321.8	317.8	317.8
15°	515.3	494.5	458.0	419.5	387.9	361.3	340.5	327.8	322.7	320.8	319.8
17.5°	554.7	531.0	486.6	442.2	401.7	368.2	349.4	341.6	334.6	331.6	331.6
20°	598.1	569.6	518.2	467.9	422.5	387.9	367.1	354.4	346.5	343.5	342.5
22.5°	641.6	611.9	551.8	494.5	444.2	413.6	384.0	368.2	358.3	354.4	353.3
25°	690.9	658.4	587.3	523.1	474.8	440.3	405.7	383.0	370.1	365.2	364.3
27.5°	744.2	705.7	626.8	553.7	504.4	463.9	425.4	394.9	382.0	376.0	375.1
30°	799.5	757.1	666.2	585.3	533.1	484.7	444.2	409.6	392.8	386.0	384.9
32.5°	857.7	807.4	708.7	622.9	559.7	503.4	459.9	423.4	402.7	394.9	394.9
35°	922.9	864.7	750.1	657.3	584.3	522.1	473.8	436.3	411.6	403.7	403.7
37.5°	985.1	921.9	794.6	694.9	607.0	536.9	484.7	448.2	420.5	410.6	410.6
40°	1051.2	979.2	837.0	725.5	626.8	548.8	494.5	457.1	427.4	418.5	416.5
42.5°	1115.4	1036.5	882.4	757.1	643.5	558.6	502.4	464.9	433.3	422.5	421.5
45°	1182.5	1093.6	925.9	782.8	657.3	565.6	506.4	469.8	440.3	426.4	424.4
47.5°	1240.7	1148.0	968.3	805.5	668.2	569.6	509.3	473.8	444.2	428.4	426.4
50°	1298.9	1196.3	1003.8	824.2	674.1	571.5	510.4	474.8	447.1	428.4	426.4
52.5°	1351.3	1241.8	1034.4	837.0	677.1	570.5	509.3	474.8	448.2	426.4	424.4
55°	1394.7	1278.3	1056.2	845.0	677.1	567.5	506.4	472.8	447.1	424.4	421.5
57.5°	1427.3	1302.9	1070.9	846.9	672.2	561.6	501.5	469.8	444.2	420.5	416.5
60°	1447.1	1316.7	1075.9	842.0	664.3	554.7	495.5	465.9	441.2	414.6	411.6
62.5°	1452.9	1318.7	1070.9	832.1	653.5	544.8	486.6	459.0	435.3	407.6	404.7
65°	1443.1	1307.8	1057.1	816.3	638.6	533.1	477.7	451.1	428.4	399.8	396.8
67.5°	1416.4	1284.1	1032.5	794.6	621.9	519.1	467.9	442.2	420.5	390.9	384.9
70°	1377.0	1248.6	1000.9	767.9	602.1	504.4	456.0	431.4	409.6	381.0	375.1
72.5°	1319.7	1200.2	959.4	735.4	579.4	488.6	441.2	418.5	397.8	369.2	361.3
75°	1250.6	1138.0	910.0	701.8	555.7	469.8	426.4	404.7	384.0	355.4	348.4
77.5°	1173.6	1073.0	856.7	663.3	528.0	451.1	410.6	389.8	368.2	340.5	330.6
80°	1089.7	997.0	798.5	623.8	502.4	430.4	392.8	373.1	351.4	324.8	313.8
82.5°	998.9	918.0	740.3	584.3	473.8	409.6	375.1	355.4	332.7	307.0	296.1
85°	910.0	837.0	679.1	541.9	446.1	387.9	355.4	335.6	314.9	288.3	278.3
87.5°	818.3	755.1	618.9	500.4	418.5	367.1	336.6	315.9	294.1	269.4	261.6
90°	738.4	678.1	562.6	460.9	389.8	344.5	316.8	295.1	274.4	250.7	243.8
92.5°	653.5	604.1	507.4	423.4	363.2	322.7	297.1	276.4	253.7	231.0	226.1
95°	580.4	539.9	457.1	386.0	334.6	302.1	277.3	255.6	232.9	211.2	208.3
97.5°	510.4	476.8	407.6	351.4	310.0	280.3	256.7	235.9	212.3	192.5	190.5
100°	448.2	418.5	363.2	319.8	283.3	259.6	237.8	216.1	192.5	173.7	173.7
102.5°	390.9	368.2	323.8	287.2	259.6	236.9	217.2	195.5	171.8	156.0	156.9
105°	344.5	322.7	286.2	258.6	235.9	215.2	196.4	174.7	152.0	139.2	140.1
107.5°	300.0	283.3	253.7	230.0	212.3	195.5	175.7	155.0	132.3	124.4	125.3
110°	261.6	248.8	225.0	205.3	191.5	175.7	157.9	136.3	115.5	110.6	110.6



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	228.0	217.2	199.4	183.6	169.8	156.9	138.2	118.5	98.7	96.8	96.8
115°	199.4	191.5	174.7	161.8	152.0	139.2	122.3	101.7	85.8	84.9	85.8
117.5°	174.7	167.8	154.0	143.1	134.2	122.3	106.6	86.8	73.0	74.1	75.0
120°	153.0	148.0	136.3	127.4	118.5	107.6	90.8	73.0	64.1	65.2	65.2
122.5°	135.2	130.3	120.4	111.5	103.6	92.8	77.9	61.2	55.2	57.3	57.3
125°	117.4	114.5	104.6	96.8	88.8	77.9	64.1	50.3	47.4	49.3	49.3
127.5°	101.7	99.7	91.8	83.0	75.0	65.2	52.3	41.4	40.5	42.5	42.5
130°	87.9	85.8	79.0	71.1	62.2	53.3	40.5	33.6	34.6	36.5	37.5
132.5°	75.0	74.1	67.1	58.2	50.3	41.4	31.6	27.6	29.6	31.6	31.6
135°	62.2	61.2	56.3	48.4	39.5	31.6	23.7	21.7	24.7	26.7	26.7
137.5°	51.4	49.3	45.4	37.5	29.6	22.7	16.8	17.8	19.7	21.7	21.7
140°	40.5	39.5	35.5	28.6	20.8	14.8	11.9	13.8	16.8	17.8	17.8
142.5°	29.6	29.6	25.7	19.7	12.8	8.9	7.9	9.8	12.8	13.8	13.8
145°	20.8	20.8	17.8	12.8	7.9	4.0	4.0	7.0	8.9	9.8	10.8
147.5°	13.8	12.8	10.8	7.9	4.0	1.0	1.9	4.9	5.9	7.0	7.0
150°	7.9	7.9	5.9	4.0	1.9	0.0	1.0	1.9	3.0	4.0	4.9
152.5°	3.0	3.0	1.9	1.0	1.0	0.0	0.0	0.0	1.0	1.9	1.9
155°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.0	0.0	1.0	0.0	0.0	0.0	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)