

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: P157060

Luminaire Tested: **UTLD-E01-LED-E-U-SL3**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157060
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-E01-LED-E-U-SL3
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2628.8 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 24.7
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



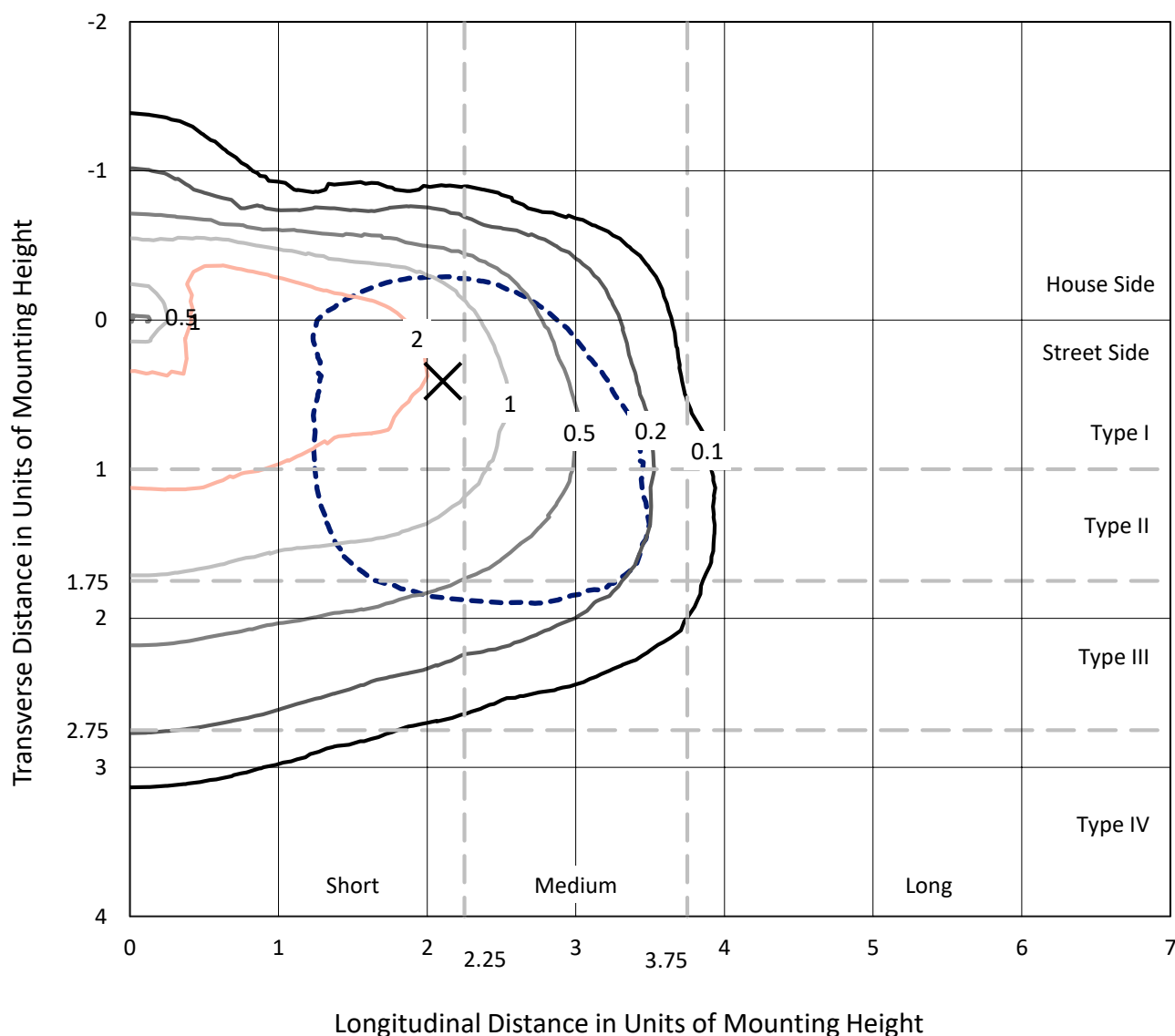
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

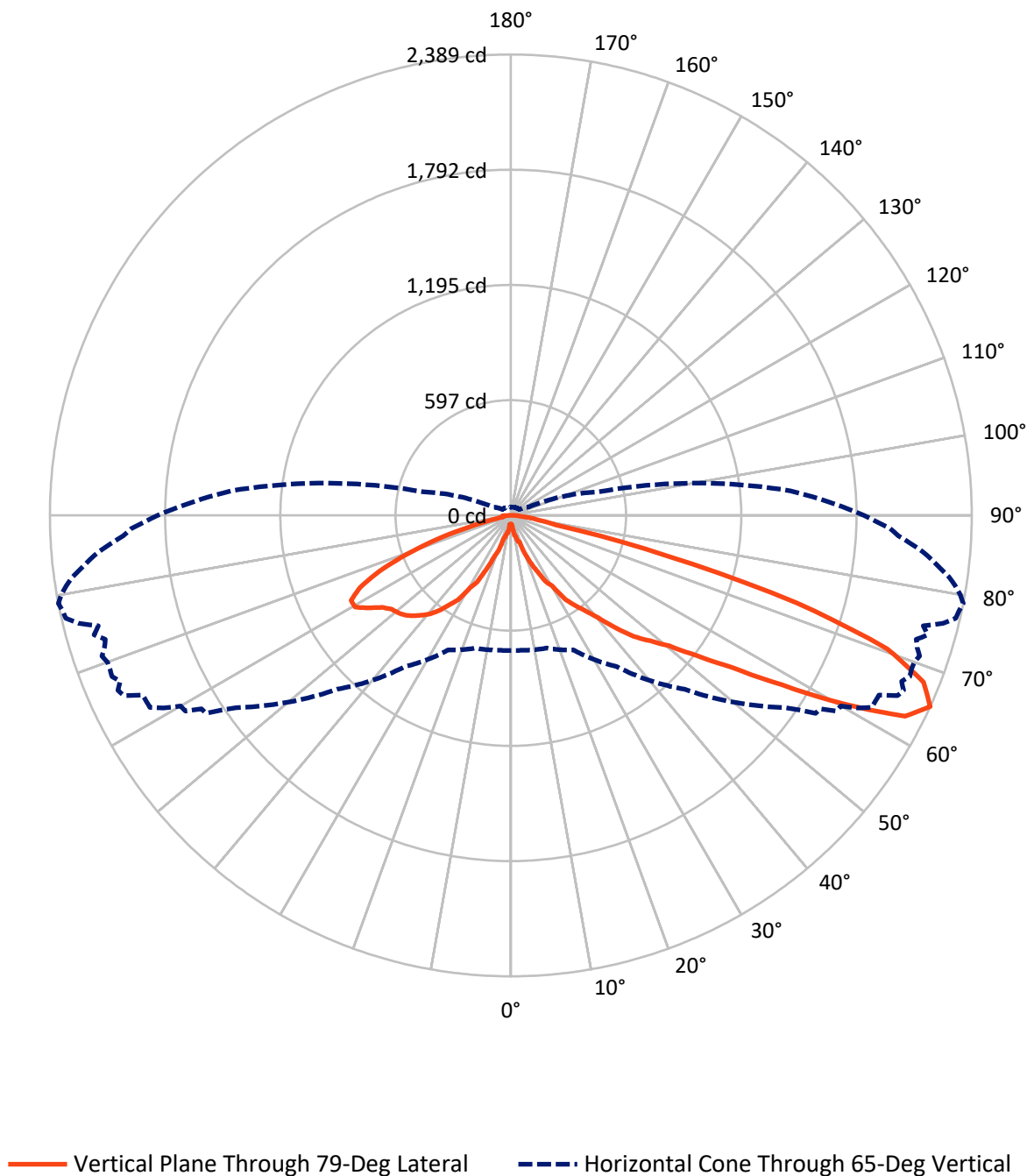


Based on 10 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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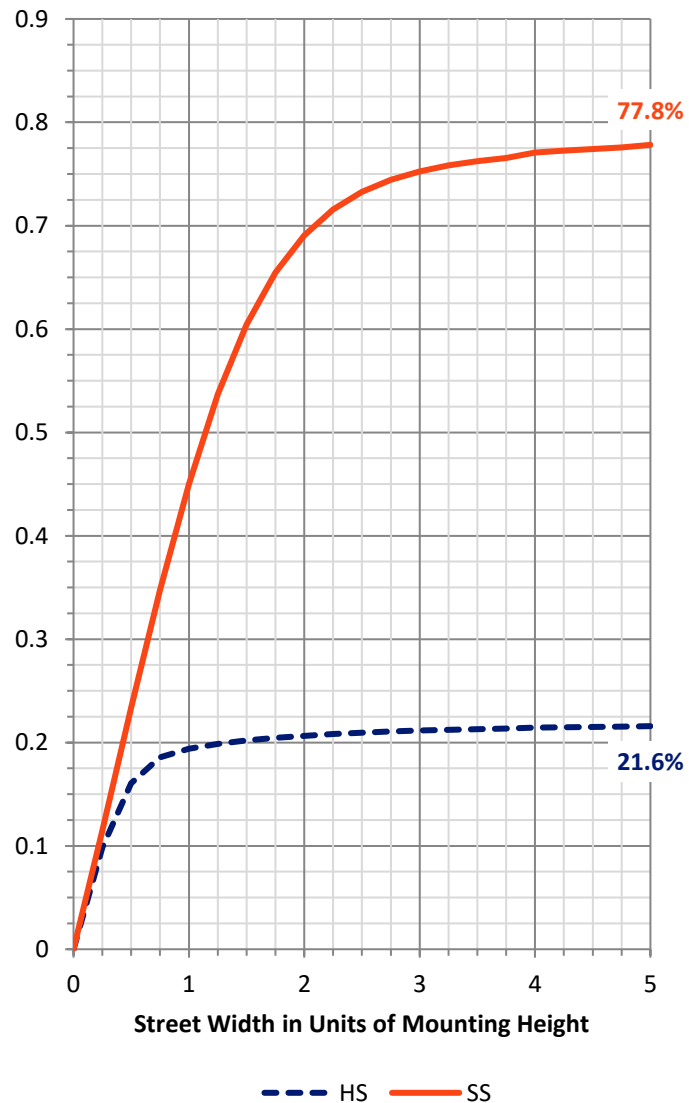
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	575.1	0.0	575.1
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	2053.7	0.0	2053.7
	% Fixture	78.1	0.0	78.1
Total	Lumens	2628.8	0.0	2628.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.3	0.2
10°-20°	40.3	1.5
20°-30°	124.1	4.7
30°-40°	239.0	9.1
40°-50°	394.9	15.0
50°-60°	594.0	22.6
60°-70°	795.6	30.3
70°-80°	373.9	14.2
80°-90°	60.7	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°	2628.8	100.0
0°-180°	2628.8	100.0

Coefficient of Utilization



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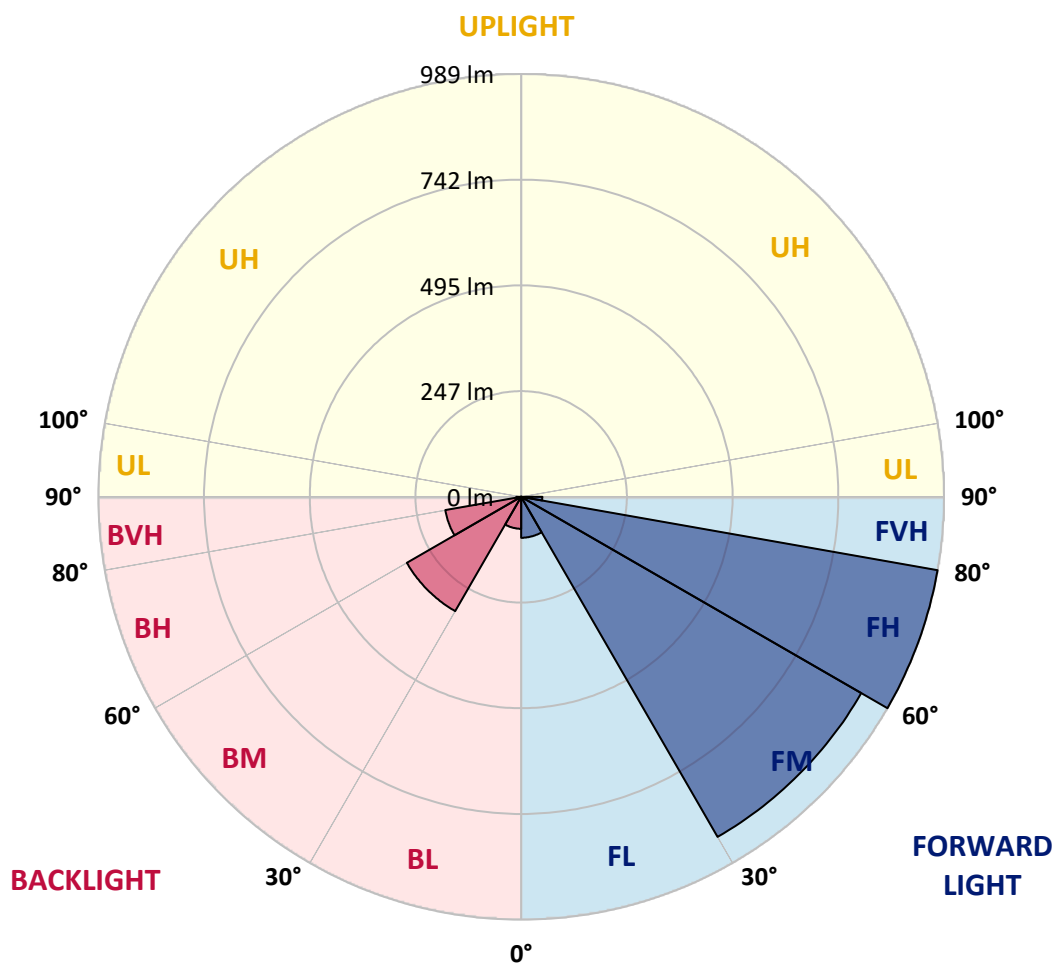
CATALOG NUMBER: UTLD-E01-LED-E-U-SL3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	95.9	3.6			
FM	(30°-60°)	918.8	35.0			
FH	(60°-80°)	989.4	37.6			G1/1800
FVH	(80°-90°)	49.6	1.9			G1/100
BL	(0°-30°)	74.8	2.8	B0/110		
BM	(30°-60°)	309.0	11.8	B1/1000		
BH	(60°-80°)	180.2	6.9	B1/500		G1/500
BVH	(80°-90°)	11.1	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-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
2.5°	75.0	74.5	74.5	75.0	74.0	73.5	64.0	62.0	60.0	58.5	57.0
5°	62.0	62.5	62.0	62.0	63.5	61.5	67.5	68.5	71.0	72.0	74.0
7.5°	99.5	100.0	99.0	98.0	80.5	64.5	62.5	62.5	62.5	64.5	64.0
10°	105.5	105.5	104.5	103.5	100.5	96.0	70.0	70.5	82.5	73.5	87.0
12.5°	147.5	148.5	146.5	139.5	107.5	133.5	134.5	133.0	132.0	128.5	125.5
15°	159.0	162.5	156.5	149.0	173.5	147.5	141.5	140.0	139.0	139.0	147.0
17.5°	219.5	220.5	216.0	202.0	183.5	176.0	174.0	173.0	172.5	172.5	173.5
20°	262.0	265.0	231.5	241.5	223.5	203.5	196.5	196.5	197.0	193.0	187.5
22.5°	288.5	287.5	272.0	278.0	246.5	227.5	245.0	249.5	254.5	256.5	259.5
25°	342.5	342.0	303.5	277.5	270.0	255.5	259.0	263.5	267.0	275.0	290.0
27.5°	348.5	348.0	320.5	309.0	268.0	292.0	328.0	335.5	340.0	341.0	340.0
30°	393.0	392.0	371.0	322.5	306.0	318.0	352.5	360.0	364.0	367.0	367.0
32.5°	439.0	439.0	399.5	339.0	329.5	363.5	414.5	417.0	420.0	420.5	421.5
35°	473.0	462.5	417.0	380.5	366.0	402.0	466.0	467.5	476.5	500.0	507.0
37.5°	491.0	492.0	475.0	431.0	432.5	473.0	572.5	574.5	576.0	582.0	590.5
40°	520.0	525.0	513.0	486.0	498.0	562.0	665.0	671.5	677.0	678.0	694.5
42.5°	549.5	553.5	554.0	562.0	572.5	655.0	754.5	761.0	760.0	767.5	792.5
45°	599.0	605.0	615.0	624.5	648.0	741.0	843.5	853.5	845.5	864.5	880.5
47.5°	662.5	667.0	684.0	709.0	718.5	816.5	936.5	939.0	946.0	966.0	972.0
50°	718.5	724.0	745.5	778.5	790.0	882.5	1007.5	1008.5	1020.0	1048.5	1037.0
52.5°	761.0	767.0	785.5	837.0	855.0	956.0	1062.5	1063.0	1083.0	1109.5	1086.0
55°	784.5	791.0	803.5	862.0	897.0	1010.5	1127.5	1130.5	1159.0	1173.5	1155.5
57.5°	785.5	791.5	806.0	857.0	915.0	1067.0	1217.5	1232.5	1262.5	1280.5	1280.5
60°	776.5	784.0	798.0	842.0	932.0	1130.0	1356.0	1387.0	1435.0	1452.5	1492.0
62.5°	753.0	756.5	765.0	815.5	957.0	1205.5	1555.5	1607.0	1678.0	1689.0	1769.5
65°	699.5	701.5	712.0	769.5	956.0	1274.5	1736.5	1804.0	1883.5	1891.0	1968.0
67.5°	629.5	634.0	642.0	697.0	865.5	1248.0	1752.0	1840.0	1902.0	1904.5	1969.0
70°	521.0	519.0	528.5	567.5	697.5	1046.5	1584.0	1666.5	1708.5	1726.0	1770.0
72.5°	341.5	342.5	335.5	359.5	470.0	737.0	1276.0	1368.0	1387.0	1429.5	1451.5
75°	192.0	188.0	195.5	215.5	265.0	443.5	868.5	950.0	989.5	1024.5	1043.5
77.5°	114.0	112.5	125.0	153.0	214.0	297.5	501.0	541.5	574.0	601.0	635.5
80°	53.0	56.5	55.5	63.0	116.5	254.5	348.0	364.0	378.0	393.5	414.5
82.5°	26.0	28.5	33.0	34.5	41.0	128.5	310.5	326.5	340.0	355.5	376.5
85°	17.0	17.5	24.5	25.0	25.5	39.0	152.0	176.0	185.5	211.5	247.5
87.5°	6.0	8.5	18.0	16.0	16.0	19.0	51.5	56.5	59.0	64.5	72.0
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°	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
2.5°	56.5	56.5	54.5	52.5	51.5	51.5	50.0	50.0	49.5	49.0	48.0
5°	73.5	74.5	74.5	74.5	74.0	73.5	73.0	72.0	71.0	69.0	67.5
7.5°	62.5	61.5	60.5	58.5	59.0	60.5	62.0	64.0	67.0	68.5	69.0
10°	88.0	90.5	90.0	90.5	90.0	91.0	91.0	92.0	91.5	92.0	93.0
12.5°	120.5	110.5	101.0	99.0	98.5	98.0	99.0	98.5	101.0	102.5	102.5
15°	151.5	162.0	162.5	168.0	167.0	159.0	150.5	148.0	146.0	146.0	141.0
17.5°	174.0	177.5	178.0	176.5	178.5	178.0	175.5	172.5	169.0	162.5	153.0
20°	207.5	212.5	215.5	218.5	224.5	220.0	219.0	239.0	241.5	243.5	241.5
22.5°	263.5	263.0	261.5	253.5	249.5	249.0	250.5	254.5	254.0	255.5	257.0
25°	297.0	296.5	300.5	315.0	319.0	333.5	329.5	329.5	332.0	334.5	330.5
27.5°	337.5	342.0	347.5	347.0	354.0	352.0	351.5	355.5	355.5	350.5	353.5
30°	369.5	383.5	402.5	408.5	404.5	404.5	410.0	415.5	414.0	413.5	414.5
32.5°	427.5	441.5	429.5	443.0	435.0	448.0	468.5	482.5	487.5	487.0	494.5
35°	521.0	523.5	516.0	521.5	531.0	533.5	535.5	535.5	529.5	539.5	544.0
37.5°	600.5	588.0	599.0	592.5	599.5	607.5	606.5	597.0	594.0	610.5	609.0
40°	701.5	681.5	695.5	692.0	696.0	698.5	687.5	681.0	689.0	694.0	693.0
42.5°	776.0	786.5	787.0	785.5	789.0	789.5	769.5	772.5	782.0	780.5	775.5
45°	856.5	874.0	864.5	879.0	880.5	861.0	856.5	869.5	872.5	867.5	861.5
47.5°	954.5	966.0	950.0	972.0	972.5	950.5	960.5	969.5	971.5	961.5	970.5
50°	1039.0	1040.0	1036.5	1053.5	1043.5	1032.5	1054.5	1059.5	1055.0	1041.5	1055.5
52.5°	1108.5	1095.0	1109.0	1132.5	1105.5	1107.0	1140.0	1136.0	1122.0	1135.0	1125.5
55°	1184.0	1172.0	1205.5	1216.5	1191.5	1214.5	1237.5	1232.0	1216.0	1242.5	1224.0
57.5°	1297.5	1300.5	1330.0	1338.5	1328.0	1379.0	1390.0	1388.5	1389.0	1406.5	1398.5
60°	1502.0	1531.5	1565.5	1591.5	1608.5	1669.0	1670.0	1671.0	1690.5	1699.0	1727.5
62.5°	1764.0	1842.0	1861.0	1892.5	1955.5	2013.5	2001.0	2002.5	2027.5	2007.5	2044.5
65°	1975.5	2058.5	2118.5	2123.0	2211.0	2228.5	2200.0	2230.0	2225.0	2225.0	2241.0
67.5°	1995.5	2081.0	2135.0	2158.5	2260.5	2256.0	2228.5	2273.5	2247.0	2269.5	2263.0
70°	1816.5	1880.5	1936.5	1986.5	2078.5	2073.5	2075.0	2137.0	2133.5	2151.0	2133.0
72.5°	1503.5	1560.0	1591.0	1682.0	1706.0	1702.5	1740.0	1745.0	1773.0	1811.0	1787.5
75°	1126.0	1163.0	1165.5	1226.0	1216.5	1205.0	1210.5	1230.5	1178.5	1145.5	1119.0
77.5°	687.5	696.0	688.0	680.5	656.0	632.0	645.0	634.0	600.5	579.0	553.5
80°	433.0	443.5	447.5	471.5	465.0	485.5	501.0	516.5	521.0	502.5	484.5
82.5°	401.0	404.5	416.5	441.0	445.5	472.0	475.5	485.0	468.5	458.0	425.5
85°	258.0	266.0	290.5	275.0	296.0	296.5	285.5	284.5	252.5	236.0	198.5
87.5°	79.0	81.0	90.5	91.0	103.0	105.0	108.5	105.0	94.0	79.0	65.5
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):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
2.5°	47.5	47.0	46.5	46.5	46.5	46.0	46.0	46.0	46.0	45.5	45.5
5°	64.5	62.0	59.0	55.0	51.0	49.5	49.5	48.5	48.0	47.5	47.0
7.5°	69.0	68.5	68.5	68.5	67.5	66.5	65.5	61.0	52.0	48.0	47.5
10°	93.0	96.0	101.0	106.0	107.0	107.0	106.0	104.0	102.0	99.5	91.5
12.5°	102.0	102.0	100.5	99.0	101.0	105.5	110.0	112.0	111.5	110.5	110.0
15°	139.5	139.5	139.0	138.0	138.0	137.5	138.0	140.5	143.5	146.5	146.5
17.5°	153.0	152.0	152.5	154.0	148.0	146.5	146.0	143.5	143.0	145.0	146.5
20°	239.0	235.5	225.5	224.5	222.5	221.5	221.0	218.0	216.5	220.5	221.0
22.5°	255.0	259.5	256.5	271.5	247.0	248.0	264.0	273.0	273.0	271.5	269.0
25°	335.0	332.0	335.5	336.5	331.5	335.5	328.0	324.0	318.5	318.0	319.0
27.5°	354.5	363.0	364.5	378.5	387.0	383.0	398.5	392.0	386.5	382.0	386.0
30°	421.0	418.5	422.5	424.0	429.5	426.5	421.0	424.0	428.5	435.5	430.0
32.5°	501.0	505.0	508.5	509.5	512.5	508.5	509.0	519.0	525.5	518.0	506.5
35°	549.0	549.0	555.5	554.5	549.0	551.0	568.0	572.0	565.0	560.0	568.0
37.5°	610.5	609.5	610.0	611.5	608.0	627.0	636.0	626.0	618.5	634.0	627.5
40°	686.0	693.0	687.0	688.0	703.0	714.0	704.5	697.0	715.5	704.0	694.5
42.5°	780.0	773.5	765.0	782.5	796.5	789.0	778.0	797.0	791.5	775.5	803.0
45°	873.0	864.5	866.0	881.5	887.0	871.5	881.5	895.0	870.0	896.0	906.0
47.5°	955.0	959.0	976.5	991.0	972.0	976.5	991.5	971.0	990.0	1009.5	1007.5
50°	1041.5	1059.0	1071.0	1068.5	1055.5	1084.0	1070.5	1063.0	1103.5	1109.0	1115.0
52.5°	1123.0	1149.5	1152.0	1136.5	1156.5	1172.5	1154.0	1206.0	1223.0	1227.0	1244.0
55°	1238.5	1262.5	1252.5	1249.0	1299.0	1287.5	1325.0	1389.5	1397.5	1413.5	1416.5
57.5°	1430.5	1448.5	1438.0	1478.5	1519.0	1512.0	1624.0	1657.0	1702.5	1711.5	1720.0
60°	1762.5	1748.5	1748.5	1835.5	1825.0	1897.0	1978.0	1987.0	2036.0	2039.5	2049.5
62.5°	2049.5	2043.5	2090.5	2116.0	2111.0	2242.0	2263.0	2292.5	2287.0	2297.0	2236.5
65°	2214.5	2197.5	2247.0	2213.5	2309.0	2367.5	2375.0	2389.0	2365.5	2332.0	2294.0
67.5°	2216.5	2219.5	2224.5	2202.0	2311.0	2315.0	2327.5	2307.0	2287.0	2200.5	2161.5
70°	2093.5	2113.0	2070.5	2111.0	2154.5	2131.0	2123.0	2069.5	2017.0	1926.5	1849.5
72.5°	1752.0	1726.0	1700.5	1731.0	1710.0	1667.0	1615.5	1549.0	1451.5	1383.0	1309.0
75°	1058.0	1009.5	1035.0	990.5	927.5	910.0	851.5	833.0	755.0	655.5	618.0
77.5°	528.0	477.5	484.0	446.0	398.0	358.5	298.0	244.0	194.5	150.5	123.0
80°	442.0	417.5	393.0	353.0	312.5	259.5	205.5	145.5	99.0	72.5	62.0
82.5°	380.5	373.5	325.5	287.0	242.0	197.0	139.0	96.0	62.0	48.0	44.5
85°	176.0	158.5	137.5	131.5	103.5	84.5	63.0	46.5	36.0	32.0	29.5
87.5°	63.5	54.5	50.5	43.5	38.0	34.5	32.5	31.5	31.5	31.5	30.0
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°	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
2.5°	45.5	45.5	45.0	45.0	45.0	45.0	45.0	44.5	44.5	44.5	45.5
5°	47.0	46.5	46.5	46.0	46.0	46.0	45.5	45.5	45.0	46.5	62.5
7.5°	47.5	48.0	48.0	48.0	48.0	48.0	47.5	47.5	47.5	53.0	61.5
10°	81.5	78.5	78.0	77.0	76.0	75.5	74.5	73.0	75.0	102.0	71.0
12.5°	107.0	95.5	86.5	85.0	84.0	82.5	82.5	78.5	82.0	97.5	76.0
15°	145.5	142.0	132.0	122.5	123.5	123.5	122.5	122.0	113.0	114.0	115.5
17.5°	150.0	157.5	163.0	150.5	139.0	131.5	133.5	144.0	129.5	124.0	148.0
20°	220.5	223.0	224.0	217.0	201.5	201.5	204.0	206.5	195.0	193.0	192.5
22.5°	264.5	267.5	265.5	268.5	264.5	262.0	257.0	251.5	245.5	221.5	237.0
25°	320.0	327.5	331.5	325.0	315.5	304.0	300.5	301.0	311.0	309.5	328.0
27.5°	391.0	387.0	382.0	386.5	390.5	378.0	373.5	369.0	366.5	404.5	360.0
30°	416.5	413.5	420.0	413.5	412.5	418.0	423.0	415.0	414.5	445.0	408.0
32.5°	512.0	510.0	495.0	501.0	507.5	508.5	508.0	516.5	511.5	518.0	428.5
35°	558.0	547.5	562.0	564.0	557.0	566.0	566.0	564.0	577.5	551.0	445.5
37.5°	620.0	627.5	637.0	640.0	647.5	631.0	644.5	647.0	668.0	583.5	433.0
40°	719.0	724.5	730.5	729.5	722.0	740.0	722.5	729.5	753.0	602.5	419.0
42.5°	811.0	816.0	825.0	824.5	827.5	818.5	832.5	827.5	830.5	607.5	401.5
45°	908.5	921.0	912.5	931.0	926.0	922.5	931.0	928.0	897.5	617.0	372.0
47.5°	1019.0	1016.0	1024.5	1024.5	1028.0	1034.0	1025.0	1027.5	955.5	623.5	340.0
50°	1115.5	1120.0	1128.5	1127.5	1135.0	1128.0	1136.5	1108.5	1003.5	619.5	299.0
52.5°	1241.0	1259.0	1249.5	1254.5	1246.5	1259.0	1233.0	1220.0	1069.0	600.5	257.0
55°	1449.5	1421.5	1439.5	1419.5	1421.0	1417.5	1384.5	1375.5	1164.5	590.5	209.0
57.5°	1710.5	1707.5	1694.0	1669.0	1663.0	1641.5	1614.0	1582.0	1317.0	587.5	169.5
60°	2027.0	2015.0	1973.0	1949.5	1906.5	1863.0	1839.0	1800.0	1479.5	574.5	140.0
62.5°	2231.5	2180.5	2150.0	2094.0	2054.0	2003.5	1964.5	1892.0	1525.5	545.5	124.0
65°	2241.5	2194.0	2142.0	2076.0	2011.5	1967.5	1897.0	1829.5	1456.5	471.5	103.5
67.5°	2097.0	2045.5	1942.5	1893.5	1830.5	1778.5	1693.5	1634.5	1280.5	378.5	82.0
70°	1806.5	1719.5	1624.5	1558.5	1505.0	1444.0	1364.0	1299.5	1022.0	278.5	63.5
72.5°	1251.0	1201.0	1113.5	1080.0	1027.5	998.0	955.5	930.0	723.0	191.5	52.5
75°	608.5	571.0	518.5	529.5	492.5	500.5	506.0	476.5	399.5	108.5	45.5
77.5°	113.5	119.0	106.0	106.0	107.5	102.5	103.5	112.5	112.0	55.0	38.5
80°	58.0	57.0	55.0	54.0	51.5	50.0	48.0	47.0	45.5	39.5	33.5
82.5°	42.0	39.5	37.0	35.5	34.0	32.0	30.5	31.0	34.0	39.0	36.0
85°	27.0	26.0	24.0	23.5	23.0	22.5	23.0	24.0	32.5	46.5	35.5
87.5°	29.0	26.5	24.0	23.0	22.5	21.5	21.0	22.5	34.5	50.5	30.5
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):

	125°	135°	145°	155°	165°	175°	180°
0°	45.0	45.0	45.0	45.0	45.0	45.0	45.0
2.5°	46.5	50.0	61.5	70.5	71.5	71.5	71.0
5°	70.0	48.5	45.0	46.0	44.0	44.5	44.0
7.5°	44.5	44.5	45.5	63.0	71.0	74.0	72.0
10°	53.0	70.5	71.5	74.5	75.0	74.5	74.0
12.5°	103.0	101.5	77.5	82.5	107.5	109.0	108.5
15°	111.0	110.0	134.0	111.0	115.0	116.0	115.0
17.5°	145.0	145.0	144.5	133.0	149.5	149.5	149.0
20°	171.5	178.5	173.5	166.5	146.5	147.0	147.0
22.5°	243.0	198.5	189.5	181.5	164.5	164.5	164.0
25°	250.5	223.0	199.0	174.0	159.5	174.5	173.0
27.5°	323.0	233.0	187.0	177.0	158.5	154.0	154.0
30°	318.0	246.0	209.0	161.5	153.0	146.5	143.5
32.5°	336.5	243.5	184.5	147.0	124.5	122.0	119.0
35°	326.0	231.0	158.0	117.0	95.5	91.0	91.0
37.5°	315.0	197.0	127.5	87.0	76.0	72.5	73.0
40°	277.5	158.5	88.5	67.0	67.0	67.5	67.5
42.5°	237.0	110.0	65.0	57.5	60.5	62.5	62.0
45°	186.5	74.0	52.5	53.0	57.0	58.5	58.5
47.5°	133.0	55.0	48.0	49.5	54.0	56.0	55.5
50°	90.5	47.0	45.0	47.5	52.0	53.0	53.0
52.5°	65.5	44.5	43.0	45.5	50.0	51.0	51.0
55°	54.5	43.5	42.0	44.0	48.0	49.0	49.5
57.5°	51.5	43.5	41.5	43.5	46.5	47.5	47.5
60°	51.5	44.0	42.5	43.5	45.0	46.0	46.5
62.5°	52.5	46.5	44.5	44.5	44.5	45.0	45.0
65°	54.5	51.0	48.0	46.5	44.5	43.0	43.5
67.5°	57.0	55.5	53.0	49.0	43.5	40.5	40.5
70°	59.0	60.0	59.0	51.0	42.5	37.5	37.0
72.5°	58.5	63.5	60.0	51.5	41.5	35.0	34.5
75°	55.0	59.0	52.0	46.5	39.0	33.0	32.0
77.5°	48.0	43.5	36.0	36.0	32.5	29.5	28.5
80°	38.5	29.0	24.0	25.5	24.5	18.5	16.0
82.5°	30.5	19.0	18.0	19.0	18.5	13.5	11.5
85°	25.0	13.0	13.0	14.5	13.0	10.0	7.5
87.5°	19.5	7.5	8.5	8.0	8.0	6.0	2.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)