

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: P239889

Luminaire Tested: **UTLD-AF24-70-D-U-T3-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239889
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-15)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-70-D-U-T3-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 930mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6193 lumens
Efficiency: N/A
Efficacy: 83.7 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 - G3

Input Watts (W): 74
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



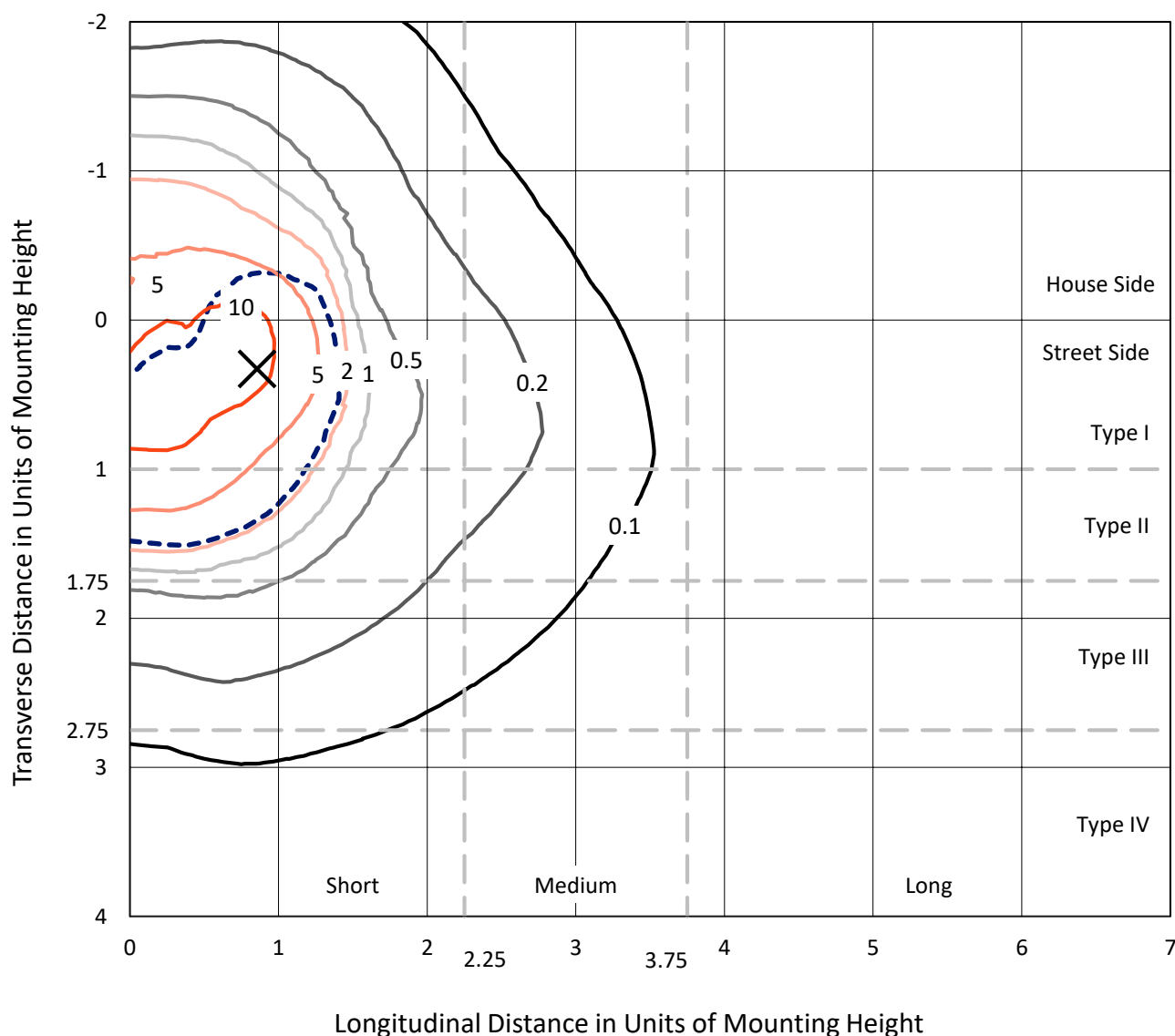
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

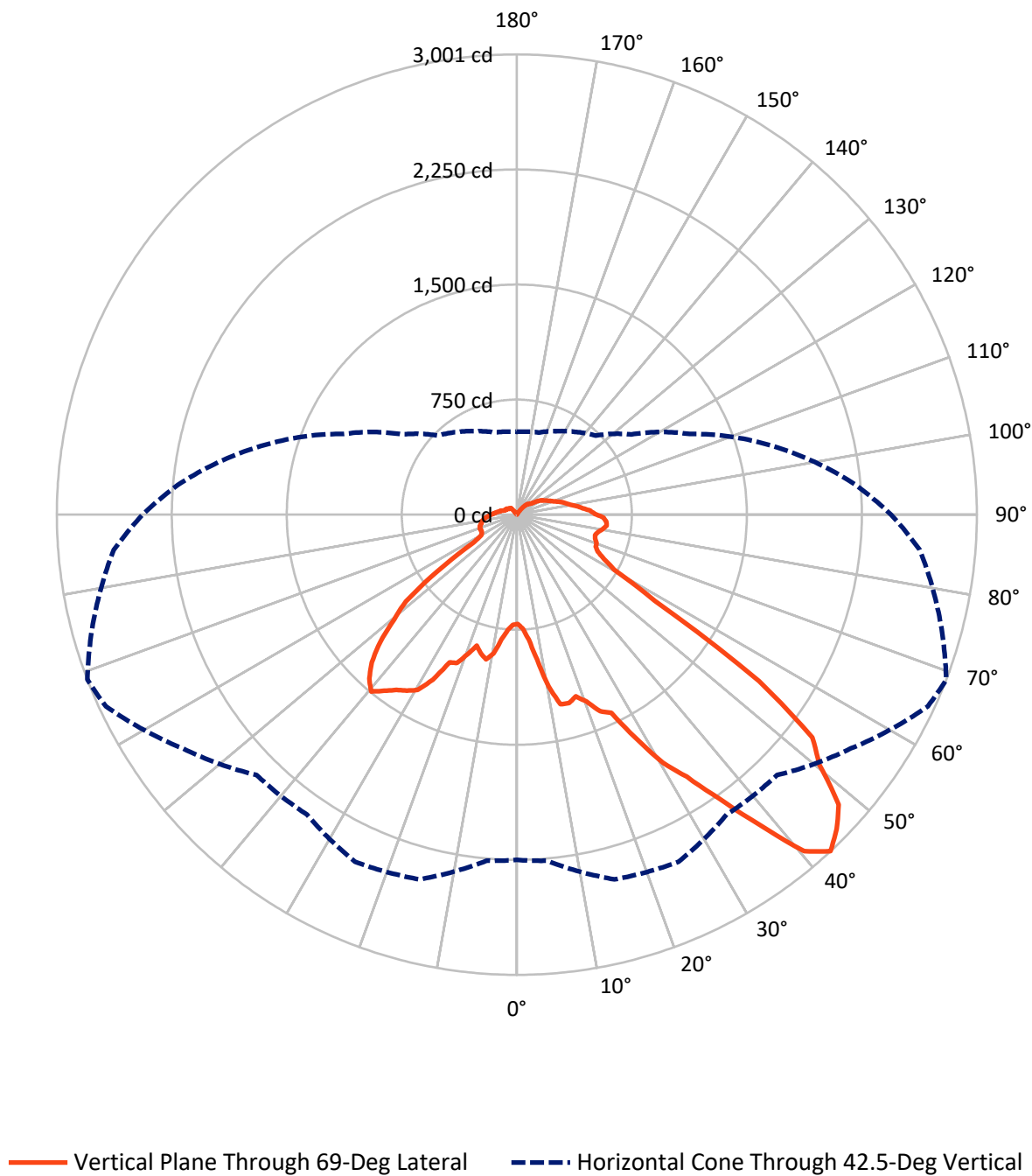


Based on 10 foot mounting height. Maximum calculated value = 14.9 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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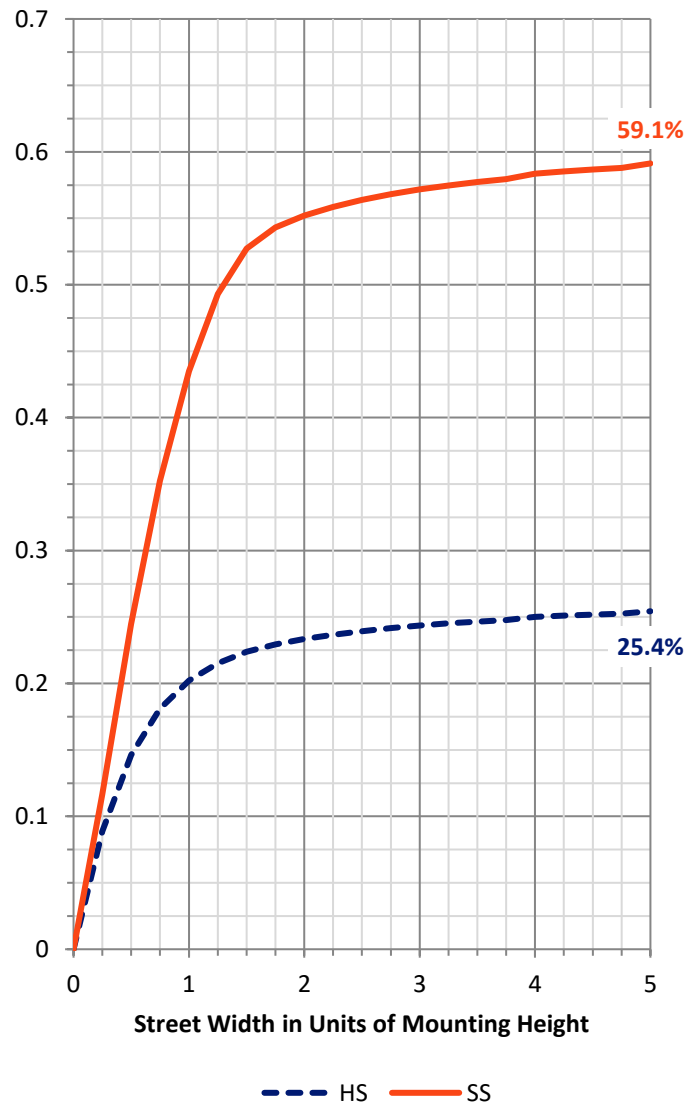
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1631.7	196.7	1828.4
	% Fixture	26.3	3.2	29.5
Street Side	Lumens	3781.2	583.4	4364.6
	% Fixture	61.1	9.4	70.5
Total	Lumens	5412.9	780.1	6193.0
	% Fixture	87.4	12.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.6	1.3
10°-20°	297.9	4.8
20°-30°	609.3	9.8
30°-40°	1024.9	16.5
40°-50°	1356.7	21.9
50°-60°	978.4	15.8
60°-70°	384.3	6.2
70°-80°	346.3	5.6
80°-90°	337.5	5.4
90°-100°	284.6	4.6
100°-110°	202.4	3.3
110°-120°	136.4	2.2
120°-130°	89.2	1.4
130°-140°	53.4	0.9
140°-150°	13.5	0.2
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5412.9	87.4
0°-180°	6193.0	100.0

Coefficient of Utilization



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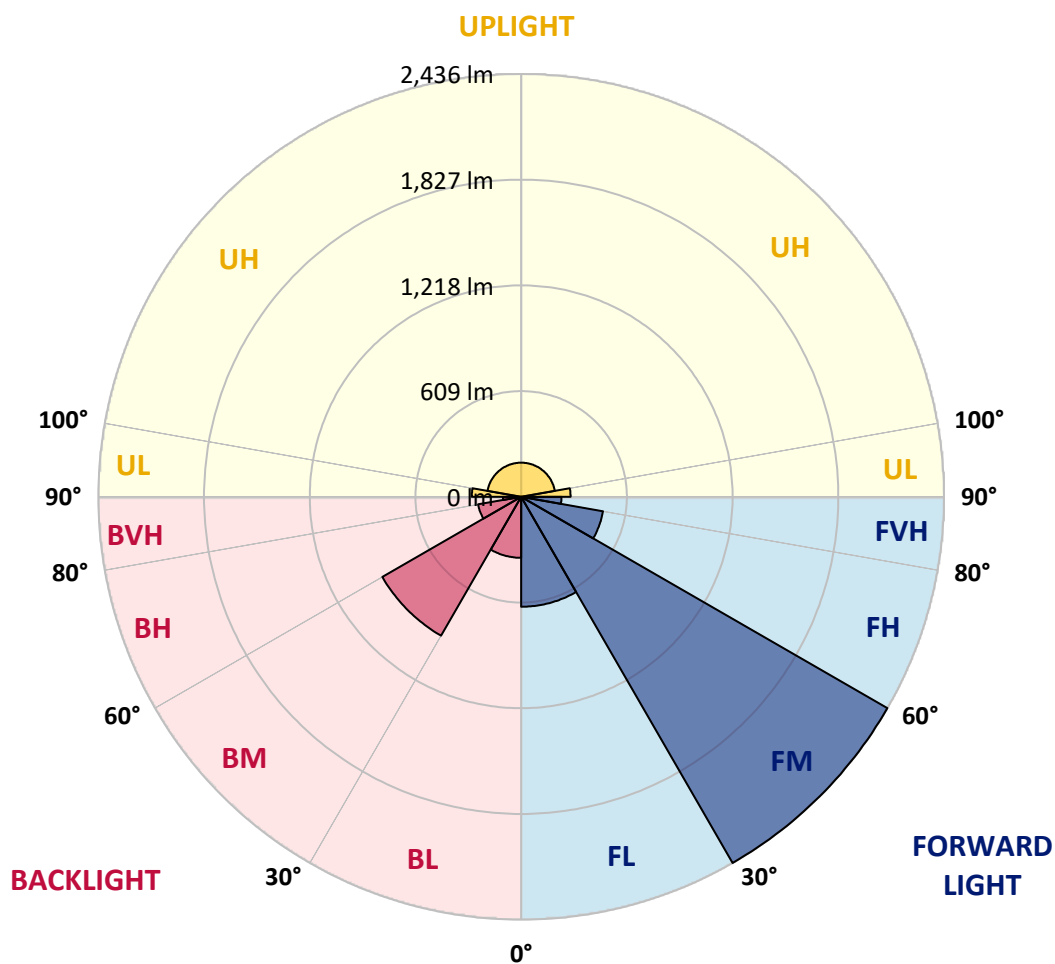
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	633.4	10.2			
FM	(30°-60°)	2436.3	39.3			
FH	(60°-80°)	478.9	7.7			G0/660
FVH	(80°-90°)	232.5	3.8			G3/500
BL	(0°-30°)	351.5	5.7	B1/500		
BM	(30°-60°)	923.6	14.9	B1/1000		
BH	(60°-80°)	251.7	4.1	B1/500		G1/500
BVH	(80°-90°)	104.9	1.7			G2/225
UL	(90°-100°)	284.6	4.6		U3/500	
UH	(100°-180°)	196.7	3.2		U3/500	

BUG Rating: B1-U3-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	69°	75°	85°
0°	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6
2.5°	759.0	754.8	753.1	753.1	750.5	749.7	751.4	748.9	744.6	743.8	738.7
5°	812.1	810.4	809.6	816.3	822.2	823.9	822.2	822.2	817.2	817.2	801.1
7.5°	897.3	894.8	901.5	918.4	924.3	942.0	963.1	950.4	953.8	944.5	914.2
10°	996.0	991.7	1022.9	1045.7	1098.0	1119.9	1146.9	1144.4	1139.3	1123.3	1072.7
12.5°	1085.3	1082.8	1123.3	1205.9	1275.9	1346.8	1352.7	1294.5	1268.3	1211.0	1147.7
15°	1196.7	1199.2	1260.8	1378.0	1481.7	1510.4	1438.7	1324.0	1275.1	1216.1	1122.4
17.5°	1376.3	1384.7	1489.3	1622.5	1691.7	1576.2	1422.7	1291.1	1244.7	1180.6	1090.4
20°	1480.9	1485.9	1629.3	1809.7	1830.0	1642.8	1483.4	1341.7	1301.2	1250.6	1176.4
22.5°	1543.3	1561.8	1726.3	1947.2	1935.4	1797.9	1577.0	1442.9	1392.3	1323.2	1262.4
25°	1643.6	1657.1	1814.8	2028.2	1975.9	1848.5	1660.5	1481.7	1431.9	1381.3	1320.6
27.5°	1779.4	1792.0	1969.1	2092.3	2037.4	1916.0	1785.3	1670.6	1644.5	1636.0	1609.9
30°	1851.9	1860.3	2059.4	2163.1	2069.5	2013.0	1976.7	1884.8	1877.2	1860.3	1800.5
32.5°	1893.2	1925.3	2156.4	2216.2	2093.9	2087.2	2109.1	2052.6	2037.4	2008.8	1939.6
35°	1930.3	1946.4	2163.9	2255.0	2133.6	2130.2	2281.2	2307.3	2273.6	2214.5	2049.2
37.5°	2216.2	2223.8	2373.1	2341.0	2185.9	2204.4	2453.2	2589.0	2558.6	2485.2	2371.4
40°	2371.4	2384.9	2523.2	2456.6	2296.3	2317.4	2577.2	2858.8	2885.8	2883.3	2783.8
42.5°	2250.8	2265.1	2461.6	2497.0	2386.6	2400.9	2658.1	2957.5	3000.5	2868.1	2638.7
45°	2643.8	2654.7	2765.2	2506.3	2325.0	2379.8	2594.9	2885.8	2924.6	2885.8	2689.3
47.5°	2642.9	2629.4	2721.4	2532.5	2320.8	2283.7	2457.4	2748.4	2825.1	2736.5	2523.2
50°	2323.3	2322.5	2549.3	2440.5	2275.3	2189.2	2306.5	2536.7	2555.2	2451.5	2165.6
52.5°	2029.0	2027.3	2289.6	2233.9	2126.0	2041.7	2114.2	2343.6	2414.4	2323.3	2084.7
55°	1768.4	1841.0	2071.2	1952.3	1907.6	1824.1	1896.6	1953.1	1916.8	1663.9	1122.4
57.5°	1071.0	1151.1	1451.3	1537.4	1547.5	1487.6	1323.2	1130.0	1060.9	847.5	506.0
60°	499.2	518.6	761.5	926.8	1130.9	1033.9	836.6	728.6	728.6	640.1	439.4
62.5°	351.7	365.2	500.1	597.9	677.2	667.9	593.7	608.9	639.2	599.6	423.3
65°	330.6	339.0	445.3	474.8	505.1	511.0	500.9	547.3	579.4	574.3	429.2
67.5°	307.0	317.9	406.5	425.9	449.5	460.4	468.0	522.0	555.7	574.3	446.1
70°	279.1	291.8	375.3	402.3	425.0	450.3	459.6	517.8	552.4	570.9	452.0
72.5°	253.0	264.0	334.0	367.7	408.2	437.7	474.8	510.2	533.8	553.2	455.4
75°	227.7	240.3	299.4	338.2	385.4	441.1	485.7	511.9	527.9	543.1	451.2
77.5°	210.8	224.3	270.7	315.4	371.9	448.6	499.2	533.0	542.3	544.8	446.1
80°	195.6	210.8	259.7	307.0	368.5	452.0	515.3	555.7	568.4	574.3	474.8
82.5°	206.6	220.1	262.3	319.6	379.5	451.2	511.0	575.1	589.5	586.1	484.1
85°	233.6	244.6	296.0	350.0	396.4	443.6	495.9	565.9	586.1	603.8	512.7
87.5°	284.2	289.3	326.4	376.1	414.1	429.2	481.5	547.3	565.9	571.8	499.2
90°	311.2	316.2	360.1	401.4	413.2	418.3	429.2	495.0	508.5	532.1	477.3
92.5°	342.4	342.4	387.9	412.4	412.4	391.3	398.9	457.9	480.7	494.2	443.6
95°	372.7	371.1	396.4	410.7	388.8	359.3	371.9	418.3	432.6	447.0	412.4
97.5°	382.0	381.2	396.4	387.9	351.7	323.8	339.9	379.5	394.7	409.8	374.4
100°	371.9	367.7	371.9	353.3	319.6	298.5	307.8	340.7	356.7	369.4	337.3
102.5°	350.0	347.4	349.1	330.6	295.2	269.9	282.5	317.1	328.9	339.0	310.3
105°	339.9	335.6	328.0	301.1	266.5	248.8	259.7	294.3	305.3	325.5	301.9
107.5°	289.3	285.9	280.0	265.6	247.9	234.4	243.7	268.2	274.9	285.0	263.1
110°	249.6	247.9	246.2	242.9	231.9	222.6	227.7	241.2	249.6	257.2	235.3



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CATALOG NUMBER: UTLD-AF24-70-D-U-T3-A

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	69°	75°	85°
112.5°	241.2	238.7	237.0	231.1	216.7	206.6	210.0	225.2	230.2	232.8	209.1
115°	230.2	227.7	218.4	210.0	199.9	194.8	195.6	208.3	211.7	213.4	199.0
117.5°	204.1	201.6	195.6	192.3	186.4	183.8	188.1	194.8	195.6	196.5	183.8
120°	188.9	188.1	184.7	178.8	174.6	168.7	175.4	182.2	184.7	187.2	178.8
122.5°	172.0	170.3	167.0	159.4	159.4	156.0	155.2	159.4	160.2	167.0	162.8
125°	151.8	150.1	146.7	140.0	148.4	148.4	142.5	133.2	135.8	141.7	138.3
127.5°	135.8	134.1	130.7	127.3	139.1	143.4	133.2	116.4	118.1	119.8	117.2
130°	133.2	131.6	127.3	121.4	124.8	137.5	119.8	106.3	108.8	110.5	108.8
132.5°	130.7	129.9	124.0	116.4	112.2	124.0	103.7	100.4	102.9	105.4	103.7
135°	122.3	121.4	116.4	105.4	93.6	99.5	82.6	87.7	91.9	95.3	93.6
137.5°	108.8	107.9	103.7	92.8	76.7	71.7	63.2	75.1	78.4	82.6	82.6
140°	87.7	86.9	82.6	71.7	54.0	37.9	40.5	57.3	60.7	65.8	66.6
142.5°	64.1	62.4	58.2	48.1	30.4	12.6	22.8	34.6	38.8	43.9	47.2
145°	43.9	43.0	37.1	28.7	14.3	1.7	10.1	21.1	23.6	27.0	30.4
147.5°	27.8	27.8	23.6	16.0	4.2	1.7	2.5	11.0	13.5	16.9	19.4
150°	16.9	16.9	12.6	5.1	0.8	0.8	0.8	1.7	4.2	7.6	10.1
152.5°	4.2	4.2	2.5	1.7	0.8	0.0	0.8	0.8	0.8	0.8	1.7
155°	1.7	1.7	1.7	0.8	0.0	0.0	0.0	0.8	0.8	0.8	0.8
157.5°	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.8	0.8	0.8	0.0	0.8	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°	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6	712.6
2.5°	736.2	731.2	724.4	715.1	705.9	696.6	687.3	682.2	679.7	678.0	677.2
5°	796.9	786.0	768.3	743.8	713.4	695.7	683.1	667.9	657.8	654.4	651.9
7.5°	904.0	886.3	850.9	798.6	761.5	709.2	664.5	635.9	614.8	603.0	603.0
10°	1047.4	1022.1	960.5	888.9	793.6	701.6	632.5	580.2	555.7	545.6	543.1
12.5°	1110.6	1086.2	1013.7	930.2	829.0	721.9	634.2	571.8	542.3	530.4	532.1
15°	1078.6	1044.9	982.5	904.0	824.8	757.3	683.9	606.3	555.7	542.3	546.5
17.5°	1046.6	1012.0	945.4	858.5	780.9	736.2	684.8	632.5	584.4	565.0	561.6
20°	1140.2	1114.9	1024.6	926.0	809.6	696.6	660.3	636.7	620.7	621.5	613.9
22.5°	1229.5	1195.0	1112.3	996.8	871.1	772.5	713.4	682.2	664.5	672.1	673.0
25°	1289.4	1263.3	1141.0	1002.7	898.1	824.8	739.6	695.7	666.2	666.2	662.8
27.5°	1593.9	1528.9	1335.0	1123.3	967.3	845.8	743.0	692.4	655.3	644.3	646.0
30°	1753.2	1689.2	1467.4	1210.2	1046.6	896.4	752.2	673.8	664.5	656.9	659.5
32.5°	1889.9	1795.4	1533.1	1232.9	1032.2	904.0	772.5	678.0	633.3	625.7	629.1
35°	1957.3	1851.9	1585.4	1253.2	1039.0	872.0	748.0	660.3	631.6	624.1	626.6
37.5°	2268.5	2110.8	1668.1	1283.5	1037.3	829.8	715.1	644.3	591.2	568.4	568.4
40°	2626.1	2394.2	1812.3	1281.8	973.2	793.6	678.9	613.1	570.9	553.2	552.4
42.5°	2440.5	2219.6	1727.9	1243.9	910.8	727.8	658.6	599.6	554.1	542.3	539.7
45°	2518.1	2282.0	1667.2	1137.6	817.2	675.5	610.6	569.2	517.0	490.0	489.1
47.5°	2271.9	2082.1	1543.3	1002.7	736.2	593.7	553.2	526.2	493.3	470.6	468.0
50°	1970.8	1779.4	1298.7	888.9	627.4	526.2	498.4	484.9	452.0	425.9	427.6
52.5°	1883.1	1651.2	1131.7	775.8	539.7	458.8	445.3	430.1	397.2	366.8	370.2
55°	933.5	773.3	688.1	603.0	452.9	398.9	393.0	383.7	350.8	324.7	325.5
57.5°	435.1	375.3	328.9	350.0	341.5	346.6	344.1	338.2	307.0	269.9	267.3
60°	389.6	334.0	279.1	264.8	280.8	302.7	301.1	282.5	242.9	199.0	194.0
62.5°	376.1	319.6	270.7	249.6	256.4	270.7	260.6	237.0	204.9	164.4	163.6
65°	382.9	323.0	269.9	243.7	248.8	254.7	240.3	223.5	204.1	176.3	176.3
67.5°	397.2	335.6	275.8	241.2	243.7	249.6	236.1	224.3	214.2	195.6	195.6
70°	401.4	341.5	279.1	242.0	239.5	244.6	235.3	224.3	218.4	203.2	202.4
72.5°	403.1	344.9	277.4	237.8	231.9	236.1	229.4	224.3	221.8	210.0	208.3
75°	395.5	341.5	269.0	228.5	222.6	224.3	222.6	221.8	225.2	217.6	215.0
77.5°	386.2	336.5	262.3	218.4	211.7	212.5	210.8	213.4	216.7	211.7	207.5
80°	405.6	350.8	263.1	210.8	198.2	194.0	194.8	197.3	201.6	190.6	184.7
82.5°	412.4	351.7	251.3	194.0	177.9	172.0	173.7	180.5	183.8	173.7	167.8
85°	437.7	367.7	242.9	178.8	160.2	154.3	156.0	160.2	158.5	146.7	141.7
87.5°	427.6	356.7	227.7	161.1	145.9	140.8	141.7	143.4	137.5	122.3	118.1
90°	413.2	344.1	210.8	141.7	129.0	127.3	125.7	123.1	113.0	97.0	92.8
92.5°	387.1	321.3	195.6	128.2	114.7	113.8	111.3	106.3	97.0	81.0	76.7
95°	365.2	301.1	181.3	117.2	102.9	99.5	99.5	94.5	84.3	70.8	69.2
97.5°	328.9	274.1	167.0	107.9	91.9	88.5	87.7	84.3	76.7	66.6	65.8
100°	297.7	247.9	151.8	97.8	82.6	79.3	77.6	75.9	70.0	64.1	64.1
102.5°	275.8	229.4	141.7	89.4	74.2	70.8	70.8	69.2	65.8	61.6	61.6
105°	269.9	225.2	137.5	81.8	65.8	64.1	64.9	64.9	62.4	59.9	59.9
107.5°	234.4	194.0	118.1	72.5	59.9	58.2	59.0	59.9	59.0	58.2	58.2
110°	209.1	176.3	109.6	68.3	56.5	54.0	54.0	54.0	54.0	54.8	55.7



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	187.2	156.9	100.4	64.9	53.1	50.6	49.8	48.9	48.1	51.4	51.4
115°	178.8	152.6	97.8	63.2	50.6	48.1	45.5	43.9	42.2	44.7	45.5
117.5°	166.1	143.4	95.3	63.2	49.8	45.5	43.0	40.5	37.9	40.5	40.5
120°	162.8	142.5	97.0	64.1	48.1	42.2	39.6	36.3	34.6	37.1	37.9
122.5°	150.1	133.2	91.9	60.7	46.4	40.5	37.9	31.2	31.2	32.9	33.7
125°	127.3	113.0	79.3	54.8	43.9	40.5	37.1	27.8	28.7	30.4	30.4
127.5°	108.8	97.8	72.5	53.1	44.7	41.3	34.6	26.1	27.8	30.4	30.4
130°	102.9	93.6	73.4	55.7	46.4	42.2	28.7	22.8	27.0	29.5	29.5
132.5°	98.7	91.1	73.4	58.2	48.1	38.8	22.8	20.2	22.8	24.5	24.5
135°	89.4	84.3	70.0	55.7	43.9	30.4	18.6	17.7	21.1	22.8	22.8
137.5°	80.1	75.1	64.1	51.4	38.8	24.5	13.5	16.0	17.7	19.4	19.4
140°	65.8	62.4	53.1	42.2	28.7	13.5	10.1	12.6	15.2	16.9	16.9
142.5°	46.4	44.7	37.1	27.0	16.0	5.1	6.7	9.3	11.0	12.6	12.6
145°	30.4	28.7	23.6	16.9	6.7	1.7	4.2	5.9	8.4	9.3	9.3
147.5°	19.4	18.6	14.3	8.4	2.5	1.7	1.7	4.2	6.7	7.6	7.6
150°	9.3	8.4	5.9	2.5	1.7	0.8	0.8	1.7	4.2	5.1	5.1
152.5°	1.7	1.7	1.7	0.8	0.8	0.0	0.0	0.8	0.8	1.7	1.7
155°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.8	0.8	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)