

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: P239890

Luminaire Tested: **UTLD-AF24-80-D-U-T3-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239890
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-AF24-80-D-U-T3-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1050mA 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: 6776 lumens
Efficiency: N/A
Efficacy: 81.6 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 - U4 - G3

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



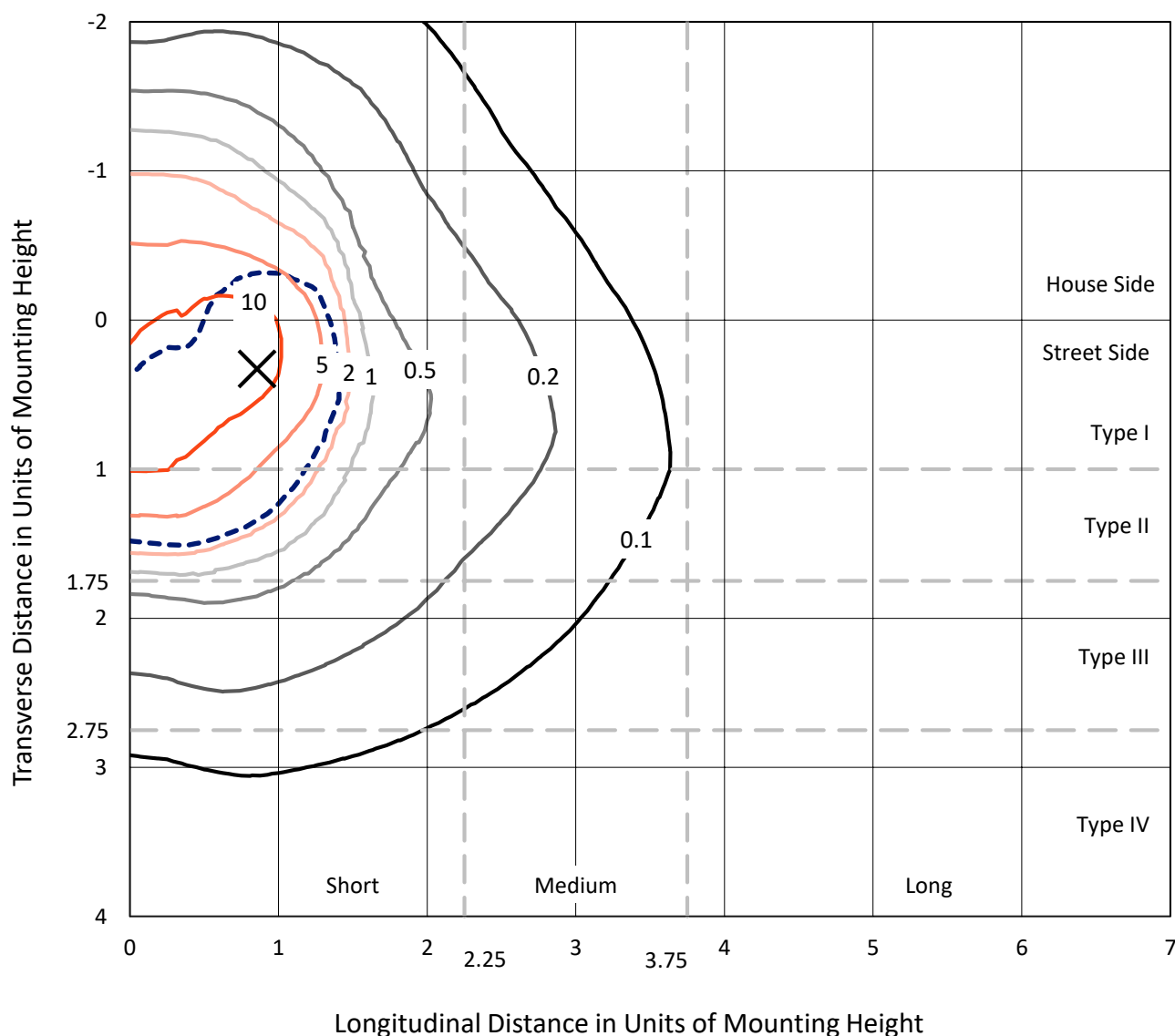
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

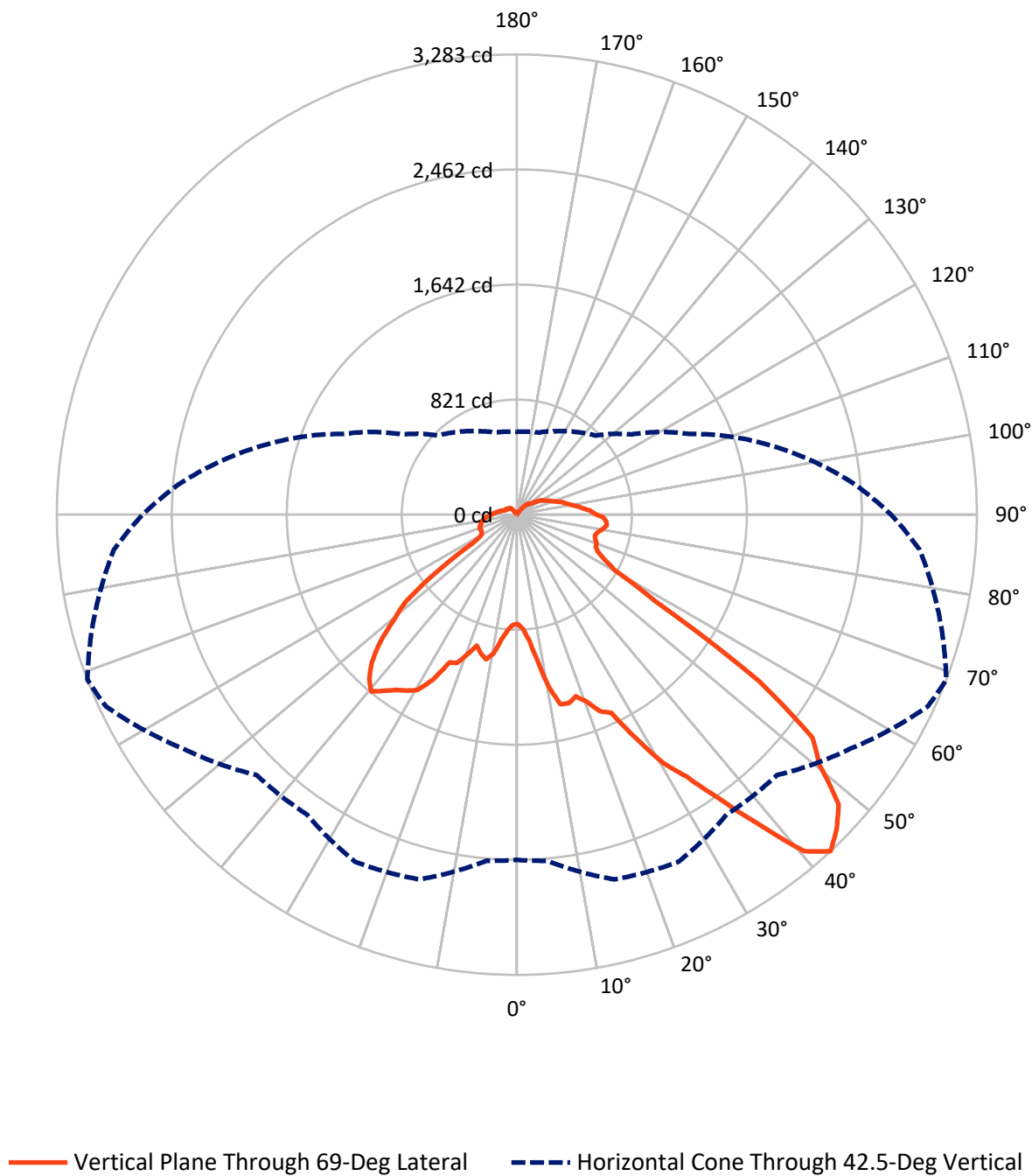


Based on 10 foot mounting height. Maximum calculated value = 16.3 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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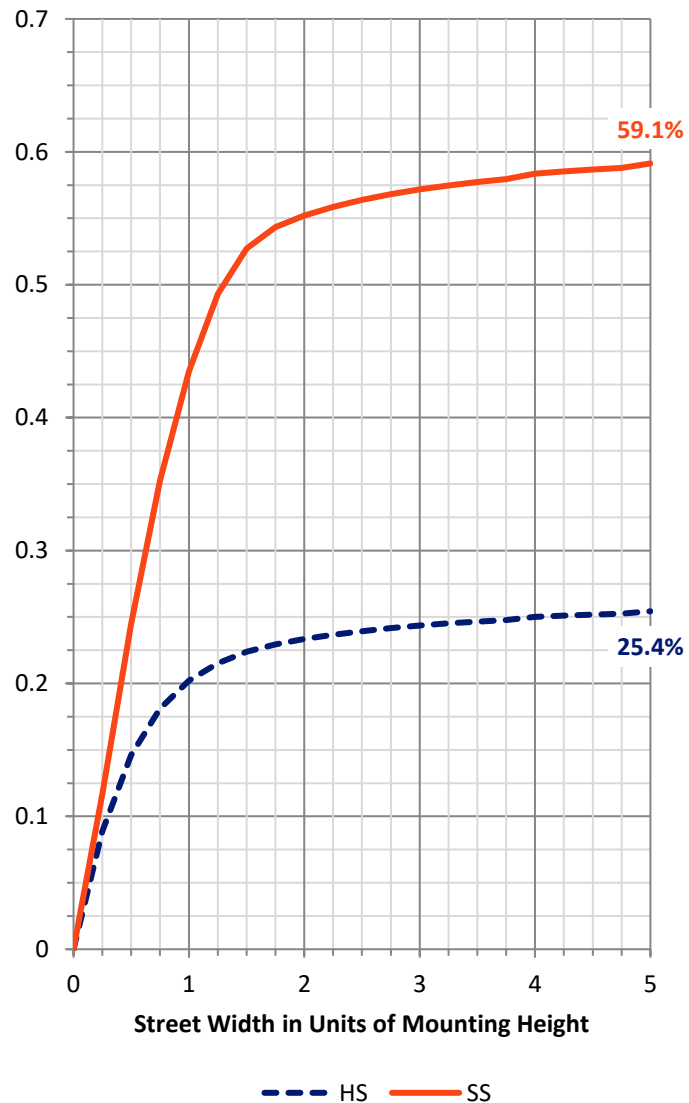
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1785.4	215.2	2000.5
	% Fixture	26.3	3.2	29.5
Street Side	Lumens	4137.1	638.3	4775.5
	% Fixture	61.1	9.4	70.5
Total	Lumens	5922.5	853.5	6776.0
	% Fixture	87.4	12.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.9	1.3
10°-20°	325.9	4.8
20°-30°	666.7	9.8
30°-40°	1121.4	16.5
40°-50°	1484.4	21.9
50°-60°	1070.5	15.8
60°-70°	420.5	6.2
70°-80°	378.9	5.6
80°-90°	369.3	5.4
90°-100°	311.4	4.6
100°-110°	221.4	3.3
110°-120°	149.3	2.2
120°-130°	97.6	1.4
130°-140°	58.4	0.9
140°-150°	14.8	0.2
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5922.5	87.4
0°-180°	6776.0	100.0

Coefficient of Utilization



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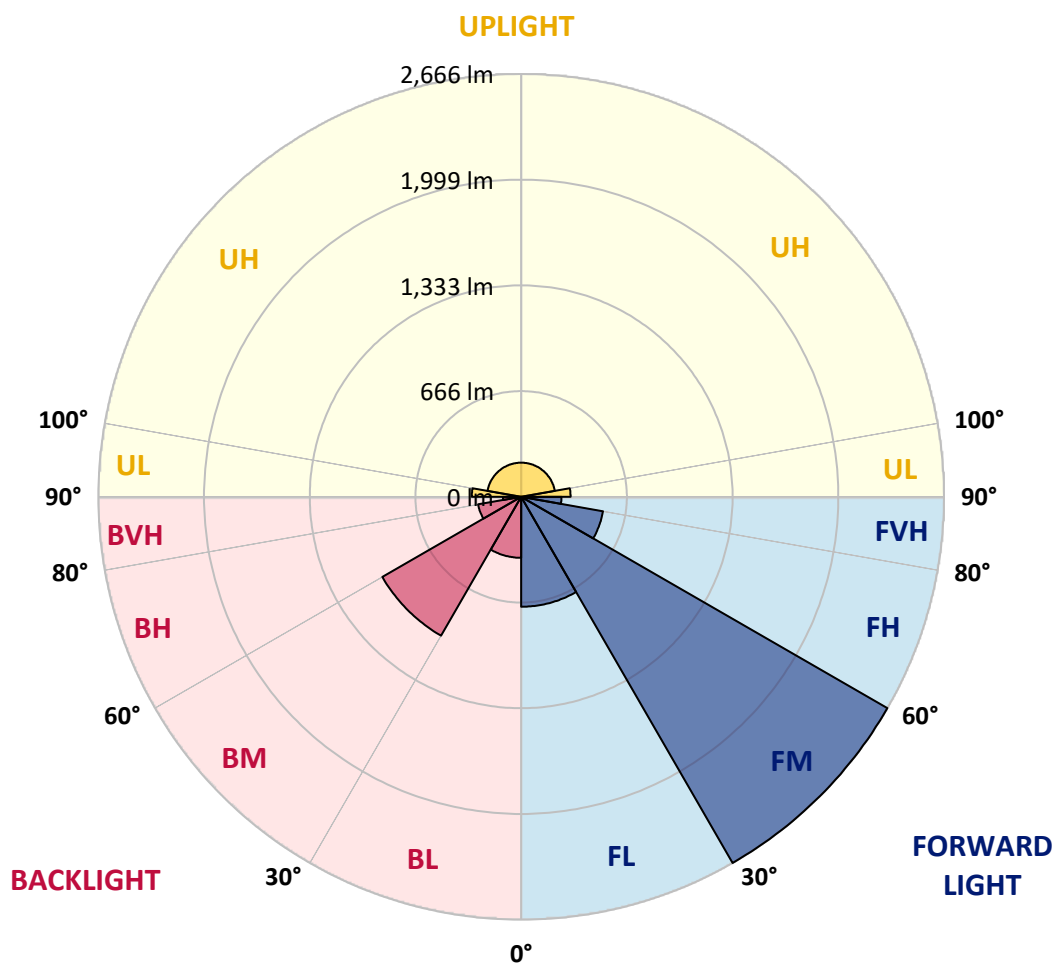
CATALOG NUMBER: UTLD-AF24-80-D-U-T3-A

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	693.0	10.2			
FM	(30°-60°)	2665.7	39.3			
FH	(60°-80°)	524.0	7.7			G0/660
FVH	(80°-90°)	254.4	3.8			G3/500
BL	(0°-30°)	384.5	5.7	B1/500		
BM	(30°-60°)	1010.6	14.9	B2/2500		
BH	(60°-80°)	275.4	4.1	B1/500		G1/500
BVH	(80°-90°)	114.8	1.7			G2/225
UL	(90°-100°)	311.4	4.6		U3/500	
UH	(100°-180°)	215.2	3.2		U3/500	

BUG Rating: B2-U4-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	69°	75°	85°
0°	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7
2.5°	830.4	825.8	824.0	824.0	821.2	820.3	822.1	819.4	814.7	813.8	808.3
5°	888.6	886.7	885.8	893.2	899.6	901.5	899.6	899.6	894.1	894.1	876.6
7.5°	981.8	979.0	986.4	1004.8	1011.3	1030.7	1053.7	1039.9	1043.6	1033.4	1000.2
10°	1089.7	1085.1	1119.2	1144.1	1201.4	1225.3	1254.9	1252.1	1246.6	1229.0	1173.7
12.5°	1187.5	1184.7	1229.0	1319.5	1396.0	1473.6	1480.0	1416.3	1387.7	1325.0	1255.8
15°	1309.3	1312.1	1379.4	1507.7	1621.2	1652.6	1574.1	1448.6	1395.1	1330.5	1228.1
17.5°	1505.8	1515.1	1629.5	1775.3	1850.9	1724.5	1556.6	1412.7	1361.9	1291.8	1193.1
20°	1620.3	1625.8	1782.7	1980.1	2002.3	1797.4	1623.0	1468.0	1423.7	1368.4	1287.2
22.5°	1688.5	1708.8	1888.8	2130.5	2117.6	1967.2	1725.5	1578.7	1523.4	1447.7	1381.3
25°	1798.3	1813.1	1985.7	2219.1	2161.9	2022.6	1816.8	1621.2	1566.7	1511.4	1444.9
27.5°	1946.9	1960.7	2154.5	2289.2	2229.2	2096.4	1953.4	1827.9	1799.3	1790.0	1761.4
30°	2026.3	2035.5	2253.2	2366.7	2264.3	2202.5	2162.8	2062.2	2053.9	2035.5	1970.0
32.5°	2071.5	2106.5	2359.3	2424.9	2291.1	2283.7	2307.7	2245.9	2229.2	2197.9	2122.2
35°	2112.1	2129.6	2367.7	2467.3	2334.4	2330.7	2495.9	2524.5	2487.6	2423.0	2242.2
37.5°	2424.9	2433.2	2596.5	2561.4	2391.6	2411.9	2684.1	2832.7	2799.5	2719.2	2594.6
40°	2594.6	2609.4	2760.7	2687.8	2512.5	2535.6	2819.8	3128.0	3157.5	3154.7	3045.8
42.5°	2462.7	2478.4	2693.4	2732.1	2611.2	2626.9	2908.4	3235.9	3283.0	3138.1	2887.1
45°	2892.7	2904.7	3025.5	2742.3	2543.9	2603.9	2839.2	3157.5	3199.9	3157.5	2942.5
47.5°	2891.7	2877.0	2977.6	2770.9	2539.3	2498.7	2688.8	3007.1	3091.0	2994.2	2760.7
50°	2542.0	2541.1	2789.3	2670.3	2489.4	2395.3	2523.6	2775.5	2795.8	2682.3	2369.5
52.5°	2220.0	2218.2	2505.1	2444.2	2326.1	2233.9	2313.2	2564.2	2641.7	2542.0	2280.9
55°	1934.9	2014.3	2266.2	2136.1	2087.1	1995.8	2075.2	2137.0	2097.3	1820.5	1228.1
57.5°	1171.8	1259.5	1588.0	1682.1	1693.2	1627.6	1447.7	1236.4	1160.8	927.3	553.6
60°	546.2	567.5	833.2	1014.0	1237.3	1131.2	915.3	797.2	797.2	700.3	480.7
62.5°	384.8	399.5	547.2	654.2	740.9	730.8	649.6	666.2	699.4	656.0	463.2
65°	361.7	370.9	487.2	519.5	552.7	559.2	548.1	598.8	633.9	628.4	469.7
67.5°	335.9	347.9	444.7	466.0	491.8	503.8	512.1	571.2	608.1	628.4	488.1
70°	305.4	319.3	410.6	440.1	465.0	492.7	502.9	566.5	604.4	624.7	494.6
72.5°	276.8	288.8	365.4	402.3	446.6	478.9	519.5	558.2	584.1	605.3	498.3
75°	249.1	263.0	327.6	370.0	421.7	482.6	531.5	560.1	577.6	594.2	493.6
77.5°	230.7	245.4	296.2	345.1	406.9	490.9	546.2	583.1	593.3	596.1	488.1
80°	214.1	230.7	284.2	335.9	403.2	494.6	563.8	608.1	621.9	628.4	519.5
82.5°	226.1	240.8	287.0	349.7	415.2	493.6	559.2	629.3	645.0	641.3	529.6
85°	255.6	267.6	323.9	382.9	433.7	485.3	542.5	619.1	641.3	660.7	561.0
87.5°	311.0	316.5	357.1	411.5	453.0	469.7	526.9	598.8	619.1	625.6	546.2
90°	340.5	346.0	394.0	439.2	452.1	457.7	469.7	541.6	556.4	582.2	522.2
92.5°	374.6	374.6	424.4	451.2	451.2	428.1	436.4	501.0	525.9	540.7	485.3
95°	407.8	406.0	433.7	449.4	425.4	393.1	406.9	457.7	473.3	489.0	451.2
97.5°	418.0	417.1	433.7	424.4	384.8	354.3	371.8	415.2	431.8	448.4	409.7
100°	406.9	402.3	406.9	386.6	349.7	326.6	336.8	372.8	390.3	404.1	369.1
102.5°	382.9	380.2	382.0	361.7	322.9	295.3	309.1	346.9	359.9	370.9	339.6
105°	371.8	367.2	358.9	329.4	291.6	272.2	284.2	322.0	334.0	356.2	330.3
107.5°	316.5	312.8	306.3	290.7	271.3	256.5	266.7	293.4	300.8	311.9	287.9
110°	273.1	271.3	269.4	265.7	253.7	243.6	249.1	263.9	273.1	281.4	257.4



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CATALOG NUMBER: UTLD-AF24-80-D-U-T3-A

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	69°	75°	85°
112.5°	263.9	261.1	259.3	252.8	237.1	226.1	229.8	246.4	251.9	254.7	228.8
115°	251.9	249.1	239.0	229.8	218.7	213.1	214.1	227.9	231.6	233.4	217.8
117.5°	223.3	220.5	214.1	210.4	203.9	201.1	205.8	213.1	214.1	215.0	201.1
120°	206.7	205.8	202.1	195.6	191.0	184.5	191.9	199.3	202.1	204.8	195.6
122.5°	188.2	186.4	182.7	174.4	174.4	170.7	169.8	174.4	175.3	182.7	178.1
125°	166.1	164.2	160.5	153.2	162.4	162.4	155.9	145.8	148.6	155.0	151.3
127.5°	148.6	146.7	143.0	139.3	152.2	156.9	145.8	127.3	129.2	131.0	128.3
130°	145.8	143.9	139.3	132.9	136.6	150.4	131.0	116.3	119.0	120.9	119.0
132.5°	143.0	142.1	135.6	127.3	122.7	135.6	113.5	109.8	112.6	115.3	113.5
135°	133.8	132.9	127.3	115.3	102.4	108.9	90.4	96.0	100.6	104.3	102.4
137.5°	119.0	118.1	113.5	101.5	84.0	78.4	69.2	82.1	85.8	90.4	90.4
140°	96.0	95.0	90.4	78.4	59.1	41.5	44.3	62.7	66.4	72.0	72.9
142.5°	70.1	68.3	63.7	52.6	33.2	13.8	24.9	37.8	42.4	48.0	51.7
145°	48.0	47.1	40.6	31.4	15.7	1.8	11.1	23.1	25.8	29.5	33.2
147.5°	30.4	30.4	25.8	17.5	4.6	1.8	2.8	12.0	14.8	18.5	21.2
150°	18.5	18.5	13.8	5.5	0.9	0.9	0.9	1.8	4.6	8.3	11.1
152.5°	4.6	4.6	2.8	1.8	0.9	0.0	0.9	0.9	0.9	0.9	1.8
155°	1.8	1.8	1.8	0.9	0.0	0.0	0.0	0.9	0.9	0.9	0.9
157.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.9	0.9	0.9	0.0	0.9	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°	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7
2.5°	805.5	800.0	792.6	782.5	772.3	762.2	752.0	746.5	743.7	741.9	740.9
5°	872.0	860.0	840.6	813.8	780.6	761.2	747.4	730.8	719.7	716.0	713.2
7.5°	989.1	969.8	931.0	873.8	833.2	776.0	727.1	695.7	672.6	659.7	659.7
10°	1146.0	1118.3	1051.0	972.5	868.3	767.7	692.0	634.8	608.1	597.0	594.2
12.5°	1215.2	1188.4	1109.1	1017.7	907.0	789.8	693.9	625.6	593.3	580.4	582.2
15°	1180.1	1143.2	1074.9	989.1	902.4	828.6	748.3	663.4	608.1	593.3	597.9
17.5°	1145.1	1107.2	1034.3	939.3	854.4	805.5	749.2	692.0	639.4	618.2	614.5
20°	1247.5	1219.8	1121.1	1013.1	885.8	762.2	722.5	696.6	679.1	680.0	671.7
22.5°	1345.3	1307.5	1217.0	1090.6	953.2	845.2	780.6	746.5	727.1	735.4	736.3
25°	1410.8	1382.2	1248.4	1097.1	982.7	902.4	809.2	761.2	728.9	728.9	725.2
27.5°	1743.9	1672.9	1460.6	1229.0	1058.3	925.5	812.9	757.5	716.9	704.9	706.8
30°	1918.3	1848.2	1605.5	1324.1	1145.1	980.8	823.0	737.2	727.1	718.8	721.6
32.5°	2067.8	1964.4	1677.5	1349.0	1129.4	989.1	845.2	741.9	692.9	684.6	688.3
35°	2141.6	2026.3	1734.7	1371.1	1136.8	954.1	818.4	722.5	691.1	682.8	685.6
37.5°	2482.1	2309.5	1825.1	1404.4	1134.9	907.9	782.5	704.9	646.8	621.9	621.9
40°	2873.3	2619.5	1982.9	1402.5	1064.8	868.3	742.8	670.8	624.7	605.3	604.4
42.5°	2670.3	2428.5	1890.6	1361.0	996.5	796.3	720.6	656.0	606.2	593.3	590.5
45°	2755.2	2496.8	1824.2	1244.7	894.1	739.1	668.0	622.8	565.6	536.1	535.2
47.5°	2485.8	2278.1	1688.5	1097.1	805.5	649.6	605.3	575.8	539.8	514.9	512.1
50°	2156.4	1946.9	1421.0	972.5	686.5	575.8	545.3	530.6	494.6	466.0	467.8
52.5°	2060.4	1806.6	1238.3	848.9	590.5	501.9	487.2	470.6	434.6	401.4	405.1
55°	1021.4	846.1	752.9	659.7	495.5	436.4	430.0	419.8	383.8	355.2	356.2
57.5°	476.1	410.6	359.9	382.9	373.7	379.2	376.5	370.0	335.9	295.3	292.5
60°	426.3	365.4	305.4	289.7	307.3	331.2	329.4	309.1	265.7	217.8	212.2
62.5°	411.5	349.7	296.2	273.1	280.5	296.2	285.1	259.3	224.2	179.9	179.0
65°	418.9	353.4	295.3	266.7	272.2	278.7	263.0	244.5	223.3	192.8	192.8
67.5°	434.6	367.2	301.7	263.9	266.7	273.1	258.4	245.4	234.4	214.1	214.1
70°	439.2	373.7	305.4	264.8	262.0	267.6	257.4	245.4	239.0	222.4	221.4
72.5°	441.1	377.4	303.6	260.2	253.7	258.4	251.0	245.4	242.7	229.8	227.9
75°	432.7	373.7	294.3	250.1	243.6	245.4	243.6	242.7	246.4	238.1	235.3
77.5°	422.6	368.2	287.0	239.0	231.6	232.5	230.7	233.4	237.1	231.6	227.0
80°	443.8	383.8	287.9	230.7	216.8	212.2	213.1	215.9	220.5	208.5	202.1
82.5°	451.2	384.8	275.0	212.2	194.7	188.2	190.1	197.5	201.1	190.1	183.6
85°	478.9	402.3	265.7	195.6	175.3	168.9	170.7	175.3	173.5	160.5	155.0
87.5°	467.8	390.3	249.1	176.2	159.6	154.1	155.0	156.9	150.4	133.8	129.2
90°	452.1	376.5	230.7	155.0	141.2	139.3	137.5	134.7	123.6	106.1	101.5
92.5°	423.5	351.5	214.1	140.3	125.5	124.6	121.8	116.3	106.1	88.6	84.0
95°	399.5	329.4	198.4	128.3	112.6	108.9	108.9	103.3	92.3	77.5	75.7
97.5°	359.9	299.9	182.7	118.1	100.6	96.9	96.0	92.3	84.0	72.9	72.0
100°	325.7	271.3	166.1	107.0	90.4	86.7	84.9	83.0	76.6	70.1	70.1
102.5°	301.7	251.0	155.0	97.8	81.2	77.5	77.5	75.7	72.0	67.4	67.4
105°	295.3	246.4	150.4	89.5	72.0	70.1	71.0	71.0	68.3	65.5	65.5
107.5°	256.5	212.2	129.2	79.4	65.5	63.7	64.6	65.5	64.6	63.7	63.7
110°	228.8	192.8	120.0	74.7	61.8	59.1	59.1	59.1	59.1	60.0	60.9



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	204.8	171.6	109.8	71.0	58.1	55.4	54.4	53.5	52.6	56.3	56.3
115°	195.6	167.0	107.0	69.2	55.4	52.6	49.8	48.0	46.1	48.9	49.8
117.5°	181.8	156.9	104.3	69.2	54.4	49.8	47.1	44.3	41.5	44.3	44.3
120°	178.1	155.9	106.1	70.1	52.6	46.1	43.4	39.7	37.8	40.6	41.5
122.5°	164.2	145.8	100.6	66.4	50.7	44.3	41.5	34.1	34.1	36.0	36.9
125°	139.3	123.6	86.7	60.0	48.0	44.3	40.6	30.4	31.4	33.2	33.2
127.5°	119.0	107.0	79.4	58.1	48.9	45.2	37.8	28.6	30.4	33.2	33.2
130°	112.6	102.4	80.3	60.9	50.7	46.1	31.4	24.9	29.5	32.3	32.3
132.5°	108.0	99.7	80.3	63.7	52.6	42.4	24.9	22.1	24.9	26.8	26.8
135°	97.8	92.3	76.6	60.9	48.0	33.2	20.3	19.4	23.1	24.9	24.9
137.5°	87.7	82.1	70.1	56.3	42.4	26.8	14.8	17.5	19.4	21.2	21.2
140°	72.0	68.3	58.1	46.1	31.4	14.8	11.1	13.8	16.6	18.5	18.5
142.5°	50.7	48.9	40.6	29.5	17.5	5.5	7.4	10.1	12.0	13.8	13.8
145°	33.2	31.4	25.8	18.5	7.4	1.8	4.6	6.5	9.2	10.1	10.1
147.5°	21.2	20.3	15.7	9.2	2.8	1.8	1.8	4.6	7.4	8.3	8.3
150°	10.1	9.2	6.5	2.8	1.8	0.9	0.9	1.8	4.6	5.5	5.5
152.5°	1.8	1.8	1.8	0.9	0.9	0.0	0.0	0.9	0.9	1.8	1.8
155°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.9	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	0.9	0.9	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)