

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: P239940

Luminaire Tested: **UTLD-AF24-40-D-U-T4W-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239940
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-16)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-40-D-U-T4W-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 500mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3657 lumens
Efficiency: N/A
Efficacy: 91.4 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 - G2

Input Watts (W): 40
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

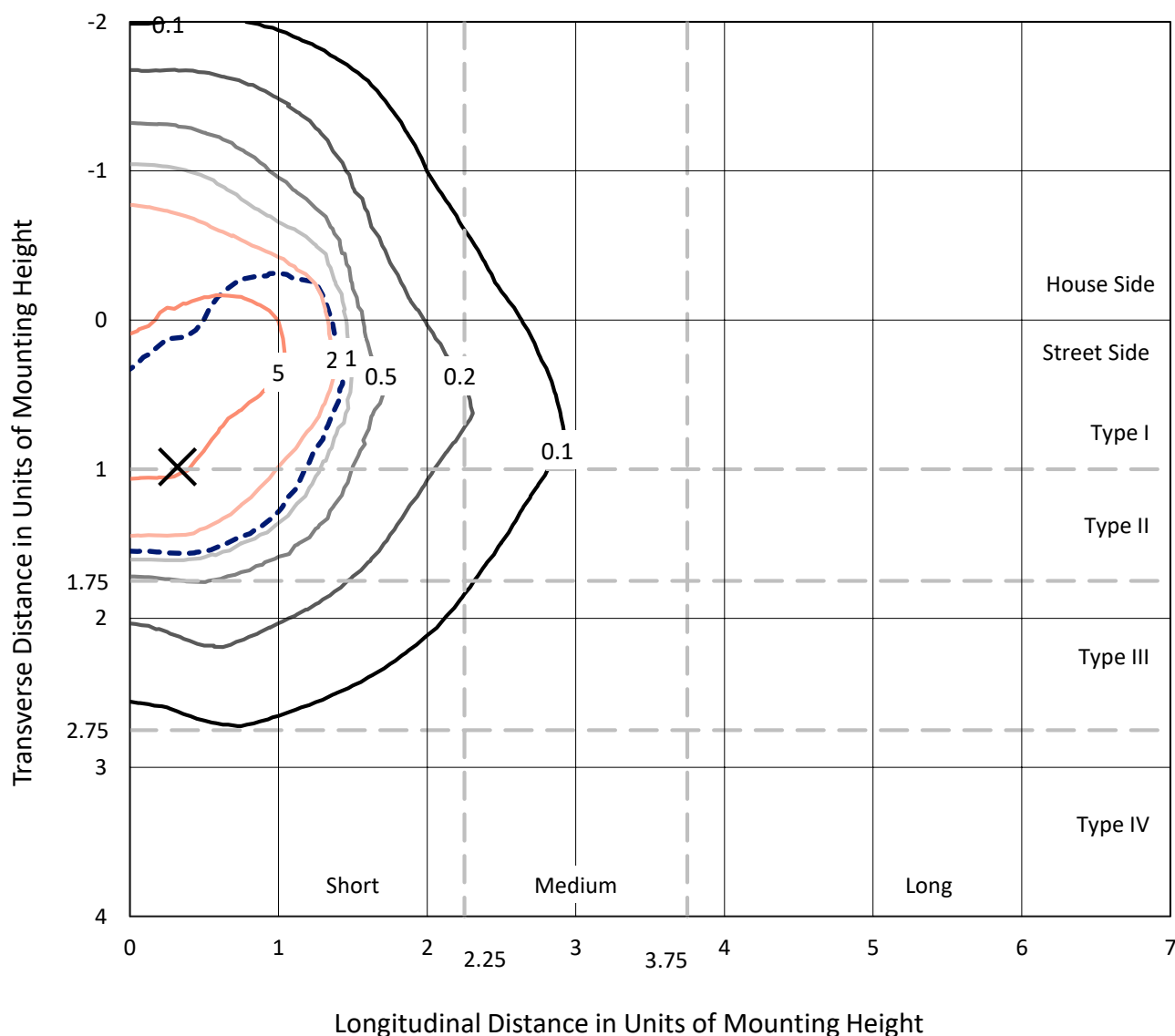


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

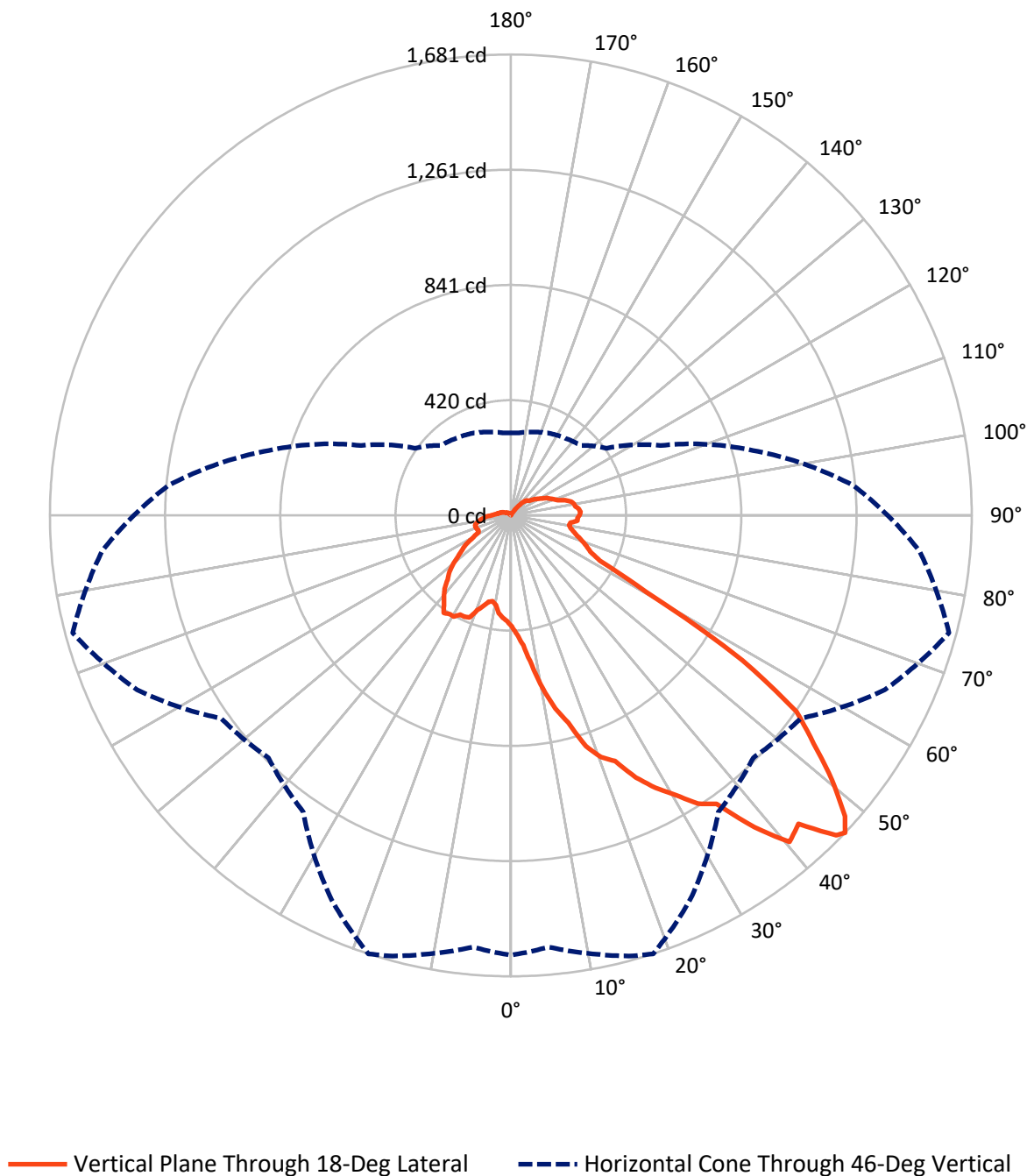


Based on 10 foot mounting height. Maximum calculated value = 8.9 fc
Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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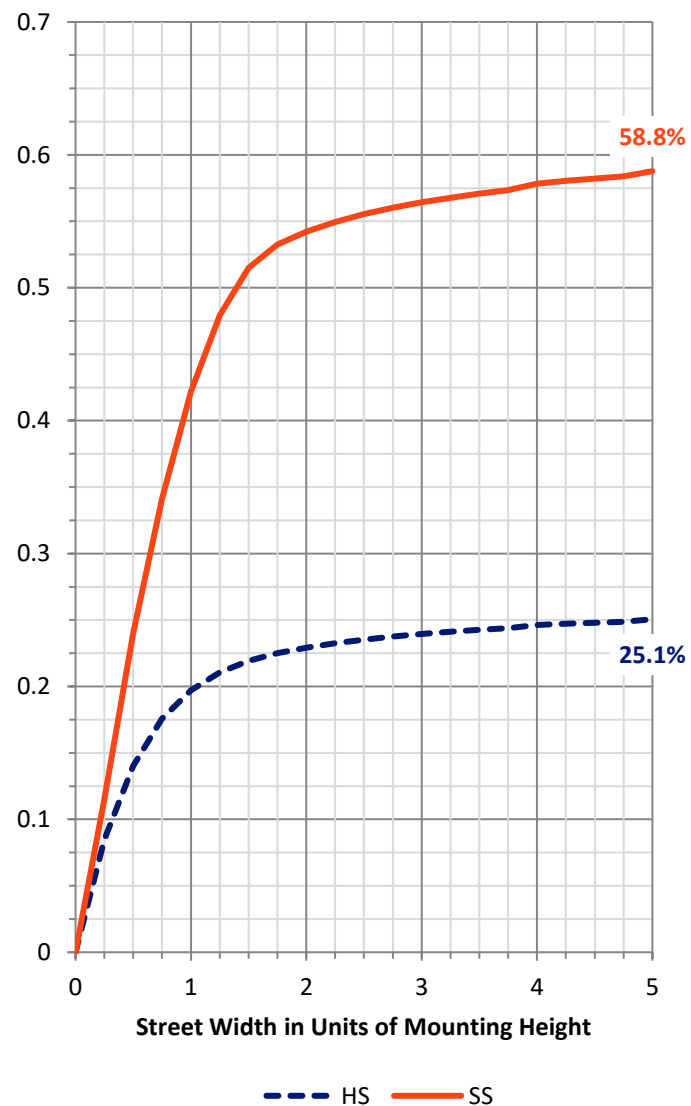
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	951.3	118.4	1069.7
	% Fixture	26.0	3.2	29.3
Street Side	Lumens	2232.3	355.0	2587.3
	% Fixture	61.0	9.7	70.7
Total	Lumens	3183.5	473.5	3657.0
	% Fixture	87.1	12.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.4	1.2
10°-20°	177.0	4.8
20°-30°	360.1	9.8
30°-40°	589.5	16.1
40°-50°	767.2	21.0
50°-60°	574.1	15.7
60°-70°	239.1	6.5
70°-80°	217.5	5.9
80°-90°	215.7	5.9
90°-100°	173.4	4.7
100°-110°	123.3	3.4
110°-120°	83.3	2.3
120°-130°	53.6	1.5
130°-140°	31.8	0.9
140°-150°	7.7	0.2
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3183.5	87.1
0°-180°	3657.0	100.0

Coefficient of Utilization



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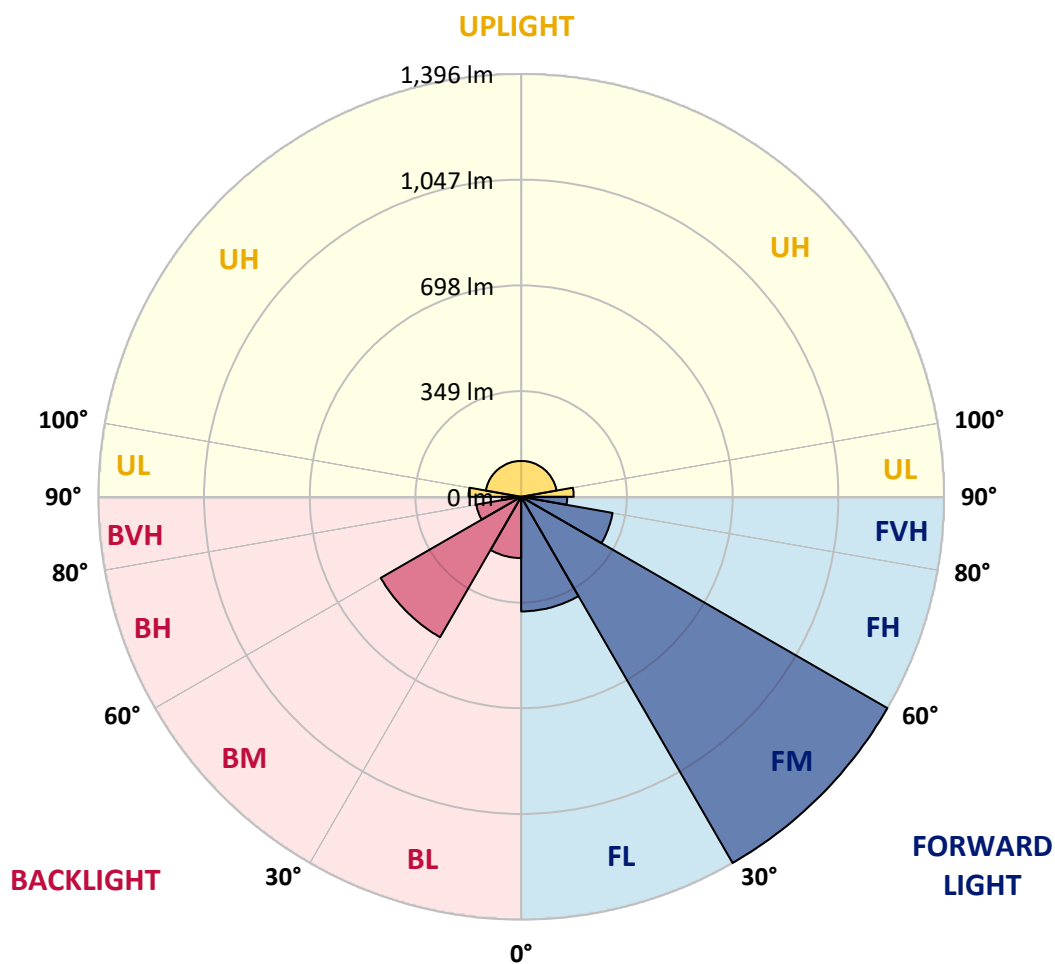
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	378.3	10.3			
FM	(30°-60°)	1395.7	38.2			
FH	(60°-80°)	306.3	8.4			G0/660
FVH	(80°-90°)	152.1	4.2			G2/225
BL	(0°-30°)	202.2	5.5	B1/500		
BM	(30°-60°)	535.1	14.6	B1/1000		
BH	(60°-80°)	150.4	4.1	B1/500		G1/500
BVH	(80°-90°)	63.6	1.7			G1/100
UL	(90°-100°)	173.4	4.7		U3/500	
UH	(100°-180°)	118.4	3.2		U3/500	

BUG Rating: B1-U3-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
0°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0
2.5°	435.4	433.4	434.4	434.4	431.8	430.8	428.3	425.3	421.2	416.7	412.6
5°	478.4	476.8	476.3	475.8	475.3	468.8	461.2	454.6	447.5	439.9	429.3
7.5°	557.8	557.2	554.2	550.7	545.6	534.5	520.8	514.3	504.7	493.0	476.8
10°	656.9	649.8	643.2	643.2	633.1	629.1	625.0	615.4	609.3	593.2	569.9
12.5°	713.5	710.0	723.6	722.6	735.8	759.5	767.6	775.7	738.8	691.8	648.3
15°	766.6	766.6	783.8	784.3	823.2	875.8	915.8	876.8	809.1	733.2	675.1
17.5°	839.4	844.0	868.7	885.4	938.0	1028.5	1001.2	929.4	828.3	737.8	672.5
20°	871.3	881.4	919.3	941.1	1022.5	1107.9	1081.6	997.2	879.9	776.7	711.0
22.5°	891.0	898.1	942.6	973.4	1077.6	1149.9	1145.9	1060.4	949.7	820.7	744.9
25°	971.9	976.5	1027.0	1058.9	1169.1	1192.4	1146.4	1087.2	978.5	844.5	777.7
27.5°	999.2	999.7	1077.6	1125.6	1216.1	1208.0	1148.4	1123.6	1068.5	962.8	917.8
30°	1036.1	1035.1	1131.2	1182.8	1237.9	1203.5	1155.5	1177.2	1180.7	1094.8	1012.9
32.5°	1081.6	1077.6	1192.4	1254.1	1271.8	1202.5	1167.1	1204.0	1257.6	1168.6	1080.6
35°	1123.6	1127.1	1250.5	1292.5	1309.2	1208.6	1173.2	1254.1	1362.8	1294.0	1146.4
37.5°	1393.6	1389.6	1428.5	1443.2	1401.2	1229.3	1196.4	1316.3	1475.5	1445.7	1287.4
40°	1454.8	1441.2	1557.5	1566.1	1492.2	1302.6	1260.1	1353.7	1564.5	1617.6	1491.7
42.5°	1403.2	1399.7	1526.6	1538.3	1485.2	1352.2	1302.1	1384.0	1574.7	1618.1	1408.8
45°	1630.3	1611.6	1677.8	1664.2	1517.0	1330.9	1276.3	1350.1	1539.8	1661.6	1495.8
46°	1604.5	1580.7	1664.2	1681.4	1547.4	1320.3	1250.5	1290.5	1504.9	1654.6	1496.8
47.5°	1525.6	1527.6	1638.9	1639.9	1516.5	1321.8	1208.0	1254.6	1427.0	1564.0	1353.7
50°	1331.9	1309.2	1512.5	1519.0	1401.2	1264.7	1164.6	1185.8	1350.1	1434.1	1220.2
52.5°	1282.4	1264.7	1384.5	1383.5	1277.3	1177.7	1085.2	1107.4	1293.0	1388.6	1235.9
55°	1178.2	1172.1	1272.8	1264.2	1189.8	1070.5	1004.3	1017.9	1072.5	1035.1	615.9
57.5°	782.8	806.0	980.0	996.7	997.2	941.1	858.1	732.2	633.6	539.0	301.4
60°	319.6	346.4	540.1	565.3	602.3	705.4	622.0	489.5	409.1	425.3	260.4
62.5°	241.2	251.3	360.5	365.1	379.3	429.3	424.3	355.0	349.4	384.8	249.3
65°	224.5	233.6	319.6	318.1	311.5	325.1	324.1	308.0	314.0	358.5	248.3
67.5°	212.4	221.5	296.8	297.3	291.8	294.3	296.3	288.2	302.4	348.4	254.9
70°	200.2	209.9	273.1	274.6	278.6	287.7	291.3	285.2	297.8	335.8	254.4
72.5°	185.6	196.2	250.8	253.3	261.4	282.2	294.3	292.8	294.3	317.1	253.3
75°	180.5	191.1	232.1	236.7	248.3	279.6	311.0	300.9	290.8	304.9	247.3
77.5°	158.3	170.4	212.4	222.5	248.3	287.7	322.1	318.6	299.9	296.8	240.7
80°	152.2	163.8	204.3	215.4	243.2	294.8	333.2	333.7	324.1	308.0	247.3
82.5°	153.2	164.3	206.3	219.0	250.8	299.9	324.1	336.8	337.8	317.6	254.9
85°	180.0	190.6	230.6	243.7	271.5	298.3	317.1	326.2	335.3	335.3	279.6
87.5°	192.2	201.8	232.1	243.7	270.5	301.9	298.9	314.0	323.1	334.8	288.2
90°	203.3	209.3	240.7	251.8	266.0	291.3	283.2	278.6	286.2	298.3	270.0
92.5°	211.4	216.9	244.7	254.4	266.5	272.1	259.9	246.8	265.5	275.1	251.3
95°	226.0	231.1	245.8	249.3	247.8	252.8	234.1	229.1	237.2	247.8	232.6
97.5°	215.9	219.5	233.6	237.7	236.7	229.1	210.4	207.3	214.4	222.5	205.8
100°	215.9	220.5	231.1	233.6	227.6	208.3	189.1	188.1	192.7	196.7	181.0
102.5°	220.5	222.5	224.5	226.0	214.9	193.7	179.5	176.0	177.5	179.5	165.4
105°	208.8	209.3	210.4	205.8	196.7	180.5	166.4	160.3	165.4	171.4	159.8
107.5°	180.5	180.0	180.5	179.0	178.0	168.4	158.3	150.7	150.7	152.7	141.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
110°	168.4	168.9	168.4	168.4	163.8	157.3	147.7	139.6	135.5	136.5	126.4
112.5°	154.2	154.2	154.7	155.2	152.7	146.6	137.0	128.9	123.9	122.9	113.3
115°	154.2	152.7	148.2	147.7	142.6	134.0	126.9	116.8	113.3	113.3	107.2
117.5°	137.5	136.5	133.0	132.0	128.9	121.9	117.8	109.7	107.2	105.7	100.1
120°	121.9	121.9	120.3	119.8	116.8	112.8	104.2	101.1	99.1	101.1	97.6
122.5°	113.3	113.3	110.7	109.7	106.2	103.2	95.6	90.0	86.5	90.5	88.5
125°	104.2	103.7	100.1	99.6	93.5	93.5	89.5	82.4	72.8	76.9	75.9
127.5°	91.5	91.0	86.5	86.0	82.4	86.5	85.5	76.4	63.2	65.7	65.7
130°	88.0	87.0	82.9	81.9	78.4	77.4	81.4	66.7	59.2	61.7	61.2
132.5°	88.0	87.0	81.9	80.4	74.8	69.3	73.3	58.2	56.6	59.7	59.2
135°	79.4	79.4	74.8	71.8	66.2	56.1	57.1	45.0	49.6	54.1	54.1
137.5°	67.3	67.3	62.7	61.7	55.1	45.0	40.5	34.4	42.0	47.0	47.5
140°	52.6	52.6	49.1	47.0	42.5	29.8	18.7	21.2	31.9	36.4	37.9
142.5°	37.9	37.4	34.4	31.9	27.3	16.2	6.1	12.1	18.7	24.8	26.8
145°	26.3	25.8	22.2	20.7	16.7	7.6	1.5	5.1	11.1	14.7	17.2
147.5°	15.7	15.7	13.1	12.6	8.6	2.0	1.0	1.5	5.6	9.1	10.6
150°	9.1	9.1	6.6	5.1	2.0	0.5	0.5	0.5	1.5	4.0	5.1
152.5°	2.0	2.0	1.5	1.0	1.0	0.5	0.0	0.5	0.5	0.5	1.0
155°	1.0	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
157.5°	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.5
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5
162.5°	0.5	0.5	0.0	0.0	0.5	0.0	0.5	0.0	0.5	0.5	0.5
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°	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0	405.0
2.5°	410.6	408.6	404.0	398.5	394.4	390.9	388.4	386.8	385.8	383.3	384.3
5°	425.8	421.7	411.1	402.5	393.4	385.3	379.3	375.2	373.7	371.7	371.7
7.5°	469.3	459.7	443.5	423.2	404.5	388.4	373.2	364.6	357.0	353.0	351.9
10°	554.7	542.1	507.2	465.7	424.8	388.4	359.0	337.8	327.7	324.1	324.1
12.5°	625.5	605.8	560.3	513.8	459.1	402.0	358.5	329.7	316.0	311.5	311.5
15°	646.8	621.0	567.4	521.9	472.8	424.8	384.3	342.8	318.1	310.5	308.0
17.5°	640.2	614.9	566.4	511.2	456.1	420.2	384.3	362.1	339.3	326.2	324.1
20°	682.2	658.9	608.3	546.6	478.9	398.5	375.7	370.7	365.1	356.5	356.5
22.5°	717.0	695.3	644.7	578.5	497.1	444.5	410.6	405.5	399.5	398.0	397.0
25°	743.8	720.6	651.3	574.9	515.8	477.4	433.9	416.7	402.0	397.5	395.9
27.5°	886.9	851.0	739.8	631.6	546.6	488.5	438.4	416.2	402.5	397.0	400.5
30°	970.9	932.0	810.1	668.0	583.5	512.8	447.5	421.2	424.8	429.3	432.9
32.5°	1035.1	984.0	840.9	672.5	577.5	517.3	462.2	430.8	420.7	426.8	427.8
35°	1098.3	1036.1	880.9	701.4	585.6	500.6	452.1	433.9	430.8	438.9	437.4
37.5°	1226.8	1145.3	930.4	709.5	578.0	480.9	434.9	415.7	400.0	398.0	400.5
40°	1394.6	1285.4	980.0	705.9	542.6	457.1	413.1	391.4	379.3	371.7	367.1
42.5°	1310.7	1201.0	916.3	677.6	499.6	414.7	390.9	371.7	356.0	346.4	343.9
45°	1402.7	1295.5	932.5	620.5	450.6	376.7	357.5	344.4	322.6	313.5	312.0
46°	1374.9	1253.6	914.3	602.8	426.8	360.5	344.4	330.7	314.5	301.9	300.9
47.5°	1273.8	1132.2	860.7	555.2	410.6	333.7	322.6	314.5	305.9	291.3	289.2
50°	1136.7	1028.5	764.1	493.5	345.9	297.8	288.2	285.7	276.1	258.4	259.9
52.5°	1126.1	1021.5	711.5	454.1	306.9	260.9	257.9	250.3	242.2	226.5	226.0
55°	543.1	461.7	394.9	355.5	256.9	231.1	229.6	226.0	215.9	201.8	204.3
57.5°	257.4	224.0	193.7	205.3	201.8	202.8	203.8	203.3	191.6	172.4	176.5
60°	225.5	195.7	167.4	158.8	166.9	179.5	179.5	171.9	155.7	133.0	131.0
62.5°	217.4	187.6	161.8	150.2	154.2	161.8	157.8	145.6	129.5	108.7	107.7
65°	218.5	186.6	161.3	146.6	150.2	153.2	145.6	136.0	127.4	112.8	112.8
67.5°	223.0	190.6	163.3	145.1	147.7	149.7	142.6	135.5	130.5	119.3	120.3
70°	224.0	193.2	165.4	145.6	145.1	147.2	142.1	135.5	133.0	125.4	124.9
72.5°	224.0	195.2	163.3	142.1	141.1	142.1	139.1	135.5	135.0	130.5	129.5
75°	216.4	190.6	156.3	135.0	134.0	135.0	134.0	133.5	135.5	133.5	131.5
77.5°	208.8	186.1	151.2	129.5	127.9	127.4	126.9	127.4	130.5	128.9	125.9
80°	212.4	188.1	150.2	124.9	120.3	118.3	118.3	118.8	118.8	114.3	109.7
82.5°	218.5	191.6	145.1	116.3	108.7	105.2	106.2	109.7	111.2	107.7	104.2
85°	240.7	207.8	146.1	110.2	99.1	95.1	96.6	101.1	98.1	93.0	89.0
87.5°	250.3	213.4	143.1	101.1	92.0	90.5	90.5	93.0	91.0	82.9	79.4
90°	239.2	204.3	129.5	86.0	79.9	81.4	81.9	79.4	70.8	61.7	58.7
92.5°	224.0	191.1	119.8	78.9	70.8	70.3	69.8	68.3	61.7	51.6	49.6
95°	211.4	180.0	110.7	72.3	64.7	63.2	62.7	60.7	54.6	47.0	46.0
97.5°	184.1	157.3	100.6	66.7	58.2	57.1	56.6	54.1	48.5	43.0	42.5
100°	165.4	140.1	90.0	60.2	52.6	51.1	50.6	49.1	44.5	40.5	39.9
102.5°	150.2	128.4	83.4	55.1	47.0	45.0	45.0	44.0	41.5	38.9	38.9
105°	146.1	125.9	80.9	50.6	42.0	41.0	40.5	40.5	38.4	36.9	36.9
107.5°	128.4	110.2	69.8	45.0	37.9	36.9	36.9	36.9	36.4	35.9	36.4



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CATALOG NUMBER: UTLD-AF24-40-D-U-T4W-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	115.8	99.6	64.2	42.0	35.4	33.9	33.9	33.9	33.9	34.9	34.9
112.5°	103.2	89.5	59.2	39.9	32.9	31.4	30.3	29.8	29.3	31.4	31.9
115°	97.6	85.5	56.6	37.9	31.4	29.8	27.8	26.8	25.3	26.8	27.3
117.5°	92.0	80.9	55.6	37.4	30.3	27.8	25.8	24.8	22.8	24.3	24.3
120°	90.5	80.4	56.6	37.9	29.3	25.8	24.3	21.7	20.7	21.7	22.2
122.5°	83.4	74.3	53.1	35.4	27.8	24.8	22.8	18.7	18.2	19.7	19.7
125°	70.8	63.7	46.0	31.9	26.3	24.3	22.2	16.7	17.2	18.2	18.7
127.5°	62.2	56.1	42.0	30.8	26.3	24.8	20.7	14.7	16.2	17.7	18.2
130°	58.2	53.6	42.0	31.9	27.3	25.3	17.2	13.7	15.2	16.7	16.7
132.5°	56.6	53.1	43.0	33.9	28.3	24.3	14.2	12.6	14.2	15.2	15.2
135°	52.1	49.1	41.0	32.9	25.8	19.2	11.1	11.1	13.1	14.2	14.2
137.5°	46.0	43.5	36.9	30.3	22.8	14.7	8.1	9.6	11.1	12.1	12.1
140°	36.9	35.4	30.3	23.8	16.2	8.1	6.1	7.6	9.1	10.1	10.1
142.5°	26.3	25.3	21.2	15.2	9.6	3.5	4.0	5.6	7.1	8.1	8.1
145°	17.2	16.2	13.1	9.6	4.0	1.0	2.5	4.0	5.6	6.1	6.1
147.5°	10.6	10.1	8.1	4.6	1.5	1.0	1.0	3.0	4.0	4.6	4.6
150°	5.6	5.1	3.5	1.5	0.5	0.5	0.5	1.0	2.5	3.0	3.5
152.5°	1.5	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.5
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
157.5°	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.5	0.0	0.5	0.5	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)