

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: P241024

Luminaire Tested: **UTLD-AF24-80-D-U-T4W-CL**

Issue Date: 5/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P241024  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-47)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 5/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-AF24-80-D-U-T4W-CL  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 4000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND CLEAR LENS PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7673.1 lumens  
Efficiency: N/A  
Efficacy: 92.4 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 - U2 - G2

Input Watts (W): 83  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

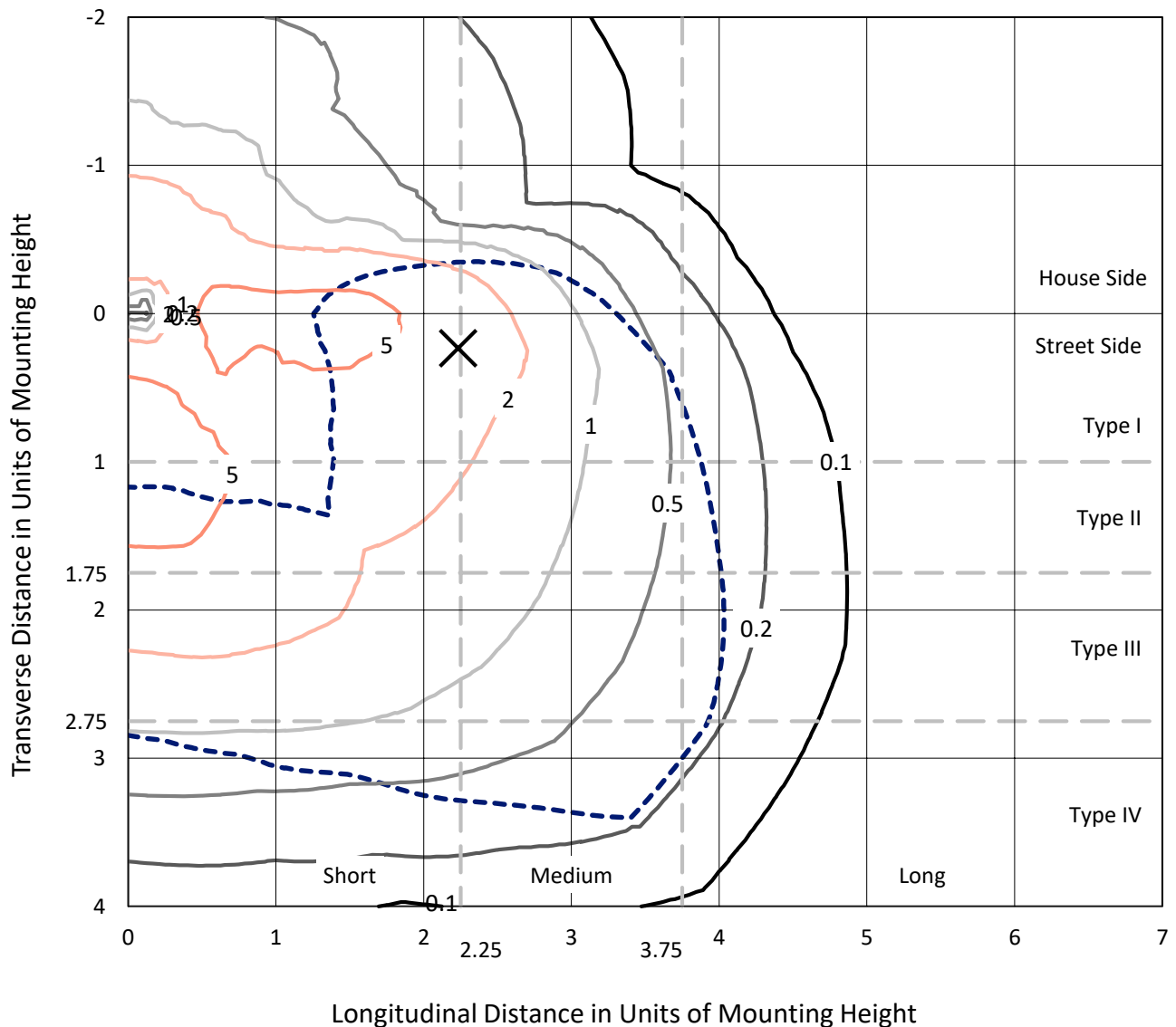


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

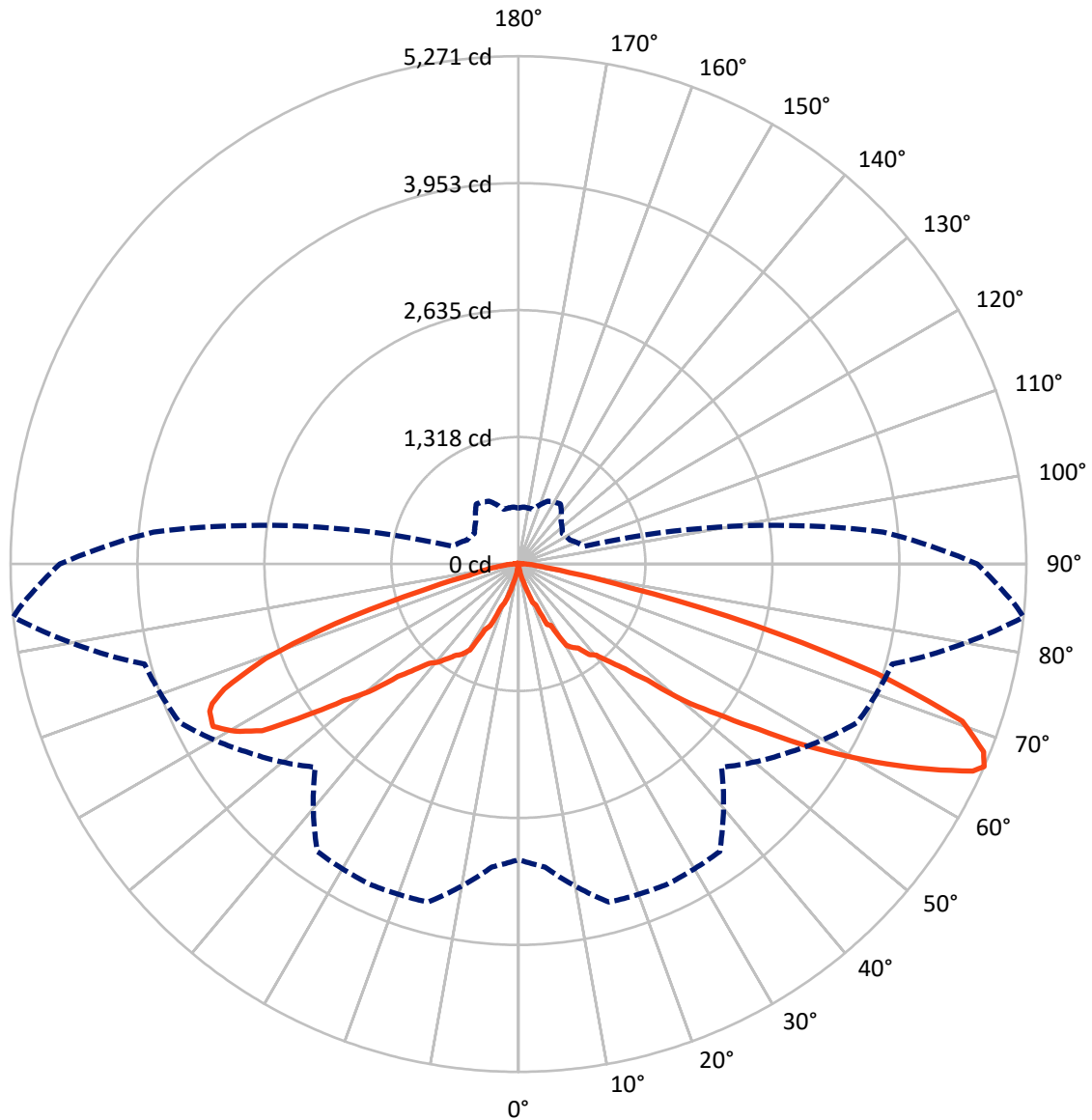


Based on 10 foot mounting height. Maximum calculated value = 8.7 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral      - - - Horizontal Cone Through 66-Deg Vertical

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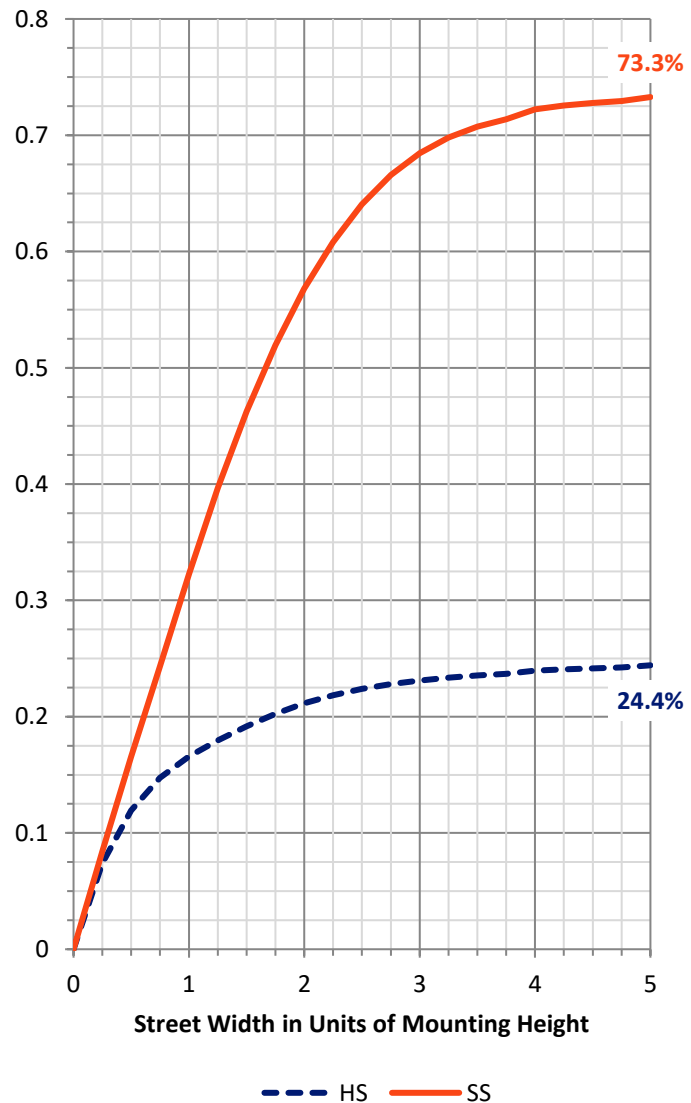
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1920.1	46.7	1966.8
	% Fixture	25.0	0.6	25.6
<b>Street Side</b>	Lumens	5662.4	43.9	5706.3
	% Fixture	73.8	0.6	74.4
<b>Total</b>	Lumens	7582.5	90.6	7673.1
	% Fixture	98.8	1.2	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5.6	0.1
10°-20°	71.2	0.9
20°-30°	263.2	3.4
30°-40°	541.2	7.1
40°-50°	897.9	11.7
50°-60°	1565.6	20.4
60°-70°	2306.3	30.1
70°-80°	1683.1	21.9
80°-90°	248.3	3.2
90°-100°	46.3	0.6
100°-110°	21.2	0.3
110°-120°	10.0	0.1
120°-130°	6.9	0.1
130°-140°	4.1	0.1
140°-150°	1.8	0.0
150°-160°	0.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	7582.5	98.8
0°-180°	7673.1	100.0



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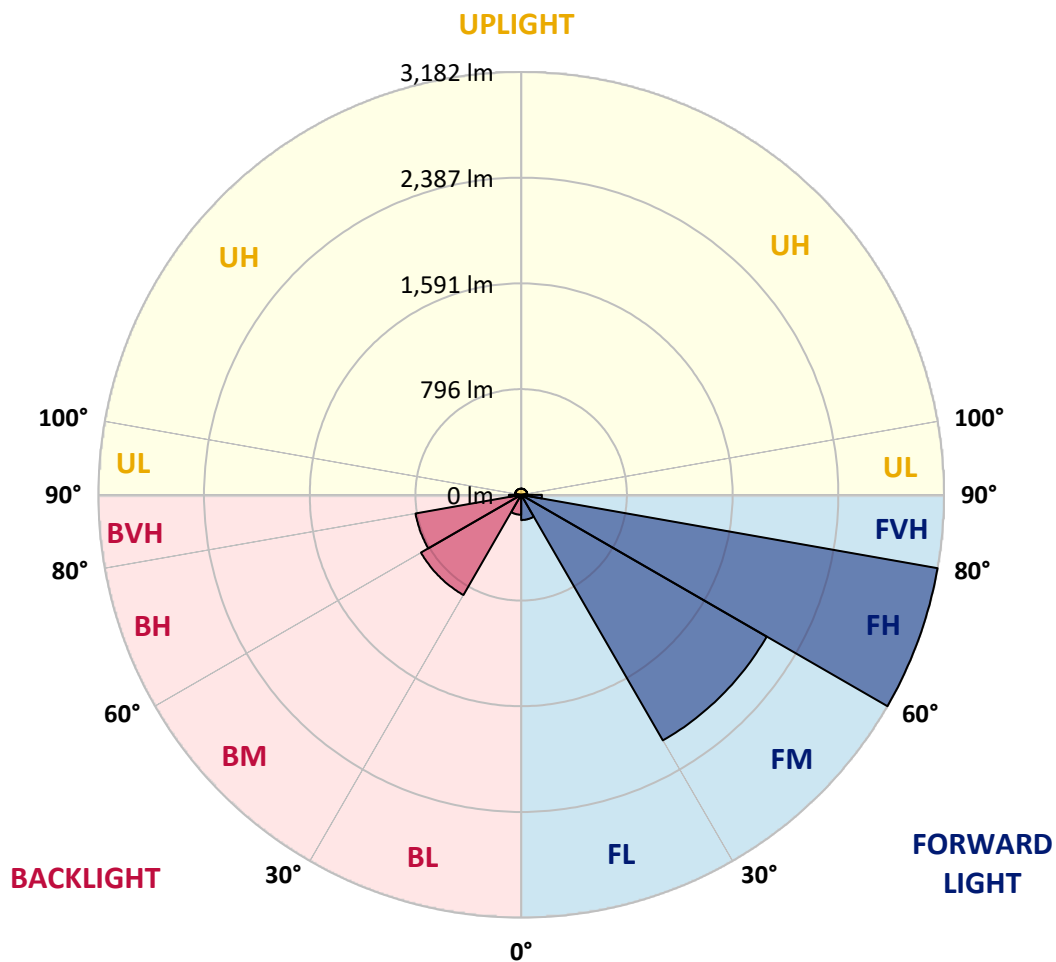
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	189.9	2.5			
FM	(30°-60°)	2134.0	27.8			
FH	(60°-80°)	3182.4	41.5			G2/5000
FVH	(80°-90°)	156.1	2.0			G2/225
BL	(0°-30°)	150.2	2.0	B1/500		
BM	(30°-60°)	870.6	11.3	B1/1000		
BH	(60°-80°)	807.1	10.5	B2/1000		G2/1000
BVH	(80°-90°)	92.2	1.2			G1/100
UL	(90°-100°)	46.3	0.6		U2/50	
UH	(100°-180°)	46.7	0.6		U2/50	

**BUG Rating: B2-U2-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
2.5°	45.3	40.6	40.6	38.7	34.9	31.2	24.6	20.8	17.9	17.9	17.0
5°	86.8	91.6	105.7	97.2	80.2	104.8	47.2	31.2	19.8	17.0	17.0
7.5°	137.8	145.4	111.4	99.1	99.1	105.7	85.9	52.0	26.4	19.8	18.9
10°	288.9	272.8	189.8	192.5	163.3	114.3	78.4	68.9	40.6	32.1	29.3
12.5°	280.4	276.6	282.2	246.3	248.3	180.2	100.0	160.5	145.4	138.7	152.9
15°	361.5	357.7	286.9	292.6	265.3	275.6	232.2	231.3	223.7	187.8	180.2
17.5°	502.2	498.4	561.6	373.8	266.2	344.5	299.2	257.7	267.1	282.2	293.6
20°	501.2	495.5	522.0	448.4	454.0	355.9	319.1	469.1	428.5	430.5	405.9
22.5°	740.0	706.0	620.1	468.2	511.6	416.2	472.9	463.5	432.3	457.8	450.2
25°	718.3	731.5	702.3	692.8	521.0	596.6	520.1	535.2	660.7	694.7	695.7
27.5°	833.5	808.0	785.3	711.7	700.4	580.5	535.2	712.7	691.9	723.0	722.1
30°	993.9	985.4	979.8	790.9	758.0	640.0	721.2	727.7	840.0	981.6	1010.9
32.5°	1148.8	1108.2	1016.6	915.6	760.8	756.1	716.5	904.3	963.7	1030.7	1041.2
35°	1394.2	1393.3	1238.4	978.9	851.4	803.2	927.8	974.2	973.1	1074.2	1135.5
37.5°	1603.7	1614.1	1451.8	1181.8	880.7	811.7	968.4	1050.6	1054.4	1191.2	1167.6
40°	1922.7	1895.3	1750.0	1411.2	1006.2	865.5	1061.9	1074.2	1151.5	1243.1	1277.2
42.5°	2149.3	2138.9	2091.7	1679.2	1151.5	964.6	1172.3	1119.5	1219.6	1385.7	1421.5
45°	2290.9	2239.9	2286.2	1875.6	1384.7	1177.0	1196.9	1267.6	1374.3	1549.9	1650.9
47.5°	2433.4	2472.1	2363.5	2023.7	1594.3	1275.2	1316.7	1540.5	1643.4	1801.0	1865.1
50°	2680.7	2639.2	2601.4	2246.5	1917.1	1431.9	1647.2	1616.9	1905.8	2227.6	2238.9
52.5°	2831.7	2831.7	2770.4	2441.0	2139.8	1663.2	1757.5	1865.1	2295.6	2587.2	2693.0
55°	3046.0	3090.3	3079.1	2670.3	2402.3	1977.5	2046.4	2272.9	2652.4	3027.1	3288.6
57.5°	3197.9	3259.3	3392.4	2915.7	2657.1	2105.8	2468.3	2720.3	3131.9	3587.8	3904.0
60°	3423.5	3424.5	3561.4	3132.8	2978.9	2350.3	2631.6	3135.7	3395.3	4126.8	4293.8
62.5°	3446.2	3484.9	3771.8	3470.8	3299.9	2605.1	3165.8	3350.0	3691.6	4668.5	4814.9
65°	3172.5	3276.3	3756.8	3629.3	3593.4	2840.2	3322.5	3773.8	3932.3	5182.1	5140.5
66°	3067.7	3155.5	3632.2	3664.2	3641.6	2980.9	3414.1	3884.1	4016.3	5270.8	5198.1
67.5°	3030.9	3095.0	3483.0	3702.1	3804.9	3235.7	3637.8	3938.0	4170.2	5206.6	5177.4
70°	2775.1	2855.4	3219.6	3951.2	4153.2	3703.0	3925.7	4068.3	4278.7	4888.5	4762.0
72.5°	2116.3	2198.3	2467.4	3260.2	4182.4	4393.9	4372.2	4232.5	3925.7	3884.1	3681.3
75°	1049.6	1137.4	1327.2	1900.1	3254.6	4316.5	4346.7	3816.2	3172.5	2505.1	2349.4
77.5°	542.8	611.6	512.5	727.7	1673.5	3062.0	3076.2	2516.5	1838.8	1170.5	1093.0
80°	370.0	385.1	349.2	358.6	689.1	1565.0	1459.2	1339.5	740.0	537.0	560.7
82.5°	271.8	251.0	240.7	261.5	371.9	489.0	524.8	579.6	395.5	272.8	287.9
85°	128.4	141.6	138.7	159.5	226.6	167.0	256.8	348.3	263.3	175.5	172.8
87.5°	80.2	79.3	84.9	98.2	136.9	110.5	140.7	172.8	158.6	109.5	107.6
90°	52.9	47.2	44.4	52.9	76.4	54.7	75.5	98.2	89.7	59.4	55.6
92.5°	35.9	35.9	38.7	44.4	66.1	58.5	53.8	55.6	55.6	46.2	44.4
95°	26.4	28.3	32.1	33.0	39.7	34.0	43.4	48.2	49.1	37.7	36.8
97.5°	22.6	24.6	26.4	27.4	33.0	27.4	35.9	42.5	41.5	30.2	31.2
100°	20.8	22.6	22.6	23.6	26.4	20.8	29.3	39.7	37.7	26.4	25.5
102.5°	19.8	19.8	18.9	18.9	20.8	16.1	24.6	34.9	28.3	21.7	19.8
105°	18.9	18.9	16.1	15.1	16.1	13.2	19.8	26.4	19.8	17.9	17.9
107.5°	17.9	17.0	14.1	12.3	13.2	10.4	16.1	17.0	14.1	16.1	17.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
110°	16.1	16.1	12.3	10.4	10.4	8.5	11.4	12.3	12.3	16.1	17.0
112.5°	15.1	14.1	10.4	8.5	8.5	7.6	8.5	9.4	10.4	15.1	16.1
115°	14.1	13.2	9.4	7.6	6.6	5.6	6.6	7.6	9.4	15.1	15.1
117.5°	13.2	12.3	8.5	6.6	5.6	4.7	5.6	6.6	9.4	15.1	15.1
120°	13.2	12.3	8.5	5.6	4.7	4.7	4.7	5.6	10.4	15.1	16.1
122.5°	12.3	12.3	8.5	5.6	4.7	3.8	3.8	5.6	9.4	14.1	14.1
125°	12.3	12.3	7.6	4.7	3.8	3.8	3.8	4.7	9.4	13.2	14.1
127.5°	11.4	11.4	7.6	4.7	3.8	2.9	2.9	4.7	8.5	13.2	13.2
130°	11.4	11.4	7.6	3.8	2.9	2.9	2.9	3.8	8.5	12.3	12.3
132.5°	9.4	9.4	6.6	3.8	2.9	1.8	2.9	3.8	7.6	10.4	11.4
135°	9.4	9.4	6.6	3.8	2.9	1.8	1.8	3.8	6.6	9.4	9.4
137.5°	8.5	8.5	5.6	3.8	2.9	1.8	1.8	2.9	5.6	8.5	8.5
140°	7.6	7.6	6.6	3.8	2.9	1.8	1.8	1.8	4.7	6.6	6.6
142.5°	7.6	7.6	5.6	3.8	1.8	0.9	0.9	1.8	3.8	4.7	4.7
145°	6.6	6.6	5.6	3.8	1.8	0.9	0.9	1.8	2.9	3.8	3.8
147.5°	6.6	6.6	5.6	2.9	0.9	0.9	0.9	1.8	2.9	3.8	3.8
150°	5.6	5.6	3.8	1.8	0.0	0.0	0.9	0.9	1.8	2.9	2.9
152.5°	3.8	3.8	2.9	0.9	0.0	0.0	0.0	0.9	1.8	1.8	1.8
155°	1.8	1.8	0.9	0.0	0.0	0.0	0.0	0.0	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	0.9
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°	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
2.5°	17.0	17.0	17.0	17.0	17.0	17.0	16.1	16.1	16.1	16.1	16.1
5°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	17.0	17.9	17.9	17.9
7.5°	17.9	17.9	17.0	16.1	17.0	18.9	28.3	65.2	95.3	117.0	116.1
10°	29.3	29.3	27.4	23.6	29.3	64.1	126.4	127.5	105.7	97.2	101.0
12.5°	154.8	137.8	117.0	96.3	94.4	114.3	107.6	150.1	168.0	180.2	178.4
15°	177.5	187.8	171.8	192.5	197.3	117.0	183.1	245.4	264.3	271.8	280.4
17.5°	292.6	323.8	231.3	219.0	219.9	234.1	247.3	259.6	265.3	262.4	263.3
20°	440.8	420.0	451.2	385.1	294.5	313.3	286.9	283.2	373.8	454.0	443.7
22.5°	450.2	486.1	444.6	406.8	450.2	319.1	395.5	420.0	432.3	442.7	455.9
25°	728.6	711.7	623.0	467.3	444.6	425.8	429.4	438.9	462.5	498.4	520.1
27.5°	774.0	770.2	689.1	629.6	473.8	532.3	440.8	530.5	573.0	610.7	618.3
30°	1041.2	1051.5	792.9	605.1	549.3	455.9	511.6	546.6	579.6	632.4	633.4
32.5°	1106.2	1128.0	876.9	669.2	575.8	472.0	514.4	540.8	666.4	715.5	717.4
35°	1123.3	1179.0	904.3	645.6	556.0	470.0	474.8	565.4	627.7	727.7	763.6
37.5°	1301.6	1261.1	960.9	654.2	520.1	452.1	512.5	542.8	640.9	705.1	717.4
40°	1377.2	1354.5	997.7	671.2	513.5	503.1	474.8	506.0	552.2	598.4	598.4
42.5°	1517.9	1429.1	1018.4	658.9	499.3	539.9	433.2	468.2	511.6	484.3	495.5
45°	1704.7	1585.8	1089.2	593.7	472.9	458.7	416.2	470.0	442.7	442.7	437.0
47.5°	1946.4	1784.0	1065.7	571.1	532.3	434.2	549.3	441.7	407.7	422.9	423.8
50°	2328.6	2136.0	1138.3	556.0	505.0	425.8	470.0	426.7	426.7	437.0	433.2
52.5°	2808.1	2428.7	1169.5	555.1	477.6	495.5	466.3	510.7	441.7	478.5	473.8
55°	3327.2	2869.5	1201.6	547.5	472.9	447.4	570.1	489.0	458.7	525.8	527.6
57.5°	3985.2	3380.1	1333.7	532.3	474.8	448.4	538.1	547.5	558.8	603.1	609.8
60°	4394.8	3663.3	1216.7	560.7	470.0	511.6	625.8	611.6	576.7	740.9	765.5
62.5°	4707.3	3877.6	1002.4	584.3	556.0	515.4	646.6	713.6	681.5	747.6	766.5
65°	4763.9	3858.7	766.5	584.3	548.4	600.4	775.9	711.7	606.9	613.6	606.0
66°	4760.1	3801.1	706.0	589.0	556.0	625.8	761.7	720.2	587.1	593.7	579.6
67.5°	4604.4	3619.0	613.6	582.4	608.9	642.8	748.5	672.1	564.5	566.3	552.2
70°	4005.1	3052.6	522.0	598.4	631.5	644.7	818.4	625.8	518.2	505.0	502.2
72.5°	2945.9	2165.3	489.0	595.6	640.9	624.8	690.0	514.4	447.4	420.9	418.2
75°	1656.6	1106.2	487.0	571.1	567.3	536.1	522.0	396.4	370.0	338.9	333.2
77.5°	763.6	533.3	412.5	459.7	428.5	423.8	388.9	330.4	315.3	294.5	286.0
80°	441.7	376.7	293.6	304.8	307.7	299.2	314.4	297.4	281.3	266.2	252.1
82.5°	257.7	238.9	214.3	201.0	201.0	215.2	258.6	247.3	235.1	221.8	190.7
85°	161.4	154.8	146.3	140.7	140.7	129.3	186.0	206.7	195.4	167.0	149.1
87.5°	105.7	110.5	98.2	99.1	96.3	85.9	125.5	138.7	119.0	95.3	79.3
90°	48.2	52.9	57.6	56.7	61.4	47.2	68.9	70.8	63.2	43.4	31.2
92.5°	36.8	43.4	48.2	48.2	52.9	32.1	50.0	55.6	52.0	40.6	29.3
95°	31.2	38.7	46.2	45.3	45.3	25.5	46.2	52.0	49.1	34.9	25.5
97.5°	25.5	31.2	37.7	37.7	41.5	21.7	42.5	50.0	47.2	34.9	24.6
100°	23.6	28.3	33.0	34.0	37.7	17.0	38.7	47.2	42.5	29.3	23.6
102.5°	21.7	23.6	27.4	27.4	28.3	15.1	31.2	38.7	34.0	22.6	22.6
105°	19.8	19.8	19.8	17.9	17.9	12.3	18.9	26.4	20.8	17.9	19.8
107.5°	18.9	17.9	15.1	14.1	13.2	10.4	13.2	16.1	12.3	16.1	17.9



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CATALOG NUMBER: UTLD-AF24-80-D-U-T4W-CL

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	17.9	17.9	14.1	12.3	11.4	9.4	11.4	10.4	10.4	16.1	17.0
112.5°	17.9	17.0	12.3	10.4	9.4	8.5	9.4	7.6	9.4	16.1	17.0
115°	17.0	17.0	11.4	9.4	9.4	7.6	7.6	6.6	8.5	15.1	17.0
117.5°	17.0	17.0	11.4	8.5	7.6	6.6	6.6	6.6	8.5	15.1	17.0
120°	17.0	16.1	11.4	8.5	6.6	5.6	5.6	5.6	8.5	15.1	16.1
122.5°	16.1	15.1	10.4	7.6	6.6	5.6	4.7	5.6	8.5	14.1	15.1
125°	15.1	15.1	10.4	6.6	5.6	4.7	3.8	4.7	8.5	14.1	15.1
127.5°	15.1	14.1	9.4	5.6	4.7	4.7	3.8	4.7	8.5	13.2	14.1
130°	13.2	13.2	8.5	5.6	3.8	3.8	2.9	3.8	8.5	13.2	13.2
132.5°	12.3	11.4	7.6	4.7	3.8	2.9	2.9	2.9	7.6	11.4	12.3
135°	10.4	9.4	6.6	3.8	2.9	2.9	1.8	2.9	6.6	10.4	10.4
137.5°	8.5	8.5	6.6	3.8	2.9	1.8	1.8	2.9	6.6	9.4	10.4
140°	7.6	6.6	4.7	2.9	1.8	1.8	1.8	2.9	5.6	7.6	8.5
142.5°	5.6	5.6	3.8	2.9	1.8	1.8	0.9	1.8	4.7	6.6	6.6
145°	4.7	4.7	3.8	1.8	1.8	0.9	0.9	0.9	3.8	4.7	5.6
147.5°	3.8	3.8	2.9	1.8	0.9	0.9	0.0	0.9	2.9	3.8	3.8
150°	2.9	2.9	2.9	1.8	0.9	0.0	0.0	0.0	0.9	1.8	1.8
152.5°	1.8	1.8	1.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.8	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	0.0	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)