

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: P240000

Luminaire Tested: **UTLD-AF24-100-D-U-T2U-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P240000  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-18)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-AF24-100-D-U-T2U-A  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
AND REFRACTOR PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7450 lumens  
Efficiency: N/A  
Efficacy: 77.6 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 - G2

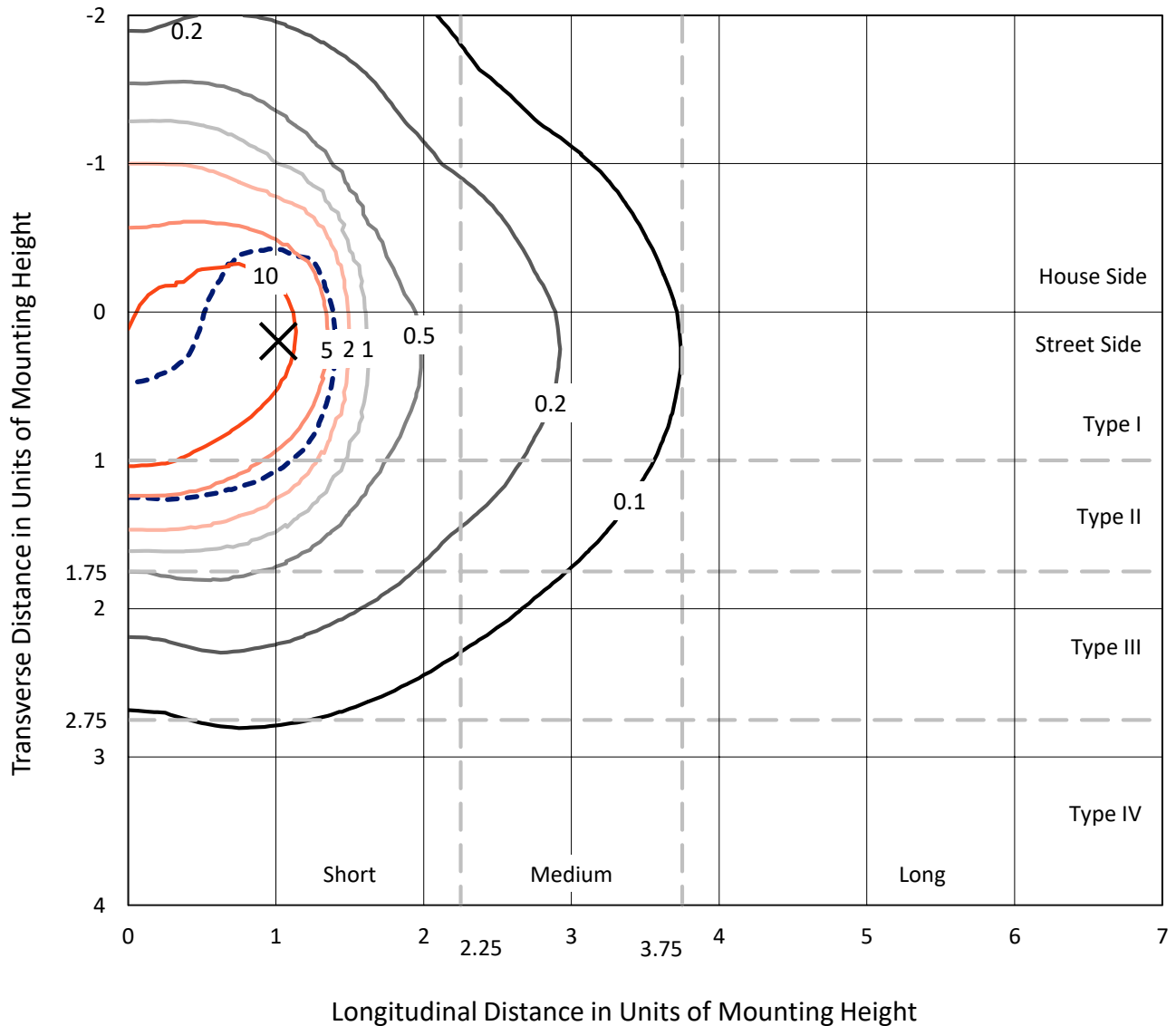
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

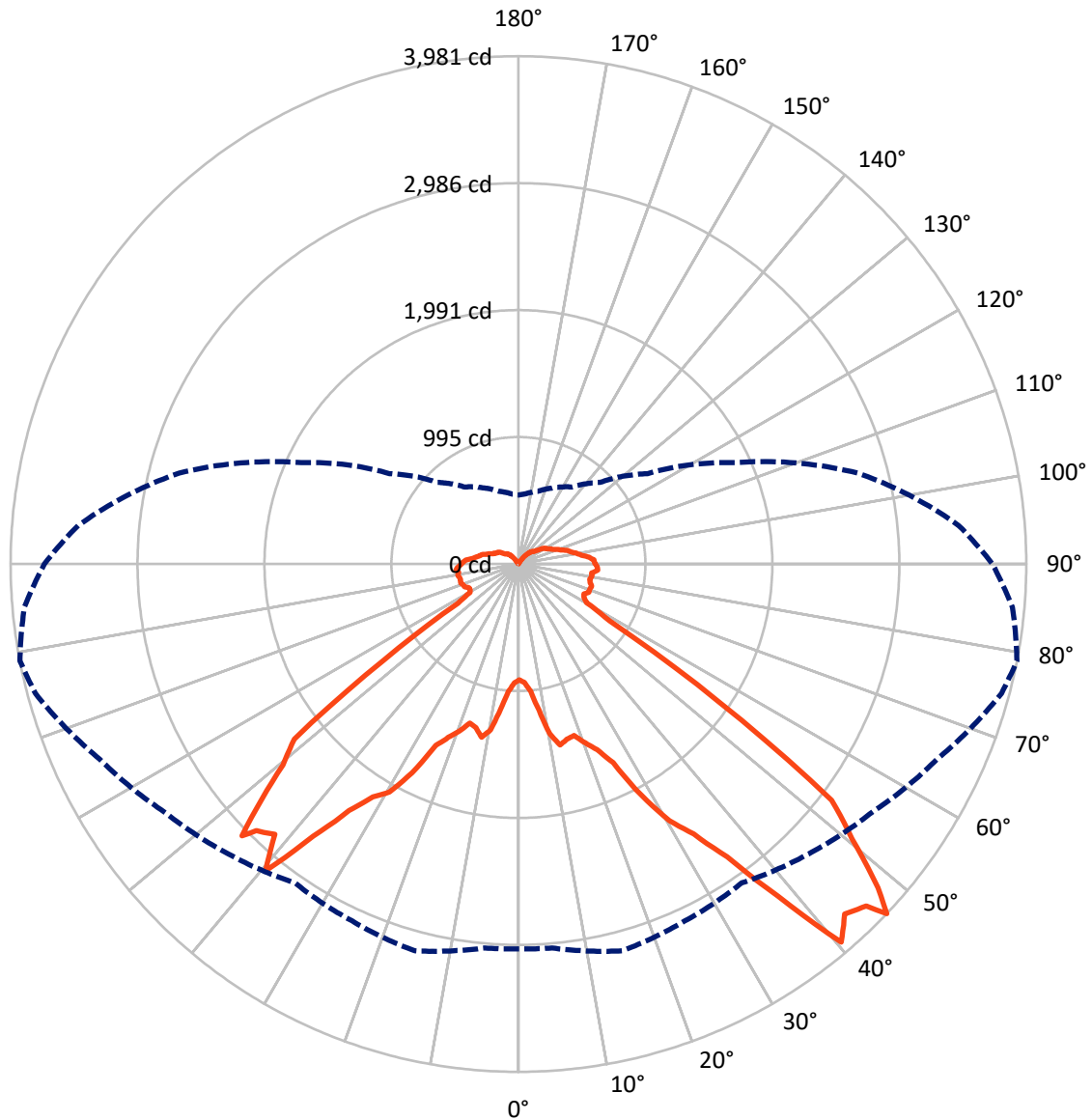
✕ Max cd  
 - - - 1/2 Max cd



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



— Vertical Plane Through 79-Deg Lateral    - - - Horizontal Cone Through 46-Deg Vertical

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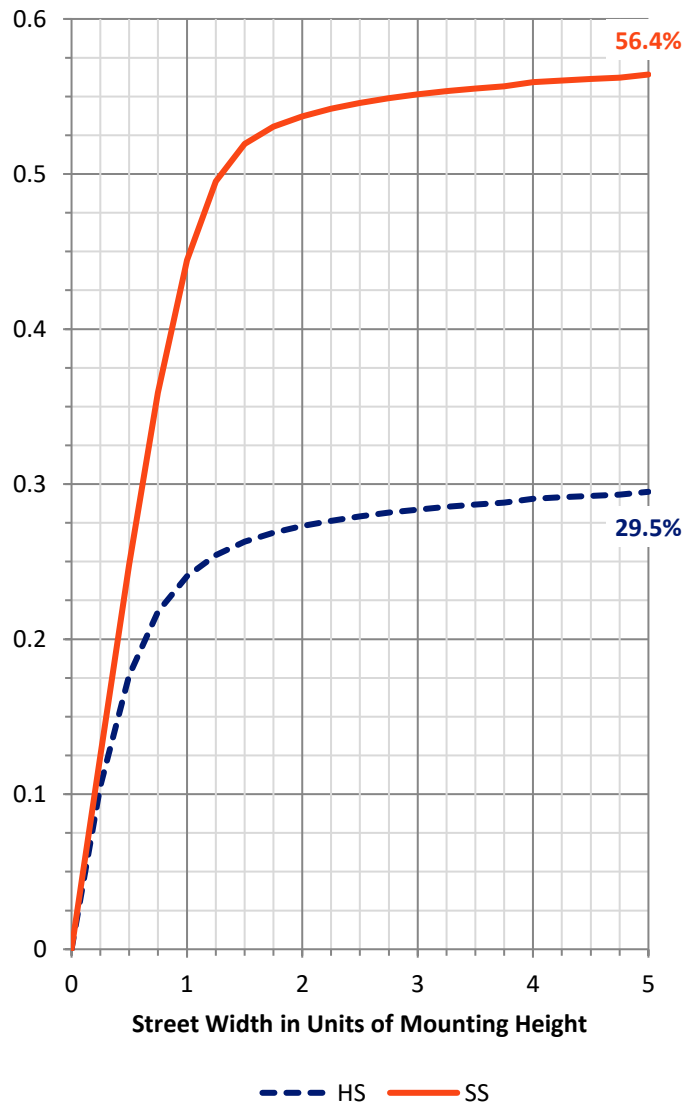
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2270.9	282.4	2553.4
	% Fixture	30.5	3.8	34.3
<b>Street Side</b>	Lumens	4283.9	612.8	4896.6
	% Fixture	57.5	8.2	65.7
<b>Total</b>	Lumens	6554.8	895.2	7450.0
	% Fixture	88.0	12.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.9	1.3
10°-20°	353.9	4.8
20°-30°	715.1	9.6
30°-40°	1309.0	17.6
40°-50°	1808.9	24.3
50°-60°	1154.7	15.5
60°-70°	413.6	5.6
70°-80°	371.4	5.0
80°-90°	330.2	4.4
90°-100°	303.0	4.1
100°-110°	235.5	3.2
110°-120°	163.5	2.2
120°-130°	109.4	1.5
130°-140°	65.6	0.9
140°-150°	17.4	0.2
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6554.8	88.0
0°-180°	7450.0	100.0

**Coefficient of Utilization**



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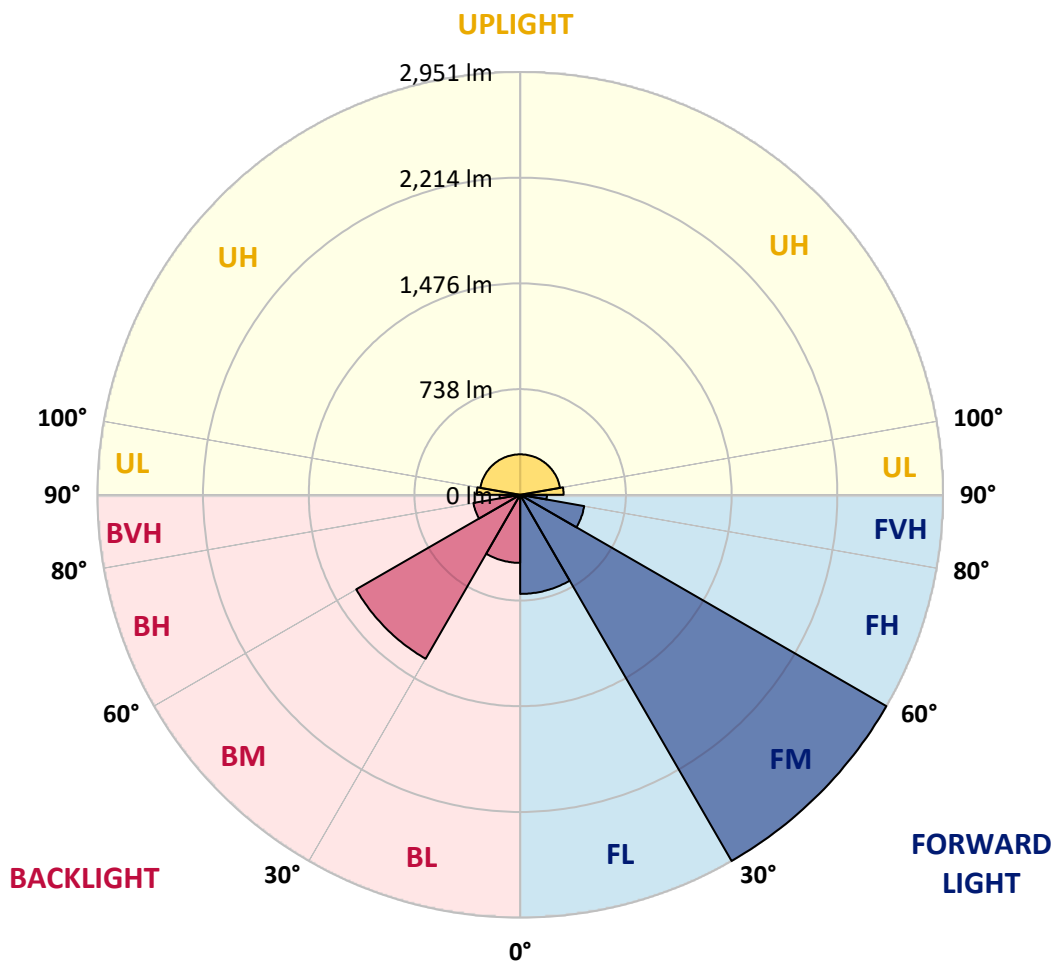
CATALOG NUMBER: UTLD-AF24-100-D-U-T2U-A

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	692.0	9.3			
FM (30°-60°)	2951.4	39.6			
FH (60°-80°)	453.9	6.1			G0/660
FVH (80°-90°)	186.5	2.5			G2/225
BL (0°-30°)	474.9	6.4	B1/500		
BM (30°-60°)	1321.2	17.7	B2/2500		
BH (60°-80°)	331.1	4.4	B1/500		G1/500
BVH (80°-90°)	143.7	1.9			G2/225
UL (90°-100°)	303.0	4.1		U3/500	
UH (100°-180°)	282.4	3.8		U3/500	

**BUG Rating: B2-U4-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	908	908	908	908	908	908	908	908	908	908	908
2.5°	923	926	925	923	927	929	929	928	929	931	935
5°	967	966	969	977	988	991	1000	998	1003	1003	1009
7.5°	1044	1045	1055	1063	1075	1101	1126	1159	1158	1156	1164
10°	1124	1124	1144	1173	1222	1277	1301	1330	1360	1355	1347
12.5°	1149	1153	1188	1260	1366	1460	1508	1502	1472	1455	1428
15°	1195	1200	1238	1348	1474	1558	1576	1502	1437	1425	1402
17.5°	1368	1368	1407	1508	1603	1584	1513	1478	1436	1413	1380
20°	1488	1495	1557	1628	1680	1618	1619	1554	1511	1497	1466
22.5°	1604	1614	1632	1743	1758	1770	1734	1675	1603	1580	1548
25°	1850	1853	1872	1925	1885	1865	1813	1765	1737	1725	1691
27.5°	2142	2133	2141	2145	2084	2029	1953	2004	2044	2055	2025
30°	2202	2187	2248	2313	2283	2217	2212	2273	2348	2334	2292
32.5°	2444	2421	2449	2456	2451	2432	2424	2501	2555	2524	2463
35°	2639	2638	2539	2562	2576	2620	2664	2769	2817	2819	2768
37.5°	3056	3026	2989	2843	2766	2786	2938	3124	3232	3303	3222
40°	3199	3212	3181	3165	3053	3006	3181	3501	3794	3898	3888
42.5°	2964	2994	2976	3087	3176	3236	3447	3721	3777	3750	3607
45°	3160	3160	3112	3043	3074	3269	3436	3621	3796	3824	3745
46°	3018	3021	3139	3087	3052	3214	3388	3621	3920	3981	3888
47.5°	2756	2751	2968	2985	3009	3142	3333	3620	3789	3793	3677
50°	2184	2193	2491	2649	2807	2938	3196	3358	3396	3389	3263
52.5°	1773	1797	1955	2154	2345	2597	2897	3048	3131	3076	2960
55°	1229	1281	1480	1659	1939	2181	2440	2454	2075	1902	1687
57.5°	760	770	946	1199	1409	1599	1602	1245	969	842	700
60°	422	431	587	774	979	1002	895	720	646	613	563
62.5°	314	321	423	538	620	653	601	589	590	575	542
65°	283	287	371	429	477	484	503	545	568	565	551
67.5°	257	262	338	380	409	443	459	524	586	596	583
70°	229	237	305	349	382	415	447	528	578	592	586
72.5°	198	208	265	311	348	384	439	508	576	601	605
75°	174	187	234	275	314	357	415	501	565	581	589
77.5°	157	171	207	245	282	329	396	499	554	572	586
80°	144	158	188	218	249	302	376	496	565	584	592
82.5°	134	147	173	200	225	273	362	491	562	578	582
85°	135	145	169	194	217	258	355	493	599	624	628
87.5°	142	149	174	203	229	271	368	489	595	618	628
90°	154	160	190	224	255	294	365	478	578	599	605
92.5°	191	196	229	266	293	306	353	495	581	593	593
95°	247	253	285	313	318	311	347	440	530	556	571
97.5°	309	311	329	334	319	303	339	411	481	499	503
100°	329	329	341	337	308	286	307	374	442	462	468
102.5°	333	335	347	334	295	259	273	337	400	422	434
105°	353	354	347	315	267	235	247	311	378	399	412
107.5°	330	327	308	278	246	223	237	284	335	352	361



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	273	271	264	253	233	216	225	268	317	330	338
112.5°	263	261	254	241	218	205	220	257	287	293	294
115°	253	251	235	220	202	196	206	240	268	275	281
117.5°	218	216	204	195	188	191	208	227	247	253	257
120°	194	193	187	181	177	179	197	218	238	244	247
122.5°	183	182	175	166	166	166	180	196	218	223	230
125°	161	161	154	147	157	161	164	165	182	190	193
127.5°	143	144	138	133	151	160	158	145	155	161	165
130°	141	141	134	128	137	155	149	136	148	152	154
132.5°	137	137	130	121	123	143	130	127	138	142	143
135°	126	126	121	109	101	121	105	111	122	125	126
137.5°	112	112	107	97	80	91	81	94	105	108	109
140°	92	91	88	76	58	51	55	75	86	88	91
142.5°	68	69	64	54	35	19	32	48	60	63	65
145°	50	49	44	35	19	3	15	30	38	41	43
147.5°	33	33	29	21	6	1	4	15	24	26	27
150°	22	22	16	6	1	1	1	3	10	12	14
152.5°	7	7	3	2	1	0	0	1	2	2	3
155°	2	2	2	1	0	0	0	0	1	1	1
157.5°	1	1	1	0	0	0	0	0	0	0	0
160°	1	1	0	0	0	0	0	0	0	0	0
162.5°	1	1	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	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°	908	908	908	908	908	908	908	908	908	908	908
2.5°	936	935	932	929	921	911	901	894	890	887	886
5°	1007	1009	995	972	950	930	911	893	883	875	872
7.5°	1158	1161	1133	1097	1041	973	915	876	848	831	828
10°	1345	1337	1304	1227	1125	1020	911	827	782	761	760
12.5°	1421	1410	1373	1309	1202	1065	930	819	752	725	724
15°	1386	1367	1299	1240	1198	1122	1001	874	782	748	739
17.5°	1356	1337	1280	1195	1116	1083	1024	919	823	775	765
20°	1444	1432	1361	1248	1161	1029	981	909	837	807	799
22.5°	1525	1519	1430	1312	1195	1103	1007	954	884	863	854
25°	1676	1648	1502	1343	1242	1152	1029	946	861	834	829
27.5°	2031	1966	1753	1514	1311	1168	1027	905	812	778	776
30°	2257	2198	1958	1695	1419	1206	1014	867	797	764	765
32.5°	2394	2315	2045	1712	1444	1225	1022	854	760	718	717
35°	2691	2581	2189	1849	1493	1197	988	827	740	709	705
37.5°	3114	2990	2459	1960	1513	1160	944	796	692	649	646
40°	3725	3543	2833	2094	1497	1132	896	749	663	635	626
42.5°	3422	3216	2610	2068	1457	1055	850	726	646	624	612
45°	3611	3371	2637	1923	1304	941	772	680	600	569	566
46°	3716	3465	2754	1879	1234	905	737	659	590	550	541
47.5°	3488	3209	2532	1793	1178	824	691	626	579	542	536
50°	3059	2786	2190	1529	1014	727	616	577	530	490	483
52.5°	2792	2563	2005	1387	861	613	550	516	468	421	415
55°	1535	1377	1239	1042	714	518	479	459	410	364	361
57.5°	632	568	563	531	491	436	414	402	353	297	295
60°	532	474	418	368	365	364	357	336	282	224	222
62.5°	518	461	406	345	319	327	314	288	247	191	189
65°	528	469	404	335	307	310	296	276	248	208	206
67.5°	562	501	428	331	297	303	293	278	262	237	232
70°	567	513	429	333	286	293	290	277	266	244	241
72.5°	582	533	438	326	274	277	281	277	270	257	252
75°	568	525	434	320	262	260	270	275	277	272	266
77.5°	565	529	435	316	251	243	251	259	263	258	253
80°	569	538	448	317	239	219	223	232	233	224	217
82.5°	560	530	434	306	220	195	196	205	206	195	187
85°	600	564	444	292	200	178	179	183	177	165	157
87.5°	599	556	424	270	187	168	167	166	156	142	135
90°	578	533	397	238	165	154	151	145	131	115	110
92.5°	564	516	379	225	145	135	133	127	113	96	93
95°	549	502	349	197	128	118	115	109	98	84	82
97.5°	484	438	308	179	114	103	101	96	87	77	76
100°	447	406	286	164	102	90	89	86	80	73	72
102.5°	418	378	265	152	91	80	79	78	75	70	70
105°	396	358	254	142	82	73	72	72	69	66	66
107.5°	345	313	221	126	75	67	67	67	65	63	64



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	325	295	210	118	72	62	61	61	60	61	61
112.5°	280	254	185	113	70	59	56	54	52	54	55
115°	269	245	179	109	68	57	53	50	46	49	49
117.5°	247	225	166	106	68	54	50	47	43	45	45
120°	237	218	167	109	69	51	47	42	39	42	42
122.5°	223	206	157	103	66	50	46	36	34	37	37
125°	187	173	135	91	63	50	45	32	32	34	35
127.5°	159	148	117	85	64	53	43	28	30	33	33
130°	150	141	116	87	67	56	35	26	28	31	31
132.5°	140	132	112	89	68	53	29	24	26	28	28
135°	123	117	101	81	61	42	23	21	24	26	27
137.5°	108	103	89	73	55	36	16	19	21	22	23
140°	89	86	75	60	41	20	12	15	17	19	19
142.5°	65	63	53	39	25	8	8	11	13	15	15
145°	43	41	34	25	11	2	5	8	11	12	12
147.5°	27	26	21	13	4	2	2	6	8	9	9
150°	14	13	9	4	2	1	1	2	5	6	6
152.5°	3	3	2	1	1	1	1	1	1	2	2
155°	1	1	1	1	1	1	1	1	1	1	1
157.5°	1	1	1	1	1	1	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)