

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: P239946

Luminaire Tested: **UTLD-AF24-100-D-U-T4W-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239946
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-AF24-100-D-U-T4W-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1200mA 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: 7232 lumens
Efficiency: N/A
Efficacy: 75.3 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

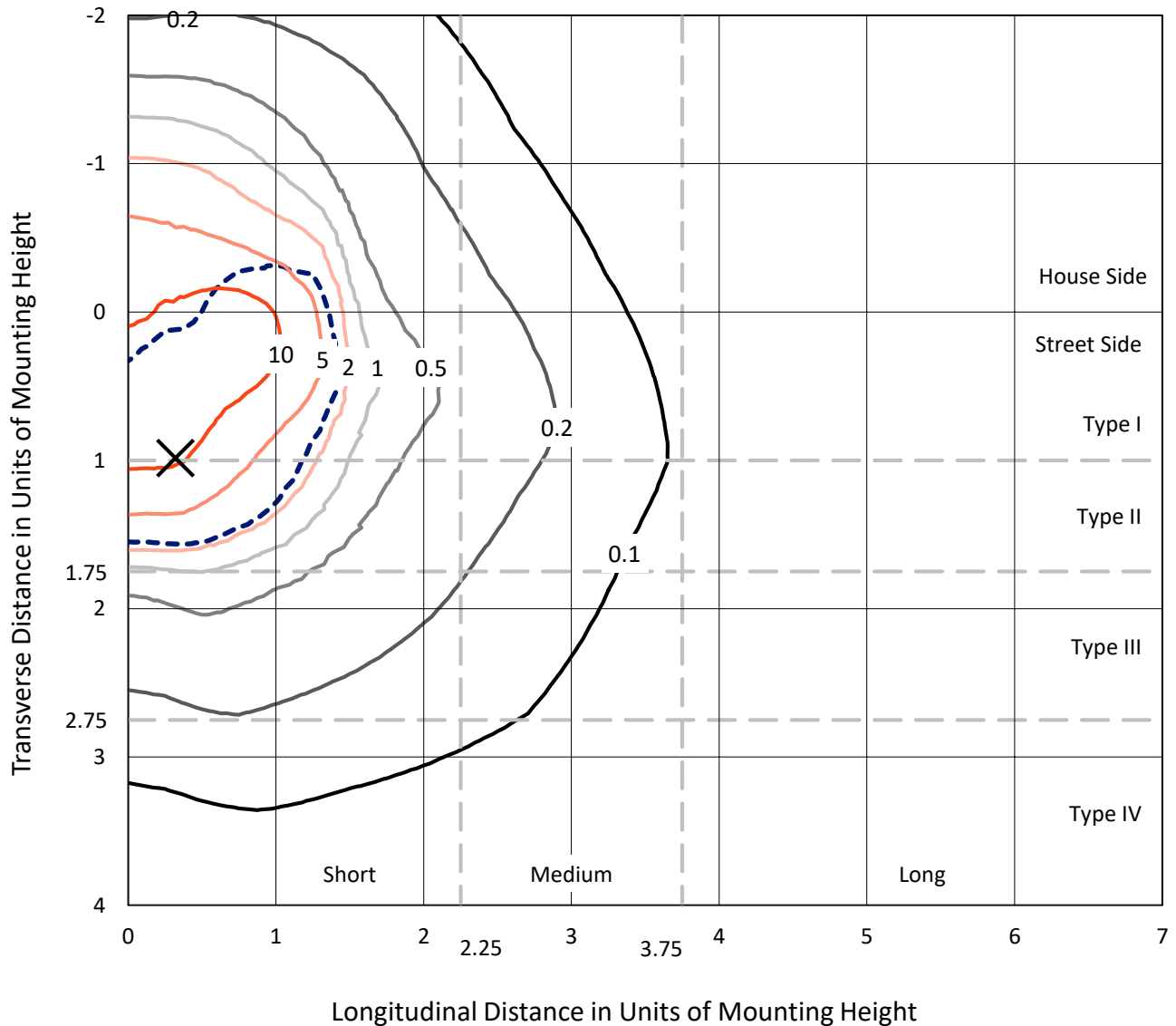
Input Watts (W): 96
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

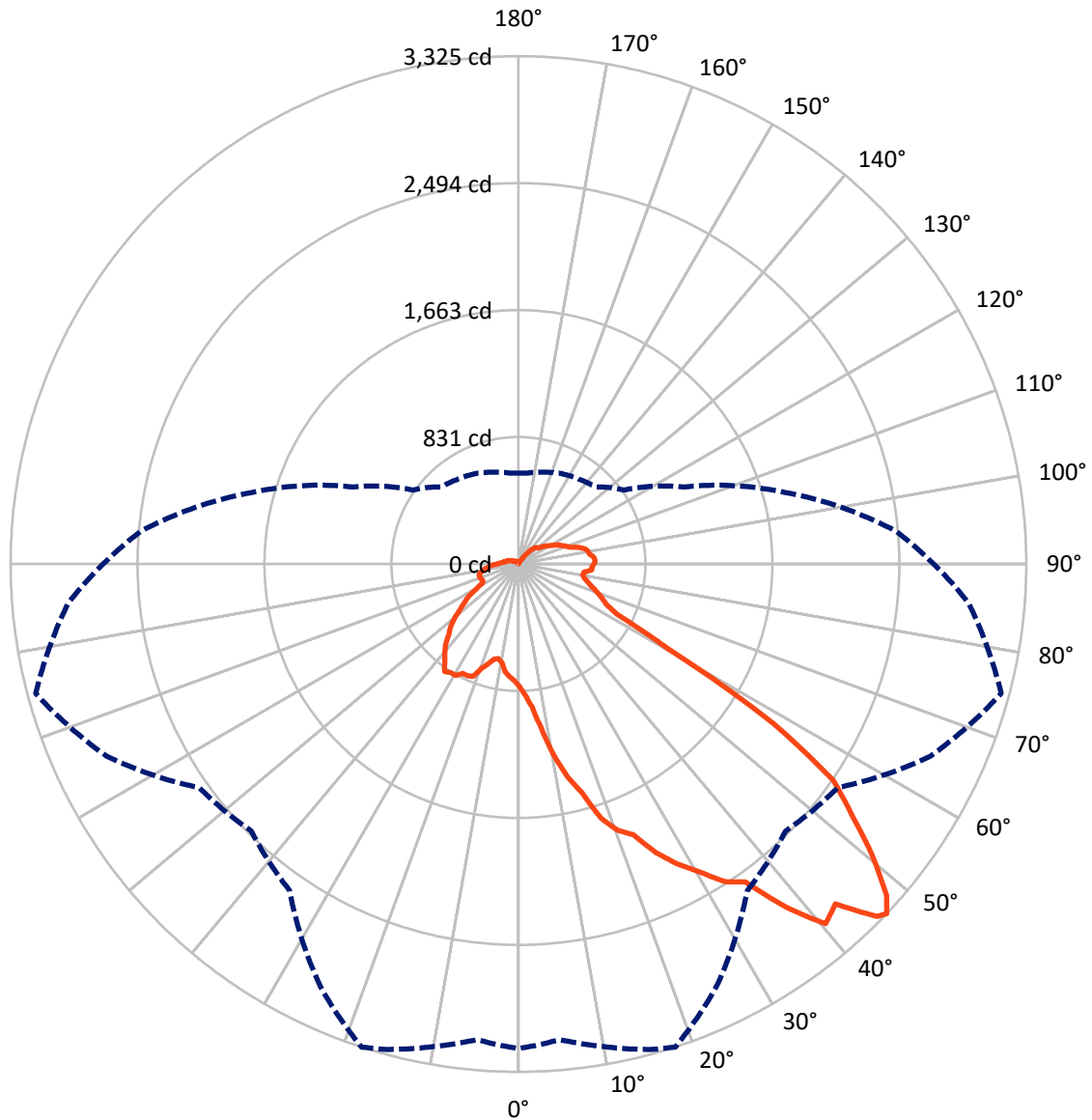


Based on 10 foot mounting height. Maximum calculated value = 17.6 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 18-Deg Lateral - - - Horizontal Cone Through 46-Deg Vertical



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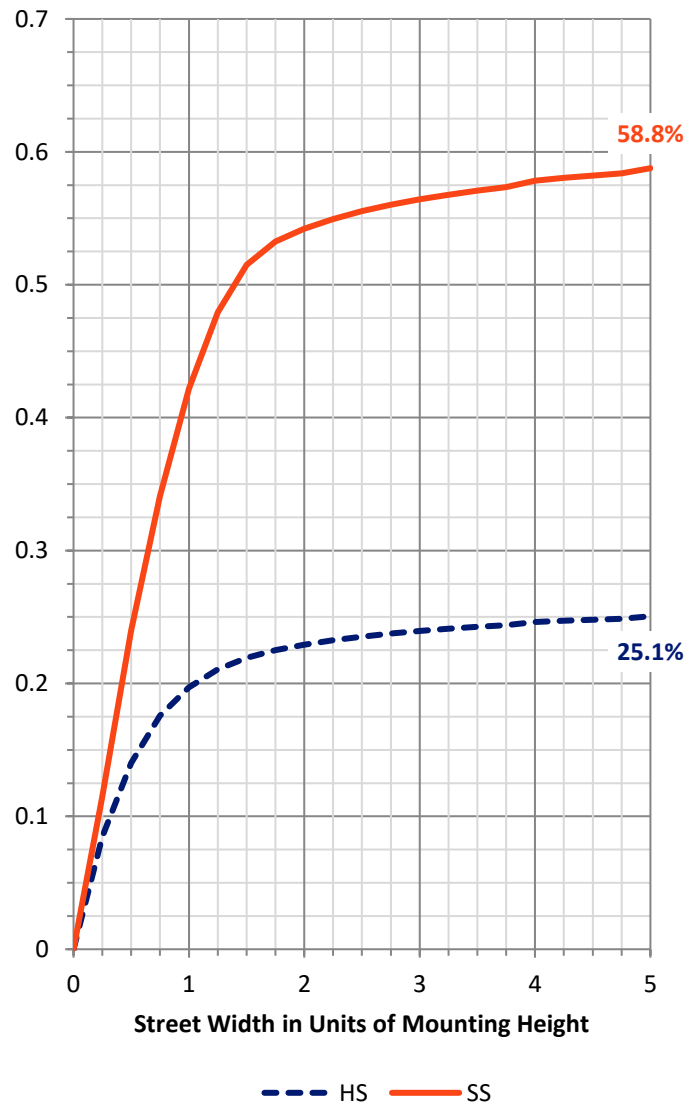
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1881.2	234.2	2115.4
	% Fixture	26.0	3.2	29.3
Street Side	Lumens	4414.5	702.1	5116.6
	% Fixture	61.0	9.7	70.7
Total	Lumens	6295.7	936.3	7232.0
	% Fixture	87.1	12.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	1.2
10°-20°	350.1	4.8
20°-30°	712.0	9.8
30°-40°	1165.7	16.1
40°-50°	1517.2	21.0
50°-60°	1135.3	15.7
60°-70°	472.9	6.5
70°-80°	430.2	5.9
80°-90°	426.5	5.9
90°-100°	342.9	4.7
100°-110°	243.7	3.4
110°-120°	164.8	2.3
120°-130°	106.0	1.5
130°-140°	62.8	0.9
140°-150°	15.2	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6295.7	87.1
0°-180°	7232.0	100.0



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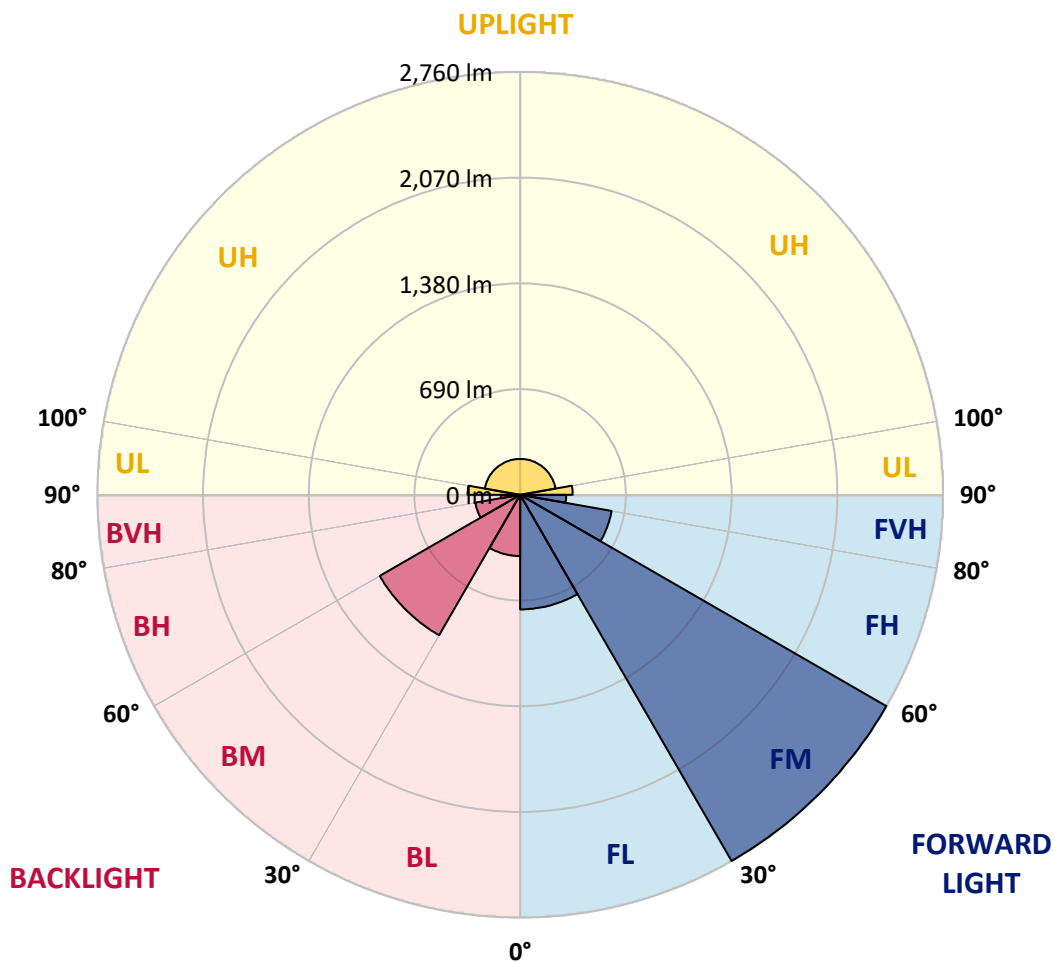
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	748.1	10.3			
FM (30°-60°)	2760.0	38.2			
FH (60°-80°)	605.7	8.4			G0/660
FVH (80°-90°)	300.7	4.2			G3/500
BL (0°-30°)	399.9	5.5	B1/500		
BM (30°-60°)	1058.2	14.6	B2/2500		
BH (60°-80°)	297.4	4.1	B1/500		G1/500
BVH (80°-90°)	125.8	1.7			G2/225
UL (90°-100°)	342.9	4.7		U3/500	
UH (100°-180°)	234.2	3.2		U3/500	

BUG Rating: B2-U4-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
0°	801	801	801	801	801	801	801	801	801	801	801
2.5°	861	857	859	859	854	852	847	841	833	824	816
5°	946	943	942	941	940	927	912	899	885	870	849
7.5°	1103	1102	1096	1089	1079	1057	1030	1017	998	975	943
10°	1299	1285	1272	1272	1252	1244	1236	1217	1205	1173	1127
12.5°	1411	1404	1431	1429	1455	1502	1518	1534	1461	1368	1282
15°	1516	1516	1550	1551	1628	1732	1811	1734	1600	1450	1335
17.5°	1660	1669	1718	1751	1855	2034	1980	1838	1638	1459	1330
20°	1723	1743	1818	1861	2022	2191	2139	1972	1740	1536	1406
22.5°	1762	1776	1864	1925	2131	2274	2266	2097	1878	1623	1473
25°	1922	1931	2031	2094	2312	2358	2267	2150	1935	1670	1538
27.5°	1976	1977	2131	2226	2405	2389	2271	2222	2113	1904	1815
30°	2049	2047	2237	2339	2448	2380	2285	2328	2335	2165	2003
32.5°	2139	2131	2358	2480	2515	2378	2308	2381	2487	2311	2137
35°	2222	2229	2473	2556	2589	2390	2320	2480	2695	2559	2267
37.5°	2756	2748	2825	2854	2771	2431	2366	2603	2918	2859	2546
40°	2877	2850	3080	3097	2951	2576	2492	2677	3094	3199	2950
42.5°	2775	2768	3019	3042	2937	2674	2575	2737	3114	3200	2786
45°	3224	3187	3318	3291	3000	2632	2524	2670	3045	3286	2958
46°	3173	3126	3291	3325	3060	2611	2473	2552	2976	3272	2960
47.5°	3017	3021	3241	3243	2999	2614	2389	2481	2822	3093	2677
50°	2634	2589	2991	3004	2771	2501	2303	2345	2670	2836	2413
52.5°	2536	2501	2738	2736	2526	2329	2146	2190	2557	2746	2444
55°	2330	2318	2517	2500	2353	2117	1986	2013	2121	2047	1218
57.5°	1548	1594	1938	1971	1972	1861	1697	1448	1253	1066	596
60°	632	685	1068	1118	1191	1395	1230	968	809	841	515
62.5°	477	497	713	722	750	849	839	702	691	761	493
65°	444	462	632	629	616	643	641	609	621	709	491
67.5°	420	438	587	588	577	582	586	570	598	689	504
70°	396	415	540	543	551	569	576	564	589	664	503
72.5°	367	388	496	501	517	558	582	579	582	627	501
75°	357	378	459	468	491	553	615	595	575	603	489
77.5°	313	337	420	440	491	569	637	630	593	587	476
80°	301	324	404	426	481	583	659	660	641	609	489
82.5°	303	325	408	433	496	593	641	666	668	628	504
85°	356	377	456	482	537	590	627	645	663	663	553
87.5°	380	399	459	482	535	597	591	621	639	662	570
90°	402	414	476	498	526	576	560	551	566	590	534
92.5°	418	429	484	503	527	538	514	488	525	544	497
95°	447	457	486	493	490	500	463	453	469	490	460
97.5°	427	434	462	470	468	453	416	410	424	440	407
100°	427	436	457	462	450	412	374	372	381	389	358
102.5°	436	440	444	447	425	383	355	348	351	355	327
105°	413	414	416	407	389	357	329	317	327	339	316
107.5°	357	356	357	354	352	333	313	298	298	302	280



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
110°	333	334	333	333	324	311	292	276	268	270	250
112.5°	305	305	306	307	302	290	271	255	245	243	224
115°	305	302	293	292	282	265	251	231	224	224	212
117.5°	272	270	263	261	255	241	233	217	212	209	198
120°	241	241	238	237	231	223	206	200	196	200	193
122.5°	224	224	219	217	210	204	189	178	171	179	175
125°	206	205	198	197	185	185	177	163	144	152	150
127.5°	181	180	171	170	163	171	169	151	125	130	130
130°	174	172	164	162	155	153	161	132	117	122	121
132.5°	174	172	162	159	148	137	145	115	112	118	117
135°	157	157	148	142	131	111	113	89	98	107	107
137.5°	133	133	124	122	109	89	80	68	83	93	94
140°	104	104	97	93	84	59	37	42	63	72	75
142.5°	75	74	68	63	54	32	12	24	37	49	53
145°	52	51	44	41	33	15	3	10	22	29	34
147.5°	31	31	26	25	17	4	2	3	11	18	21
150°	18	18	13	10	4	1	1	1	3	8	10
152.5°	4	4	3	2	2	1	0	1	1	1	2
155°	2	2	2	1	1	1	1	1	1	1	1
157.5°	1	1	1	1	1	0	0	1	1	1	1
160°	0	0	0	0	0	0	0	0	1	1	1
162.5°	1	1	0	0	1	0	1	0	1	1	1
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°	801	801	801	801	801	801	801	801	801	801	801
2.5°	812	808	799	788	780	773	768	765	763	758	760
5°	842	834	813	796	778	762	750	742	739	735	735
7.5°	928	909	877	837	800	768	738	721	706	698	696
10°	1097	1072	1003	921	840	768	710	668	648	641	641
12.5°	1237	1198	1108	1016	908	795	709	652	625	616	616
15°	1279	1228	1122	1032	935	840	760	678	629	614	609
17.5°	1266	1216	1120	1011	902	831	760	716	671	645	641
20°	1349	1303	1203	1081	947	788	743	733	722	705	705
22.5°	1418	1375	1275	1144	983	879	812	802	790	787	785
25°	1471	1425	1288	1137	1020	944	858	824	795	786	783
27.5°	1754	1683	1463	1249	1081	966	867	823	796	785	792
30°	1920	1843	1602	1321	1154	1014	885	833	840	849	856
32.5°	2047	1946	1663	1330	1142	1023	914	852	832	844	846
35°	2172	2049	1742	1387	1158	990	894	858	852	868	865
37.5°	2426	2265	1840	1403	1143	951	860	822	791	787	792
40°	2758	2542	1938	1396	1073	904	817	774	750	735	726
42.5°	2592	2375	1812	1340	988	820	773	735	704	685	680
45°	2774	2562	1844	1227	891	745	707	681	638	620	617
46°	2719	2479	1808	1192	844	713	681	654	622	597	595
47.5°	2519	2239	1702	1098	812	660	638	622	605	576	572
50°	2248	2034	1511	976	684	589	570	565	546	511	514
52.5°	2227	2020	1407	898	607	516	510	495	479	448	447
55°	1074	913	781	703	508	457	454	447	427	399	404
57.5°	509	443	383	406	399	401	403	402	379	341	349
60°	446	387	331	314	330	355	355	340	308	263	259
62.5°	430	371	320	297	305	320	312	288	256	215	213
65°	432	369	319	290	297	303	288	269	252	223	223
67.5°	441	377	323	287	292	296	282	268	258	236	238
70°	443	382	327	288	287	291	281	268	263	248	247
72.5°	443	386	323	281	279	281	275	268	267	258	256
75°	428	377	309	267	265	267	265	264	268	264	260
77.5°	413	368	299	256	253	252	251	252	258	255	249
80°	420	372	297	247	238	234	234	235	235	226	217
82.5°	432	379	287	230	215	208	210	217	220	213	206
85°	476	411	289	218	196	188	191	200	194	184	176
87.5°	495	422	283	200	182	179	179	184	180	164	157
90°	473	404	256	170	158	161	162	157	140	122	116
92.5°	443	378	237	156	140	139	138	135	122	102	98
95°	418	356	219	143	128	125	124	120	108	93	91
97.5°	364	311	199	132	115	113	112	107	96	85	84
100°	327	277	178	119	104	101	100	97	88	80	79
102.5°	297	254	165	109	93	89	89	87	82	77	77
105°	289	249	160	100	83	81	80	80	76	73	73
107.5°	254	218	138	89	75	73	73	73	72	71	72



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	229	197	127	83	70	67	67	67	67	69	69
112.5°	204	177	117	79	65	62	60	59	58	62	63
115°	193	169	112	75	62	59	55	53	50	53	54
117.5°	182	160	110	74	60	55	51	49	45	48	48
120°	179	159	112	75	58	51	48	43	41	43	44
122.5°	165	147	105	70	55	49	45	37	36	39	39
125°	140	126	91	63	52	48	44	33	34	36	37
127.5°	123	111	83	61	52	49	41	29	32	35	36
130°	115	106	83	63	54	50	34	27	30	33	33
132.5°	112	105	85	67	56	48	28	25	28	30	30
135°	103	97	81	65	51	38	22	22	26	28	28
137.5°	91	86	73	60	45	29	16	19	22	24	24
140°	73	70	60	47	32	16	12	15	18	20	20
142.5°	52	50	42	30	19	7	8	11	14	16	16
145°	34	32	26	19	8	2	5	8	11	12	12
147.5°	21	20	16	9	3	2	2	6	8	9	9
150°	11	10	7	3	1	1	1	2	5	6	7
152.5°	3	2	2	1	1	1	1	1	1	2	3
155°	1	1	1	1	1	1	0	0	0	0	0
157.5°	1	1	1	1	1	0	0	0	0	0	0
160°	0	0	0	1	1	0	0	0	0	0	0
162.5°	0	1	0	1	1	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)