

Scaled data based on original data using
LM-31-95 IESNA Approved Method for Photometric Testing of Roadway Luminaires
Using Incandescent Filament and High Intensity Discharge Lamps

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: STREETWORKS

Report Number: P10703

Luminaire Tested: **LXF10SXX3HB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: P10703
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: LXF10SXX3HB
Description: STREET WORKS LEXINGTON TYPE III POST TOP
WITH THREE ACRYLIC CLEAR PRISMATIC PANELS(COOPER PART NO 3002C41)
AND ONE DIFFUSE PANEL(COOPER PART NO 3002C41) IN HOUSE SIDE AS HSS,
SPECULAR HORIZONTALLY LAMPED REFLECTOR, SOCKET IN STREET SIDE AT END OF
TRIP TOWARD HOUSE
Light Source: MOGUL BASE ED23.5 CLEAR HIGH PRESSURE SODIUM LAMP
LU100 100 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 9500 (1 lamp)
Luminaire Lumens: 5504.7 lumens
Efficiency: 57.9%
Efficacy: 55.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.75' x L: 0.75' x H: 0.83')
IES Classification: Type III - Medium - Non-Cutoff
BUG Rating: B2 - U3 - G3

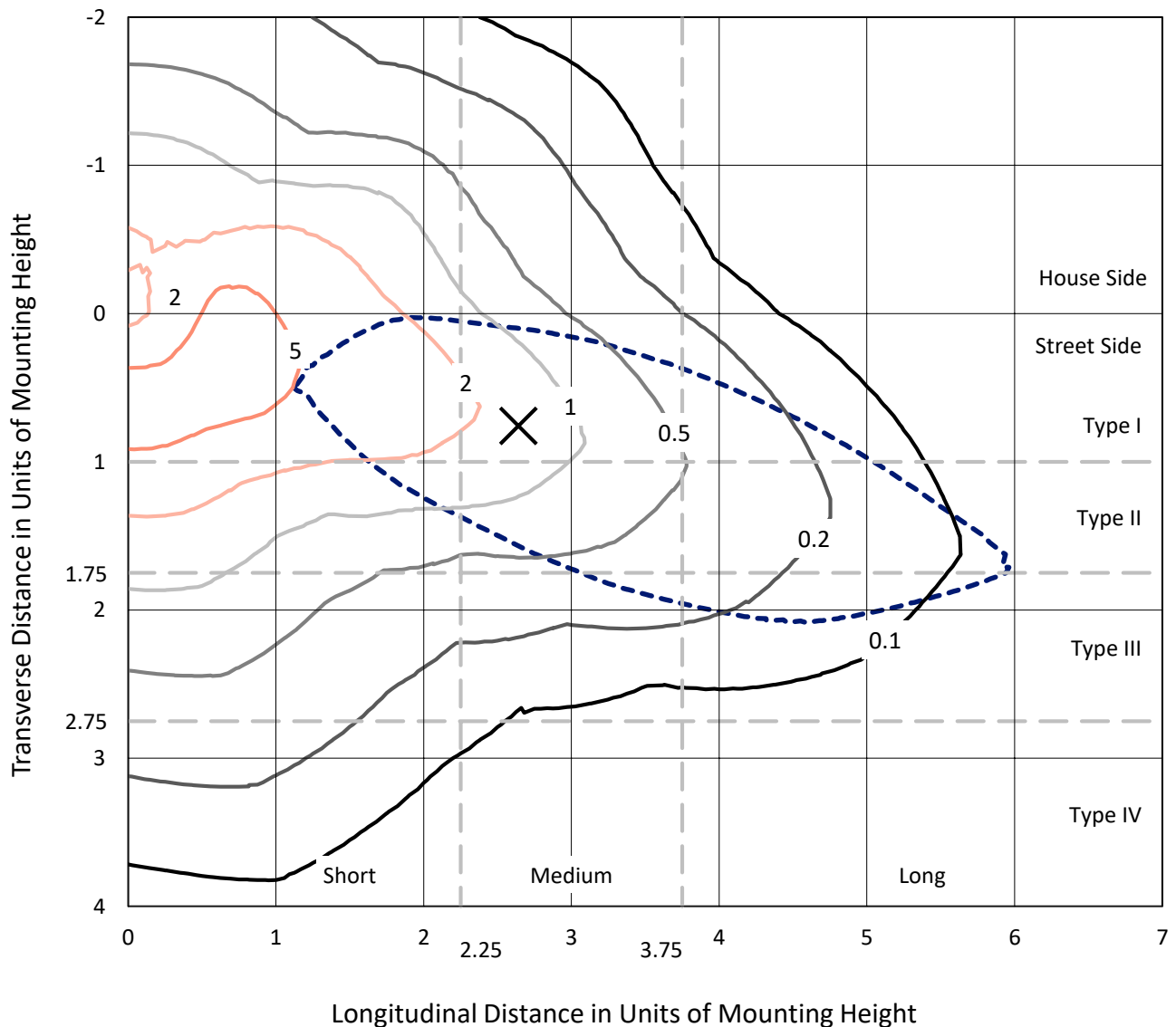
Input Watts (W): 100
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

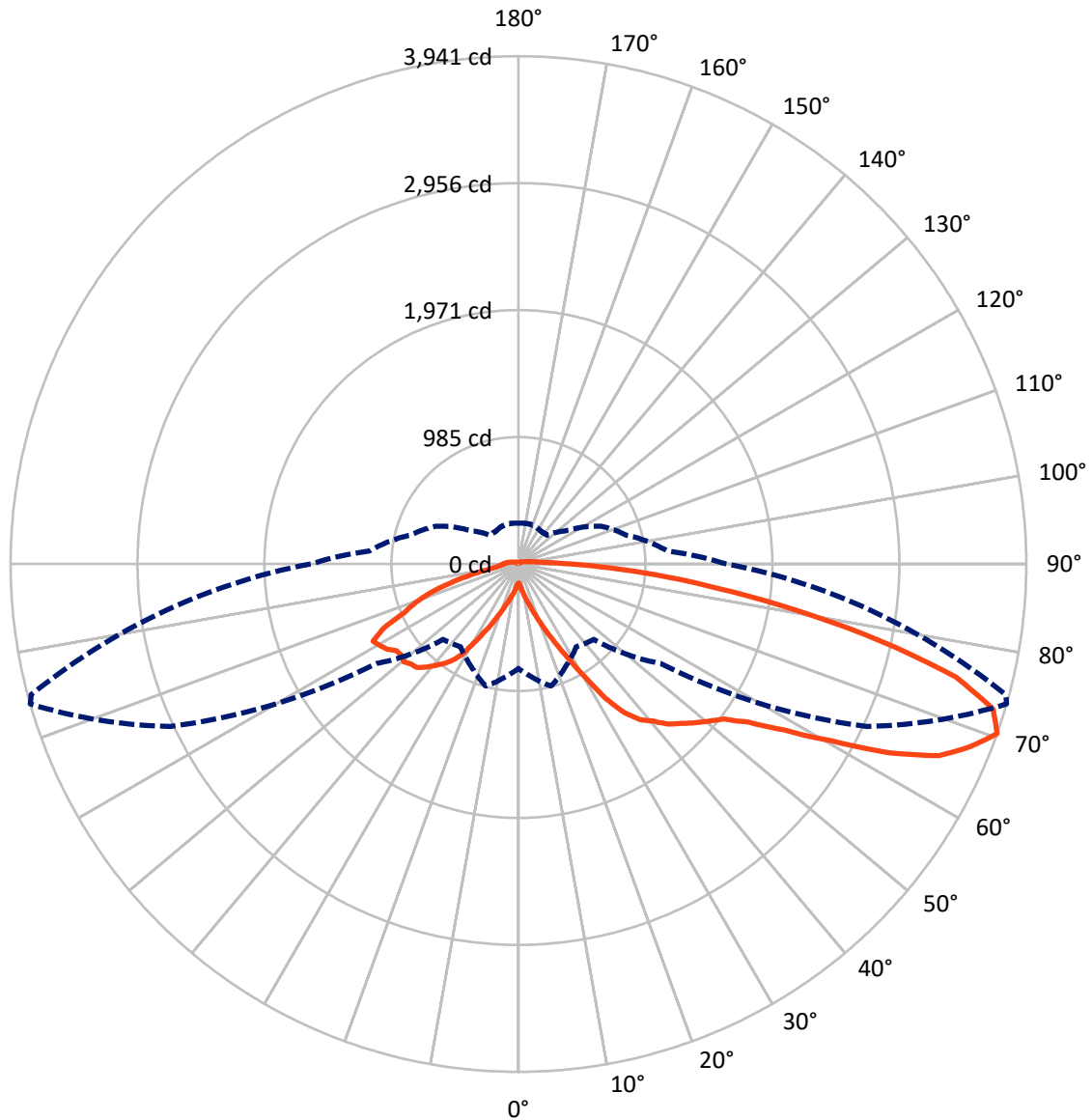
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 8 fc
 Type III - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical



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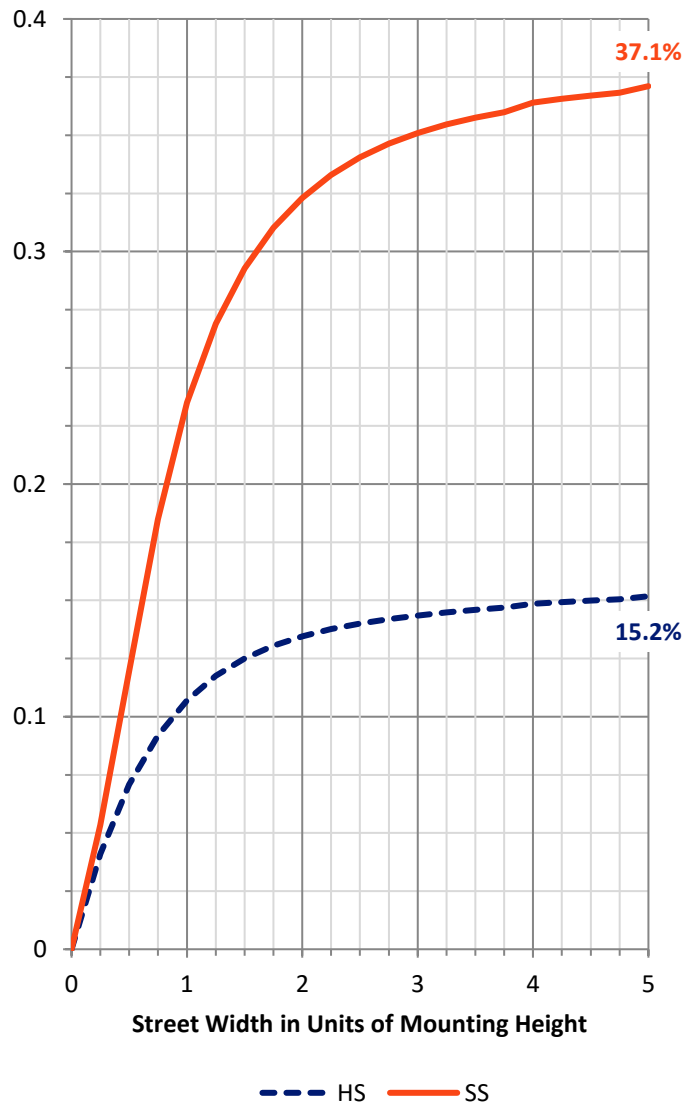
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1509.5	223.4	1732.9
	% Lamp	15.9	2.4	18.2
Street Side	Lumens	3611.8	160.0	3771.8
	% Lamp	38.0	1.7	39.7
Total	Lumens	5121.3	383.4	5504.7
	% Lamp	53.9	4.0	57.9

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	19.0	0.3	0.2
10°-20°	93.1	1.7	1.0
20°-30°	265.2	4.8	2.8
30°-40°	578.3	10.5	6.1
40°-50°	811.8	14.7	8.5
50°-60°	947.6	17.2	10.0
60°-70°	1136.7	20.6	12.0
70°-80°	900.2	16.4	9.5
80°-90°	369.6	6.7	3.9
90°-100°	152.4	2.8	1.6
100°-110°	95.3	1.7	1.0
110°-120°	62.2	1.1	0.7
120°-130°	40.1	0.7	0.4
130°-140°	22.1	0.4	0.2
140°-150°	9.0	0.2	0.1
150°-160°	2.2	0.0	0.0
160°-170°	0.1	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	5121.3	93.0	53.9
0°-180°	5504.7	100.0	57.9

Coefficient of Utilization

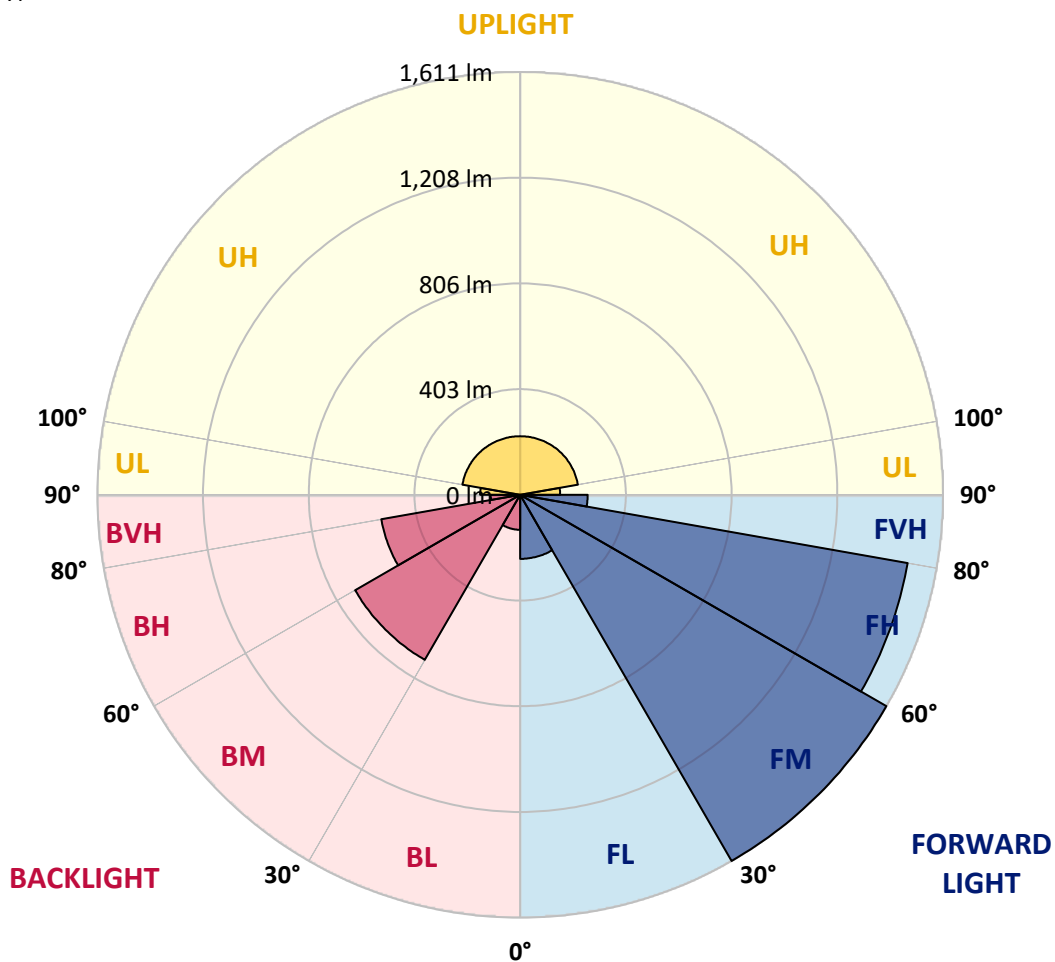


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	244.0	2.6			
FM (30°-60°)	1611.3	17.0			
FH (60°-80°)	1499.4	15.8			G1/1800
FVH (80°-90°)	257.1	2.7			G3/500
BL (0°-30°)	133.2	1.4	B1/500		
BM (30°-60°)	726.4	7.6	B1/1000		
BH (60°-80°)	537.5	5.7	B2/1000		G2/1000
BVH (80°-90°)	112.5	1.2			G2/225
UL (90°-100°)	152.4	1.6		U3/500	
UH (100°-180°)	223.4	2.4		U3/500	
Trapped Light	3995.3	42.1			

BUG Rating: B2-U3-G3
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	148	148	148	148	148	148	148	148	148	148	148
2.5°	169	169	169	169	168	171	164	159	157	156	155
5°	198	199	198	196	194	191	187	182	179	178	176
7.5°	236	239	236	234	231	225	222	213	209	207	204
10°	286	288	288	283	275	265	259	252	245	244	237
12.5°	352	350	347	341	328	317	306	298	288	286	276
15°	427	425	422	411	394	378	365	354	340	339	323
17.5°	510	510	501	488	470	455	436	419	404	401	380
20°	602	600	593	575	558	544	524	501	484	480	454
22.5°	682	684	674	662	648	641	628	606	582	579	547
25°	799	798	781	755	742	748	747	726	696	691	658
27.5°	929	924	899	866	849	870	892	878	837	834	780
30°	1062	1055	1021	979	968	1000	1047	1057	1015	1015	948
32.5°	1200	1194	1148	1096	1085	1139	1230	1272	1242	1234	1160
35°	1337	1324	1262	1194	1192	1272	1419	1496	1415	1400	1268
37.5°	1435	1432	1372	1287	1276	1390	1590	1658	1532	1504	1323
40°	1368	1377	1373	1333	1323	1478	1708	1759	1602	1572	1372
42.5°	1232	1242	1279	1278	1318	1507	1770	1856	1697	1667	1441
45°	1086	1101	1164	1197	1255	1490	1805	1916	1765	1734	1501
47.5°	991	1008	1062	1104	1169	1437	1796	1950	1841	1815	1572
50°	963	977	1016	1032	1076	1362	1753	1962	1916	1894	1618
52.5°	958	976	1008	1003	1009	1269	1679	1985	1998	1974	1662
55°	974	986	1010	977	959	1182	1613	2029	2166	2162	1810
57.5°	961	977	1010	958	913	1102	1568	2194	2428	2417	1954
60°	936	956	991	944	884	1045	1574	2399	2786	2793	2178
62.5°	938	960	994	917	863	998	1604	2658	3223	3214	2385
65°	911	943	1003	913	836	996	1592	2869	3586	3568	2448
67.5°	887	924	1010	922	837	936	1507	2950	3784	3765	2423
70°	811	863	981	872	783	827	1345	2983	3941	3914	2372
72.5°	691	737	855	761	667	706	1203	2920	3852	3817	2210
75°	566	607	715	631	566	592	1048	2653	3507	3473	1887
77.5°	448	491	605	544	478	505	848	2176	2876	2832	1473
80°	345	381	496	452	408	411	633	1688	2194	2136	1062
82.5°	258	287	369	356	335	326	460	1251	1568	1536	756
85°	183	198	255	266	275	252	335	880	1068	1029	523
87.5°	136	143	172	191	209	197	263	565	627	610	335
90°	117	121	142	159	171	167	205	339	351	342	214
92.5°	105	108	124	140	149	148	160	209	218	215	150
95°	97	99	112	125	132	132	134	152	155	152	116
97.5°	89	91	102	111	116	117	116	121	121	119	94
100°	81	83	91	98	101	103	102	103	99	98	78
102.5°	75	76	81	85	88	90	90	89	83	81	65
105°	69	70	72	74	76	79	79	77	69	67	53
107.5°	63	65	64	64	66	69	69	67	58	57	45
110°	58	58	56	56	58	61	61	58	51	49	39



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
112.5°	51	51	49	49	51	55	55	51	45	44	35
115°	46	45	44	43	46	49	49	46	40	40	33
117.5°	40	41	39	38	41	43	44	41	37	36	31
120°	37	37	35	34	36	39	39	37	33	33	29
122.5°	35	34	33	31	33	35	35	34	31	30	27
125°	31	31	30	29	29	31	31	30	29	28	26
127.5°	29	29	28	26	27	28	28	27	26	26	25
130°	27	28	26	24	24	25	25	25	24	24	24
132.5°	26	26	24	22	21	21	22	21	22	22	22
135°	23	23	21	19	18	18	18	18	19	19	19
137.5°	19	19	18	16	15	14	15	15	16	16	16
140°	17	17	16	14	12	12	12	12	13	13	13
142.5°	15	15	15	13	11	10	10	10	11	11	11
145°	14	14	14	11	9	8	8	8	9	9	9
147.5°	13	13	12	10	7	6	6	7	8	8	8
150°	11	11	11	9	6	5	4	5	6	6	6
152.5°	10	10	9	8	5	2	3	4	5	5	5
155°	8	8	8	6	3	1	1	3	3	3	3
157.5°	6	6	6	4	2	1	0	1	2	2	2
160°	4	4	4	3	2	1	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	148	148	148	148	148	148	148	148	148	148	148
2.5°	155	156	158	160	161	161	158	155	152	151	151
5°	176	176	177	177	176	173	171	168	166	164	165
7.5°	202	202	200	198	193	189	186	183	181	179	178
10°	235	232	228	219	211	203	199	197	195	193	193
12.5°	272	268	257	244	229	217	210	208	208	207	207
15°	316	309	293	271	250	232	222	219	220	221	221
17.5°	371	361	334	305	275	251	235	229	232	234	235
20°	441	423	388	345	304	273	250	241	244	248	248
22.5°	528	505	451	391	335	293	265	253	257	262	262
25°	633	609	534	447	370	311	279	268	272	277	278
27.5°	748	709	617	506	400	327	293	283	287	294	293
30°	904	852	721	565	425	338	305	299	303	310	310
32.5°	1102	1030	849	637	449	350	316	314	320	325	326
35°	1200	1121	931	699	474	360	328	329	335	341	341
37.5°	1244	1170	993	743	497	370	339	343	349	354	355
40°	1293	1223	1048	771	516	380	350	356	362	366	367
42.5°	1352	1280	1105	813	537	390	362	367	373	376	376
45°	1414	1331	1156	859	562	402	372	377	382	383	383
47.5°	1466	1367	1167	872	572	411	381	385	388	388	388
50°	1489	1379	1200	892	570	411	386	390	391	390	390
52.5°	1499	1364	1179	904	581	409	387	392	392	389	389
55°	1604	1432	1189	902	581	405	384	390	390	385	385
57.5°	1685	1485	1243	952	587	401	379	385	384	380	379
60°	1809	1545	1276	977	595	394	370	377	377	371	370
62.5°	1905	1591	1308	1004	599	385	360	366	366	361	359
65°	1849	1476	1178	978	602	372	347	353	353	348	346
67.5°	1726	1298	977	809	525	345	330	337	338	334	332
70°	1612	1161	867	696	448	316	308	319	322	318	317
72.5°	1447	1002	729	597	396	291	289	300	305	302	300
75°	1180	774	551	479	343	268	271	281	288	285	284
77.5°	885	559	385	363	289	246	254	265	272	269	269
80°	614	370	244	263	247	227	238	250	256	254	253
82.5°	438	264	176	190	201	210	224	235	241	239	238
85°	321	206	148	163	179	195	211	222	227	226	225
87.5°	227	163	132	147	164	183	199	210	214	212	212
90°	160	130	119	134	152	171	188	198	203	201	200
92.5°	122	107	107	122	141	160	177	187	191	189	188
95°	100	91	95	112	131	151	167	177	180	179	178
97.5°	83	78	84	102	121	142	157	166	170	169	168
100°	70	67	75	93	113	133	148	157	161	160	159
102.5°	59	57	66	85	105	125	140	149	151	151	151
105°	50	49	57	78	98	117	132	140	143	143	143
107.5°	43	41	49	71	92	111	124	132	135	136	136
110°	37	36	43	64	86	104	118	125	128	128	129



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	33	31	37	58	80	98	111	118	121	122	122
115°	31	29	33	52	74	92	104	111	114	115	115
117.5°	29	27	30	47	68	86	98	104	107	109	109
120°	27	25	27	42	62	79	91	97	100	102	103
122.5°	26	25	26	38	56	73	84	91	94	96	96
125°	25	24	24	33	50	65	77	83	87	89	90
127.5°	25	24	22	29	44	58	69	76	80	83	83
130°	23	22	21	26	38	51	61	68	73	76	76
132.5°	21	21	19	22	33	45	54	61	65	68	69
135°	19	18	16	18	27	38	47	53	58	61	62
137.5°	16	15	14	15	23	31	39	45	51	54	54
140°	13	13	12	12	18	26	33	38	44	47	47
142.5°	11	11	10	10	14	21	27	31	36	39	39
145°	9	9	9	9	10	15	21	26	29	32	32
147.5°	8	8	8	8	8	11	15	19	24	26	27
150°	6	6	6	6	6	7	9	14	17	19	19
152.5°	5	5	5	5	5	4	5	8	11	13	13
155°	4	4	4	4	4	3	3	4	6	7	7
157.5°	2	2	2	3	3	3	2	2	2	3	3
160°	0	0	1	2	3	3	2	1	1	1	1
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)