

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: P10096

Luminaire Tested: **LXF70S22**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: P10096
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: LXF70S22
Description: LEXINGTON HID TYPE 2 POST TOP FIXTURE
WITH TYPE 2 & 3 PRISMATIC PANELS
AND VERTICAL LAMP SOCKET ASSEMBLY
Light Source: MOGUL BASE ED23.5 CLEAR HIGH PRESSURE SODIUM
LU70/U 70 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 6400 (1 lamp)
Luminaire Lumens: 3474.8 lumens
Efficiency: 54.3%
Efficacy: 49.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.96' x L: 0.96' x H: 0.81')
IES Classification: Type I - Short - Non-Cutoff
BUG Rating: B2 - U3 - G3

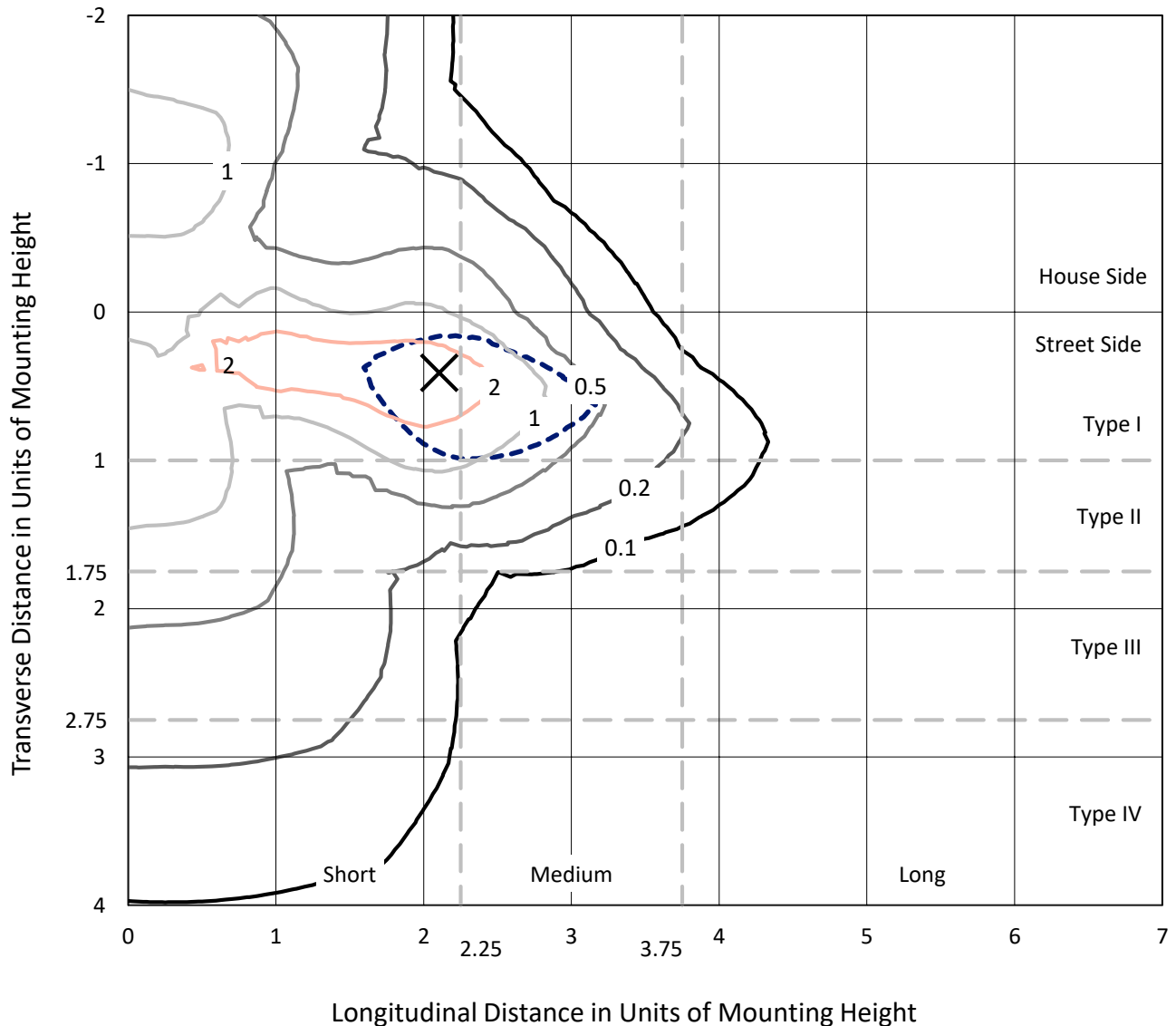
Input Watts (W): 70
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P10096
 CATALOG NUMBER: LXF70S22

Iso-Footcandle Lines of Horizontal Illumination

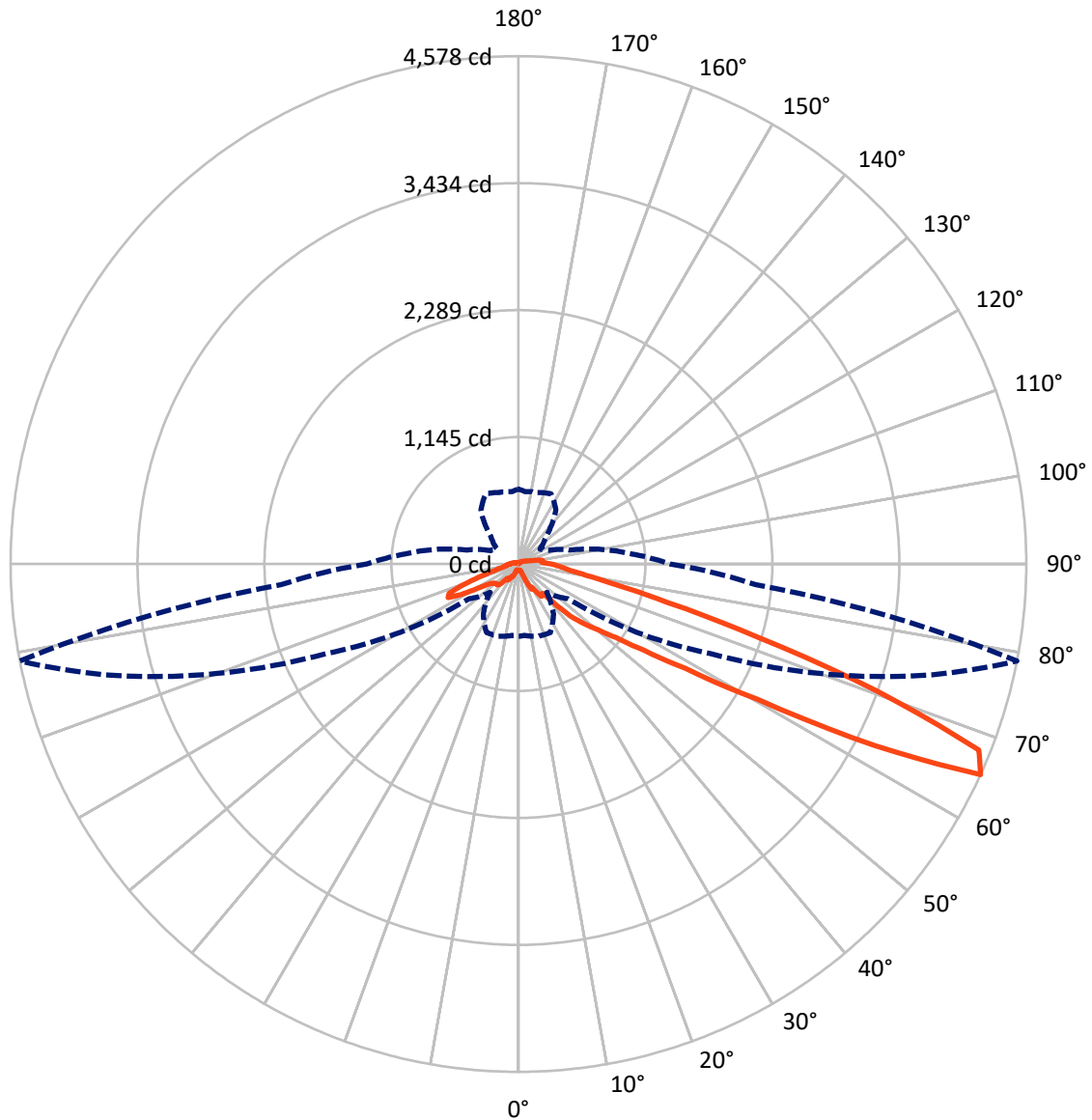
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 3.5 fc
 Type I - Short - Non-Cutoff

REPORT NUMBER: P10096
CATALOG NUMBER: LXF70S22

Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



REPORT NUMBER: P10096
 CATALOG NUMBER: LXF70S22

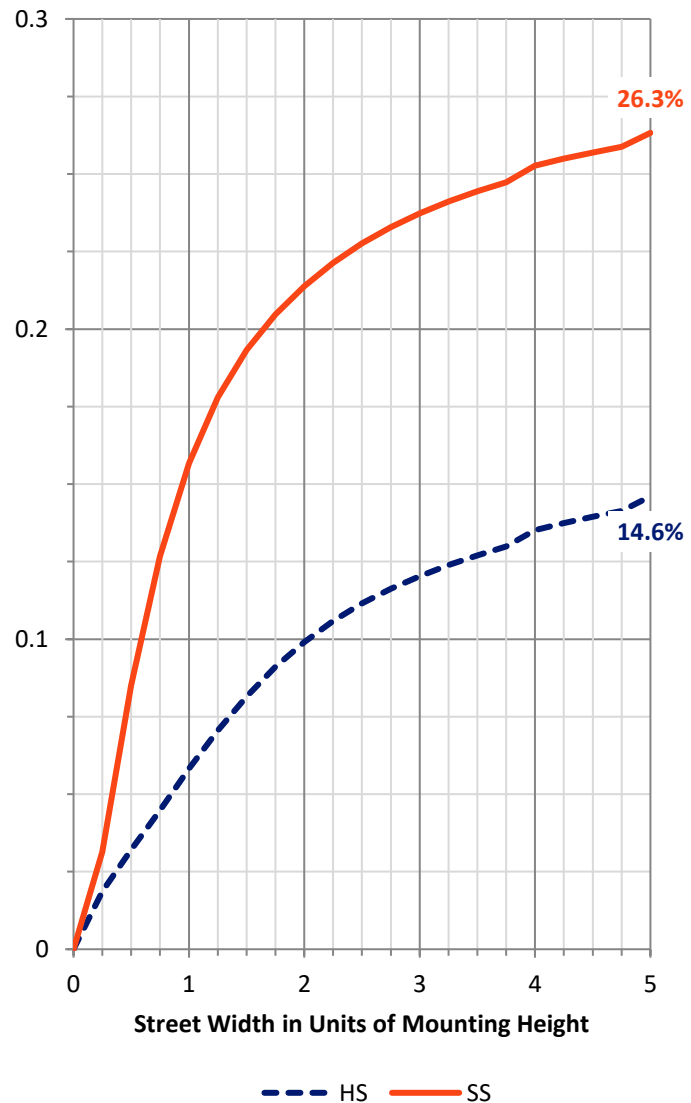
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1108.8	249.9	1358.7
	% Lamp	17.3	3.9	21.2
Street Side	Lumens	1853.4	262.7	2116.2
	% Lamp	29.0	4.1	33.1
Total	Lumens	2962.2	512.6	3474.8
	% Lamp	46.3	8.0	54.3

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	6.0	0.2	0.1
10°-20°	22.5	0.6	0.4
20°-30°	67.8	2.0	1.1
30°-40°	155.5	4.5	2.4
40°-50°	302.5	8.7	4.7
50°-60°	475.6	13.7	7.4
60°-70°	853.7	24.6	13.3
70°-80°	610.1	17.6	9.5
80°-90°	468.3	13.5	7.3
90°-100°	317.4	9.1	5.0
100°-110°	128.0	3.7	2.0
110°-120°	35.4	1.0	0.6
120°-130°	17.1	0.5	0.3
130°-140°	9.3	0.3	0.1
140°-150°	3.7	0.1	0.1
150°-160°	1.1	0.0	0.0
160°-170°	0.4	0.0	0.0
170°-180°	0.1	0.0	0.0
0°-90°	2962.2	85.2	46.3
0°-180°	3474.8	100.0	54.3

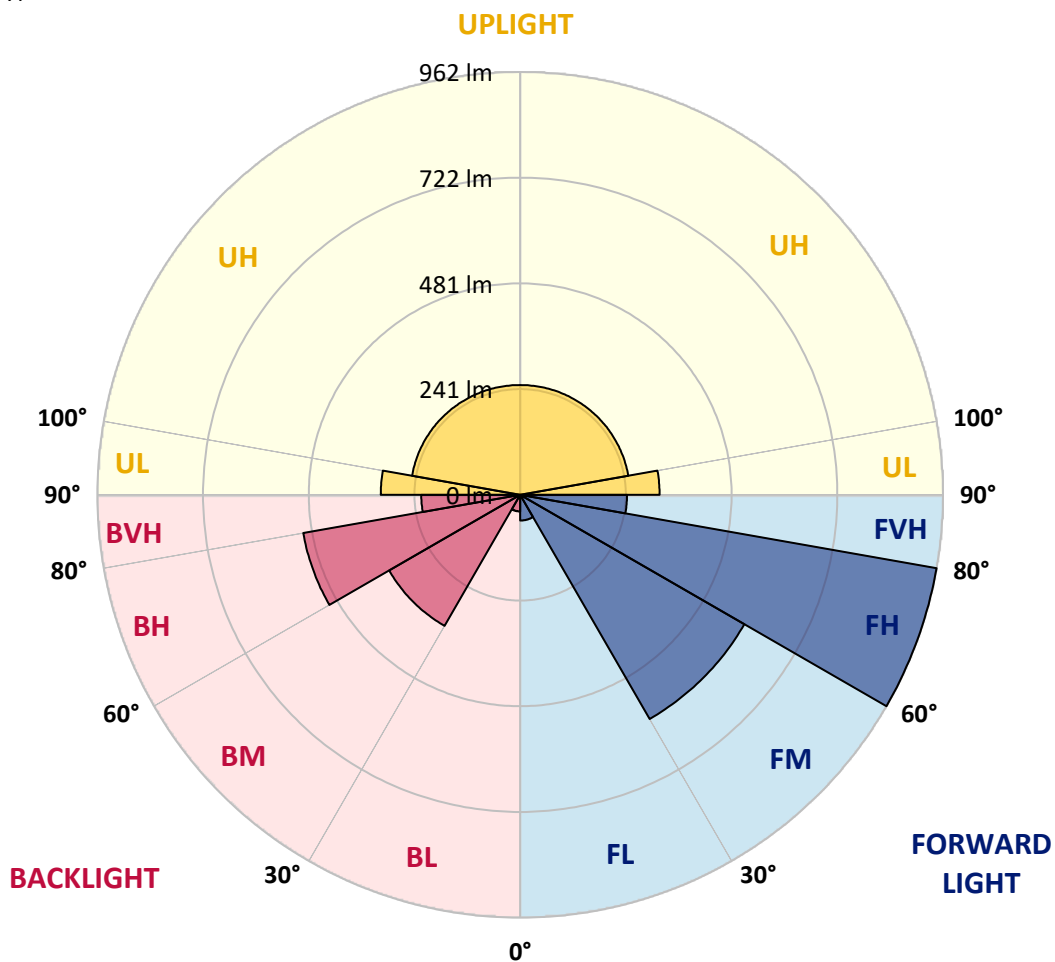


REPORT NUMBER: P10096
 CATALOG NUMBER: LXF70S22

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	58.5	0.9			
FM (30°-60°)	589.3	9.2			
FH (60°-80°)	962.4	15.0			G1/1800
FVH (80°-90°)	243.2	3.8			G3/500
BL (0°-30°)	37.9	0.6	B0/110		
BM (30°-60°)	344.4	5.4	B1/1000		
BH (60°-80°)	501.3	7.8	B2/1000		G2/1000
BVH (80°-90°)	225.1	3.5			G3/500
UL (90°-100°)	317.4	5.0		U3/500	
UH (100°-180°)	249.9	3.9		U3/500	
Trapped Light	2925.2	45.7			

BUG Rating: B2-U3-G3
 Type I Short





REPORT NUMBER: P10096
 CATALOG NUMBER: LXF70S22

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	60	60	60	60	60	60	60	60	60	60	60
2.5°	65	65	67	67	65	63	62	61	60	60	59
5°	75	75	75	74	71	68	65	62	60	60	59
7.5°	89	89	87	84	79	73	67	63	60	59	57
10°	110	109	105	100	90	79	70	63	59	58	56
12.5°	123	122	119	114	102	86	74	63	58	57	55
15°	131	131	129	122	109	90	76	65	61	59	58
17.5°	136	137	135	129	118	97	81	72	68	67	66
20°	143	144	142	137	124	107	95	86	85	85	86
22.5°	151	151	153	156	146	137	122	116	123	130	128
25°	165	165	168	184	199	220	175	157	189	211	179
27.5°	180	180	182	187	229	288	262	178	250	257	175
30°	205	206	206	202	206	238	280	206	278	243	179
32.5°	238	235	233	223	212	241	390	306	289	301	239
35°	298	295	274	246	226	232	379	462	410	360	253
37.5°	362	356	343	297	251	235	318	532	431	337	238
40°	387	383	379	347	283	243	269	553	463	352	279
42.5°	435	425	415	377	310	248	266	767	672	519	396
45°	455	447	457	423	329	258	302	838	1003	689	476
47.5°	474	466	470	452	361	273	331	851	1259	810	514
50°	497	488	493	485	394	285	349	779	1434	932	532
52.5°	527	517	521	517	416	286	349	770	1608	1102	587
55°	551	544	555	552	436	289	359	784	1779	1370	668
57.5°	564	553	571	582	462	303	378	904	1955	1776	819
60°	601	576	593	607	489	316	408	1108	2380	2477	1133
62.5°	624	613	626	636	518	336	470	1467	3189	3608	1650
65°	652	646	675	681	551	361	546	1908	3861	4578	2148
67.5°	664	659	704	729	601	384	556	1996	3711	4476	2160
70°	666	666	714	756	632	385	449	1514	2891	3427	1623
72.5°	674	678	719	761	623	353	293	885	1905	2247	1014
75°	683	691	719	750	588	315	195	541	1236	1390	635
77.5°	693	709	727	751	577	298	151	387	822	887	449
80°	701	717	723	746	580	294	129	304	580	619	344
82.5°	724	738	731	746	585	297	115	233	437	469	272
85°	734	744	736	747	589	304	103	190	355	395	228
87.5°	735	738	728	731	581	301	95	160	299	341	197
90°	702	701	687	677	535	280	87	135	250	282	162
92.5°	644	642	616	588	461	245	80	114	199	225	131
95°	549	551	526	495	389	213	74	108	180	206	120
97.5°	432	432	426	408	323	185	68	103	190	222	122
100°	328	327	334	325	259	153	61	89	172	199	105
102.5°	234	233	243	244	200	124	55	75	131	145	82
105°	149	151	167	168	148	100	49	63	97	109	66
107.5°	93	93	106	106	99	78	45	56	85	94	57
110°	52	52	60	63	62	57	41	50	74	79	49



REPORT NUMBER: P10096
 CATALOG NUMBER: LXF70S22

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
112.5°	27	28	35	39	41	40	38	46	65	68	44
115°	18	19	24	28	31	32	34	43	57	59	40
117.5°	14	14	17	22	24	26	31	40	52	54	37
120°	10	11	13	16	20	23	28	38	48	49	34
122.5°	8	9	11	13	17	21	26	35	44	43	32
125°	7	7	9	11	15	19	24	32	40	39	30
127.5°	6	6	8	9	13	17	23	30	38	35	27
130°	5	6	7	8	11	14	21	27	34	30	25
132.5°	5	5	6	7	9	12	19	26	30	27	22
135°	4	5	6	7	7	11	17	23	28	25	20
137.5°	4	4	5	6	6	9	14	21	24	21	18
140°	4	4	5	5	5	6	12	18	21	19	16
142.5°	3	3	4	5	4	4	8	14	17	15	13
145°	3	3	4	5	4	3	5	10	12	12	10
147.5°	2	3	4	4	3	2	3	6	7	8	7
150°	2	2	3	4	3	2	2	3	4	4	4
152.5°	2	2	3	4	3	2	2	2	2	2	2
155°	2	2	3	3	2	1	1	2	2	2	2
157.5°	2	2	3	3	2	1	1	1	1	1	2
160°	1	1	2	3	2	2	1	1	1	1	1
162.5°	1	1	2	3	2	2	1	1	1	1	1
165°	1	1	2	3	2	1	1	1	1	1	1
167.5°	1	1	2	3	2	1	1	1	1	1	1
170°	1	1	2	3	2	2	1	1	1	1	1
172.5°	1	1	2	3	2	1	1	1	1	1	1
175°	1	1	2	3	2	1	1	1	1	1	1
177.5°	1	1	2	3	2	1	1	1	1	1	1
180°	2	2	2	2	2	2	2	2	2	2	2



REPORT NUMBER: P10096
 CATALOG NUMBER: LXF70S22

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	60	60	60	60	60	60	60	60	60	60	60
2.5°	59	59	58	59	59	58	56	55	54	54	53
5°	58	57	57	57	57	56	54	53	52	52	51
7.5°	56	56	55	55	55	54	53	53	53	52	53
10°	55	54	53	53	54	54	54	54	54	55	55
12.5°	54	53	52	52	55	55	56	57	58	59	60
15°	57	56	55	55	56	59	60	63	65	66	67
17.5°	64	63	61	61	63	64	68	71	73	75	76
20°	82	79	75	74	74	75	77	80	83	86	87
22.5°	116	110	102	93	90	90	91	95	98	101	102
25°	143	135	121	111	105	105	107	112	118	120	121
27.5°	144	132	118	110	110	115	126	133	140	142	144
30°	162	150	132	119	118	128	144	158	168	173	175
32.5°	202	185	154	130	125	140	164	189	209	217	222
35°	217	198	158	129	130	153	190	227	265	276	287
37.5°	205	184	143	118	131	167	223	287	335	341	359
40°	247	219	158	118	128	179	262	354	392	391	402
42.5°	345	297	201	131	130	192	302	405	421	418	430
45°	399	337	217	142	140	211	337	434	444	438	454
47.5°	421	341	217	143	149	224	362	452	457	457	476
50°	439	347	217	141	150	234	381	476	479	482	500
52.5°	469	369	222	144	148	242	407	514	511	513	531
55°	521	407	232	149	153	257	439	551	543	548	567
57.5°	620	479	259	161	163	274	468	588	586	584	602
60°	817	625	320	184	178	292	504	630	615	604	620
62.5°	1126	846	409	230	202	317	547	668	638	626	625
65°	1364	1029	485	284	236	351	589	698	668	656	676
67.5°	1304	981	476	304	253	373	612	717	684	670	688
70°	992	741	373	254	220	368	613	717	683	672	689
72.5°	654	495	241	176	164	339	602	719	694	692	710
75°	439	338	162	124	122	307	598	744	721	720	740
77.5°	313	237	123	101	107	305	630	784	745	762	777
80°	236	181	104	93	101	326	671	808	785	794	797
82.5°	189	149	94	86	97	343	685	821	799	803	809
85°	163	130	86	80	92	341	671	807	790	792	797
87.5°	144	116	79	73	84	317	633	762	756	760	760
90°	122	99	71	66	75	279	570	697	710	718	719
92.5°	98	83	63	59	68	241	495	618	646	662	657
95°	88	75	58	54	62	210	421	531	563	580	570
97.5°	87	72	55	51	58	183	358	436	468	481	471
100°	78	65	50	46	53	156	291	359	374	384	378
102.5°	64	54	43	40	49	129	225	274	291	292	286
105°	52	45	36	36	44	103	164	202	210	207	202
107.5°	45	41	33	32	41	78	115	138	139	131	127
110°	40	35	30	29	35	58	76	89	89	83	80



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	36	32	27	27	30	41	51	56	56	52	50
115°	34	30	25	25	26	31	35	36	35	33	31
117.5°	32	29	24	24	24	25	25	25	23	22	21
120°	30	28	24	23	22	22	20	17	16	16	15
122.5°	28	26	23	22	21	20	17	13	12	11	11
125°	27	25	22	21	20	18	15	11	9	9	9
127.5°	25	24	21	20	18	16	12	9	7	7	7
130°	23	22	19	18	16	14	10	7	6	6	6
132.5°	21	20	18	16	14	12	9	6	6	5	5
135°	19	18	16	14	13	10	7	6	5	5	5
137.5°	17	16	14	12	11	8	6	5	4	4	4
140°	15	14	12	11	9	7	5	4	4	4	3
142.5°	12	12	10	9	7	6	5	4	3	3	3
145°	10	9	8	7	6	5	4	3	3	2	3
147.5°	7	7	6	5	5	4	4	3	2	2	2
150°	4	4	4	4	4	4	3	2	2	2	2
152.5°	3	3	3	3	4	4	3	2	2	1	1
155°	2	2	2	3	3	3	3	2	1	1	1
157.5°	2	2	2	2	3	3	2	2	1	1	1
160°	1	1	2	2	3	3	2	1	1	0	0
162.5°	1	1	1	2	3	3	2	1	1	0	0
165°	1	1	1	2	3	3	2	1	1	0	0
167.5°	1	1	1	2	3	3	2	1	1	0	0
170°	1	1	1	2	3	3	2	1	1	0	0
172.5°	1	1	1	2	3	3	2	1	1	0	0
175°	1	1	1	2	3	3	2	1	1	0	0
177.5°	1	1	1	2	3	3	2	1	1	0	0
180°	2	2	2	2	2	2	2	2	2	2	2

(END OF REPORT)