

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: P10112

Luminaire Tested: **LXF70S33**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: P10112
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: LXF70S33
Description: LEXINGTON HID TYPE 3 POST TOP FIXTURE
WITH TYPE 2 & 3 PRISMATIC PANELS
AND VERTICAL LAMP SOCKET ASSEMBLY
Light Source: MOGUL BASE ED28 COATED HIGH PRESSURE SODIUM LAMP
C70S62/D 70 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 6000 (1 lamp)
Luminaire Lumens: 3163.7 lumens
Efficiency: 52.7%
Efficacy: 45.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.96' x L: 0.96' x H: 0.81')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B1 - U3 - G3

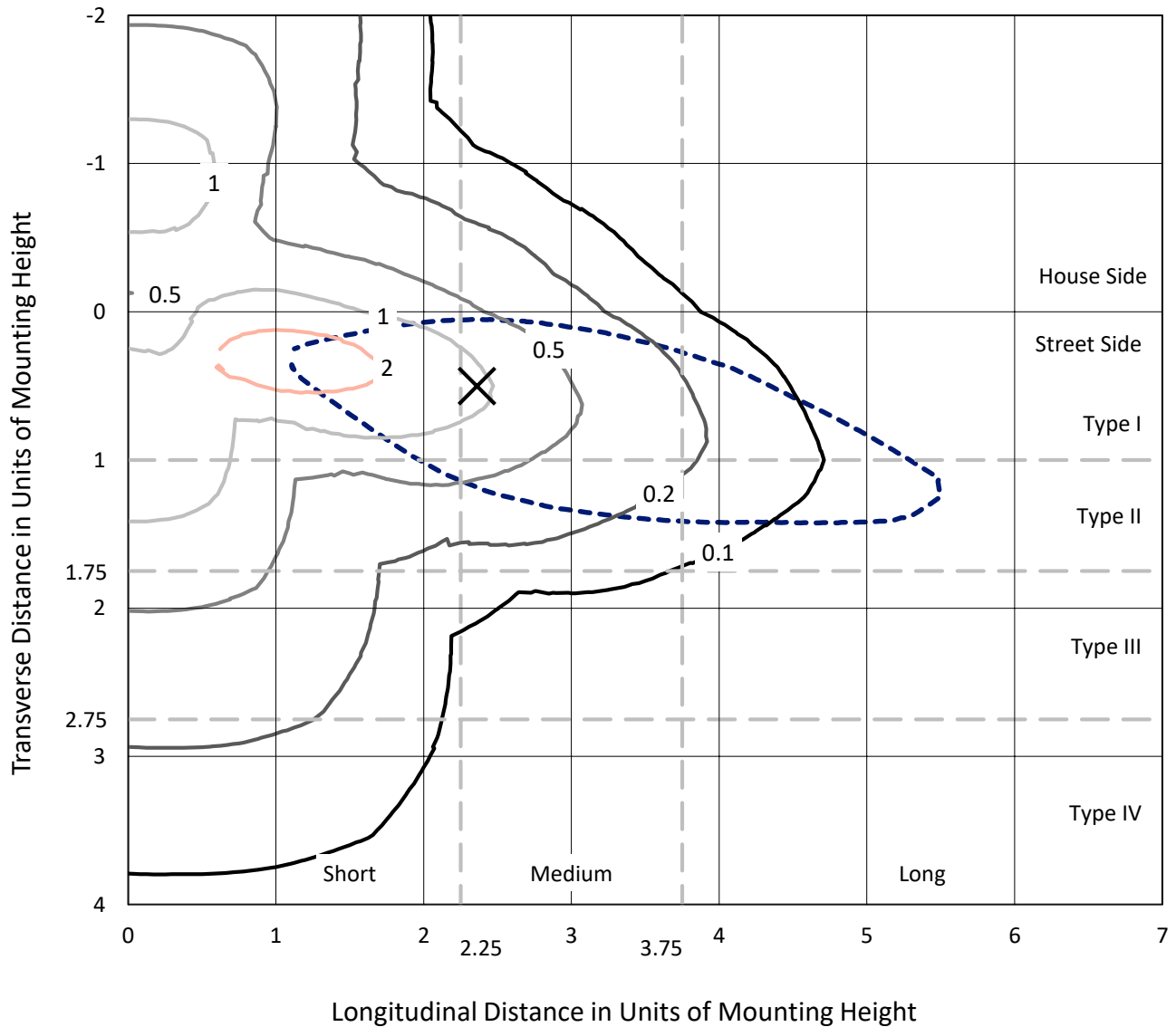
Input Watts (W): 70
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

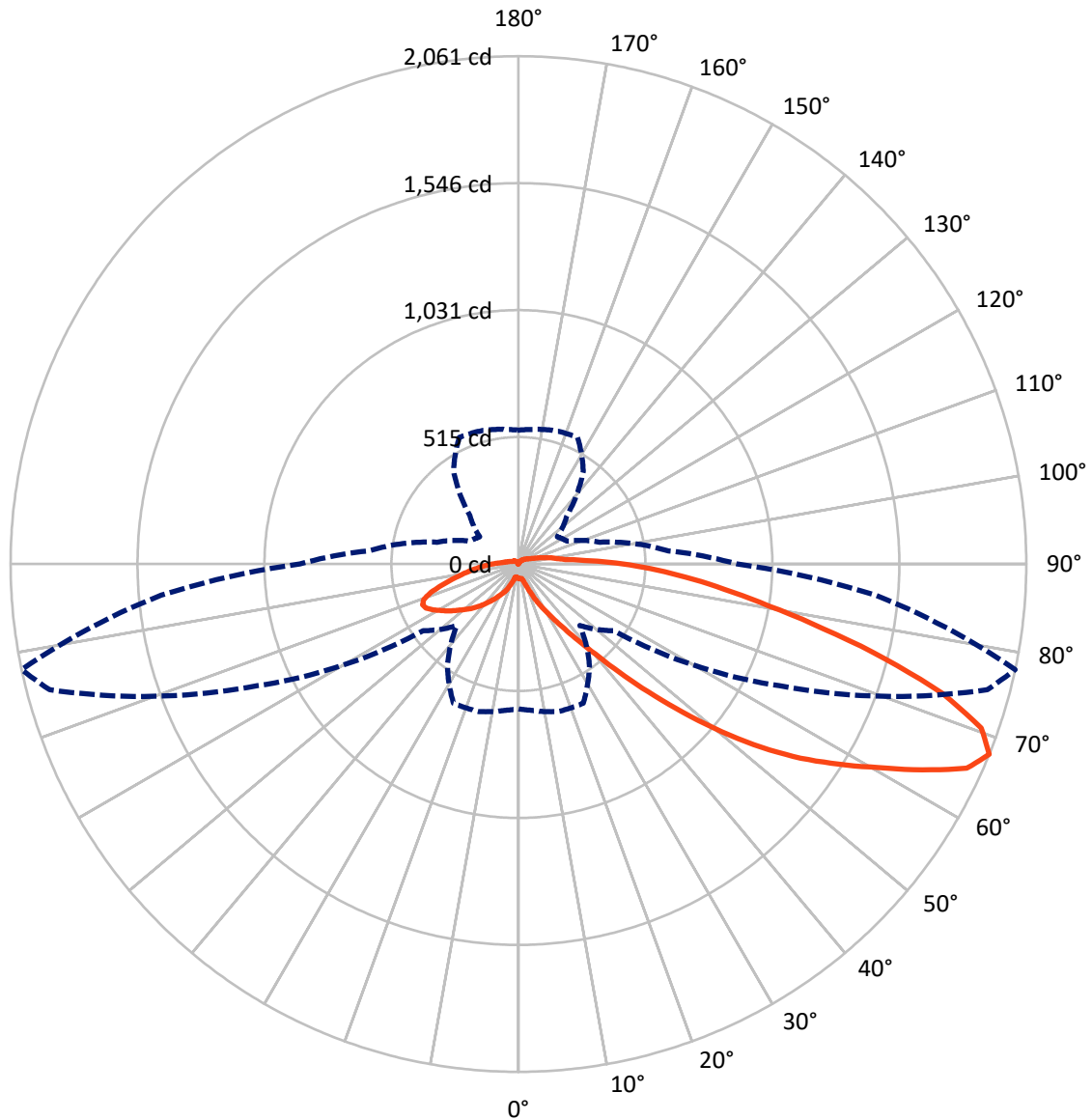
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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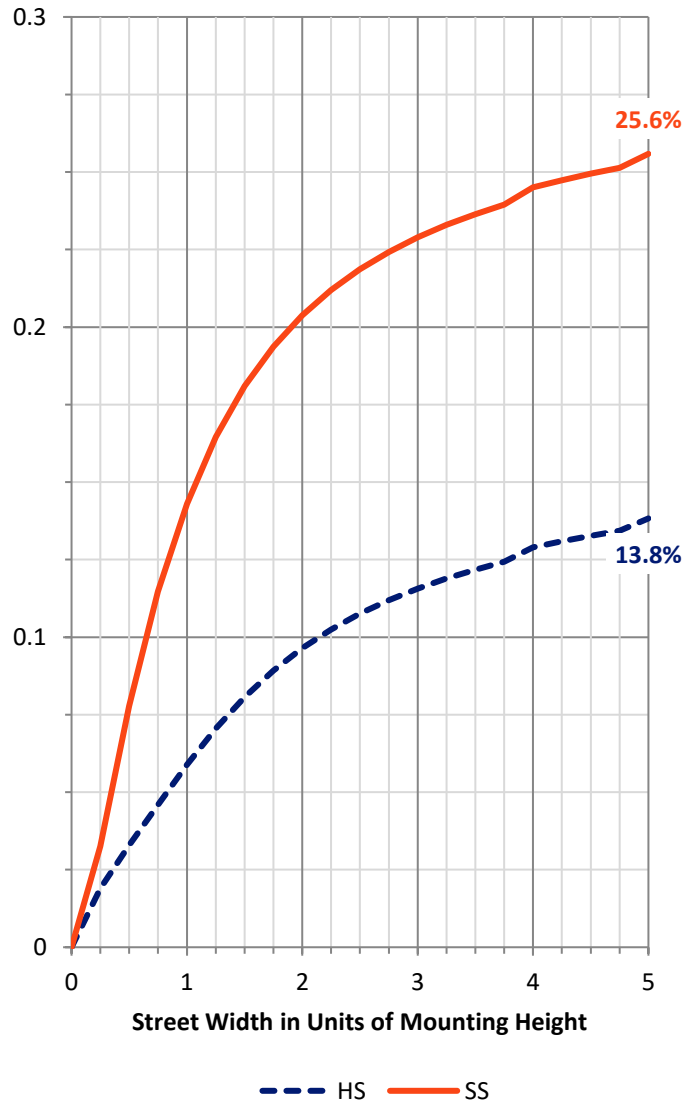
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	965.7	244.6	1210.3
	% Lamp	16.1	4.1	20.2
Street Side	Lumens	1684.1	269.3	1953.4
	% Lamp	28.1	4.5	32.6
Total	Lumens	2649.8	513.9	3163.7
	% Lamp	44.2	8.6	52.7

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	5.9	0.2	0.1
10°-20°	22.3	0.7	0.4
20°-30°	65.6	2.1	1.1
30°-40°	155.9	4.9	2.6
40°-50°	292.9	9.3	4.9
50°-60°	452.0	14.3	7.5
60°-70°	613.4	19.4	10.2
70°-80°	593.6	18.8	9.9
80°-90°	448.3	14.2	7.5
90°-100°	290.8	9.2	4.8
100°-110°	140.5	4.4	2.3
110°-120°	49.5	1.6	0.8
120°-130°	18.5	0.6	0.3
130°-140°	9.1	0.3	0.2
140°-150°	3.9	0.1	0.1
150°-160°	1.0	0.0	0.0
160°-170°	0.4	0.0	0.0
170°-180°	0.1	0.0	0.0
0°-90°	2649.8	83.8	44.2
0°-180°	3163.7	100.0	52.7

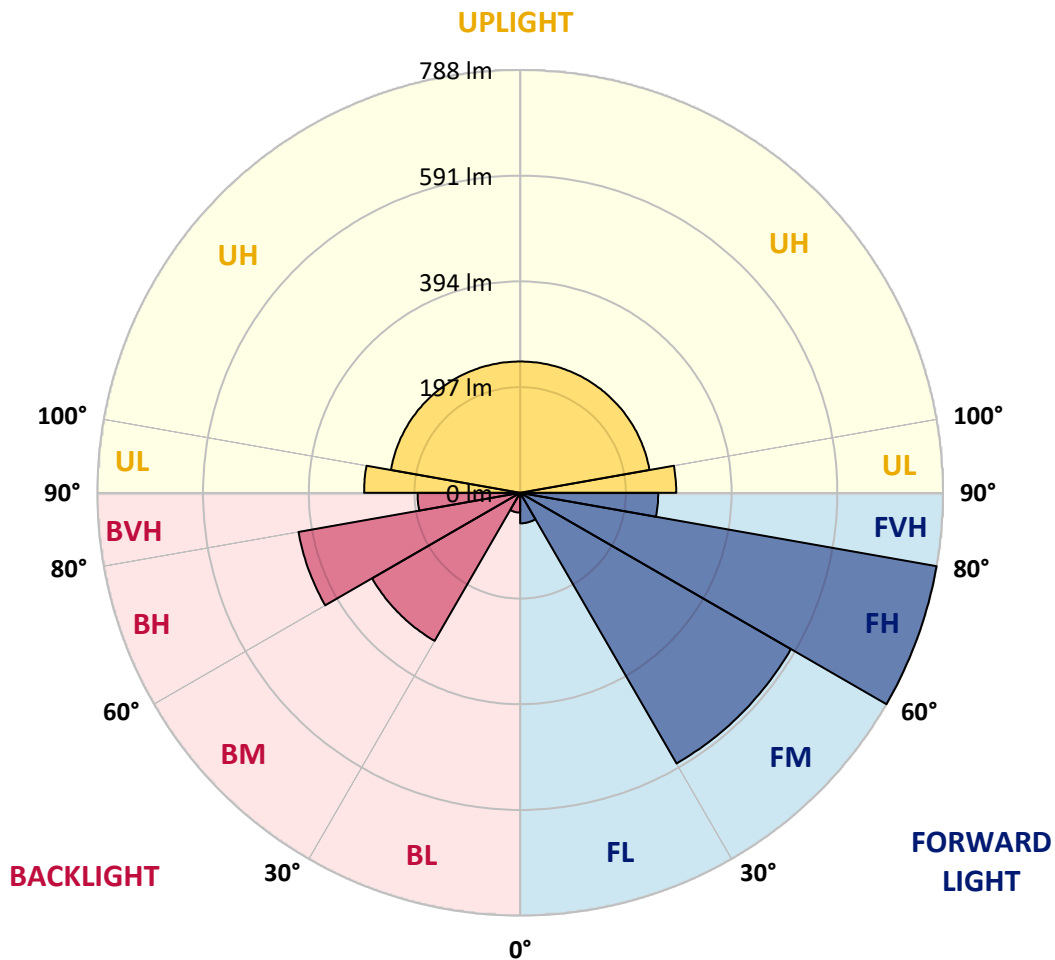


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	56.9	0.9			
FM (30°-60°)	582.3	9.7			
FH (60°-80°)	787.8	13.1			G1/1800
FVH (80°-90°)	257.1	4.3			G3/500
BL (0°-30°)	36.9	0.6	B0/110		
BM (30°-60°)	318.4	5.3	B1/1000		
BH (60°-80°)	419.2	7.0	B1/500		G1/500
BVH (80°-90°)	191.1	3.2			G2/225
UL (90°-100°)	290.8	4.8		U3/500	
UH (100°-180°)	244.6	4.1		U3/500	
Trapped Light	2836.3	47.3			

BUG Rating: B1-U3-G3
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	58	58	58	58	58	58	58	58	58	58	58
2.5°	64	63	64	64	63	62	61	60	59	59	58
5°	72	72	72	72	70	67	65	62	60	60	58
7.5°	82	82	81	80	77	72	68	64	60	60	58
10°	92	92	91	89	84	77	71	65	60	59	56
12.5°	103	103	101	97	91	82	73	66	62	61	58
15°	114	114	112	107	99	87	79	72	69	68	65
17.5°	125	125	124	119	110	97	88	83	81	81	78
20°	140	140	140	137	127	112	102	99	99	99	96
22.5°	155	156	158	159	154	142	125	121	125	124	119
25°	172	172	176	179	188	188	163	150	158	158	147
27.5°	191	191	193	196	212	231	218	190	195	192	177
30°	219	219	215	211	223	255	270	246	232	226	205
32.5°	260	259	250	234	230	261	316	316	280	270	235
35°	307	307	293	266	243	261	343	404	346	323	274
37.5°	354	354	341	305	264	263	364	497	436	392	317
40°	388	386	378	345	288	269	368	582	547	480	363
42.5°	418	417	410	376	314	279	374	660	682	598	421
45°	445	444	439	407	337	290	378	726	849	740	490
47.5°	466	466	465	437	360	302	385	784	1018	901	571
50°	485	485	487	462	381	311	392	826	1176	1069	664
52.5°	503	505	508	487	399	321	405	873	1316	1238	770
55°	522	524	530	512	417	329	419	919	1440	1391	891
57.5°	538	542	550	537	433	334	435	974	1545	1533	1011
60°	552	557	569	561	452	341	451	1034	1664	1677	1141
62.5°	565	571	587	583	470	347	464	1094	1794	1840	1274
65°	579	585	605	604	486	352	473	1150	1911	1999	1390
67.5°	588	596	620	623	502	353	472	1169	1970	2061	1455
70°	594	603	634	640	514	350	449	1121	1907	1993	1423
72.5°	598	607	640	651	522	341	405	995	1718	1801	1297
75°	602	610	643	655	524	328	347	831	1464	1539	1108
77.5°	603	610	641	653	518	310	292	665	1203	1265	913
80°	603	608	636	646	511	296	246	535	988	1030	747
82.5°	601	605	628	636	502	282	210	427	802	841	605
85°	592	596	616	621	491	270	180	336	645	682	478
87.5°	577	581	595	598	473	256	158	256	507	535	366
90°	553	555	565	565	444	240	135	192	378	396	264
92.5°	517	519	525	517	404	218	116	144	265	271	187
95°	469	470	473	460	360	196	101	115	191	191	143
97.5°	408	404	410	395	309	172	90	97	152	158	117
100°	335	338	343	330	259	148	79	84	130	137	100
102.5°	270	270	278	267	210	127	70	73	110	115	83
105°	205	207	216	206	166	105	62	64	91	94	70
107.5°	159	160	166	158	130	86	54	56	77	79	60
110°	113	115	119	117	97	70	47	50	65	66	51



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
112.5°	76	78	84	84	74	56	41	44	56	57	44
115°	53	54	59	60	55	43	36	41	49	49	39
117.5°	36	37	41	44	40	34	31	38	45	45	37
120°	24	25	28	30	29	27	28	35	41	41	34
122.5°	17	17	19	20	22	22	25	32	38	37	31
125°	12	12	14	15	17	19	23	30	35	35	29
127.5°	9	9	10	11	14	17	21	28	32	32	27
130°	7	7	8	9	11	15	19	25	29	28	25
132.5°	6	6	7	8	9	13	18	23	26	25	22
135°	5	5	6	7	7	11	16	21	24	23	20
137.5°	5	5	6	6	6	9	14	19	21	20	18
140°	4	4	5	5	5	7	12	17	19	19	17
142.5°	4	4	5	5	4	5	9	14	16	16	14
145°	3	3	4	4	4	3	5	10	13	13	12
147.5°	3	3	4	4	3	3	3	6	9	9	8
150°	2	3	3	4	3	2	2	3	5	5	5
152.5°	2	2	3	3	3	2	2	2	2	3	3
155°	2	2	3	3	2	1	1	2	2	2	2
157.5°	2	2	2	3	2	1	1	1	1	1	2
160°	1	1	2	2	2	1	1	1	1	1	1
162.5°	1	1	2	2	2	1	1	1	1	1	1
165°	1	1	2	2	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	1	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	2	2	1	1	1	1	1	1
180°	1	1	1	1	1	1	1	1	1	1	1



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	58	58	58	58	58	58	58	58	58	58	58
2.5°	58	58	57	57	57	57	56	55	54	54	53
5°	57	57	56	55	55	55	54	53	52	52	51
7.5°	56	55	54	54	54	54	53	52	51	51	51
10°	55	54	53	53	53	53	52	52	52	52	52
12.5°	57	56	54	54	54	54	54	54	55	55	55
15°	64	62	59	57	57	57	58	60	61	62	62
17.5°	76	74	68	65	64	64	66	68	70	71	71
20°	92	88	79	75	74	74	75	78	80	81	81
22.5°	113	106	94	87	85	85	87	91	94	95	96
25°	138	127	110	100	98	98	101	106	111	113	113
27.5°	161	145	122	111	109	110	116	123	131	135	136
30°	183	161	133	120	117	122	133	146	158	165	166
32.5°	208	181	145	128	125	133	152	176	195	206	207
35°	236	204	159	136	130	144	175	213	240	252	254
37.5°	267	228	172	142	135	156	202	254	286	296	298
40°	305	256	186	146	140	169	230	295	325	332	333
42.5°	347	288	201	152	143	180	257	330	357	358	358
45°	388	319	215	157	147	191	280	358	381	380	381
47.5°	434	352	229	163	152	202	303	383	403	402	403
50°	482	377	244	169	156	210	324	408	426	421	421
52.5°	534	408	259	176	160	219	342	433	447	442	440
55°	590	441	277	183	165	229	365	459	469	463	461
57.5°	650	476	294	191	171	241	385	484	491	483	480
60°	719	513	310	199	177	252	407	507	511	501	499
62.5°	791	556	326	207	184	263	425	530	529	517	514
65°	858	595	338	216	190	272	443	550	545	533	530
67.5°	887	611	342	219	192	279	458	567	561	548	543
70°	861	592	331	214	188	284	471	581	575	560	556
72.5°	781	539	302	198	178	284	481	593	585	571	565
75°	665	463	263	174	162	279	488	601	595	582	576
77.5°	550	389	225	151	147	273	494	610	605	593	589
80°	451	326	192	133	136	269	499	617	613	603	598
82.5°	368	271	166	117	126	266	502	618	615	607	604
85°	300	223	141	103	116	259	496	611	611	604	602
87.5°	236	181	118	89	105	248	479	593	595	591	590
90°	182	145	96	77	94	231	449	562	569	569	568
92.5°	138	109	77	65	84	210	411	518	531	532	533
95°	102	82	63	56	75	187	365	467	483	488	488
97.5°	83	67	54	49	67	165	316	407	425	433	433
100°	71	58	48	44	60	143	266	344	363	366	366
102.5°	61	51	42	39	53	122	219	281	299	301	300
105°	52	44	37	35	48	101	175	222	235	236	235
107.5°	45	38	33	31	43	83	138	172	181	179	178
110°	39	33	29	28	37	67	104	130	136	133	132



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	35	30	26	26	32	54	78	95	98	95	94
115°	32	28	24	24	28	41	58	68	69	66	66
117.5°	30	26	23	22	24	32	41	48	48	46	45
120°	28	25	22	21	22	25	30	32	33	31	31
122.5°	26	24	21	20	20	21	22	22	22	20	20
125°	25	23	21	19	18	18	17	16	15	15	15
127.5°	24	22	19	18	17	16	14	12	11	10	10
130°	22	20	18	16	16	14	11	9	8	8	8
132.5°	20	18	16	15	14	12	9	7	7	6	6
135°	18	17	15	14	12	10	7	6	6	5	5
137.5°	16	15	14	12	10	8	6	5	5	5	5
140°	15	14	12	10	9	7	5	5	4	4	4
142.5°	13	12	10	9	7	6	5	4	3	3	3
145°	11	10	8	7	6	5	4	3	3	3	3
147.5°	8	7	6	5	5	4	4	3	2	2	2
150°	5	5	4	4	4	4	3	2	2	2	2
152.5°	3	3	3	3	3	3	3	2	2	1	1
155°	2	2	2	3	3	3	2	2	1	1	1
157.5°	2	2	2	2	3	3	2	1	1	1	0
160°	1	1	1	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°	1	1	1	1	1	1	1	1	1	1	1

(END OF REPORT)