

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: P10093

Luminaire Tested: **LXF10S22**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: P10093
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: LXF10S22
Description: LEXINGTON HID POST TOP FIXTURE
WITH PRISMATIC TYPE 2 & 3 PANELS
AND VERTICAL LAMP SOCKET ASSEMBLY
Light Source: MOGUL BASE ED23.5 CLEAR HIGH PRESSURE SODIUM
LU100/U 100 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 9500 (1 lamp)
Luminaire Lumens: 4977.9 lumens
Efficiency: 52.4%
Efficacy: 49.8 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

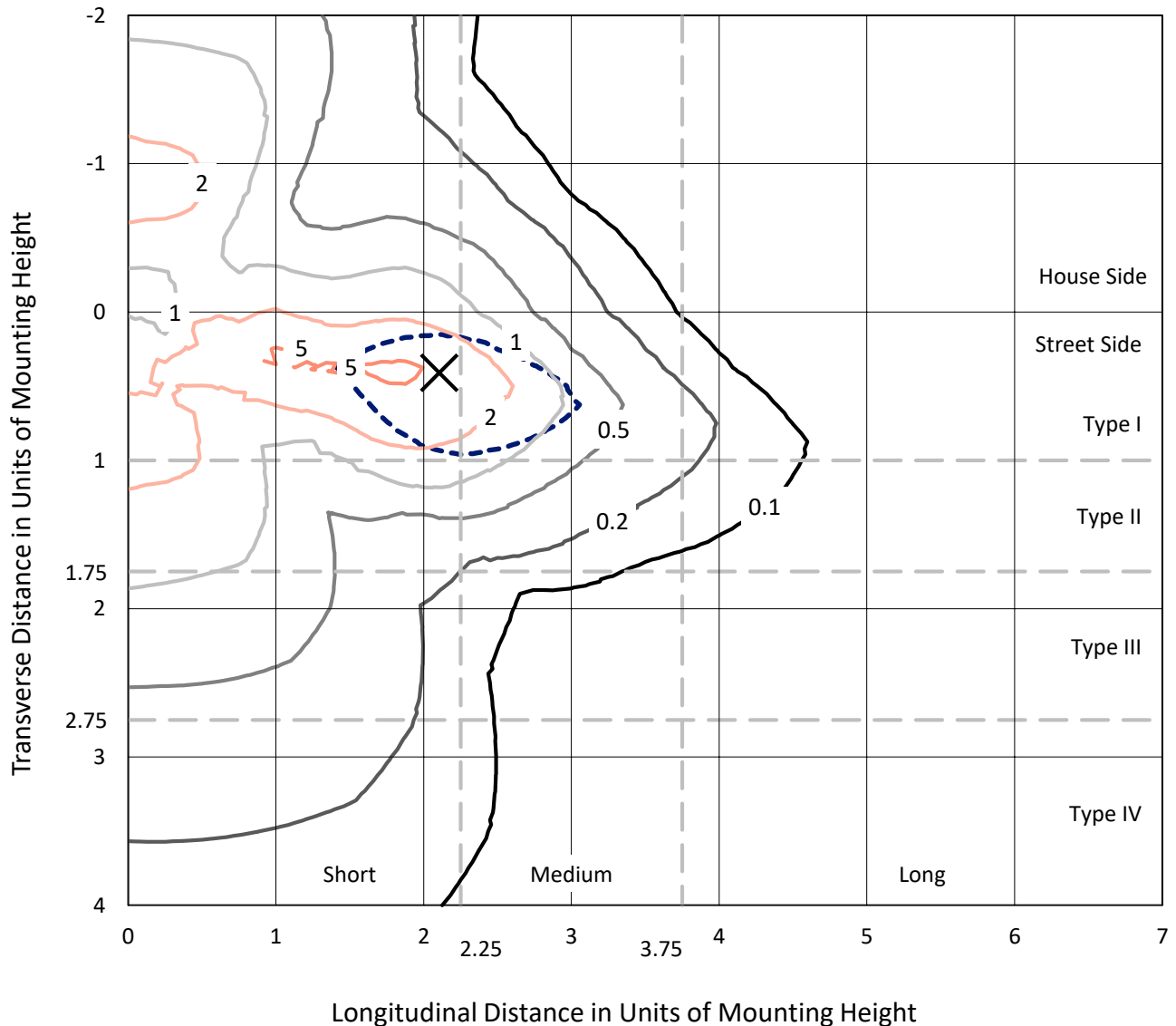
Input Watts (W): 100
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

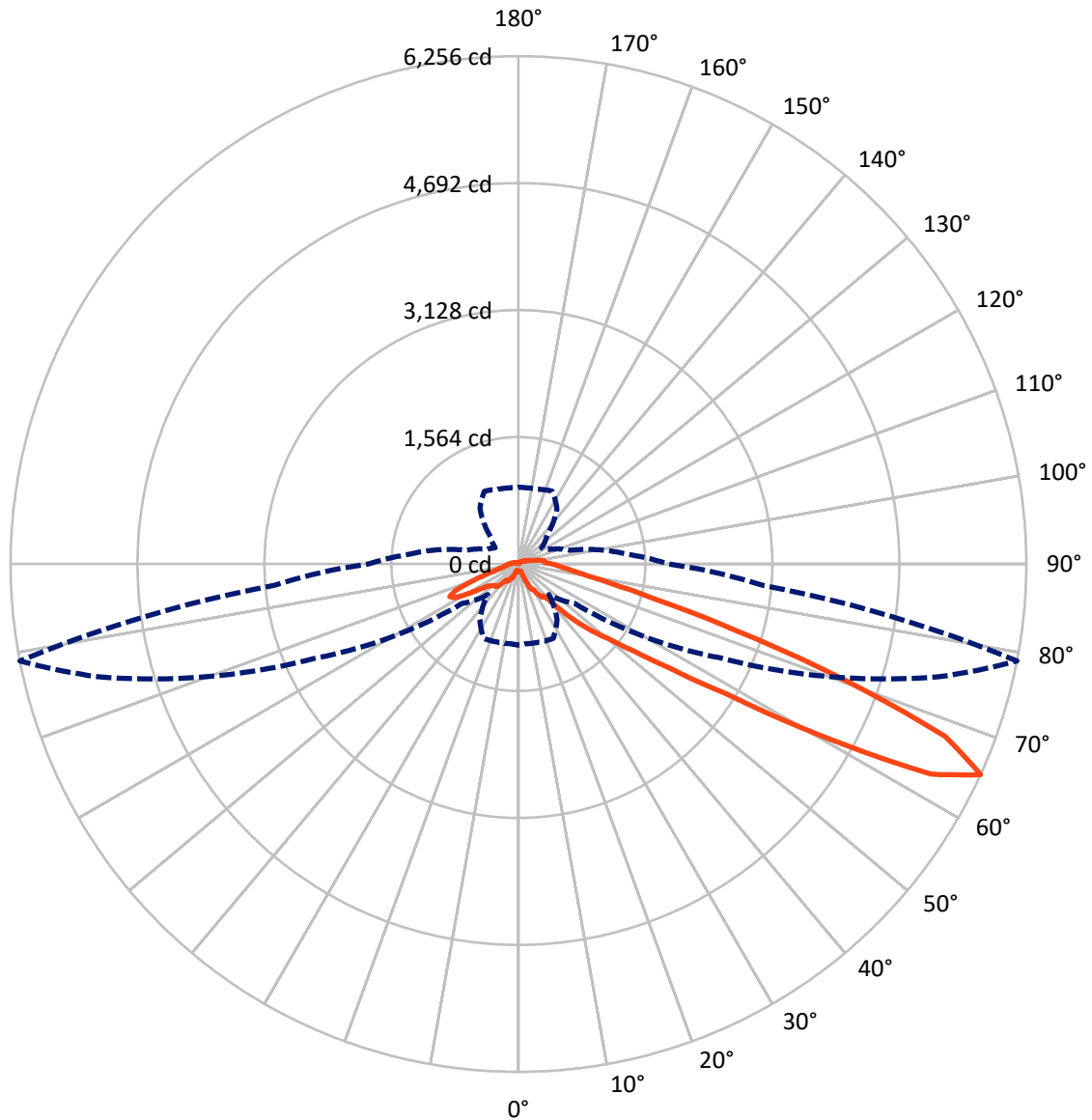
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type I - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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

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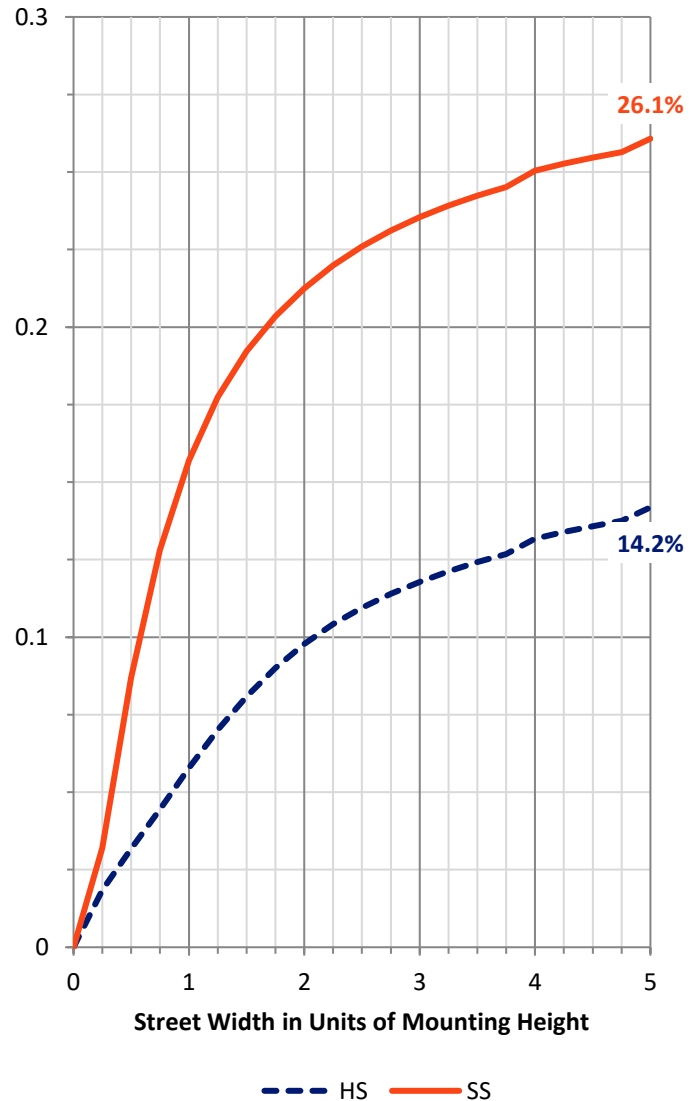
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1577.3	322.1	1899.4
	% Lamp	16.6	3.4	20.0
Street Side	Lumens	2717.1	361.4	3078.4
	% Lamp	28.6	3.8	32.4
Total	Lumens	4294.3	683.5	4977.9
	% Lamp	45.2	7.2	52.4

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	9.3	0.2	0.1
10°-20°	34.6	0.7	0.4
20°-30°	105.7	2.1	1.1
30°-40°	239.1	4.8	2.5
40°-50°	460.8	9.3	4.9
50°-60°	741.3	14.9	7.8
60°-70°	1223.4	24.6	12.9
70°-80°	834.3	16.8	8.8
80°-90°	645.8	13.0	6.8
90°-100°	424.2	8.5	4.5
100°-110°	164.5	3.3	1.7
110°-120°	48.2	1.0	0.5
120°-130°	24.7	0.5	0.3
130°-140°	13.8	0.3	0.1
140°-150°	5.6	0.1	0.1
150°-160°	1.6	0.0	0.0
160°-170°	0.7	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-90°	4294.3	86.3	45.2
0°-180°	4977.9	100.0	52.4

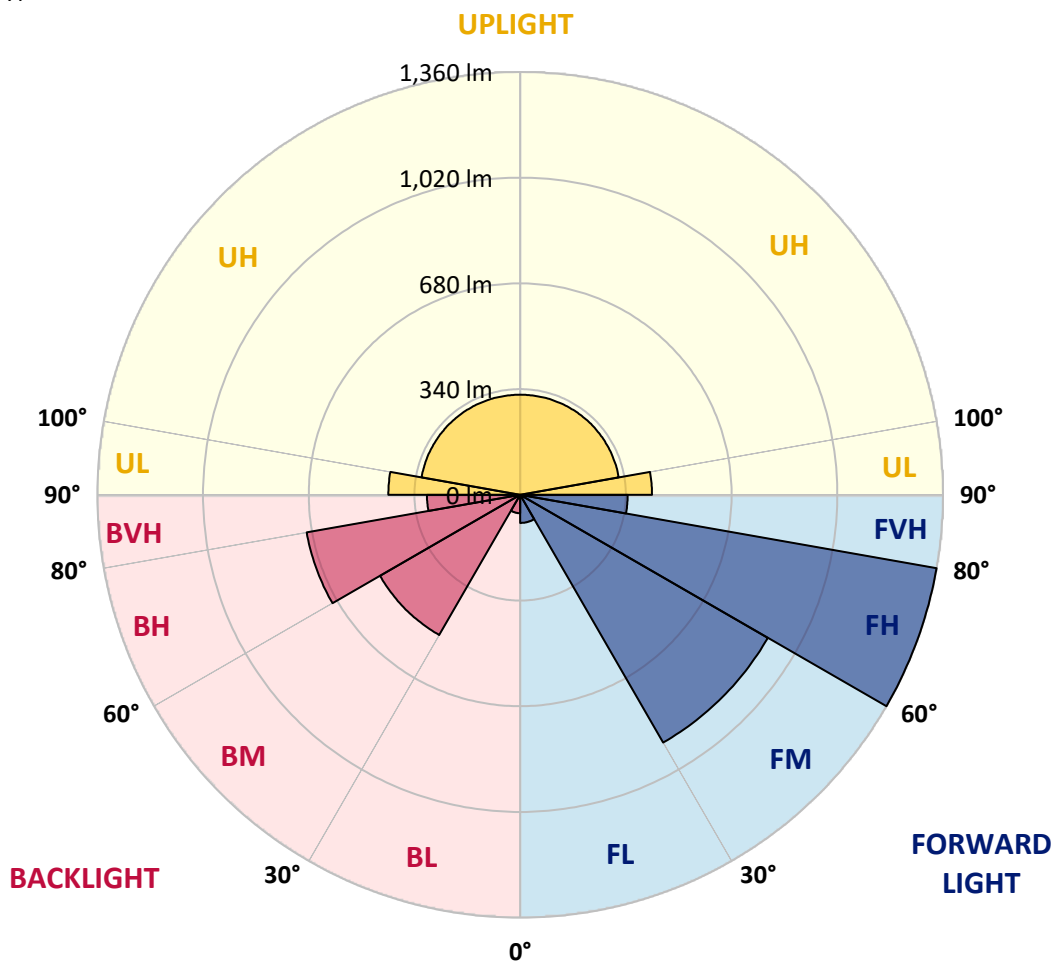


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	90.5	1.0			
FM (30°-60°)	920.3	9.7			
FH (60°-80°)	1360.4	14.3			G1/1800
FVH (80°-90°)	345.9	3.6			G3/500
BL (0°-30°)	59.1	0.6	B0/110		
BM (30°-60°)	521.0	5.5	B1/1000		
BH (60°-80°)	697.3	7.3	B2/1000		G2/1000
BVH (80°-90°)	299.9	3.2			G3/500
UL (90°-100°)	424.2	4.5		U3/500	
UH (100°-180°)	322.1	3.4		U3/500	
Trapped Light	4522.1	47.6			

BUG Rating: B2-U3-G3
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	91	91	91	91	91	91	91	91	91	91	91
2.5°	101	101	102	101	100	97	95	94	92	92	91
5°	118	118	118	115	110	103	99	96	92	91	90
7.5°	140	139	136	131	123	112	102	97	91	89	87
10°	167	167	161	154	138	120	106	97	90	88	86
12.5°	187	186	181	173	154	130	110	96	89	87	84
15°	200	199	195	186	165	138	114	97	93	91	89
17.5°	210	209	205	196	177	147	122	109	103	104	102
20°	220	219	216	210	189	163	147	135	139	140	136
22.5°	233	232	235	243	241	224	196	189	212	221	203
25°	254	251	260	283	330	373	285	242	307	316	260
27.5°	275	271	277	289	355	452	398	267	373	358	259
30°	313	307	309	307	313	371	447	333	401	367	284
32.5°	362	354	350	331	314	376	635	518	470	441	360
35°	451	437	415	366	341	362	598	725	587	505	374
37.5°	543	530	511	434	374	354	504	814	638	497	367
40°	583	569	570	515	416	359	425	984	766	585	460
42.5°	656	636	628	561	452	370	443	1251	1124	800	609
45°	690	672	680	623	481	393	478	1336	1544	1031	711
47.5°	715	697	704	671	533	413	515	1358	1895	1245	765
50°	753	737	739	717	583	426	541	1245	2202	1459	818
52.5°	797	784	782	770	614	427	550	1250	2507	1783	937
55°	837	822	824	824	644	430	565	1280	2851	2264	1086
57.5°	867	846	850	872	682	445	607	1463	3327	3008	1422
60°	908	886	884	911	725	470	681	1864	4166	4316	1995
62.5°	964	947	943	957	768	503	787	2390	5090	5701	2675
65°	999	987	995	1012	828	533	849	2731	5365	6256	3017
67.5°	1005	1004	1041	1068	885	547	788	2556	4783	5669	2798
70°	1003	1012	1055	1088	908	528	614	1885	3598	4234	2093
72.5°	1013	1021	1055	1087	888	486	413	1163	2407	2787	1370
75°	1018	1030	1056	1072	848	437	281	716	1556	1761	858
77.5°	1018	1040	1051	1066	839	418	219	518	1071	1173	605
80°	1038	1063	1054	1062	842	413	188	405	777	844	469
82.5°	1054	1082	1066	1077	856	420	167	326	606	660	385
85°	1049	1079	1052	1061	852	425	149	268	496	548	326
87.5°	1036	1063	1032	1022	822	414	137	228	424	475	278
90°	977	999	953	928	743	381	127	193	355	398	232
92.5°	870	890	845	803	640	335	116	168	293	330	193
95°	728	744	707	672	535	293	107	157	277	319	184
97.5°	560	577	557	535	441	250	98	145	270	314	173
100°	426	441	446	431	352	208	89	123	227	261	143
102.5°	293	303	316	315	268	168	80	105	176	198	114
105°	185	192	213	210	191	134	72	91	139	154	95
107.5°	115	119	133	132	127	102	66	82	124	136	84
110°	65	68	76	83	83	76	60	74	107	117	72



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
112.5°	36	37	46	53	56	56	54	68	94	100	64
115°	25	25	32	39	43	44	48	63	83	86	58
117.5°	18	19	23	30	34	38	45	59	77	80	54
120°	14	15	18	23	28	33	41	55	70	72	50
122.5°	12	12	15	19	25	30	38	51	65	63	47
125°	10	10	12	16	22	27	36	48	60	58	44
127.5°	8	9	11	13	18	24	34	44	54	51	40
130°	8	8	10	11	15	21	31	41	50	46	37
132.5°	7	7	9	10	13	19	28	39	45	41	33
135°	6	7	8	9	10	16	25	35	42	37	30
137.5°	6	6	8	8	8	13	22	31	36	32	27
140°	5	6	7	8	7	9	18	27	33	29	24
142.5°	5	5	7	7	6	6	13	22	26	24	20
145°	4	5	6	6	5	4	8	15	19	18	16
147.5°	4	4	6	6	5	4	5	9	12	12	11
150°	3	4	5	5	4	3	3	5	7	7	7
152.5°	3	3	5	5	4	2	2	3	3	4	4
155°	3	3	4	5	3	2	2	2	3	3	3
157.5°	3	3	4	4	3	2	2	2	2	2	2
160°	2	2	4	4	3	2	2	2	2	1	2
162.5°	2	2	4	4	3	2	2	2	2	1	2
165°	2	2	3	4	3	2	2	2	2	1	2
167.5°	2	2	3	4	3	2	2	2	2	1	2
170°	2	2	4	4	3	2	2	2	2	1	2
172.5°	2	2	4	4	3	2	2	2	2	1	2
175°	2	2	3	4	3	2	2	2	2	1	2
177.5°	2	2	4	4	3	2	2	2	2	1	2
180°	2	2	2	2	2	2	2	2	2	2	2



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	91	91	91	91	91	91	91	91	91	91	91
2.5°	90	90	90	89	89	88	86	84	83	82	82
5°	88	88	87	86	86	85	83	81	81	80	80
7.5°	86	85	84	83	83	83	83	82	81	81	82
10°	84	83	82	81	82	83	84	84	85	85	85
12.5°	82	81	80	80	83	85	87	89	91	93	93
15°	88	86	84	84	86	90	94	98	101	104	104
17.5°	100	98	95	94	95	98	105	110	114	117	119
20°	132	128	122	116	115	117	120	125	131	134	137
22.5°	185	177	165	151	145	142	141	147	155	159	161
25°	214	201	185	172	166	165	168	175	185	188	191
27.5°	213	198	179	168	171	181	198	207	219	223	229
30°	258	239	208	184	179	196	224	245	265	275	282
32.5°	308	279	234	199	192	214	252	294	329	345	359
35°	311	284	229	193	199	235	289	361	416	444	457
37.5°	316	284	218	179	196	252	337	448	523	540	561
40°	406	354	252	182	193	268	400	538	600	598	617
42.5°	521	444	302	200	201	288	455	603	646	632	649
45°	587	490	323	213	216	311	496	637	672	661	681
47.5°	621	504	323	218	227	330	527	668	698	688	708
50°	663	524	328	221	227	339	559	710	731	725	746
52.5°	727	567	343	226	226	352	601	763	772	770	791
55°	826	633	367	236	233	373	642	808	814	820	842
57.5°	1035	787	421	261	249	396	685	863	864	862	880
60°	1378	1028	516	309	277	426	735	921	901	893	900
62.5°	1731	1273	621	381	319	464	787	966	929	919	924
65°	1846	1357	657	427	349	500	826	990	953	943	947
67.5°	1649	1221	597	410	341	512	843	1008	966	956	959
70°	1226	909	455	333	285	487	833	1008	968	966	971
72.5°	819	614	307	237	214	447	817	1015	986	992	999
75°	554	422	213	172	165	418	829	1037	1012	1022	1034
77.5°	404	305	166	145	146	421	864	1077	1042	1062	1081
80°	315	242	143	132	139	440	893	1105	1065	1092	1111
82.5°	260	203	131	123	133	449	900	1104	1066	1094	1115
85°	227	179	121	114	124	436	867	1066	1046	1068	1091
87.5°	200	159	111	104	112	399	801	1003	1005	1027	1048
90°	169	137	99	95	101	348	716	915	937	963	982
92.5°	141	118	89	84	91	302	621	804	843	871	891
95°	129	107	83	78	83	263	527	679	724	754	776
97.5°	122	101	78	72	77	226	443	554	590	612	621
100°	106	89	69	63	70	192	355	452	471	482	488
102.5°	88	75	59	55	63	157	270	340	357	359	360
105°	73	64	52	50	57	125	195	240	249	243	238
107.5°	65	57	46	45	52	96	133	159	163	154	151
110°	56	50	43	41	47	72	89	102	105	98	97



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	51	46	39	38	42	54	61	65	66	61	60
115°	48	43	37	36	37	42	45	45	42	39	38
117.5°	46	42	36	34	34	35	34	33	29	28	27
120°	44	40	35	34	32	31	28	24	21	20	20
122.5°	41	38	35	33	31	28	24	18	16	15	14
125°	39	37	33	31	29	26	21	15	12	11	11
127.5°	37	35	31	29	27	23	17	12	10	9	9
130°	34	32	29	27	24	20	15	10	9	8	8
132.5°	31	29	26	24	21	17	13	9	8	7	7
135°	28	27	24	21	18	15	11	8	7	6	6
137.5°	25	23	21	18	16	12	9	7	6	6	6
140°	22	21	18	16	13	10	8	6	5	5	5
142.5°	18	17	15	13	11	9	7	6	5	4	4
145°	15	14	12	10	9	7	6	5	4	4	4
147.5°	10	10	8	7	7	7	6	4	3	3	3
150°	7	6	6	5	6	6	5	4	3	3	2
152.5°	4	4	4	4	5	5	4	3	2	2	2
155°	3	3	3	4	5	5	4	3	2	2	2
157.5°	2	2	3	3	5	5	4	2	2	1	1
160°	2	2	2	3	5	5	4	2	1	0	0
162.5°	2	2	2	3	5	5	4	2	1	0	0
165°	2	2	2	3	5	5	4	2	1	0	0
167.5°	2	2	2	3	5	5	4	2	1	0	0
170°	2	2	2	3	5	5	4	2	1	0	0
172.5°	2	2	2	3	5	5	4	2	1	0	0
175°	2	2	2	3	5	5	4	2	1	0	0
177.5°	2	2	2	3	5	5	4	2	1	0	0
180°	2	2	2	2	2	2	2	2	2	2	2

(END OF REPORT)