

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: P10097

Luminaire Tested: **LXF10S33**

Issue Date: 3/3/2020

Test Information

Test Method: LM-31-95
Report Number: P10097
Test Lab: PEACHTREE CITY
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: LXF10S33
Description: LEXINGTON HID TYPE 3 POST TOP FIXTURE
WITH PRISMATIC TYPE 2 & 3 PANELS
AND VERTICAL LAMP SOCKET ASSEMBLY
Light Source: MOGUL BASE ED23.5 COATED HIGH PRESSURE SODIUM
LU100/C/U 100 WATTS
Ballast/Driver: -

Summary

Lumens per Lamp: 8800 (1 lamp)
Luminaire Lumens: 4497.4 lumens
Efficiency: 51.1%
Efficacy: 45.0 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.96' x L: 0.96' x H: 0.81')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B2 - U3 - G3

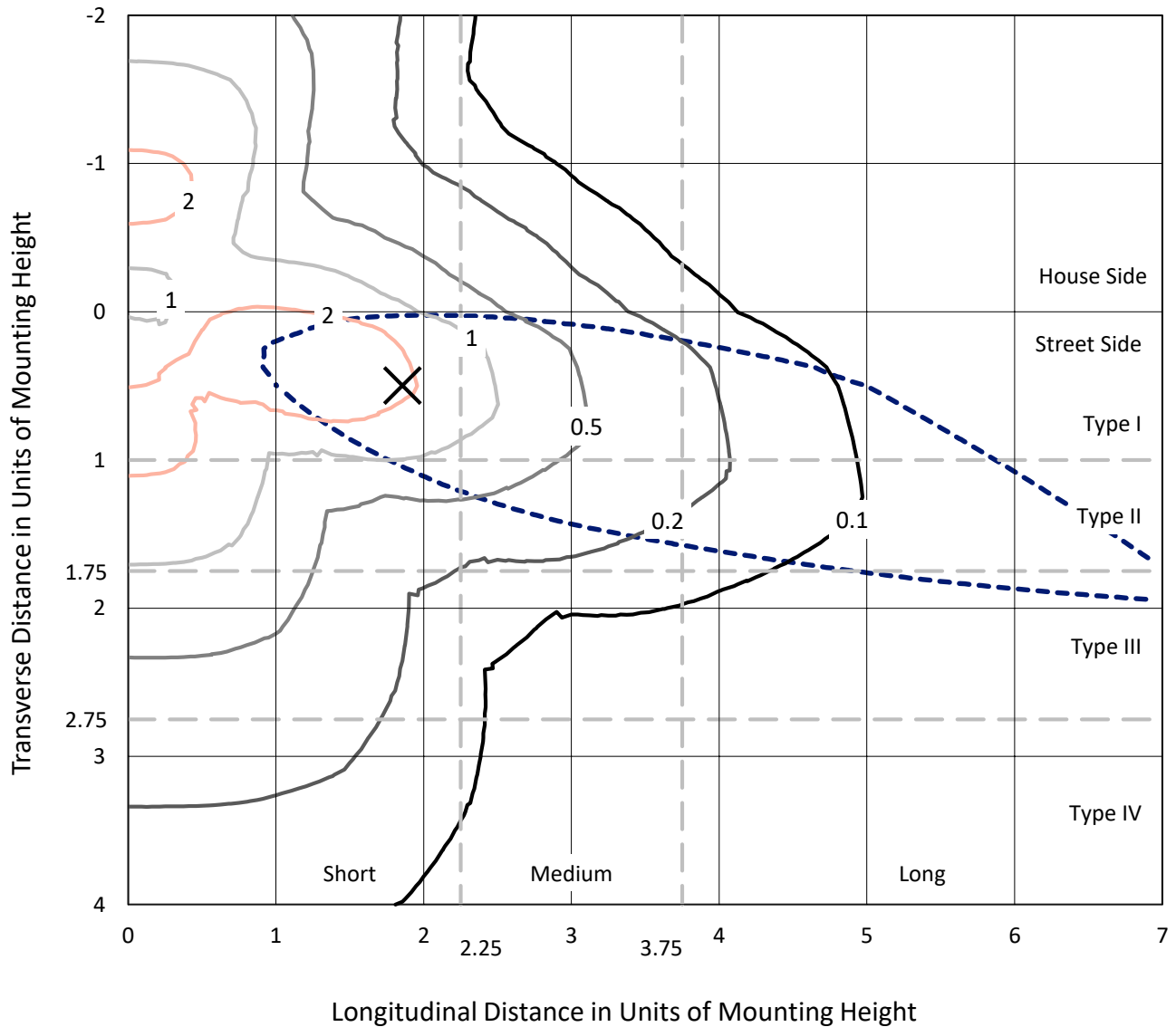
Input Watts (W): 100
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P10097
 CATALOG NUMBER: LXF10S33

Iso-Footcandle Lines of Horizontal Illumination

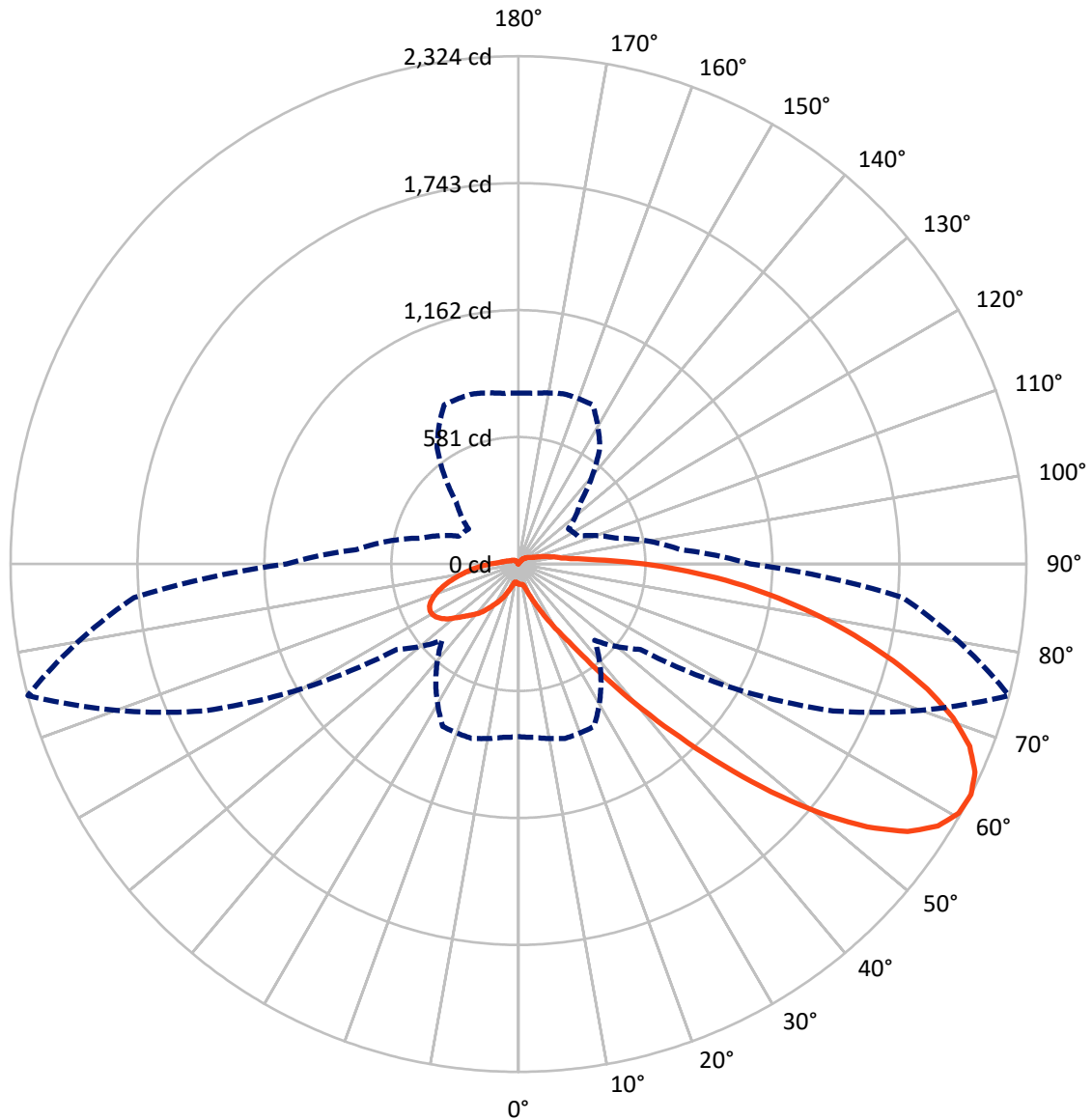
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.5 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P10097
CATALOG NUMBER: LXF10S33

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical



REPORT NUMBER: P10097
 CATALOG NUMBER: LXF10S33

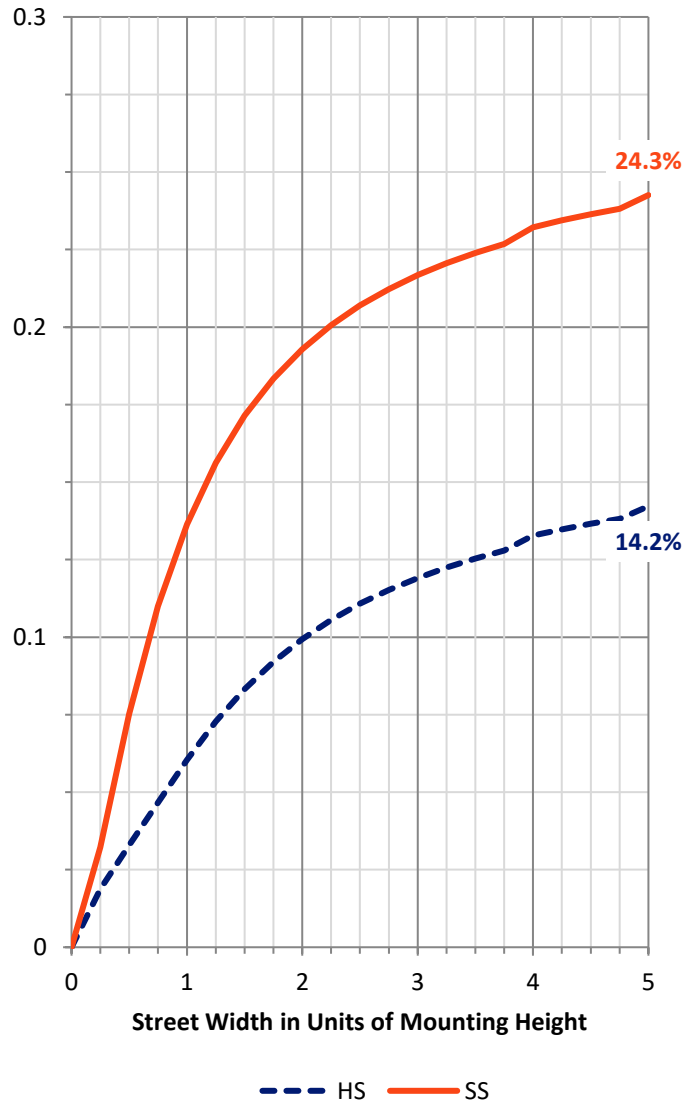
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1446.9	342.6	1789.5
	% Lamp	16.4	3.9	20.3
Street Side	Lumens	2341.8	366.2	2708.0
	% Lamp	26.6	4.2	30.8
Total	Lumens	3788.7	708.8	4497.4
	% Lamp	43.1	8.1	51.1

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	9.2	0.2	0.1
10°-20°	35.3	0.8	0.4
20°-30°	102.4	2.3	1.2
30°-40°	243.9	5.4	2.8
40°-50°	451.9	10.0	5.1
50°-60°	681.5	15.2	7.7
60°-70°	829.2	18.4	9.4
70°-80°	800.3	17.8	9.1
80°-90°	635.0	14.1	7.2
90°-100°	398.8	8.9	4.5
100°-110°	191.4	4.3	2.2
110°-120°	70.0	1.6	0.8
120°-130°	27.1	0.6	0.3
130°-140°	13.4	0.3	0.2
140°-150°	5.6	0.1	0.1
150°-160°	1.5	0.0	0.0
160°-170°	0.7	0.0	0.0
170°-180°	0.2	0.0	0.0
0°-90°	3788.7	84.2	43.1
0°-180°	4497.4	100.0	51.1

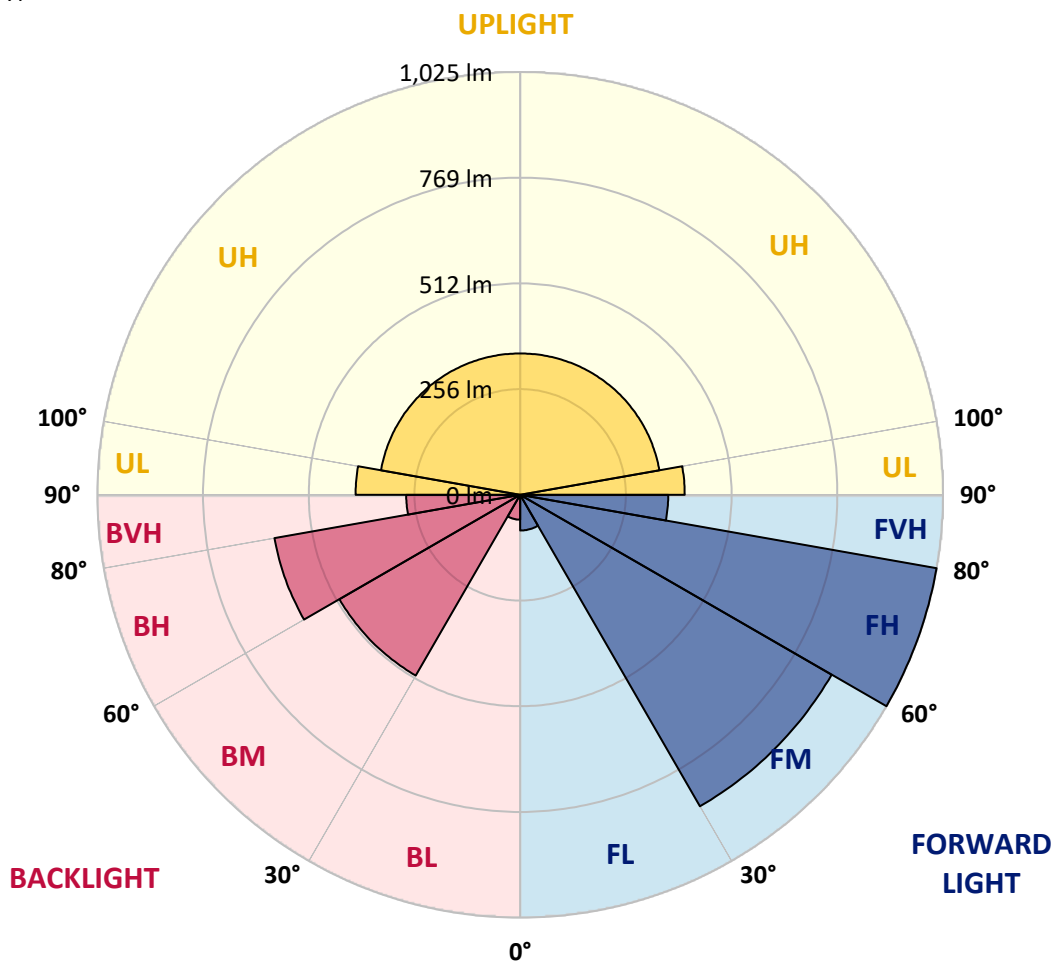


REPORT NUMBER: P10097
 CATALOG NUMBER: LXF10S33

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Lamp	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	86.5	1.0			
FM (30°-60°)	871.6	9.9			
FH (60°-80°)	1024.8	11.6			G1/1800
FVH (80°-90°)	358.8	4.1			G3/500
BL (0°-30°)	60.3	0.7	B0/110		
BM (30°-60°)	505.7	5.7	B1/1000		
BH (60°-80°)	604.7	6.9	B2/1000		G2/1000
BVH (80°-90°)	276.2	3.1			G3/500
UL (90°-100°)	398.8	4.5		U3/500	
UH (100°-180°)	342.6	3.9		U3/500	
Trapped Light	4302.6	48.9			

BUG Rating: B2-U3-G3
 Type II Short





REPORT NUMBER: P10097
 CATALOG NUMBER: LXF10S33

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	91	91	91	91	91	91	91	91	91	91	91
2.5°	101	101	102	103	101	99	96	95	93	91	90
5°	114	115	114	113	110	106	101	97	94	90	89
7.5°	128	128	127	125	120	113	106	99	94	89	87
10°	141	141	140	137	129	120	110	102	95	89	87
12.5°	156	156	153	148	138	127	116	105	98	93	91
15°	171	171	169	162	150	135	124	114	111	107	105
17.5°	187	188	186	180	168	150	137	131	132	129	125
20°	207	209	211	208	194	174	157	154	161	156	149
22.5°	231	232	237	238	230	217	191	185	194	188	179
25°	256	257	262	268	278	277	247	228	239	230	215
27.5°	288	288	289	294	318	340	327	289	292	273	250
30°	329	331	325	318	336	377	403	381	352	316	284
32.5°	386	387	377	353	347	391	468	494	425	364	321
35°	451	450	432	394	363	395	528	628	535	424	367
37.5°	511	512	494	447	390	399	571	772	687	497	418
40°	563	562	548	500	420	407	595	910	873	576	474
42.5°	603	602	593	548	456	419	606	1022	1081	664	533
45°	634	635	631	590	489	432	606	1122	1315	769	598
47.5°	660	661	664	626	517	443	610	1223	1558	898	673
50°	685	686	692	659	544	455	624	1323	1793	1058	754
52.5°	709	713	721	692	567	467	643	1425	1999	1245	837
55°	734	736	749	726	590	478	665	1508	2161	1422	912
57.5°	755	757	777	760	615	488	681	1567	2263	1580	976
60°	776	777	802	792	638	493	690	1595	2315	1694	1027
62.5°	790	796	826	820	659	494	681	1590	2324	1766	1061
65°	807	812	848	848	677	490	661	1548	2296	1787	1072
67.5°	819	828	867	874	693	482	627	1477	2227	1755	1053
70°	832	841	882	893	705	469	580	1370	2110	1678	999
72.5°	843	850	894	906	715	456	524	1240	1957	1557	920
75°	851	858	899	913	720	440	468	1088	1772	1397	821
77.5°	856	864	901	915	720	423	407	928	1572	1226	713
80°	859	864	897	910	713	407	353	780	1369	1042	608
82.5°	850	856	886	896	700	388	305	636	1160	864	514
85°	833	838	865	868	680	368	263	502	953	681	423
87.5°	802	807	829	828	645	345	223	374	733	504	331
90°	760	763	781	775	600	319	189	269	535	358	247
92.5°	702	705	715	702	543	289	165	200	361	249	179
95°	630	634	639	622	480	259	144	162	250	188	137
97.5°	540	548	552	536	412	227	126	137	198	161	114
100°	454	456	464	446	343	196	112	120	174	139	99
102.5°	364	368	372	357	276	166	99	105	148	118	86
105°	278	283	288	274	216	139	87	92	126	100	74
107.5°	209	211	215	208	170	115	77	81	109	88	65
110°	155	154	160	157	132	95	67	73	92	75	57



REPORT NUMBER: P10097
 CATALOG NUMBER: LXF10S33

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	105	106	114	114	101	77	59	66	80	66	52
115°	74	75	81	84	76	60	52	61	70	59	47
117.5°	51	52	57	61	56	48	46	57	65	55	45
120°	34	34	39	41	41	39	41	52	60	51	42
122.5°	24	24	27	29	31	33	37	48	55	47	40
125°	17	17	18	21	24	28	34	45	51	44	38
127.5°	13	13	14	16	19	24	32	42	47	40	35
130°	10	11	12	13	16	21	29	38	42	37	33
132.5°	9	9	10	11	13	18	26	34	38	33	29
135°	8	8	9	10	10	16	23	31	35	30	27
137.5°	7	7	8	9	8	13	20	27	30	27	24
140°	6	6	7	8	7	10	17	24	27	24	22
142.5°	6	6	7	7	6	7	13	20	22	20	18
145°	5	5	6	6	5	5	8	14	17	16	15
147.5°	4	4	5	6	5	4	5	8	11	11	11
150°	4	4	5	5	4	3	3	4	7	7	7
152.5°	3	3	4	5	4	2	3	3	3	4	4
155°	3	3	4	4	3	2	2	2	3	3	3
157.5°	2	3	3	4	3	2	2	2	2	2	2
160°	2	2	3	4	3	2	2	2	1	2	2
162.5°	2	2	3	4	3	2	2	2	1	2	2
165°	2	2	3	4	3	2	2	2	1	2	2
167.5°	2	2	3	4	3	2	2	2	1	2	2
170°	2	2	3	4	3	2	2	2	1	2	2
172.5°	2	2	3	4	3	2	1	2	1	2	2
175°	2	2	3	4	3	2	1	2	1	1	2
177.5°	2	2	3	4	3	2	1	2	1	2	2
180°	2	2	2	2	2	2	2	2	2	2	2



REPORT NUMBER: P10097
 CATALOG NUMBER: LXF10S33

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	91	91	91	91	91	91	91	91	91	91
2.5°	90	89	89	88	88	86	85	84	83	83
5°	88	86	86	86	85	84	82	82	81	81
7.5°	86	84	84	84	84	83	82	82	81	81
10°	86	84	84	84	84	84	84	84	84	84
12.5°	89	87	86	87	88	88	89	90	91	91
15°	102	97	94	94	95	97	99	102	103	103
17.5°	120	111	106	105	105	110	114	117	118	119
20°	140	127	121	119	121	125	132	136	139	139
22.5°	166	147	138	137	140	145	153	160	163	164
25°	197	169	157	156	160	168	179	190	195	196
27.5°	225	189	174	172	180	194	211	227	236	237
30°	250	206	188	186	198	222	251	277	292	295
32.5°	280	226	202	197	216	255	304	342	362	366
35°	317	248	214	207	235	296	365	409	430	432
37.5°	359	274	224	216	256	340	426	476	493	496
40°	398	294	233	224	277	379	484	534	545	547
42.5°	440	312	240	230	296	417	534	580	586	588
45°	485	332	248	236	312	452	581	621	622	622
47.5°	537	354	257	242	326	484	619	653	651	649
50°	587	379	267	249	340	515	654	682	675	675
52.5°	639	408	279	256	352	546	688	709	699	698
55°	682	430	290	264	366	577	722	734	720	720
57.5°	715	447	297	272	382	603	751	758	741	741
60°	737	456	301	277	395	627	778	781	762	761
62.5°	747	458	301	279	403	649	804	806	784	782
65°	743	451	296	276	409	671	829	829	807	804
67.5°	724	434	287	270	414	690	852	851	827	825
70°	688	410	273	259	418	708	874	871	845	840
72.5°	638	380	255	247	419	724	891	886	862	857
75°	577	344	234	236	418	737	904	899	875	871
77.5°	513	306	212	223	414	744	912	908	887	881
80°	447	268	191	210	407	744	910	909	891	886
82.5°	384	231	171	195	397	736	901	901	887	883
85°	320	199	150	180	382	716	877	882	872	869
87.5°	255	165	130	164	360	682	841	849	843	840
90°	194	133	109	146	333	635	789	801	800	799
92.5°	145	106	93	130	302	578	723	738	742	742
95°	110	87	80	116	270	512	647	666	672	674
97.5°	92	76	72	103	235	441	558	584	593	593
100°	81	68	64	92	201	369	471	493	502	503
102.5°	72	60	58	82	168	299	385	404	412	411
105°	63	53	52	73	142	236	301	319	323	325
107.5°	56	48	47	65	117	185	228	243	243	245
110°	49	43	42	56	96	144	175	184	183	185



REPORT NUMBER: P10097
 CATALOG NUMBER: LXF10S33

CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	45	39	39	48	76	110	131	136	136	137
115°	41	36	36	42	59	82	95	97	94	94
117.5°	40	35	34	36	46	59	68	68	66	66
120°	38	34	32	33	37	42	46	47	46	46
122.5°	36	33	31	30	31	32	32	32	30	30
125°	35	31	29	27	26	25	22	22	21	22
127.5°	33	29	27	25	22	19	17	16	16	16
130°	30	27	25	22	19	16	13	13	12	12
132.5°	28	25	22	20	17	13	11	10	10	10
135°	25	22	20	17	14	11	9	9	9	9
137.5°	22	20	18	15	12	9	8	8	7	7
140°	20	18	15	13	10	8	7	6	6	6
142.5°	17	15	13	11	8	7	6	5	5	5
145°	14	12	10	8	7	6	5	5	5	4
147.5°	10	9	8	7	6	5	4	4	4	4
150°	7	6	6	6	5	5	4	3	3	3
152.5°	4	4	5	5	5	4	3	3	2	2
155°	3	3	4	5	4	3	3	2	2	2
157.5°	3	3	4	4	4	3	2	2	1	1
160°	2	2	3	4	4	3	2	1	1	0
162.5°	2	2	3	4	4	3	2	1	0	0
165°	2	2	3	4	4	3	2	1	0	0
167.5°	2	2	3	4	4	3	2	1	0	0
170°	2	2	3	4	4	3	2	1	0	0
172.5°	2	2	3	4	4	3	2	1	0	0
175°	2	2	3	4	4	3	2	1	0	0
177.5°	2	2	3	4	4	3	2	1	0	0
180°	2	2	2	2	2	2	2	2	2	2

(END OF REPORT)