

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P27134

Luminaire Tested: **LDWP-GL-4B-ED-7040**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P27134
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDWP-GL-4B-ED-7040
Description: LUMARK LED WALPAK GLASS 4LED 4000K PROGRAMMED TO 800mA
Light Source: (4) 4000K COB LEDS
Ballast/Driver: [1] ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4159.5 lumens
Efficiency: N/A
Efficacy: 130.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 0.38' x H: 0.46')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U3 - G3

Input Watts (W): 31.9
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: 25 FT

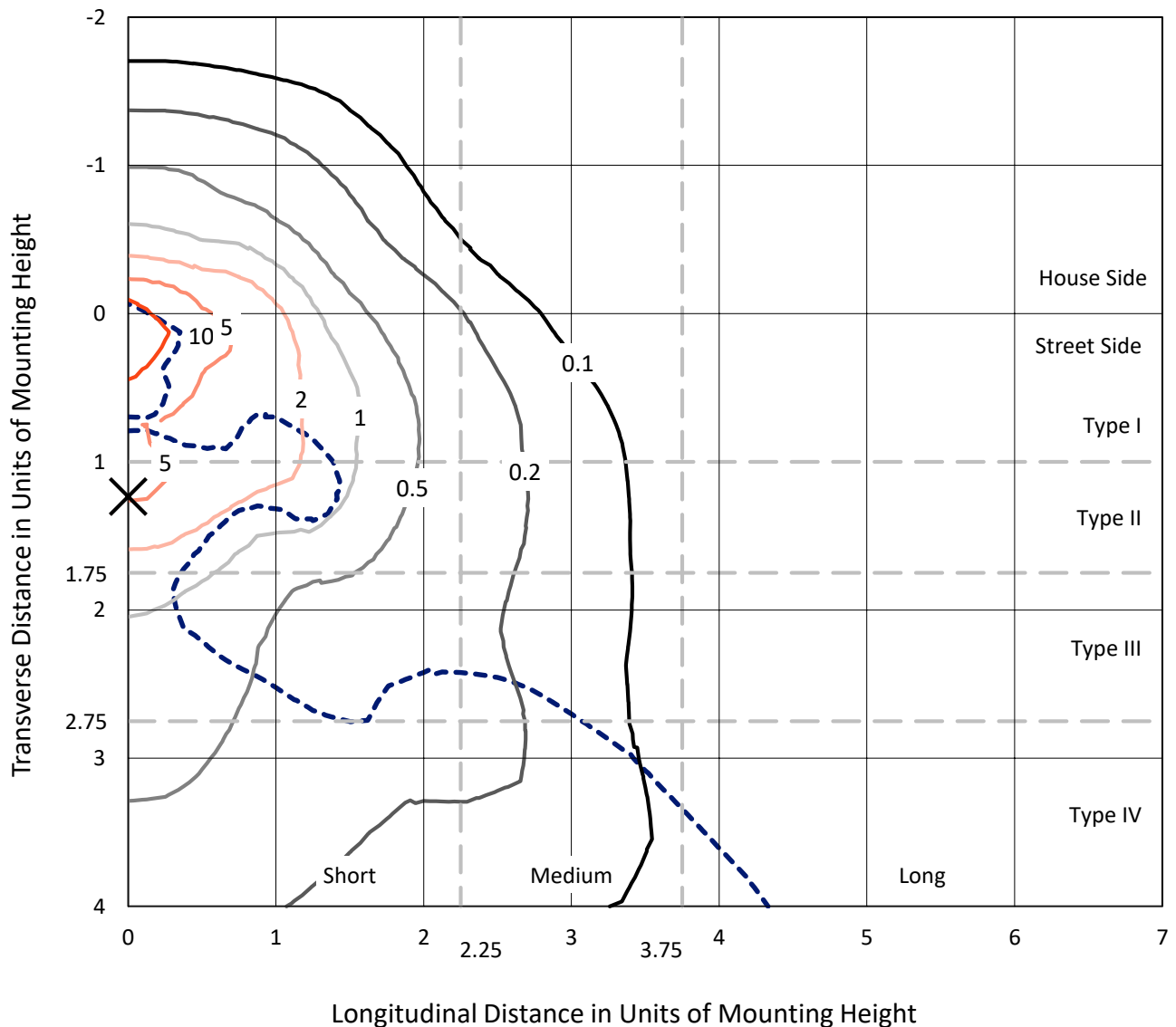


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Iso-Footcandle Lines of Horizontal Illumination

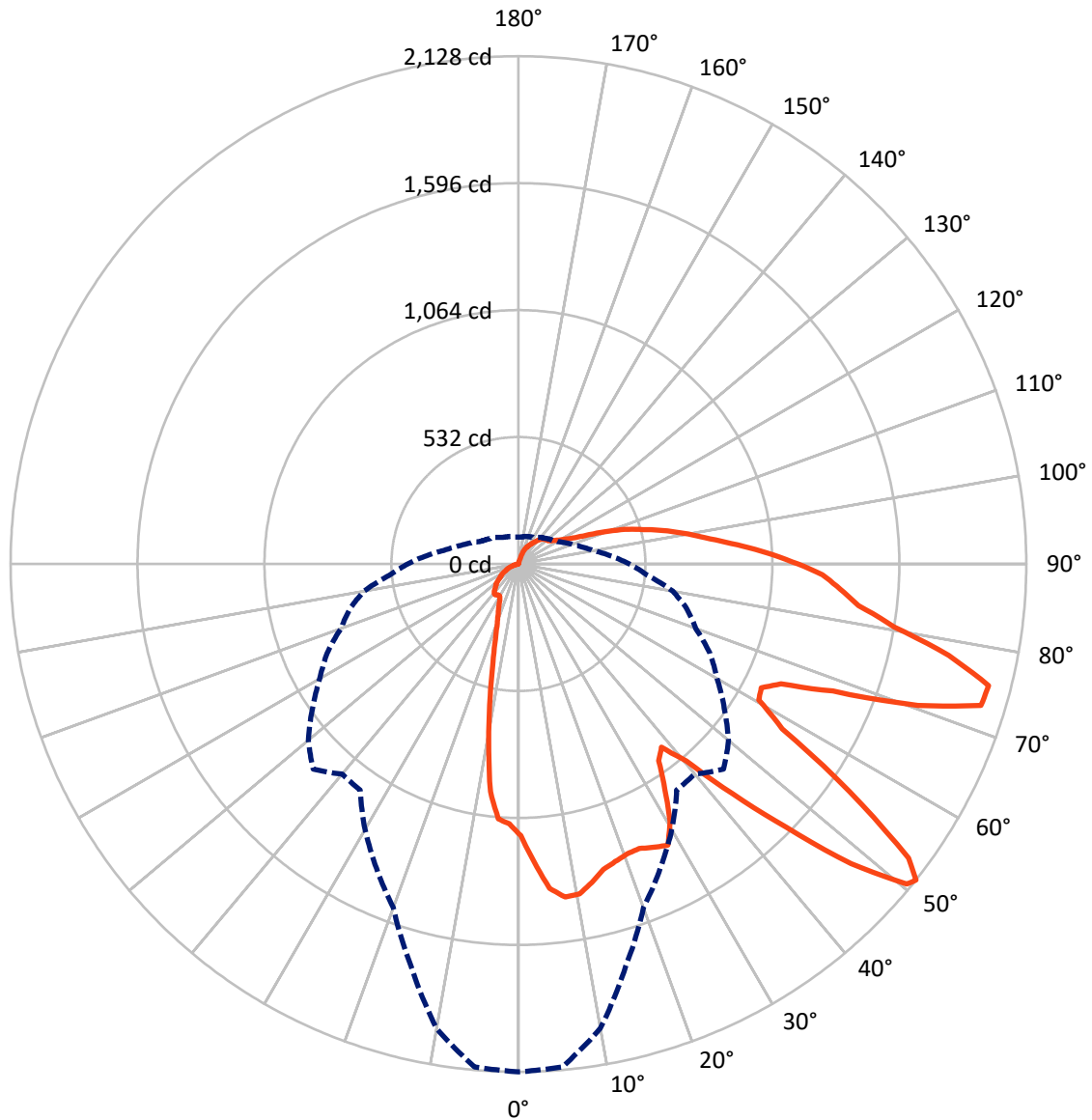
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.7 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 51-Deg Vertical

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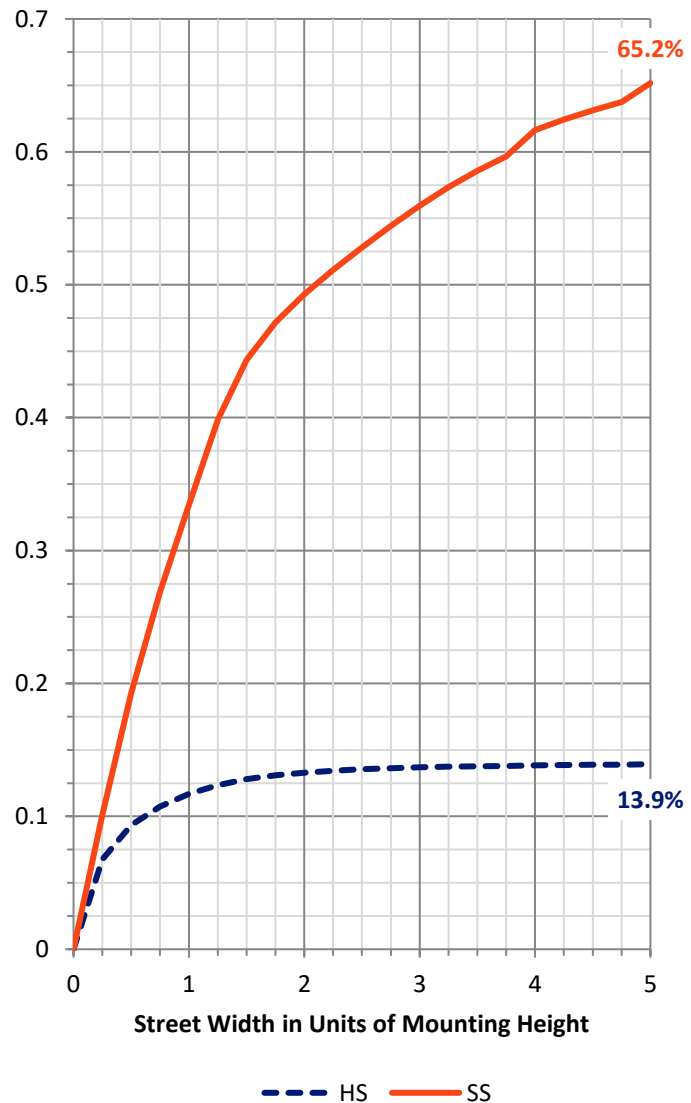
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	587.4	30.7	618.2
	% Fixture	14.1	0.7	14.9
Street Side	Lumens	2956.2	585.2	3541.4
	% Fixture	71.1	14.1	85.1
Total	Lumens	3543.6	616.0	4159.5
	% Fixture	85.2	14.8	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.3	2.6
10°-20°	259.2	6.2
20°-30°	327.9	7.9
30°-40°	385.4	9.3
40°-50°	500.6	12.0
50°-60°	555.0	13.3
60°-70°	456.5	11.0
70°-80°	558.0	13.4
80°-90°	391.7	9.4
90°-100°	240.0	5.8
100°-110°	152.6	3.7
110°-120°	89.5	2.2
120°-130°	60.3	1.5
130°-140°	41.0	1.0
140°-150°	22.2	0.5
150°-160°	8.7	0.2
160°-170°	1.5	0.0
170°-180°	0.1	0.0
0°-90°	3543.6	85.2
0°-180°	4159.5	100.0



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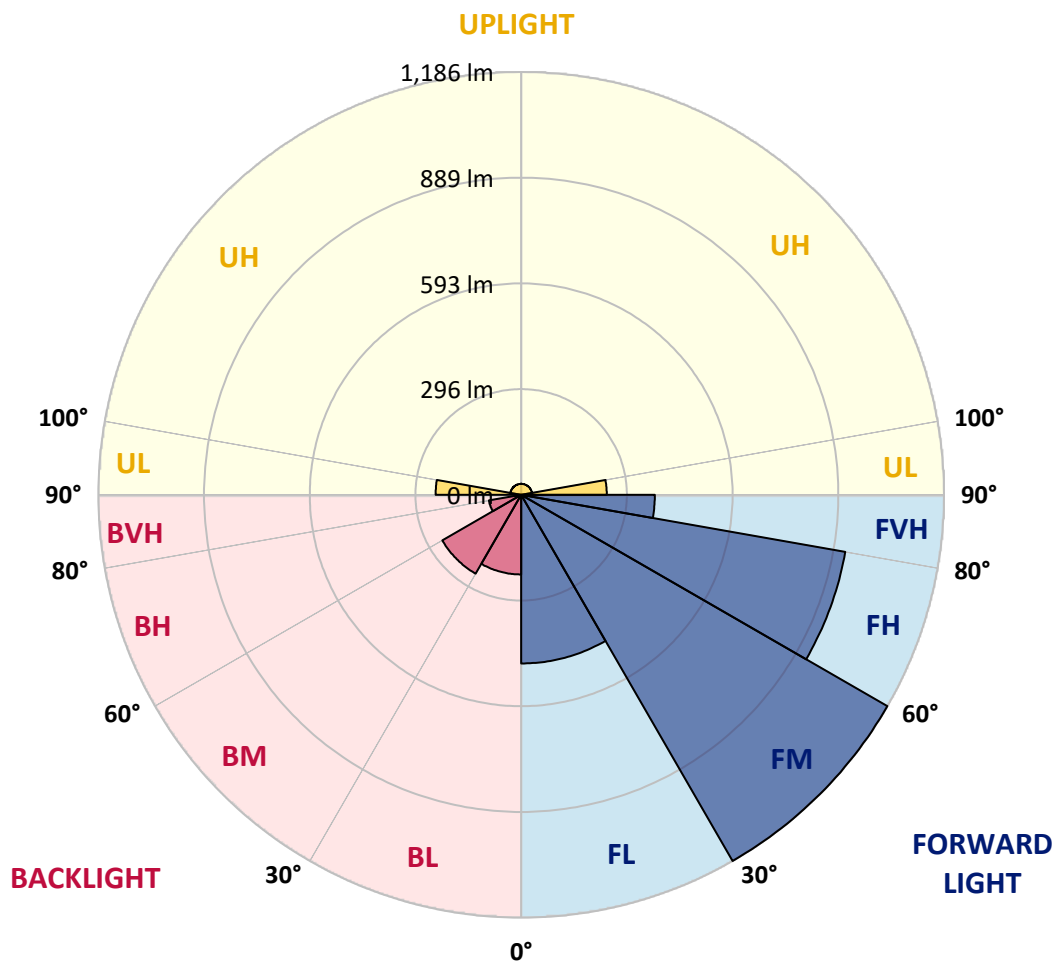
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	473.0	11.4			
FM (30°-60°)	1185.7	28.5			
FH (60°-80°)	922.7	22.2			G1/1800
FVH (80°-90°)	374.7	9.0			G3/500
BL (0°-30°)	223.4	5.4	B1/500		
BM (30°-60°)	255.2	6.1	B1/1000		
BH (60°-80°)	91.8	2.2	B0/110		G0/110
BVH (80°-90°)	17.0	0.4			G1/100
UL (90°-100°)	240.0	5.8		U3/500	
UH (100°-180°)	30.7	0.7		U2/50	

BUG Rating: B1-U3-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1138	1138	1138	1138	1138	1138	1138	1138	1138	1138	1138
2.5°	1249	1254	1246	1243	1249	1240	1235	1236	1228	1222	1212
5°	1365	1368	1363	1361	1362	1354	1344	1338	1325	1313	1294
7.5°	1409	1412	1412	1409	1407	1400	1396	1384	1367	1351	1324
10°	1406	1400	1401	1407	1405	1400	1390	1379	1359	1337	1305
12.5°	1369	1357	1362	1366	1366	1360	1351	1338	1316	1293	1263
15°	1329	1324	1325	1324	1314	1304	1289	1269	1247	1239	1228
17.5°	1311	1305	1295	1283	1263	1238	1210	1189	1176	1178	1184
20°	1297	1288	1271	1255	1223	1177	1136	1109	1096	1101	1125
22.5°	1295	1290	1269	1244	1195	1133	1082	1048	1032	1033	1048
25°	1315	1317	1297	1260	1190	1115	1057	1013	988	979	974
27.5°	1334	1333	1327	1285	1199	1111	1040	991	953	928	923
30°	1252	1261	1273	1246	1177	1103	1033	973	925	889	877
32.5°	1127	1138	1169	1146	1094	1055	1016	964	910	867	837
35°	1012	1025	1049	1038	986	969	957	930	896	856	821
37.5°	974	980	983	946	900	881	884	876	865	848	835
40°	1085	1089	1065	982	904	866	862	859	852	850	875
42.5°	1317	1329	1295	1162	1022	938	897	875	864	886	931
45°	1573	1593	1539	1380	1204	1069	989	928	928	954	988
47.5°	1876	1885	1785	1583	1393	1236	1112	1029	1020	1056	1048
50°	2109	2102	1969	1725	1519	1380	1241	1122	1116	1182	1116
51°	2128	2115	1976	1742	1532	1407	1285	1156	1149	1216	1149
52.5°	2047	2045	1903	1688	1501	1404	1302	1185	1173	1273	1193
55°	1683	1675	1596	1435	1312	1238	1211	1192	1203	1312	1239
57.5°	1304	1306	1264	1170	1077	1009	982	1080	1200	1303	1222
60°	1157	1154	1096	1017	941	847	799	903	1118	1198	1148
62.5°	1142	1120	1035	939	869	780	711	773	1018	1046	1028
65°	1209	1169	1047	938	850	754	678	694	871	900	881
67.5°	1421	1378	1209	1056	927	802	705	702	775	795	777
70°	1775	1729	1499	1284	1129	950	840	845	830	772	744
72.5°	2027	1994	1742	1520	1326	1145	1041	1115	1064	896	789
75°	2035	2000	1775	1603	1420	1275	1203	1394	1438	1184	878
77.5°	1843	1796	1611	1508	1356	1250	1205	1463	1605	1394	943
80°	1596	1560	1406	1340	1199	1105	1052	1226	1399	1272	874
82.5°	1436	1413	1279	1192	1040	930	864	937	1015	958	714
85°	1353	1318	1186	1069	911	798	733	757	765	693	581
87.5°	1275	1230	1085	950	806	699	646	664	644	570	501
90°	1145	1096	954	831	709	615	573	590	559	498	445
92.5°	1020	973	849	737	629	551	515	525	502	450	413
95°	896	856	753	664	568	499	475	475	456	412	392
97.5°	789	761	676	601	517	454	431	431	408	377	373
100°	706	681	607	537	466	413	391	389	366	344	349
102.5°	623	599	533	472	414	372	352	340	324	316	323
105°	541	521	464	411	365	331	306	295	287	289	297
107.5°	470	451	401	356	318	285	259	255	257	265	273



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
110°	386	373	335	298	266	240	222	223	232	244	247
112.5°	305	298	272	245	224	206	196	201	211	225	219
115°	252	248	231	213	200	187	180	183	193	205	193
117.5°	220	218	207	194	184	175	168	169	180	187	176
120°	198	197	188	181	172	165	159	158	168	170	169
122.5°	181	182	178	172	164	157	151	151	158	166	162
125°	168	169	166	162	154	148	145	145	152	163	154
127.5°	158	159	157	153	147	143	141	141	147	156	150
130°	156	156	154	150	143	140	137	137	141	148	143
132.5°	151	150	148	145	140	135	132	131	134	135	132
135°	147	145	141	139	133	129	125	124	124	123	119
137.5°	140	138	135	132	127	123	120	117	114	111	105
140°	129	128	127	126	121	117	112	108	104	99	92
142.5°	117	117	117	115	112	108	103	98	93	87	80
145°	107	107	106	103	100	97	93	88	82	76	68
147.5°	98	98	97	94	91	87	83	78	72	66	57
150°	89	89	87	85	82	78	73	68	62	54	43
152.5°	81	80	79	77	74	70	65	58	50	41	33
155°	72	72	71	69	65	60	54	46	38	30	21
157.5°	61	60	59	56	52	47	40	33	25	18	12
160°	44	43	41	39	35	30	25	17	13	9	7
162.5°	24	23	22	20	17	13	11	8	7	5	3
165°	8	8	8	8	7	6	5	4	3	3	3
167.5°	3	3	3	3	3	2	2	2	3	3	3
170°	1	1	1	2	2	2	2	2	2	3	3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1138	1138	1138	1138	1138	1138	1138	1138	1138	1138	1138
2.5°	1200	1190	1181	1171	1160	1154	1144	1136	1127	1112	1108
5°	1274	1250	1228	1199	1174	1153	1132	1115	1098	1083	1076
7.5°	1298	1266	1237	1197	1158	1120	1086	1057	1036	1021	1016
10°	1271	1233	1194	1152	1110	1069	1032	997	975	963	959
12.5°	1234	1204	1168	1126	1082	1035	990	953	929	914	913
15°	1214	1191	1165	1120	1069	1016	958	913	886	870	864
17.5°	1190	1179	1149	1102	1042	986	919	867	841	828	812
20°	1142	1142	1112	1067	1009	940	874	819	793	776	745
22.5°	1059	1069	1068	1033	980	909	841	784	755	732	685
25°	982	1000	1016	997	950	876	806	751	719	686	625
27.5°	920	937	953	955	919	858	789	738	707	659	585
30°	870	875	911	942	927	873	807	751	720	663	574
32.5°	830	854	901	953	954	902	837	784	743	674	567
35°	822	848	900	962	973	919	855	796	742	657	540
37.5°	842	856	899	962	978	927	858	780	710	607	494
40°	883	875	908	959	972	930	840	748	658	541	433
42.5°	933	908	924	952	958	901	801	705	598	479	384
45°	988	953	933	931	925	856	749	649	542	433	352
47.5°	1029	974	914	869	845	777	667	573	476	388	323
50°	1044	970	888	808	758	688	580	494	414	340	289
51°	1053	961	885	791	732	657	543	464	388	321	274
52.5°	1069	952	878	777	698	611	498	422	354	292	256
55°	1071	936	864	763	661	551	445	376	311	260	226
57.5°	1077	917	844	758	635	513	415	349	287	236	203
60°	1033	860	795	726	595	479	400	342	277	218	184
62.5°	939	790	726	667	550	459	388	331	269	205	167
65°	823	746	682	610	517	439	373	315	246	184	155
67.5°	731	718	672	571	508	425	350	296	219	164	142
70°	709	702	653	546	499	418	329	266	187	152	128
72.5°	730	683	606	530	477	401	304	218	158	131	115
75°	757	673	581	522	465	392	279	177	139	110	104
77.5°	757	663	586	514	450	385	247	149	114	96	94
80°	683	611	556	488	434	346	212	133	92	84	86
82.5°	560	521	482	441	410	288	173	111	76	75	77
85°	458	457	420	376	354	237	142	78	64	65	68
87.5°	403	408	373	326	285	195	118	63	54	56	59
90°	378	373	334	285	223	153	81	52	48	49	50
92.5°	361	351	305	247	187	131	73	45	43	43	44
95°	343	332	279	207	156	101	61	43	41	40	40
97.5°	332	308	247	179	140	90	55	42	39	38	38
100°	312	290	217	165	122	81	55	42	38	36	36
102.5°	291	262	194	154	109	76	55	43	37	35	35
105°	268	231	180	145	103	74	55	42	37	34	33
107.5°	239	203	170	129	99	75	54	41	36	33	31



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
110°	213	187	161	120	97	75	51	40	35	32	30
112.5°	189	177	143	113	93	72	49	39	34	30	28
115°	179	165	130	109	90	68	47	38	32	29	26
117.5°	174	150	122	104	85	61	44	36	30	27	23
120°	157	137	118	99	78	54	40	33	28	24	21
122.5°	146	131	114	93	71	49	37	30	26	22	19
125°	141	127	108	86	64	45	34	28	24	20	18
127.5°	136	119	100	80	58	40	30	25	22	19	16
130°	128	112	93	73	52	36	26	22	20	17	15
132.5°	119	104	86	65	46	30	23	20	18	15	13
135°	109	94	78	57	38	25	21	18	16	14	12
137.5°	97	84	67	46	30	22	19	16	15	12	10
140°	85	73	55	36	24	20	17	15	13	11	9
142.5°	73	60	44	28	19	16	14	13	12	10	8
145°	59	47	34	22	15	13	12	11	10	8	7
147.5°	46	35	23	15	12	11	11	10	9	7	6
150°	34	23	15	10	9	9	9	9	8	6	5
152.5°	22	14	9	7	7	8	8	7	7	5	4
155°	13	9	5	5	6	6	7	6	6	5	4
157.5°	8	4	3	4	4	5	6	6	6	5	4
160°	4	3	3	4	4	5	6	6	6	5	4
162.5°	3	3	3	4	4	5	6	6	6	5	4
165°	3	3	3	4	4	5	6	6	6	5	5
167.5°	3	3	3	4	5	5	6	6	6	5	4
170°	3	3	3	4	4	5	6	6	6	5	4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1138	1138	1138	1138	1138	1138	1138	1138	1138	1138	1138
2.5°	1102	1095	1093	1088	1085	1081	1083	1084	1083	1085	1085
5°	1068	1068	1070	1069	1073	1070	1071	1070	1068	1070	1069
7.5°	1015	1026	1032	1034	1031	1024	1018	1014	1002	998	982
10°	962	963	963	950	936	917	894	868	847	823	801
12.5°	908	895	877	844	801	759	721	684	656	641	610
15°	843	810	768	718	657	604	560	526	498	484	460
17.5°	776	720	665	598	530	477	437	404	382	368	354
20°	692	622	558	491	428	381	345	321	303	292	285
22.5°	616	535	465	402	352	315	287	266	253	243	238
25°	552	463	391	336	299	269	248	231	220	213	206
27.5°	494	400	338	292	259	238	221	208	197	188	181
30°	462	361	299	258	232	215	201	188	179	169	162
32.5°	444	341	276	237	213	196	184	173	164	155	152
35°	422	328	265	227	200	182	172	159	154	149	150
37.5°	391	314	263	223	193	174	160	152	148	149	153
40°	359	301	256	220	194	169	154	147	149	153	156
42.5°	324	280	244	213	190	165	150	147	150	154	157
45°	299	258	225	201	181	161	149	147	148	151	151
47.5°	276	237	209	187	172	159	149	144	143	141	137
50°	249	220	194	177	166	156	147	140	133	129	126
51°	240	212	188	174	164	153	146	137	129	125	122
52.5°	226	201	181	170	161	151	143	133	124	120	116
55°	203	184	172	161	154	145	136	126	118	111	104
57.5°	181	169	160	151	145	137	128	118	108	100	94
60°	164	155	149	140	135	128	121	108	98	92	86
62.5°	151	142	138	130	124	120	111	99	90	83	75
65°	139	132	128	121	114	109	100	89	80	70	63
67.5°	129	124	119	111	103	96	88	78	67	58	52
70°	119	116	110	100	91	83	76	65	55	46	42
72.5°	109	107	100	89	78	70	63	53	43	36	32
75°	101	98	89	78	66	58	50	41	33	26	23
77.5°	91	88	79	66	55	45	38	31	23	16	12
80°	83	78	69	57	45	34	27	20	12	6	3
82.5°	74	68	61	49	35	25	19	13	7	3	3
85°	64	59	53	42	29	20	15	10	5	3	2
87.5°	56	52	47	36	25	17	13	8	4	2	2
90°	48	45	40	30	21	15	11	7	4	2	2
92.5°	42	39	33	26	19	13	9	6	3	2	2
95°	38	34	28	23	17	12	8	5	3	2	2
97.5°	35	30	24	20	15	11	7	4	2	2	2
100°	33	28	22	18	13	10	6	3	2	2	2
102.5°	32	26	20	16	12	9	6	3	2	2	2
105°	30	24	19	15	12	8	5	2	2	2	1
107.5°	28	22	17	14	11	7	4	2	2	1	1



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REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°	
110°	25	20	16	13	10	6	3	2	2	1	1	0°
112.5°	23	19	15	13	9	6	3	2	2	1	1	2.5°
115°	22	18	15	12	9	5	3	2	2	2	2	5°
117.5°	20	16	14	11	8	5	3	2	2	2	2	7.5°
120°	18	15	13	10	7	4	2	2	2	2	2	10°
122.5°	17	14	12	9	6	4	2	2	2	2	2	12.5°
125°	15	13	10	8	5	3	2	2	2	2	2	15°
127.5°	14	12	9	7	5	3	2	2	2	2	2	17.5°
130°	13	10	8	6	4	3	2	2	2	2	2	20°
132.5°	11	9	7	5	4	3	2	2	2	2	2	22.5°
135°	10	8	6	5	4	3	2	2	2	2	2	25°
137.5°	8	7	5	4	3	3	2	2	2	2	2	27.5°
140°	7	6	5	4	4	3	3	2	2	2	2	30°
142.5°	6	5	4	4	4	3	3	2	2	2	2	32.5°
145°	5	4	4	4	4	3	2	2	2	2	2	35°
147.5°	5	4	4	4	4	3	3	2	2	2	2	37.5°
150°	4	4	4	4	4	3	3	2	2	2	2	40°
152.5°	4	4	4	4	4	3	3	2	2	2	2	42.5°
155°	4	4	4	4	4	3	2	2	2	2	2	45°
157.5°	4	4	4	4	4	3	2	2	2	2	2	47.5°
160°	4	4	4	4	3	3	2	2	2	2	1	50°
162.5°	4	4	4	4	3	3	2	2	2	2	2	51°
165°	4	4	4	4	4	3	2	2	2	2	2	52.5°
167.5°	4	4	4	4	4	3	2	2	2	2	2	55°
170°	4	4	3	4	3	3	2	2	2	2	1	57.5°
172.5°	0	0	0	0	0	0	0	0	0	0	0	60°
175°	0	0	0	0	0	0	0	0	0	0	0	62.5°
177.5°	0	0	0	0	0	0	0	0	0	0	0	65°
180°	0	0	0	0	0	0	0	0	0	0	0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

NUMBER: P27134
 NUMBER: LDWP-GL-4B-ED-7040

REPORT NUMBER: P
 CATALOG NUMBER:

DISTRIBUTION (continued):

165°	170°	175°	180°
1138	1138	1138	1138
1089	1085	1086	1089
1071	1070	1067	1071
973	966	957	961
784	768	750	753
595	582	565	565
449	439	424	423
345	338	329	328
278	272	266	264
235	232	227	226
205	202	198	197
181	178	174	173
161	160	158	157
153	154	154	154
153	154	157	157
156	158	161	162
158	158	160	159
157	152	151	150
147	141	138	137
134	130	128	128
125	121	119	119
120	116	113	113
113	108	104	104
100	97	94	93
91	89	86	85
82	79	76	75
70	66	64	62
59	56	55	54
49	48	47	47
40	39	37	37
30	28	27	27
21	19	18	18
10	9	9	9
3	2	2	1
2	2	2	1
2	2	1	1
2	2	1	1
2	1	1	1
2	2	1	1
2	2	1	1
1	1	1	1
1	1	1	1
1	1	1	1
1	1	0	0
1	1	0	0

CANDELA DISTRIBUTION:

	165°
110°	1
112.5°	1
115°	1
117.5°	2
120°	1
122.5°	1
125°	1
127.5°	1
130°	1
132.5°	1
135°	2
137.5°	2
140°	2
142.5°	2
145°	1
147.5°	2
150°	1
152.5°	1
155°	1
157.5°	1
160°	1
162.5°	1
165°	1
167.5°	1
170°	1
172.5°	0
175°	0
177.5°	0
180°	0



'27134
LDWP-GL-4B-ED-7040

TION (continued):

170°	175°	180°
1	0	0
1	0	0
1	1	1
2	1	1
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	1	0
1	0	0
1	0	0
1	0	0
1	0	0
1	0	0
1	0	0
0	0	0
0	0	0
0	0	0
0	0	0

(END OF REPORT)