

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: McGRAW-EDISON

Report Number: P198375

Luminaire Tested: **TT-C3-LED-E1-DL-LWR-LW-UPL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198375
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P27139) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TT-C3-LED-E1-DL-LWR-LW-UPL
Description: TOPTIER LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
DRIVE LANE DISTRIBUTION WITH LumaWatt WIRELESS SENSOR
Light Source: (160) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5747.4 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1.12' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U4 - G2

Input Watts (W): 83.9
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



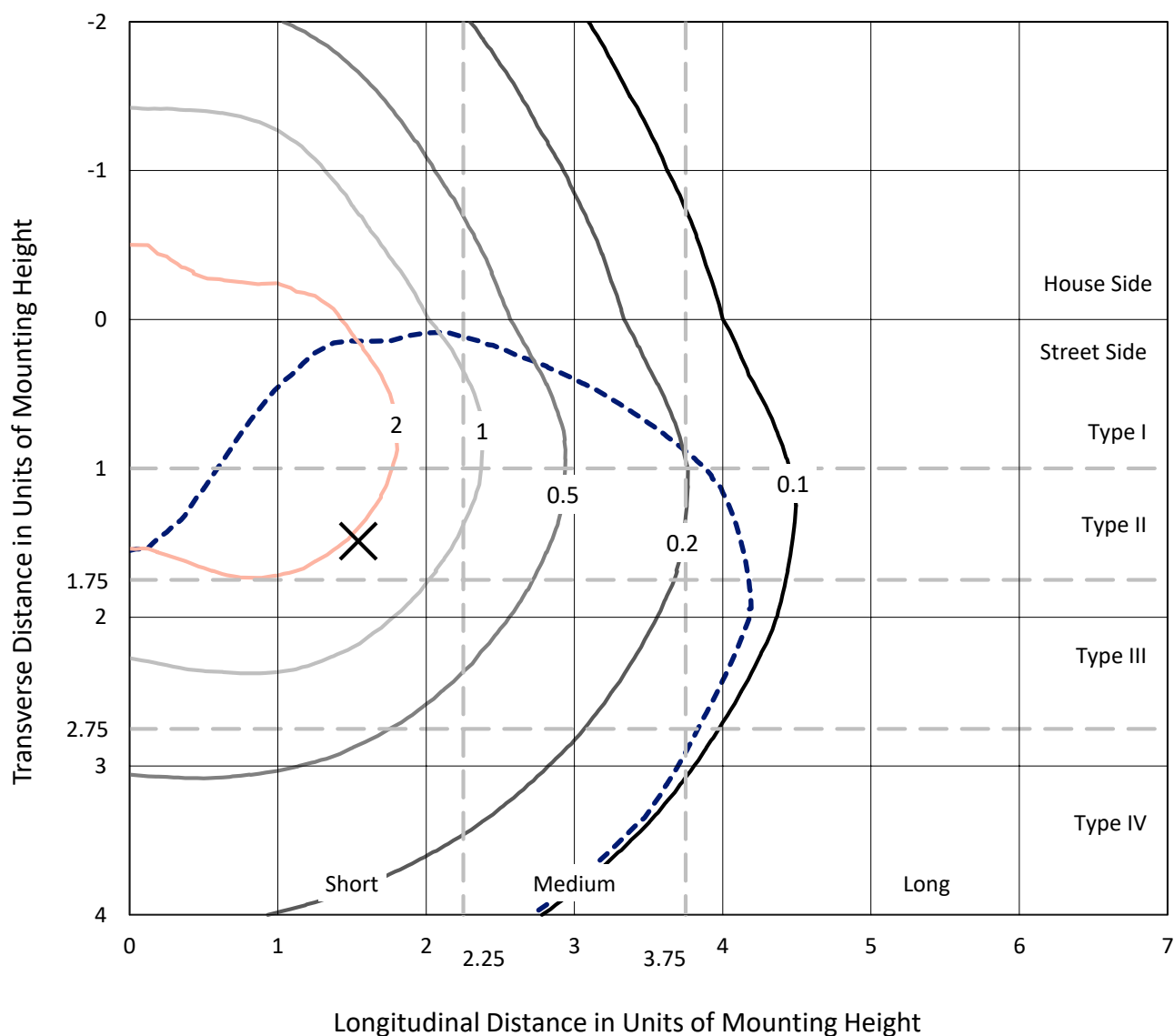
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

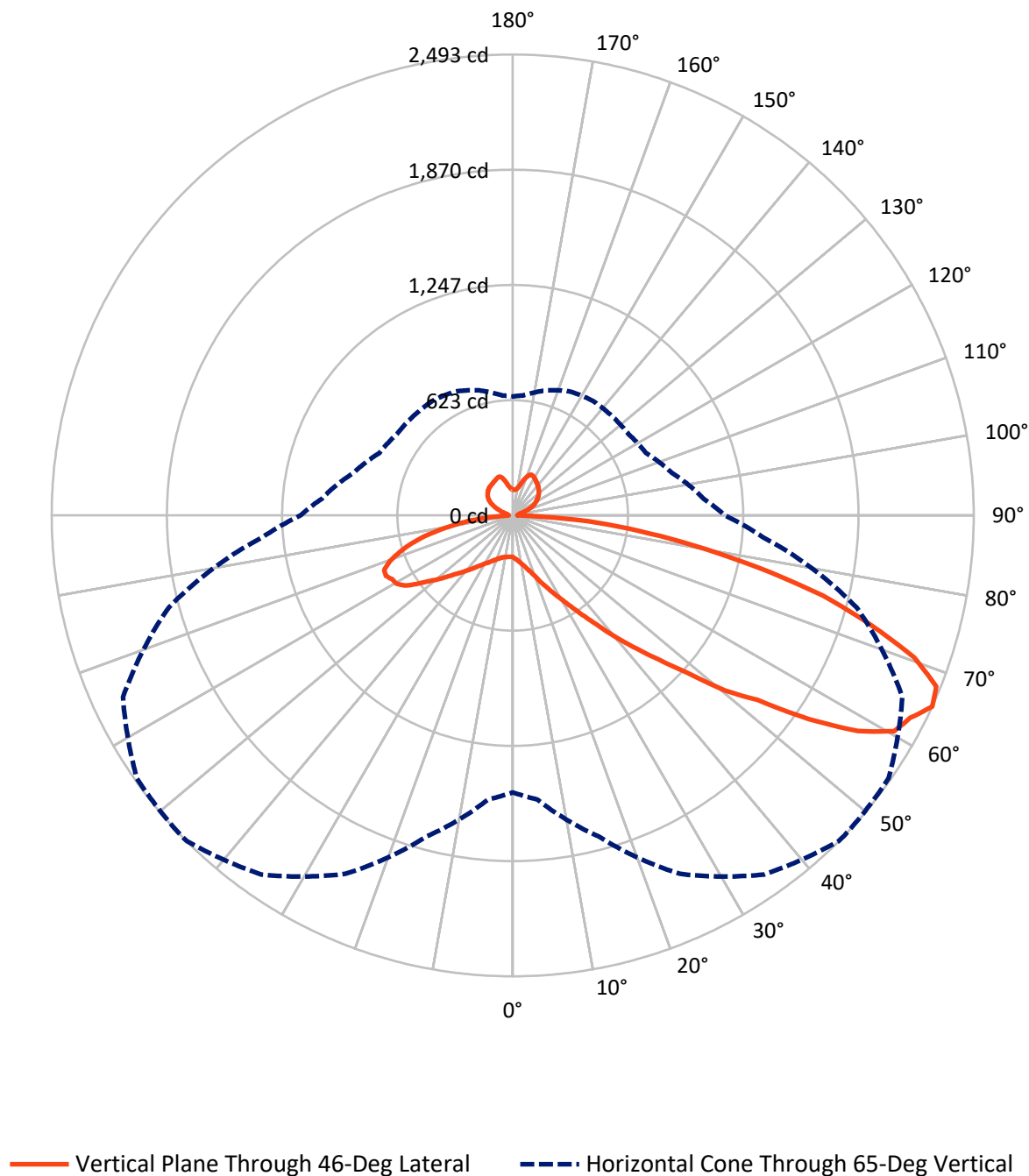


Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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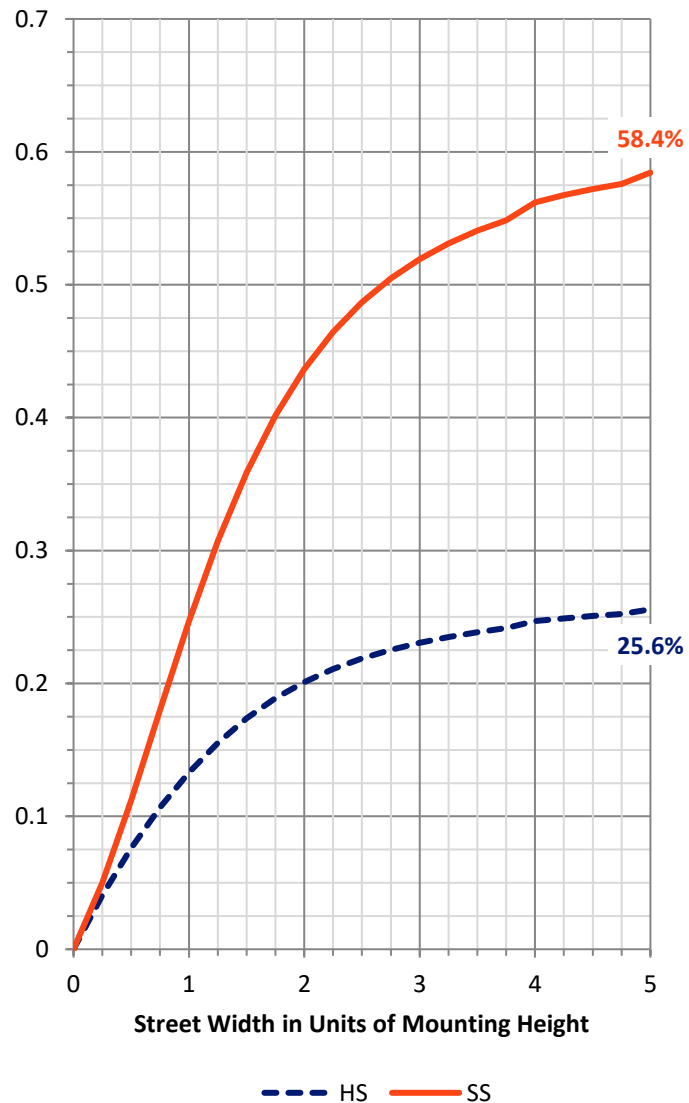
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1503.1	387.3	1890.4
	% Fixture	26.2	6.7	32.9
Street Side	Lumens	3444.3	412.6	3856.9
	% Fixture	59.9	7.2	67.1
Total	Lumens	4947.4	799.9	5747.4
	% Fixture	86.1	13.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.7	0.4
10°-20°	77.5	1.3
20°-30°	163.6	2.8
30°-40°	310.9	5.4
40°-50°	574.3	10.0
50°-60°	1006.6	17.5
60°-70°	1365.9	23.8
70°-80°	1110.5	19.3
80°-90°	315.3	5.5
90°-100°	36.3	0.6
100°-110°	55.2	1.0
110°-120°	110.8	1.9
120°-130°	144.2	2.5
130°-140°	147.9	2.6
140°-150°	133.4	2.3
150°-160°	102.6	1.8
160°-170°	55.1	1.0
170°-180°	14.3	0.2
0°-90°	4947.4	86.1
0°-180°	5747.4	100.0

Coefficient of Utilization



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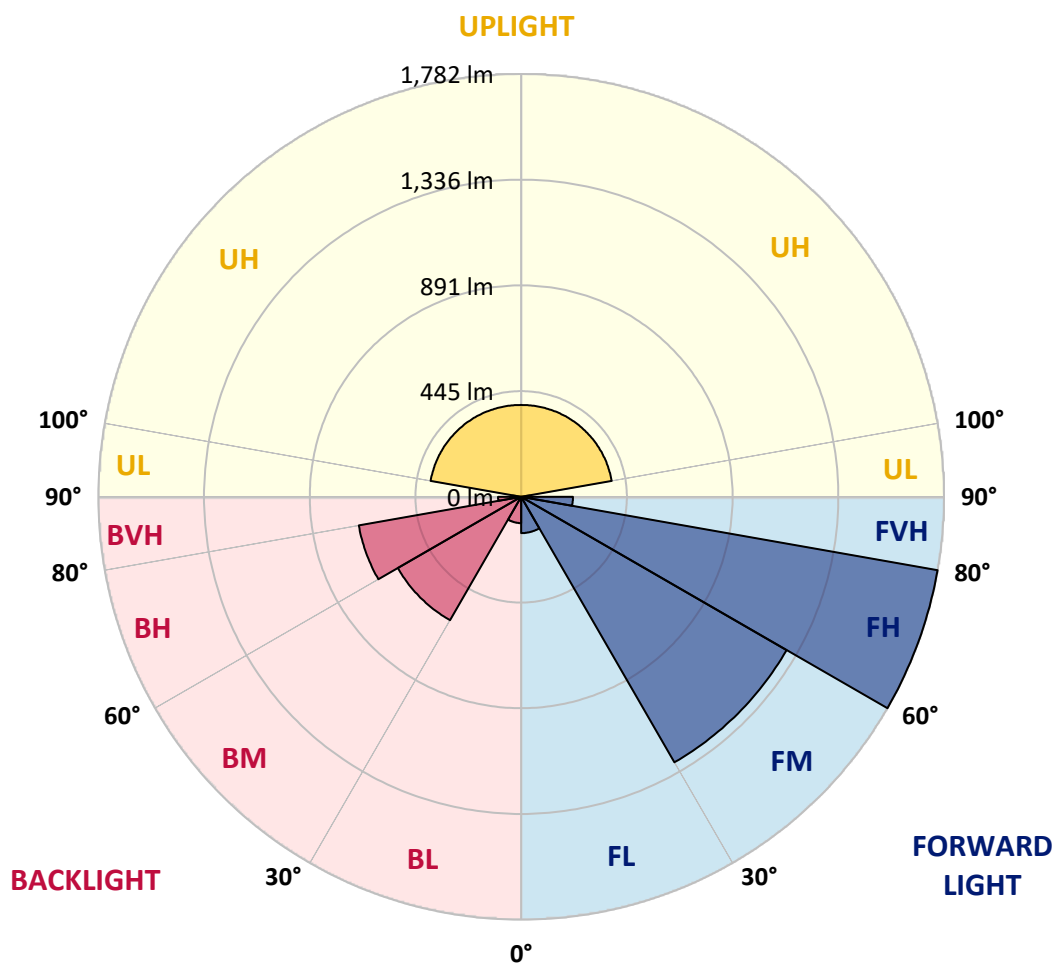
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	153.0	2.7			
FM	(30°-60°)	1291.5	22.5			
FH	(60°-80°)	1781.7	31.0			G1/1800
FVH	(80°-90°)	218.1	3.8			G2/225
BL	(0°-30°)	110.9	1.9	B1/500		
BM	(30°-60°)	600.3	10.4	B1/1000		
BH	(60°-80°)	694.7	12.1	B2/1000		G2/1000
BVH	(80°-90°)	97.2	1.7			G1/100
UL	(90°-100°)	36.3	0.6		U2/50	
UH	(100°-180°)	387.3	6.7		U3/500	

BUG Rating: B2-U4-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	225	225	225	225	225	225	225	225	225	225	225
2.5°	234	235	235	235	234	233	233	232	231	231	230
5°	245	245	245	244	243	242	241	240	237	235	234
7.5°	258	258	258	257	255	252	253	250	247	243	239
10°	273	274	275	272	270	267	266	262	258	253	248
12.5°	291	290	292	289	287	282	281	276	269	263	257
15°	313	314	313	311	307	302	302	295	287	278	268
17.5°	344	344	340	339	332	326	324	318	305	294	282
20°	378	376	371	372	366	357	355	345	331	314	298
22.5°	417	415	409	408	400	393	393	379	360	338	316
25°	448	449	450	451	445	434	433	418	393	365	336
27.5°	486	491	490	495	492	482	480	464	433	400	364
30°	529	536	532	542	542	535	531	515	484	437	394
32.5°	577	578	584	597	603	599	596	581	541	489	433
35°	632	627	637	662	671	672	671	653	617	553	482
37.5°	687	685	704	729	756	767	762	756	704	624	533
40°	739	748	773	804	847	873	874	862	808	711	594
42.5°	790	808	840	894	949	991	986	976	929	813	672
45°	860	878	910	975	1063	1115	1116	1134	1094	950	778
47.5°	924	940	987	1074	1182	1277	1273	1299	1248	1076	861
50°	1012	1007	1076	1197	1344	1464	1490	1503	1407	1234	950
52.5°	1090	1085	1171	1333	1516	1671	1657	1689	1649	1448	1140
55°	1168	1168	1276	1489	1730	1933	1945	1999	1891	1608	1207
57.5°	1254	1263	1416	1682	1977	2199	2201	2206	2032	1672	1225
60°	1337	1361	1560	1872	2172	2354	2370	2301	2086	1713	1232
62.5°	1429	1453	1697	2030	2316	2417	2412	2344	2175	1828	1321
65°	1498	1543	1798	2139	2371	2491	2493	2481	2325	1926	1358
67.5°	1568	1636	1850	2181	2410	2473	2470	2424	2264	1871	1284
70°	1643	1693	1886	2143	2293	2301	2304	2238	2108	1758	1191
72.5°	1669	1705	1831	1985	2055	2053	2025	2000	1890	1585	1058
75°	1623	1626	1645	1712	1744	1717	1732	1695	1632	1362	902
77.5°	1443	1438	1384	1360	1361	1355	1356	1311	1284	1122	732
80°	1126	1125	1082	1015	994	988	994	972	947	847	557
82.5°	781	769	750	697	694	682	685	681	669	602	395
85°	379	395	412	408	395	397	410	409	395	345	230
87.5°	52	75	78	75	95	119	95	97	78	80	51
90°	36	36	36	34	29	26	26	28	32	34	34
92.5°	40	39	38	34	29	27	27	28	32	35	36
95°	44	43	41	36	32	30	30	30	34	37	39
97.5°	42	42	40	37	35	33	33	33	34	36	36
100°	45	45	44	40	38	36	36	36	38	38	37
102.5°	51	51	49	46	44	42	42	43	44	42	41
105°	60	60	57	54	53	52	52	54	53	49	48
107.5°	72	72	70	67	66	68	68	68	66	60	59
110°	86	86	89	85	86	87	87	84	84	78	74

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
112.5°	101	102	108	107	110	107	106	102	105	100	95
115°	121	122	128	128	129	124	123	121	125	123	116
117.5°	140	141	144	141	141	136	136	138	141	139	133
120°	152	153	155	149	149	147	147	150	153	148	145
122.5°	161	162	164	154	155	158	158	159	162	155	153
125°	169	169	172	163	165	168	168	167	168	163	160
127.5°	177	177	181	171	176	178	177	176	175	173	166
130°	187	188	191	179	186	186	185	183	183	184	171
132.5°	198	199	201	186	193	195	194	190	192	192	179
135°	210	210	209	192	199	201	200	196	201	199	185
137.5°	221	219	213	197	205	208	207	203	210	204	191
140°	229	226	216	200	207	213	213	212	217	209	195
142.5°	235	231	218	201	208	218	218	220	223	211	198
145°	235	230	218	202	211	223	223	230	227	211	201
147.5°	230	227	219	207	216	229	230	239	229	212	204
150°	224	221	220	214	222	235	236	242	232	214	210
152.5°	216	214	221	220	230	241	241	242	235	219	215
155°	208	207	219	224	237	243	242	238	234	224	220
157.5°	203	203	216	224	234	235	234	228	229	226	222
160°	199	198	210	213	219	219	218	215	219	221	218
162.5°	185	184	193	193	198	198	198	196	200	204	207
165°	169	167	173	173	176	177	177	176	181	185	190
167.5°	154	152	156	155	159	159	159	160	165	168	172
170°	142	141	145	144	147	147	147	148	152	155	159
172.5°	137	135	139	138	141	141	141	141	145	146	149
175°	136	134	137	137	139	139	139	138	141	141	143
177.5°	137	136	139	138	140	139	139	138	140	140	141
180°	140	140	140	140	140	140	140	140	140	140	140

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	225	225	225	225	225	225	225	225	225	225	225
2.5°	229	228	227	226	225	224	223	223	222	222	222
5°	233	232	230	228	227	225	224	223	221	221	220
7.5°	237	236	233	230	228	226	225	224	223	221	221
10°	245	242	238	234	230	228	226	225	225	224	224
12.5°	253	250	243	238	233	230	228	228	227	227	226
15°	263	259	251	244	238	235	232	232	232	232	232
17.5°	275	269	260	252	246	242	239	239	238	239	240
20°	291	283	271	261	254	251	249	248	248	249	250
22.5°	306	297	281	271	265	260	259	259	258	260	260
25°	324	313	296	283	275	271	271	271	272	273	271
27.5°	348	335	312	296	289	285	283	285	286	287	285
30°	372	358	329	311	301	297	297	299	300	301	299
32.5°	405	384	353	330	319	315	315	316	316	318	317
35°	451	422	383	356	340	334	333	334	336	335	339
37.5°	495	462	413	384	368	359	355	354	356	357	358
40°	547	507	450	414	394	384	378	378	377	378	374
42.5°	614	569	497	451	423	414	403	400	397	398	392
45°	705	648	562	501	464	445	434	425	421	419	413
47.5°	768	707	614	548	509	484	467	455	445	440	441
50°	852	773	677	597	557	529	509	488	473	467	470
52.5°	1011	916	767	673	606	575	554	528	506	495	498
55°	1064	967	830	734	674	636	603	572	543	525	526
57.5°	1069	973	841	761	720	694	663	622	582	557	555
60°	1064	966	839	758	729	728	709	673	626	589	586
62.5°	1134	1029	875	775	734	737	741	716	668	623	613
65°	1147	1036	890	796	765	759	756	739	700	651	643
67.5°	1083	978	845	764	743	756	767	752	715	678	667
70°	998	903	779	704	692	712	736	741	720	690	686
72.5°	884	804	695	635	630	645	673	696	693	686	684
75°	753	691	596	550	550	569	590	615	634	646	649
77.5°	620	558	488	449	454	479	494	519	540	556	557
80°	466	432	371	350	352	369	390	405	422	436	432
82.5°	337	306	264	252	260	268	285	298	303	307	315
85°	194	185	162	155	157	165	175	178	183	181	185
87.5°	47	50	47	46	47	45	43	52	53	54	52
90°	34	34	34	32	27	21	25	30	33	34	34
92.5°	36	35	33	31	27	23	25	29	34	36	36
95°	38	38	35	33	29	26	27	31	34	35	36
97.5°	36	35	35	34	30	25	26	30	33	35	35
100°	37	37	38	38	33	27	28	32	35	36	36
102.5°	41	42	43	45	39	32	33	35	38	40	41
105°	49	49	52	54	48	39	38	41	44	48	49
107.5°	60	61	65	65	58	50	47	50	54	60	61
110°	75	77	78	75	71	65	60	62	67	73	74

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	94	94	91	86	84	82	77	80	85	87	87
115°	113	111	104	100	99	102	99	103	106	102	102
117.5°	129	128	121	117	116	120	121	125	125	120	120
120°	142	142	137	134	134	137	137	139	139	134	136
122.5°	150	153	151	148	149	149	145	148	149	145	146
125°	158	162	162	159	160	159	149	154	156	154	154
127.5°	163	169	170	168	168	169	154	158	163	160	161
130°	169	176	178	174	175	175	159	164	169	164	167
132.5°	176	182	186	181	183	181	165	171	176	171	174
135°	184	190	195	190	191	187	170	177	184	179	179
137.5°	190	196	204	200	199	191	175	182	192	187	187
140°	195	201	213	212	206	195	180	186	200	195	196
142.5°	198	204	220	222	212	197	184	190	205	204	205
145°	202	208	225	230	216	199	187	193	208	211	214
147.5°	206	212	230	236	219	202	191	195	212	220	225
150°	211	216	231	235	219	205	194	199	215	227	233
152.5°	216	220	229	230	220	208	201	205	219	232	239
155°	219	221	224	222	220	213	208	212	224	234	240
157.5°	219	219	216	213	216	219	215	220	229	232	235
160°	215	214	210	208	213	223	224	228	233	229	232
162.5°	207	207	204	204	209	221	227	231	230	224	226
165°	192	194	196	198	203	212	216	219	220	215	217
167.5°	174	177	181	184	189	195	196	199	200	197	200
170°	160	163	166	168	172	177	178	180	181	178	181
172.5°	151	153	155	156	159	162	162	164	165	163	166
175°	144	146	147	148	149	151	151	152	153	151	153
177.5°	141	142	142	142	143	144	143	144	145	143	145
180°	140	140	140	140	140	140	140	140	140	140	140

(END OF REPORT)