

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: P23006

Luminaire Tested: **XTOR5ARL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P23006
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: XTOR5ARL
Description: LUMARK CROSSTOUR MAXX LED 50W - 5000K, REFRACTIVE LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4552.5 lumens
Efficiency: N/A
Efficacy: 91.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.71' x L: 0.33' x H: 0.17')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U3 - G2

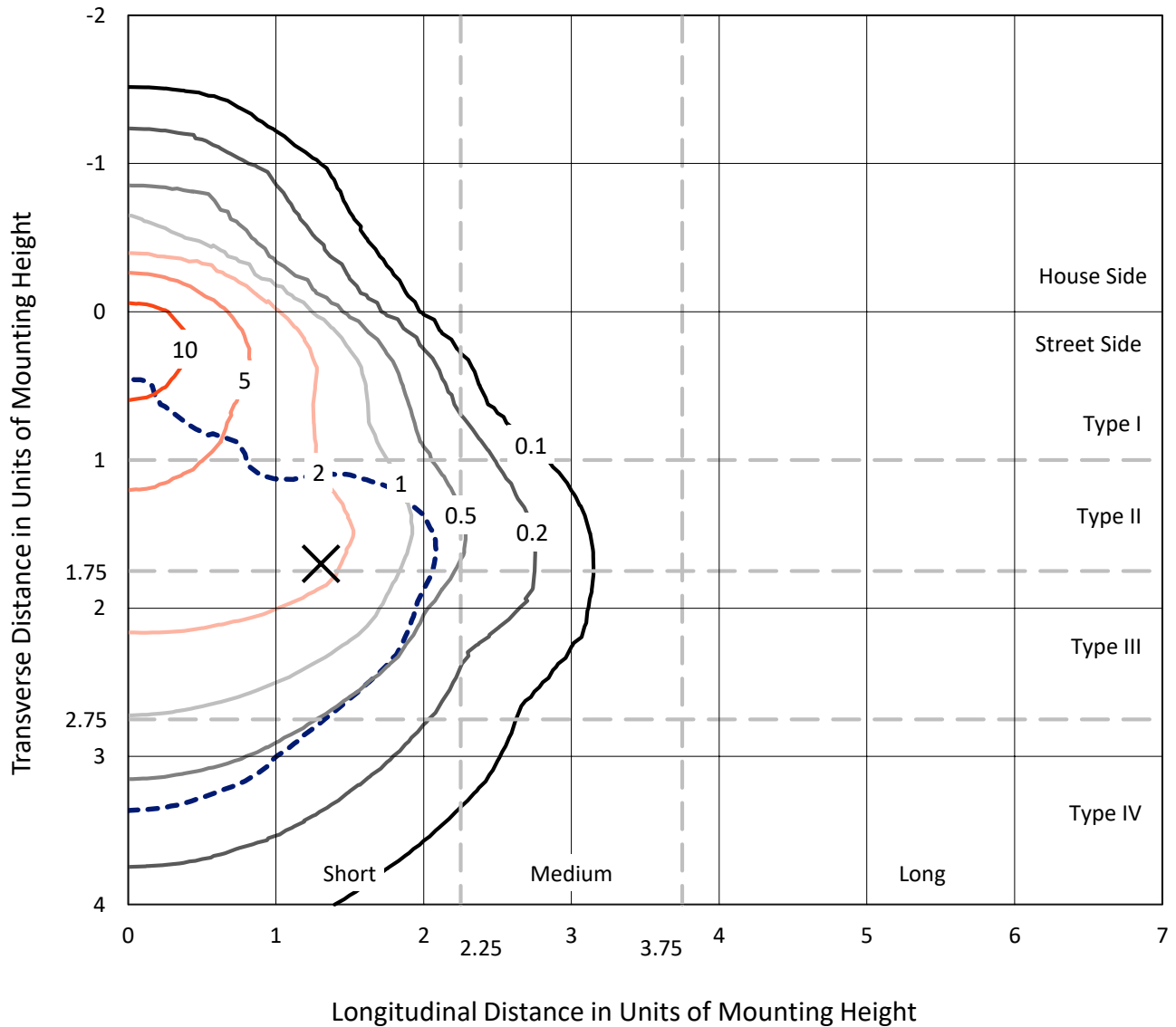
Input Watts (W): 49.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

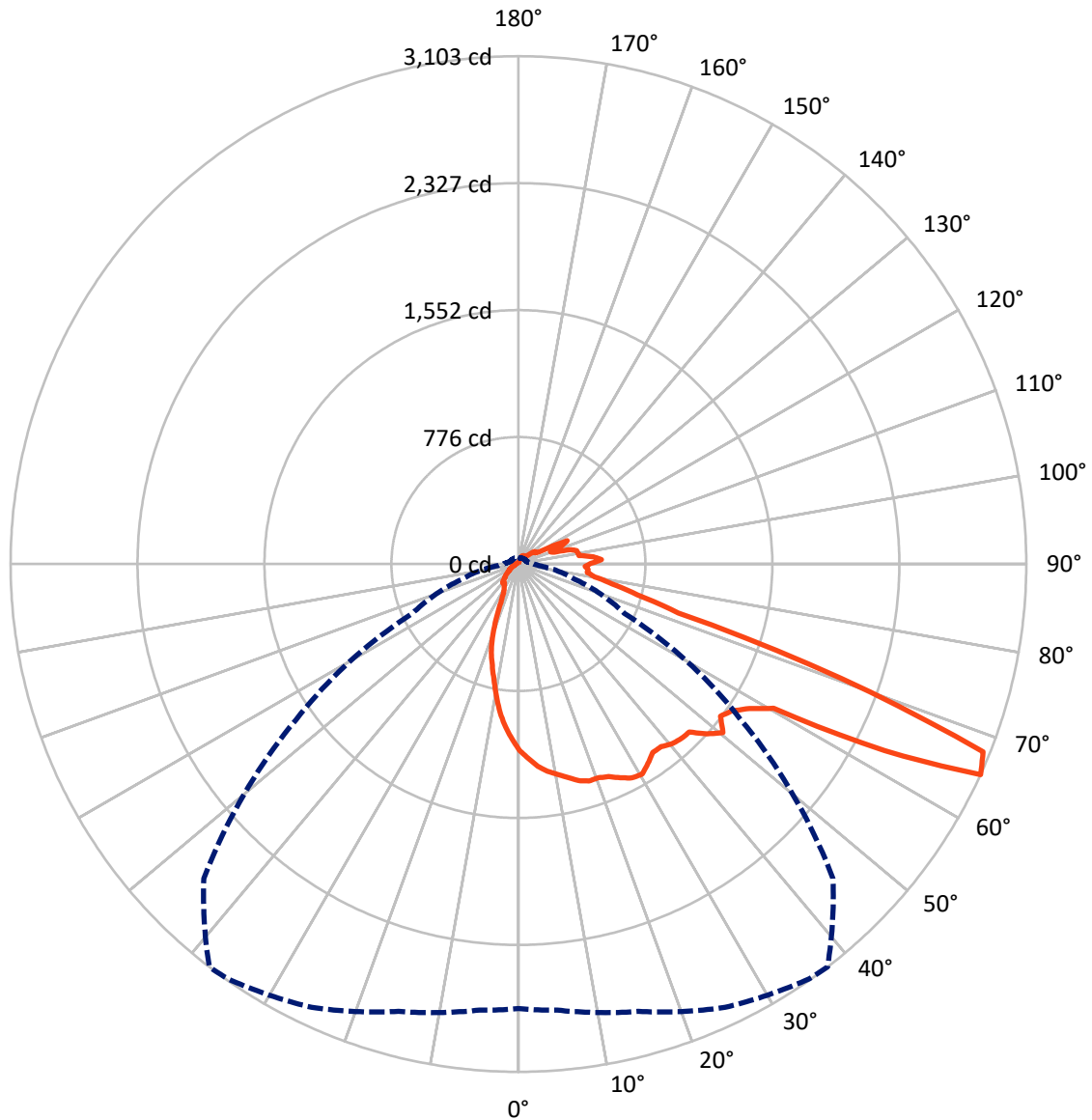
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.9 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 37.5-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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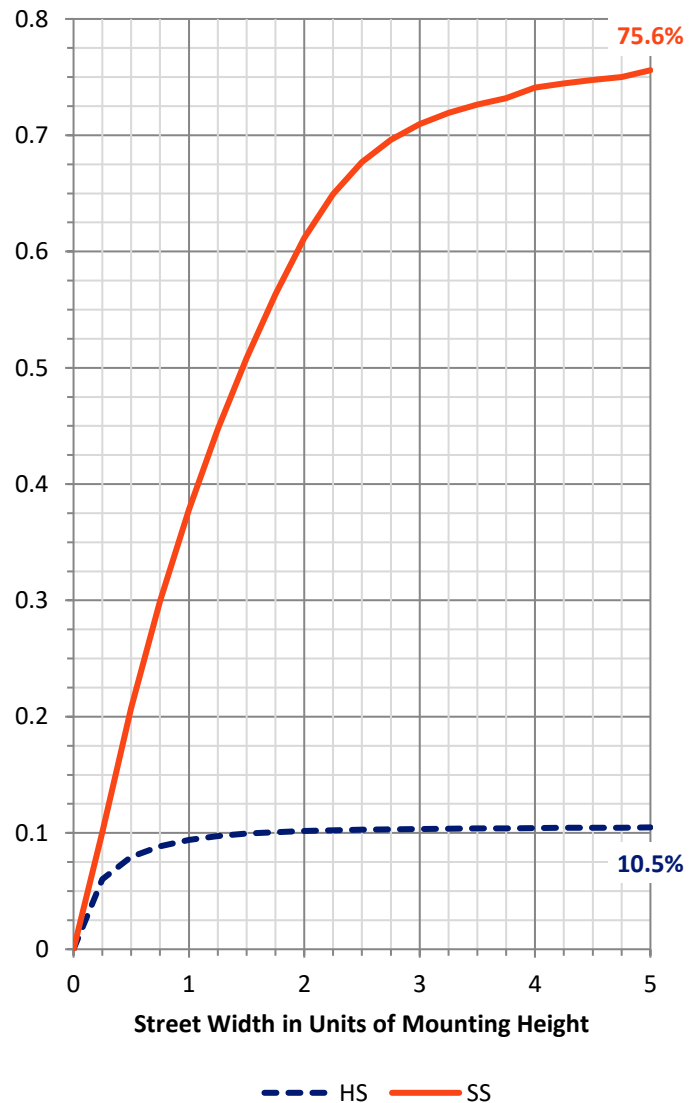
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	485.9	31.2	517.1
	% Fixture	10.7	0.7	11.4
Street Side	Lumens	3569.8	465.6	4035.4
	% Fixture	78.4	10.2	88.6
Total	Lumens	4055.7	496.8	4552.5
	% Fixture	89.1	10.9	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.0	2.3
10°-20°	290.1	6.4
20°-30°	418.8	9.2
30°-40°	515.7	11.3
40°-50°	595.9	13.1
50°-60°	662.4	14.6
60°-70°	883.1	19.4
70°-80°	399.8	8.8
80°-90°	183.8	4.0
90°-100°	178.1	3.9
100°-110°	122.2	2.7
110°-120°	102.8	2.3
120°-130°	41.5	0.9
130°-140°	25.8	0.6
140°-150°	15.7	0.3
150°-160°	10.0	0.2
160°-170°	0.7	0.0
170°-180°	0.0	0.0
0°-90°	4055.7	89.1
0°-180°	4552.5	100.0

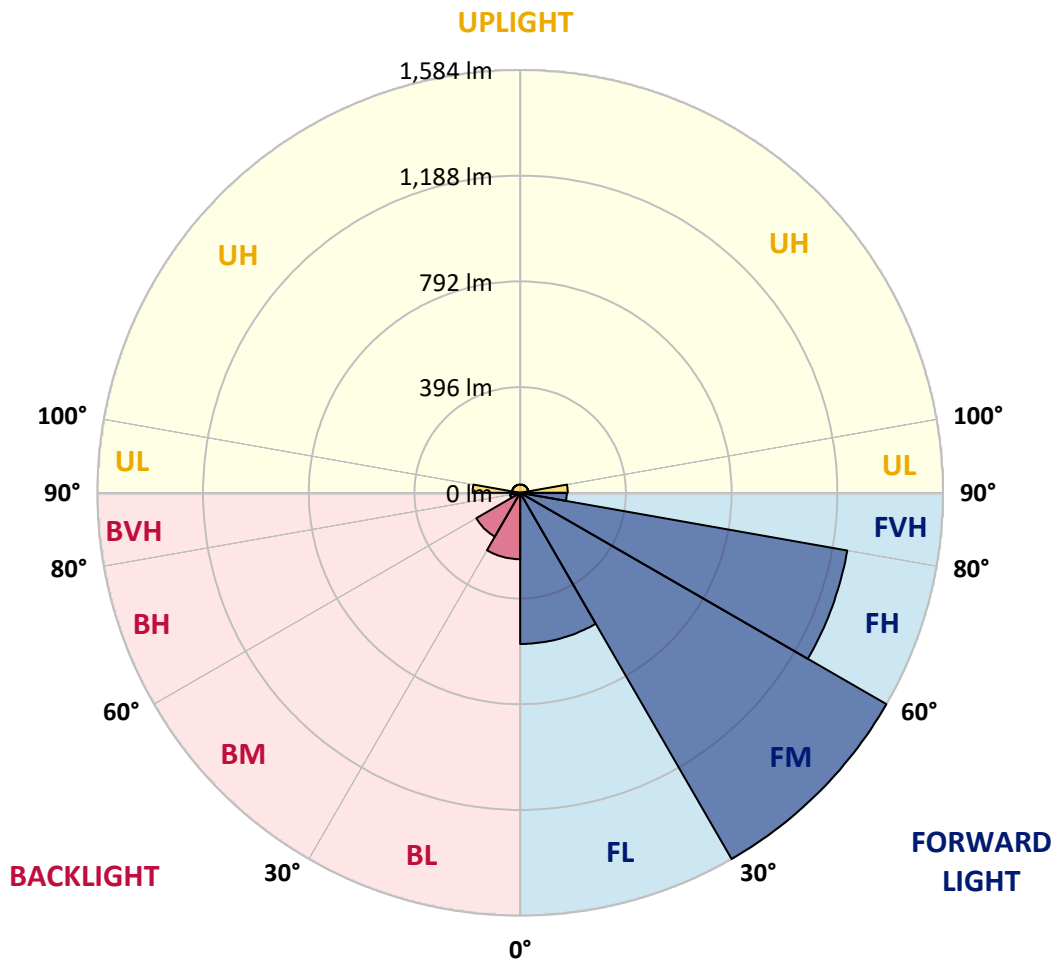


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	566.3	12.4			
FM (30°-60°)	1584.4	34.8			
FH (60°-80°)	1244.6	27.3			G1/1800
FVH (80°-90°)	174.4	3.8			G2/225
BL (0°-30°)	248.6	5.5	B1/500		
BM (30°-60°)	189.7	4.2	B0/220		
BH (60°-80°)	38.3	0.8	B0/110		G0/110
BVH (80°-90°)	9.3	0.2			G0/10
UL (90°-100°)	178.1	3.9		U3/500	
UH (100°-180°)	31.2	0.7		U2/50	

BUG Rating: B1-U3-G2
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	37.5°	45°	55°	65°	75°	85°
0°	1142	1142	1142	1142	1142	1142	1142	1142	1142	1142	1142
2.5°	1201	1200	1195	1194	1193	1191	1181	1174	1171	1166	1157
5°	1258	1260	1256	1252	1246	1242	1229	1215	1202	1185	1165
7.5°	1304	1304	1300	1289	1282	1278	1263	1247	1226	1199	1166
10°	1347	1346	1340	1324	1311	1307	1288	1267	1243	1207	1162
12.5°	1395	1393	1387	1366	1346	1339	1320	1292	1260	1216	1159
15°	1427	1426	1422	1405	1382	1373	1351	1318	1277	1225	1156
17.5°	1458	1454	1445	1420	1399	1394	1374	1336	1290	1230	1148
20°	1511	1506	1490	1448	1403	1394	1379	1347	1295	1226	1133
22.5°	1566	1561	1543	1495	1428	1411	1376	1348	1296	1222	1114
25°	1589	1588	1580	1542	1467	1447	1391	1341	1296	1217	1095
27.5°	1554	1555	1558	1551	1503	1480	1419	1335	1294	1212	1074
30°	1549	1549	1532	1509	1496	1490	1440	1338	1282	1200	1045
32.5°	1592	1593	1559	1498	1451	1453	1446	1350	1266	1186	1013
35°	1653	1647	1610	1529	1431	1414	1411	1362	1249	1168	976
37.5°	1661	1658	1626	1569	1446	1416	1362	1367	1239	1147	935
40°	1680	1674	1636	1570	1479	1445	1339	1336	1230	1121	889
42.5°	1784	1766	1694	1579	1481	1459	1351	1274	1218	1094	838
45°	1857	1858	1839	1700	1491	1464	1387	1223	1203	1059	784
47.5°	1834	1831	1777	1704	1622	1551	1412	1217	1171	1016	723
50°	1903	1892	1831	1727	1632	1619	1495	1202	1103	966	652
52.5°	1977	1987	1958	1868	1605	1545	1410	1233	1022	918	572
55°	1997	1990	1912	1801	1632	1583	1432	1203	970	860	486
57.5°	2017	2013	1940	1829	1704	1665	1507	1257	954	784	392
60°	2190	2202	2132	2013	1825	1791	1754	1351	906	668	295
62.5°	2532	2556	2570	2593	2538	2510	2321	1496	813	510	200
65°	2717	2736	2830	2989	3095	3103	2718	1660	715	354	131
67.5°	2707	2714	2743	2851	3031	3062	2432	1612	639	223	100
70°	2418	2412	2349	2270	2153	2091	1578	1348	580	159	84
72.5°	1781	1765	1644	1329	1053	1023	815	959	528	119	71
75°	1170	1154	1059	899	781	751	589	593	394	98	61
77.5°	859	851	798	684	599	586	503	436	258	84	54
80°	673	668	613	527	480	473	415	355	153	72	49
82.5°	578	574	536	466	433	423	354	289	129	64	44
85°	583	583	551	491	453	427	300	246	115	56	38
87.5°	597	591	546	474	427	407	268	225	109	50	34
90°	590	582	540	490	462	444	265	231	104	48	30
92.5°	632	628	608	590	555	508	266	242	99	49	28
95°	661	663	646	594	520	460	268	245	93	50	27
97.5°	546	547	538	463	393	374	292	214	90	49	27
100°	421	419	391	335	377	370	262	183	86	47	26
102.5°	351	352	356	392	433	365	212	166	81	46	25
105°	321	327	365	463	394	326	182	150	77	43	24
107.5°	359	363	393	396	275	232	153	142	76	42	24
110°	388	389	369	318	240	210	140	135	76	41	23



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	37.5°	45°	55°	65°	75°	85°
112.5°	435	431	392	362	317	290	162	125	75	38	23
115°	491	488	461	401	348	331	180	112	72	35	21
117.5°	381	382	365	320	228	218	134	102	68	32	20
120°	162	161	155	148	151	146	120	93	59	30	18
122.5°	129	130	127	120	121	124	122	79	50	27	17
125°	92	93	102	109	122	127	112	71	51	25	16
127.5°	93	95	101	113	125	123	94	66	46	26	16
130°	102	102	110	116	105	100	77	61	40	26	15
132.5°	108	108	105	99	81	76	69	54	38	24	16
135°	91	91	89	77	67	65	60	50	36	23	16
137.5°	71	71	68	63	57	58	55	52	37	23	16
140°	57	57	56	54	54	55	53	53	41	23	15
142.5°	50	50	52	50	53	53	51	53	42	22	14
145°	47	47	48	49	52	54	58	48	40	20	14
147.5°	48	48	49	49	59	60	54	46	38	18	13
150°	51	51	52	56	57	55	53	49	34	16	13
152.5°	59	59	59	55	54	55	52	45	27	14	13
155°	54	54	53	52	51	50	45	36	21	13	12
157.5°	49	49	47	45	41	40	36	27	17	12	11
160°	41	41	41	38	32	30	26	20	13	10	10
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1142	1142	1142	1142	1142	1142	1142	1142	1142	1142	1142
2.5°	1151	1144	1129	1112	1098	1082	1068	1055	1056	1048	1047
5°	1152	1139	1110	1077	1048	1018	994	972	964	955	954
7.5°	1148	1127	1083	1033	986	941	906	874	859	848	848
10°	1136	1107	1047	978	913	852	805	762	739	727	727
12.5°	1126	1090	1010	922	837	759	705	670	645	636	637
15°	1115	1069	969	859	756	672	627	586	565	548	550
17.5°	1099	1043	922	789	675	605	553	506	449	418	421
20°	1074	1008	865	714	606	535	460	376	311	283	284
22.5°	1046	968	802	644	540	446	334	253	208	192	193
25°	1017	928	736	576	467	336	229	186	174	171	171
27.5°	983	884	667	518	381	242	187	170	165	163	163
30°	944	831	599	448	286	194	171	161	158	157	158
32.5°	900	773	533	369	222	176	160	152	154	177	180
35°	851	709	472	285	191	162	145	156	177	166	166
37.5°	796	643	396	220	173	148	138	167	134	129	128
40°	736	572	309	185	156	134	156	132	118	112	112
42.5°	672	497	230	160	139	126	146	114	105	103	103
45°	602	420	176	139	124	125	115	104	97	95	95
47.5°	526	343	147	120	111	139	102	96	92	89	89
50°	446	267	132	106	100	115	90	88	91	83	83
52.5°	363	203	119	93	90	94	80	82	76	76	76
55°	281	152	104	83	81	75	71	74	73	70	70
57.5°	205	121	88	73	77	68	63	65	59	54	53
60°	145	104	73	65	69	56	58	52	50	45	45
62.5°	111	88	63	56	59	52	49	44	42	39	39
65°	93	74	53	49	48	44	43	39	37	34	34
67.5°	79	62	45	42	41	38	36	34	32	29	30
70°	67	53	39	36	36	34	31	30	28	26	26
72.5°	56	46	34	31	32	30	28	26	25	22	22
75°	48	40	30	27	29	27	25	23	20	18	18
77.5°	42	35	27	25	26	24	22	20	17	15	16
80°	37	31	24	22	24	22	20	17	14	13	13
82.5°	33	28	22	21	22	20	18	15	11	10	10
85°	29	25	20	19	21	18	17	13	9	8	8
87.5°	26	23	19	18	20	17	16	11	8	6	6
90°	24	21	17	17	19	16	15	10	7	5	5
92.5°	23	20	17	17	19	17	15	10	7	6	6
95°	22	19	16	17	18	17	15	10	7	6	6
97.5°	21	19	16	16	17	17	14	10	7	6	6
100°	20	18	16	16	17	17	14	10	7	6	6
102.5°	20	18	16	16	16	16	13	10	8	6	6
105°	19	17	16	15	15	14	12	10	8	5	5
107.5°	19	17	16	15	15	13	12	9	7	5	5
110°	19	16	16	15	14	12	11	9	7	5	5



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	18	16	15	14	14	12	10	8	6	5	5
115°	17	16	14	14	13	11	10	8	6	5	5
117.5°	17	15	14	13	13	11	9	7	6	5	5
120°	16	14	13	13	13	10	9	7	6	5	5
122.5°	15	14	13	13	12	10	9	6	5	5	5
125°	15	14	13	13	12	9	8	6	5	4	4
127.5°	15	14	13	13	12	9	8	6	5	4	4
130°	14	14	13	12	11	9	7	5	4	4	4
132.5°	14	14	13	12	11	9	7	5	4	4	4
135°	15	14	12	11	11	8	7	5	4	4	4
137.5°	15	14	12	11	10	8	7	5	4	4	3
140°	14	13	12	11	10	7	6	5	4	4	4
142.5°	14	13	12	10	9	7	6	4	4	4	4
145°	13	13	11	10	9	7	6	4	4	3	3
147.5°	13	12	11	10	9	6	6	4	4	3	3
150°	13	12	11	9	9	6	5	4	4	3	3
152.5°	12	12	10	9	8	6	5	4	3	3	3
155°	12	11	10	9	8	6	5	4	3	3	3
157.5°	11	10	9	8	7	5	5	4	3	3	3
160°	10	10	9	8	7	5	5	4	3	3	3
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
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

(END OF REPORT)