

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P151230

Luminaire Tested: **TLM-E03-LED-E1-SL3**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P151230  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33679)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TLM-E03-LED-E1-SL3  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (63) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

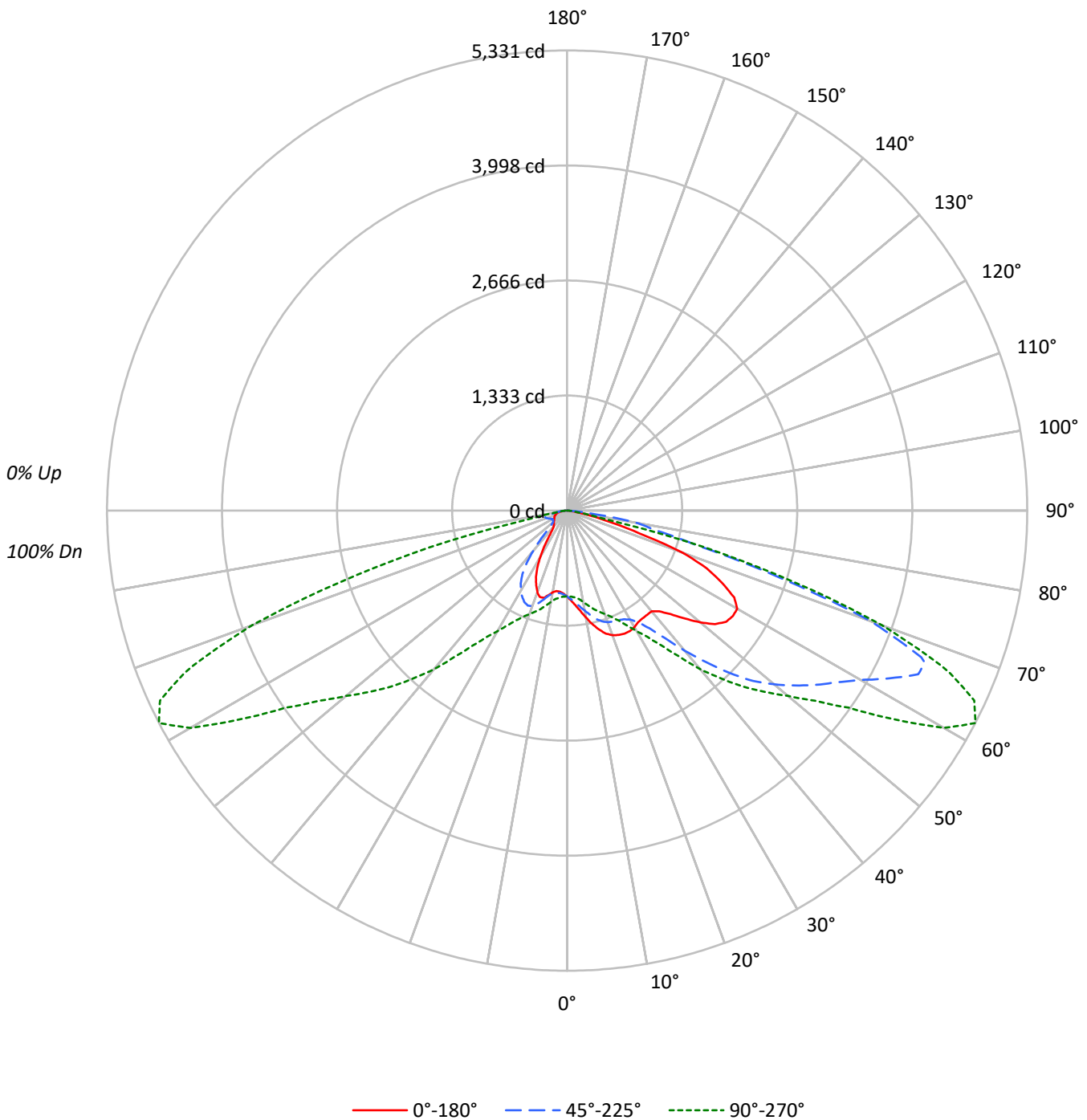
Lumens per Lamp: N/A  
Luminaire Lumens: 9108.5 lumens  
Efficiency: N/A  
Efficacy: 121.1 lumens/watt  
Spacing Criteria (0/90/45): 1.44 / 3.92 / 2.51  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

Input Watts (W): 75.2  
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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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	106	100	94	89	103	97	92	88	93	89	85	89	85	82	85	82	80	77					77			
2	93	82	74	66	90	80	72	65	77	70	64	73	67	62	70	65	61	58					58			
3	82	69	59	50	79	67	58	50	64	56	49	61	54	48	58	52	47	44					44			
4	73	59	48	39	71	57	47	39	54	46	38	52	44	38	49	43	37	35					35			
5	66	51	40	32	64	49	39	31	47	38	31	45	37	31	43	36	30	28					28			
6	60	44	34	26	58	43	33	26	41	32	26	39	31	25	38	31	25	23					23			
7	55	39	29	22	53	38	29	22	37	28	22	35	27	21	34	27	21	19					19			
8	51	35	25	19	49	35	25	19	33	25	18	32	24	18	30	23	18	16					16			
9	47	32	23	16	46	31	22	16	30	22	16	29	21	16	28	21	16	14					14			
10	44	29	20	14	43	29	20	14	28	20	14	27	19	14	26	19	14	12					12			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	21420	21420	21420
5°	23793	21826	20400
10°	27500	23434	21029
15°	31804	26277	23335
20°	35189	29255	23093
25°	37340	33350	20238
30°	38754	40047	15437
35°	40052	50170	9408
40°	42772	67390	6857
45°	51665	87834	6607
50°	67485	111861	6665
55°	84298	149492	6906
60°	97952	216742	7363
65°	100758	265138	8201
70°	89694	244031	9064
75°	43086	137908	10563
80°	14877	19092	10786
85°	6669	11856	10868



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.1	1.1
10°-20°	339.7	3.7
20°-30°	599.8	6.6
30°-40°	860.9	9.5
40°-50°	1307.5	14.4
50°-60°	1925.2	21.1
60°-70°	2558.5	28.1
70°-80°	1251.7	13.7
80°-90°	166.2	1.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1038.5	11.4
0°-40°	1899.5	20.9
0°-60°	5132.2	56.3
0°-90°	9108.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9108.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	995	995	995	995	995	
5°	1101	1070	1010	960	944	110
15°	1427	1299	1179	1068	1047	406
25°	1572	1401	1404	1171	852	724
35°	1524	1665	1909	903	358	961
45°	1697	2661	2885	325	217	1341
55°	2246	3520	3983	197	184	1982
65°	1978	4489	5205	220	161	1921
75°	518	1544	1658	255	127	645
85°	27	85	48	61	44	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	995	995	995	995	995	995	995	995	995	995	995
2.5°	1042	1043	1041	1040	1034	1028	1024	1019	1019	1019	1017
5°	1101	1097	1100	1093	1081	1070	1059	1050	1048	1048	1044
7.5°	1172	1167	1165	1155	1137	1121	1099	1090	1085	1083	1081
10°	1258	1258	1245	1228	1204	1176	1152	1136	1135	1135	1126
12.5°	1346	1348	1331	1314	1275	1238	1210	1192	1191	1187	1182
15°	1427	1422	1411	1386	1343	1299	1264	1246	1242	1238	1235
17.5°	1494	1489	1475	1443	1398	1346	1303	1284	1282	1280	1276
20°	1536	1532	1512	1475	1428	1375	1329	1316	1312	1312	1310
22.5°	1560	1554	1525	1476	1430	1391	1353	1345	1342	1343	1343
25°	1572	1567	1526	1456	1412	1401	1385	1380	1381	1382	1384
27.5°	1574	1567	1519	1430	1389	1420	1431	1439	1439	1443	1450
30°	1559	1551	1505	1410	1379	1458	1502	1523	1531	1529	1545
32.5°	1533	1528	1491	1410	1407	1533	1611	1641	1645	1647	1665
35°	1524	1523	1507	1458	1494	1665	1784	1807	1812	1812	1825
37.5°	1522	1527	1545	1548	1647	1861	2017	2052	2052	2062	2062
40°	1522	1533	1601	1682	1834	2116	2332	2372	2372	2383	2377
42.5°	1581	1597	1709	1863	2070	2379	2627	2672	2675	2672	2681
45°	1697	1711	1847	2068	2313	2661	2909	2963	2952	2959	2962
47.5°	1851	1873	2028	2292	2550	2922	3225	3274	3270	3273	3260
50°	2015	2038	2211	2514	2786	3132	3479	3552	3545	3550	3557
52.5°	2160	2174	2341	2681	2965	3328	3674	3765	3781	3783	3788
55°	2246	2263	2416	2764	3095	3520	3897	4035	4066	4074	4096
57.5°	2276	2294	2433	2776	3166	3700	4208	4451	4477	4520	4590
60°	2275	2294	2415	2749	3238	3923	4692	5099	5231	5275	5375
62.5°	2182	2204	2327	2667	3330	4208	5412	6038	6208	6288	6396
65°	1978	1994	2109	2459	3304	4489	6014	6795	6950	7067	7260
67°	1797	1807	1897	2213	3050	4499	6204	6983	7118	7242	7441
67.5°	1751	1772	1842	2138	2955	4442	6191	6954	7092	7221	7431
70°	1425	1455	1490	1689	2323	3737	5732	6452	6573	6693	6986
72.5°	879	933	940	1066	1512	2583	4638	5441	5532	5618	5918
75°	518	526	551	653	887	1544	3112	4042	4126	4168	4403
77.5°	289	297	318	406	682	1040	1812	2375	2426	2479	2441
80°	120	131	141	164	319	821	1246	1510	1543	1574	1613
82.5°	58	62	76	87	116	337	977	1309	1348	1393	1484
85°	27	30	42	50	56	85	327	637	691	701	719
87.5°	2	2	5	7	10	11	34	48	54	49	62
90°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	995	995	995	995	995	995	995	995	995	995	995
2.5°	1016	1015	1013	1013	1012	1012	1012	1010	1010	1010	1009
5°	1043	1042	1039	1039	1037	1037	1034	1033	1031	1031	1030
7.5°	1078	1077	1073	1073	1070	1069	1067	1064	1064	1062	1060
10°	1126	1123	1122	1117	1118	1116	1114	1111	1109	1107	1105
12.5°	1180	1180	1175	1172	1174	1172	1168	1167	1164	1164	1161
15°	1231	1231	1229	1225	1226	1223	1222	1220	1216	1217	1216
17.5°	1275	1275	1272	1270	1270	1267	1268	1266	1264	1263	1260
20°	1310	1310	1308	1306	1307	1307	1304	1304	1304	1302	1302
22.5°	1344	1345	1345	1345	1346	1347	1346	1348	1347	1349	1349
25°	1389	1392	1394	1394	1399	1400	1401	1404	1404	1407	1408
27.5°	1456	1458	1466	1468	1469	1477	1478	1482	1486	1487	1488
30°	1548	1553	1559	1563	1563	1573	1577	1575	1586	1589	1593
32.5°	1671	1675	1681	1685	1689	1694	1695	1700	1709	1717	1712
35°	1826	1836	1826	1837	1840	1847	1845	1851	1855	1858	1857
37.5°	2051	2046	2044	2040	2033	2057	2045	2044	2038	2055	2044
40°	2347	2350	2353	2337	2328	2328	2325	2314	2309	2324	2322
42.5°	2656	2659	2645	2635	2612	2609	2595	2592	2587	2595	2587
45°	2937	2939	2908	2913	2895	2898	2876	2885	2873	2881	2896
47.5°	3251	3255	3228	3239	3221	3210	3209	3215	3202	3210	3214
50°	3536	3531	3517	3520	3512	3514	3502	3513	3498	3514	3512
52.5°	3789	3783	3780	3790	3783	3783	3776	3781	3783	3807	3812
55°	4096	4101	4106	4124	4132	4119	4132	4157	4158	4215	4246
57.5°	4589	4624	4642	4653	4700	4695	4725	4785	4791	4923	5000
60°	5449	5511	5570	5538	5633	5662	5680	5792	5827	5952	6019
62.5°	6535	6542	6634	6605	6659	6646	6668	6719	6765	6868	6931
65°	7293	7326	7362	7325	7324	7280	7252	7251	7279	7301	7371
67°	7499	7532	7541	7514	7475	7419	7367	7340	7322	7332	7376
67.5°	7497	7528	7539	7513	7459	7412	7357	7326	7302	7307	7344
70°	7071	7138	7174	7182	7175	7093	7046	7018	6998	6949	6946
72.5°	5991	6072	6100	6145	6165	6044	5993	6024	5954	5799	5806
75°	4399	4405	4311	4293	4226	3952	3870	3795	3675	3488	3312
77.5°	2293	2292	2184	2129	2049	1884	1876	1742	1648	1477	1415
80°	1629	1655	1691	1709	1681	1617	1529	1434	1325	1218	1090
82.5°	1515	1531	1550	1480	1441	1351	1284	1146	1069	947	818
85°	737	786	748	704	689	539	521	435	395	325	303
87.5°	47	58	52	47	41	23	31	22	23	17	15
90°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	995	995	995	995	995	995	995	995	995	995	995
2.5°	1009	1008	1007	1006	1005	1005	1004	1003	1002	1000	1000
5°	1028	1028	1027	1025	1025	1023	1020	1019	1019	1017	1015
7.5°	1059	1058	1056	1055	1053	1051	1049	1047	1046	1043	1042
10°	1106	1104	1099	1097	1096	1094	1092	1090	1087	1085	1084
12.5°	1159	1158	1154	1156	1151	1149	1147	1142	1144	1140	1138
15°	1212	1213	1211	1211	1207	1204	1202	1198	1197	1195	1193
17.5°	1259	1261	1258	1256	1254	1252	1248	1244	1244	1240	1238
20°	1302	1304	1303	1301	1298	1297	1295	1292	1292	1290	1287
22.5°	1351	1352	1352	1351	1348	1349	1347	1344	1345	1341	1341
25°	1410	1412	1414	1415	1413	1414	1412	1410	1409	1410	1409
27.5°	1491	1493	1499	1494	1499	1500	1497	1493	1496	1501	1498
30°	1598	1596	1604	1605	1604	1605	1603	1600	1602	1611	1606
32.5°	1718	1722	1724	1726	1729	1733	1730	1727	1732	1729	1736
35°	1863	1872	1875	1872	1874	1881	1880	1881	1891	1881	1894
37.5°	2046	2055	2062	2058	2063	2063	2071	2093	2079	2097	2111
40°	2312	2326	2327	2326	2331	2337	2345	2369	2353	2372	2385
42.5°	2586	2603	2609	2599	2610	2623	2624	2645	2646	2649	2656
45°	2895	2910	2922	2917	2918	2935	2931	2951	2936	2936	2940
47.5°	3224	3238	3246	3254	3244	3259	3266	3262	3244	3240	3216
50°	3524	3536	3548	3570	3569	3576	3581	3563	3559	3537	3510
52.5°	3842	3873	3900	3946	3953	3977	3968	3938	3933	3897	3861
55°	4285	4374	4413	4484	4532	4531	4511	4506	4468	4396	4353
57.5°	5056	5195	5262	5354	5369	5360	5334	5288	5222	5101	5023
60°	6169	6255	6333	6355	6366	6349	6258	6156	6027	5860	5721
62.5°	7010	7098	7156	7147	7078	6991	6858	6687	6506	6319	6111
65°	7438	7475	7466	7396	7278	7126	6932	6721	6508	6287	6071
67°	7415	7416	7355	7219	7068	6877	6640	6410	6160	5928	5671
67.5°	7374	7370	7285	7136	6973	6776	6530	6292	6033	5799	5533
70°	6910	6854	6662	6424	6197	5931	5673	5400	5108	4907	4601
72.5°	5678	5489	5158	4909	4666	4318	4157	3818	3613	3485	3254
75°	3288	3130	2874	2641	2523	2317	2219	1970	1918	1916	1836
77.5°	1255	1095	930	749	637	506	446	399	363	388	352
80°	941	774	605	440	314	232	199	184	175	168	163
82.5°	701	553	429	280	196	148	128	120	116	109	103
85°	237	190	150	104	82	67	62	60	57	52	49
87.5°	13	12	13	10	12	10	11	11	11	10	10
90°	0	0	0	0	0	0	0	0	0	0	0





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**CANDELA DISTRIBUTION (continued):**

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	995	995	995	995	995	995	995	995	995	995	995
2.5°	999	999	999	997	994	988	982	977	972	969	967
5°	1014	1012	1011	1010	1003	991	980	970	960	952	949
7.5°	1041	1037	1036	1033	1024	1006	990	974	960	949	944
10°	1082	1082	1076	1072	1062	1038	1015	994	975	963	960
12.5°	1134	1134	1129	1126	1114	1083	1055	1030	1012	1000	999
15°	1188	1187	1183	1179	1166	1133	1105	1083	1068	1054	1050
17.5°	1236	1236	1231	1227	1214	1186	1161	1145	1128	1099	1077
20°	1284	1285	1281	1277	1266	1242	1231	1215	1177	1114	1062
22.5°	1337	1341	1336	1332	1323	1313	1309	1271	1191	1090	1014
25°	1405	1412	1406	1404	1399	1402	1390	1302	1171	1038	943
27.5°	1498	1498	1499	1499	1497	1508	1464	1303	1127	971	858
30°	1607	1613	1611	1611	1619	1626	1505	1281	1071	888	754
32.5°	1738	1743	1745	1736	1768	1732	1520	1241	1002	785	630
35°	1896	1903	1908	1909	1930	1824	1512	1182	903	656	494
37.5°	2102	2116	2127	2132	2133	1902	1490	1104	774	512	368
40°	2376	2391	2388	2398	2341	1948	1440	991	614	376	284
42.5°	2640	2642	2646	2637	2521	1972	1370	853	460	281	243
45°	2935	2918	2899	2885	2687	1981	1274	685	325	236	225
47.5°	3212	3189	3150	3110	2835	1967	1151	513	247	216	213
50°	3484	3441	3386	3340	2977	1946	1015	370	216	206	203
52.5°	3821	3749	3677	3617	3162	1913	872	281	203	198	194
55°	4283	4183	4067	3983	3413	1863	722	238	197	193	187
57.5°	4923	4773	4642	4505	3756	1812	593	221	196	190	182
60°	5577	5397	5230	5034	4106	1761	503	219	199	190	178
62.5°	5917	5731	5530	5331	4257	1641	441	222	206	193	178
65°	5839	5612	5408	5205	4082	1414	373	226	220	205	181
67°	5447	5210	5014	4820	3692	1184	320	230	235	219	187
67.5°	5309	5072	4879	4690	3577	1136	307	232	238	223	189
70°	4402	4228	4023	3877	2896	841	252	236	256	246	198
72.5°	3168	3002	2848	2767	2133	588	212	232	267	259	202
75°	1684	1674	1618	1658	1320	384	187	217	255	237	188
77.5°	340	350	411	405	426	214	160	186	197	174	153
80°	158	155	152	154	151	137	130	146	137	112	102
82.5°	98	96	93	92	102	109	114	115	91	78	75
85°	47	47	46	48	60	89	96	85	61	56	53
87.5°	9	9	10	9	12	21	24	28	23	24	27
90°	0	0	0	0	0	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (continued):**

	165°	175°	180°
0°	995	995	995
2.5°	965	963	963
5°	945	944	944
7.5°	940	941	940
10°	959	958	962
12.5°	1001	1004	1003
15°	1045	1047	1047
17.5°	1058	1051	1050
20°	1024	1011	1008
22.5°	960	936	937
25°	879	850	852
27.5°	785	754	753
30°	672	638	621
32.5°	536	495	495
35°	403	370	358
37.5°	306	287	281
40°	255	246	244
42.5°	232	229	228
45°	220	218	217
47.5°	209	208	207
50°	201	200	199
52.5°	194	192	191
55°	184	184	184
57.5°	178	178	177
60°	172	171	171
62.5°	167	165	166
65°	164	161	161
67°	162	156	156
67.5°	162	154	154
70°	159	146	144
72.5°	156	137	134
75°	148	130	127
77.5°	127	116	114
80°	98	85	87
82.5°	71	61	60
85°	51	44	44
87.5°	27	23	24
90°	0	0	0

(END OF REPORT)