

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: P156630

Luminaire Tested: **TLM-E03-LED-E1-T4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P156630
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33673)
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-T4
Description: TALON MEDIUM LED SITE LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4
Light Source: (63) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

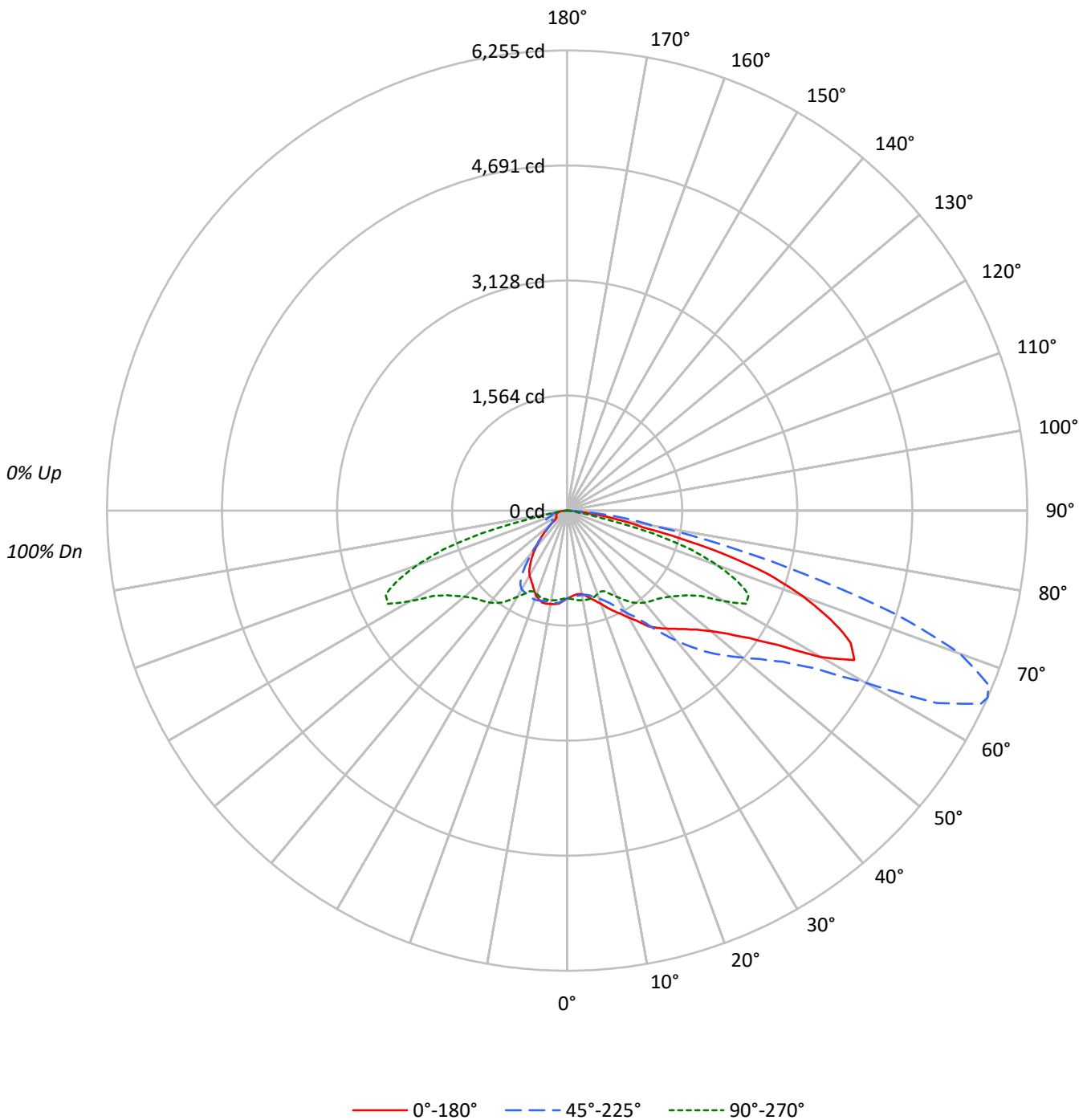
Lumens per Lamp: N/A
Luminaire Lumens: 9066.1 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.73 / 2.02 / 2.64
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
CIE Type: Direct

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	105	99	93	88	102	96	91	87	92	88	84	88	84	81	84	81	79	76					76			
2	92	81	72	65	89	79	71	64	76	69	62	72	66	61	69	64	59	57					57			
3	82	68	58	49	79	66	57	49	63	55	48	60	53	47	57	51	46	43					43			
4	73	58	47	39	70	57	46	38	54	45	38	51	43	37	49	42	36	34					34			
5	66	50	39	31	64	49	39	31	47	38	31	45	36	30	42	35	30	27					27			
6	60	44	34	26	58	43	33	26	41	32	25	39	31	25	38	30	25	22					22			
7	55	39	29	22	53	38	29	22	37	28	22	35	27	21	34	27	21	19					19			
8	51	35	26	19	49	35	25	19	33	25	19	32	24	18	31	23	18	16					16			
9	47	32	23	16	46	31	23	16	30	22	16	29	22	16	28	21	16	14					14			
10	44	29	21	15	43	29	20	15	28	20	14	27	19	14	26	19	14	12					12			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	25726	25726	25726
5°	24895	26278	27402
10°	25183	27063	28177
15°	27592	27614	28907
20°	30928	27675	28179
25°	35796	28765	26390
30°	41762	33683	25380
35°	50380	39999	22838
40°	58875	45920	18857
45°	69384	51970	14340
50°	85302	60954	9177
55°	113461	75215	6868
60°	171318	106003	7233
65°	216644	138555	8354
70°	214888	136901	9945
75°	170430	101393	12227
80°	86410	21323	15249
85°	12597	17537	19513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.0	1.3
10°-20°	352.3	3.9
20°-30°	606.9	6.7
30°-40°	918.1	10.1
40°-50°	1190.0	13.1
50°-60°	1640.7	18.1
60°-70°	2549.0	28.1
70°-80°	1482.3	16.3
80°-90°	210.8	2.3
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°	1075.2	11.9
0°-40°	1993.3	22.0
0°-60°	4824.0	53.2
0°-90°	9066.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9066.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1195	1195	1195	1195	1195	
5°	1152	1169	1216	1256	1268	110
15°	1238	1195	1239	1271	1297	355
25°	1507	1393	1211	1266	1111	703
35°	1917	1873	1522	1074	869	1198
45°	2279	2728	1707	450	471	1781
55°	3023	3581	2004	232	183	2800
65°	4253	6209	2720	328	164	4025
75°	2049	3338	1219	206	147	2110
85°	51	348	71	84	79	221
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	1195	1195	1195	1195	1195	1195	1195	1195	1195	1195	1195
2.5°	1173	1177	1174	1175	1175	1176	1176	1177	1176	1179	1181
5°	1152	1154	1153	1155	1157	1161	1160	1165	1166	1169	1174
7.5°	1144	1142	1143	1146	1148	1150	1152	1156	1159	1166	1170
10°	1152	1151	1152	1154	1154	1155	1153	1157	1159	1165	1169
12.5°	1185	1185	1183	1183	1181	1179	1174	1171	1170	1171	1173
15°	1238	1236	1232	1229	1225	1218	1211	1205	1201	1195	1193
17.5°	1290	1287	1283	1279	1274	1267	1256	1249	1238	1231	1227
20°	1350	1344	1339	1334	1324	1322	1311	1299	1286	1270	1268
22.5°	1428	1418	1412	1409	1399	1396	1378	1361	1345	1324	1319
25°	1507	1497	1494	1490	1483	1479	1462	1443	1422	1393	1387
27.5°	1584	1585	1577	1580	1578	1571	1554	1535	1519	1485	1478
30°	1680	1674	1670	1676	1669	1670	1655	1645	1619	1599	1585
32.5°	1780	1779	1785	1789	1788	1786	1774	1764	1741	1712	1706
35°	1917	1923	1928	1946	1946	1959	1947	1935	1908	1873	1861
37.5°	2010	2012	2032	2056	2086	2114	2122	2125	2114	2088	2070
40°	2095	2099	2131	2168	2212	2267	2300	2315	2318	2306	2267
42.5°	2180	2186	2219	2273	2334	2404	2462	2499	2520	2520	2497
45°	2279	2287	2323	2382	2453	2541	2621	2692	2726	2728	2706
47.5°	2396	2403	2445	2505	2578	2667	2768	2849	2912	2916	2898
50°	2547	2557	2592	2646	2721	2811	2912	3025	3091	3107	3088
52.5°	2747	2749	2778	2828	2901	2987	3094	3217	3304	3317	3286
55°	3023	3020	3039	3093	3148	3215	3326	3464	3561	3581	3549
57.5°	3398	3395	3411	3424	3527	3592	3701	3833	3927	3985	3930
60°	3979	3976	4002	4078	4155	4250	4356	4514	4646	4663	4609
62.5°	4400	4415	4472	4561	4717	4903	5097	5305	5576	5662	5636
65°	4253	4283	4362	4497	4705	4962	5266	5643	6006	6209	6203
66°	4121	4154	4251	4381	4601	4882	5214	5625	6031	6255	6269
67.5°	3881	3918	4013	4167	4381	4680	5037	5484	5943	6204	6241
70°	3414	3456	3525	3652	3863	4130	4506	4906	5387	5686	5731
72.5°	2854	2891	2968	3072	3245	3413	3708	4003	4347	4688	4655
75°	2049	2065	2111	2224	2317	2468	2705	2947	3182	3338	3360
77.5°	1065	1107	1172	1297	1398	1534	1688	1870	2042	2185	2146
80°	697	715	773	837	911	998	1101	1169	1191	1182	1191
82.5°	402	435	512	561	616	646	728	806	850	795	775
85°	51	66	208	262	300	345	370	417	389	348	424
87.5°	11	10	14	30	31	26	49	52	32	16	20
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	1195	1195	1195	1195	1195	1195	1195	1195	1195	1195	1195
2.5°	1183	1184	1186	1189	1191	1193	1195	1198	1200	1202	1206
5°	1178	1182	1186	1190	1195	1203	1208	1212	1216	1224	1227
7.5°	1175	1182	1188	1195	1203	1210	1219	1224	1230	1235	1241
10°	1173	1183	1189	1199	1208	1215	1225	1231	1238	1244	1247
12.5°	1177	1182	1188	1198	1209	1219	1230	1235	1241	1246	1247
15°	1194	1194	1195	1203	1214	1222	1231	1236	1239	1242	1242
17.5°	1225	1218	1213	1214	1221	1226	1231	1231	1229	1228	1226
20°	1261	1252	1242	1235	1233	1229	1226	1216	1208	1201	1196
22.5°	1313	1299	1285	1272	1260	1245	1228	1208	1189	1176	1168
25°	1377	1366	1349	1329	1314	1286	1264	1235	1211	1194	1180
27.5°	1468	1455	1439	1421	1399	1368	1341	1307	1278	1253	1235
30°	1581	1564	1552	1530	1515	1480	1453	1411	1355	1315	1290
32.5°	1697	1678	1668	1651	1634	1613	1572	1507	1435	1370	1327
35°	1852	1832	1814	1799	1774	1735	1699	1621	1522	1431	1359
37.5°	2047	2014	1969	1931	1887	1831	1776	1696	1583	1465	1369
40°	2255	2197	2133	2062	1986	1905	1842	1761	1634	1494	1362
42.5°	2472	2380	2291	2191	2085	1989	1907	1818	1672	1502	1334
45°	2687	2584	2449	2318	2184	2065	1973	1873	1707	1505	1297
47.5°	2865	2759	2605	2441	2282	2147	2039	1931	1754	1526	1288
50°	3053	2924	2753	2559	2379	2228	2113	2001	1820	1580	1317
52.5°	3258	3110	2910	2693	2496	2327	2202	2087	1904	1656	1372
55°	3508	3327	3110	2865	2654	2467	2329	2193	2004	1746	1441
57.5°	3890	3668	3424	3145	2911	2690	2525	2368	2159	1880	1535
60°	4581	4344	4027	3689	3414	3156	2914	2719	2462	2144	1743
62.5°	5571	5256	4833	4360	4000	3628	3355	3065	2746	2403	1988
65°	6121	5739	5173	4624	4161	3757	3410	3074	2720	2392	2045
66°	6189	5791	5203	4625	4139	3724	3359	3011	2649	2336	2021
67.5°	6161	5754	5148	4538	4044	3598	3221	2860	2499	2207	1941
70°	5702	5316	4721	4130	3661	3221	2861	2506	2175	1925	1729
72.5°	4735	4405	3888	3424	3056	2693	2388	2049	1769	1584	1468
75°	3418	3218	2747	2481	2158	1917	1621	1420	1219	1129	1109
77.5°	2159	1890	1591	1310	1077	893	695	590	492	482	582
80°	1093	984	758	604	508	411	325	246	172	207	248
82.5°	716	597	468	385	335	278	216	150	110	124	170
85°	387	330	266	210	170	152	102	72	71	76	97
87.5°	28	28	22	20	24	20	18	18	17	18	24
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	1195	1195	1195	1195	1195	1195	1195	1195	1195	1195	1195
2.5°	1208	1211	1212	1217	1220	1222	1224	1224	1225	1228	1229
5°	1231	1236	1242	1246	1248	1254	1256	1256	1258	1262	1265
7.5°	1245	1252	1258	1260	1264	1266	1269	1271	1271	1275	1277
10°	1250	1254	1260	1260	1264	1264	1267	1268	1268	1272	1275
12.5°	1250	1252	1257	1257	1260	1261	1265	1268	1269	1274	1278
15°	1244	1246	1250	1251	1258	1262	1271	1277	1277	1282	1284
17.5°	1227	1232	1240	1248	1261	1270	1281	1286	1282	1279	1276
20°	1199	1208	1227	1247	1270	1282	1288	1283	1269	1255	1246
22.5°	1171	1189	1221	1251	1277	1285	1282	1264	1241	1224	1212
25°	1184	1205	1236	1263	1280	1278	1266	1241	1216	1194	1174
27.5°	1238	1261	1278	1287	1285	1271	1252	1224	1194	1165	1137
30°	1289	1301	1305	1298	1282	1259	1235	1203	1163	1127	1095
32.5°	1312	1300	1281	1262	1236	1216	1183	1148	1098	1055	1023
35°	1312	1264	1216	1176	1137	1112	1074	1027	981	945	920
37.5°	1283	1191	1112	1047	998	971	914	872	833	821	805
40°	1230	1094	980	895	833	793	736	707	692	686	683
42.5°	1159	986	834	729	662	617	579	561	560	559	559
45°	1083	870	692	567	508	468	450	443	449	448	449
47.5°	1036	782	562	429	384	358	349	352	357	355	355
50°	1030	737	475	334	300	287	285	285	288	286	285
52.5°	1052	730	430	287	260	249	247	246	245	239	234
55°	1090	746	417	275	247	235	232	230	226	218	209
57.5°	1166	796	429	281	251	241	238	238	230	217	204
60°	1349	923	478	304	270	260	262	261	249	230	210
62.5°	1585	1089	542	336	294	292	302	300	280	251	222
65°	1694	1167	560	343	299	308	328	326	301	261	224
66°	1696	1167	552	337	292	303	323	322	297	257	220
67.5°	1655	1135	529	325	278	286	304	303	280	247	212
70°	1501	1016	470	304	259	255	261	257	242	219	195
72.5°	1286	853	410	288	246	230	226	223	211	198	183
75°	1013	675	360	276	234	213	206	202	194	185	173
77.5°	625	483	314	260	225	204	199	193	181	170	161
80°	279	299	258	227	201	182	174	165	153	146	141
82.5°	186	193	187	170	152	137	125	125	123	117	115
85°	119	120	116	105	98	89	84	85	89	88	87
87.5°	27	27	32	30	35	37	40	43	49	49	52
90°	0	0	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	1195	1195	1195	1195	1195
2.5°	1230	1232	1234	1231	1232
5°	1265	1264	1269	1266	1268
7.5°	1276	1277	1281	1281	1282
10°	1277	1279	1284	1287	1289
12.5°	1282	1286	1294	1296	1296
15°	1286	1288	1293	1295	1297
17.5°	1272	1268	1270	1271	1270
20°	1237	1233	1232	1228	1230
22.5°	1199	1188	1181	1173	1173
25°	1153	1136	1122	1108	1111
27.5°	1110	1088	1074	1065	1063
30°	1068	1045	1032	1021	1021
32.5°	998	982	965	958	957
35°	901	891	877	874	869
37.5°	792	789	777	776	771
40°	678	680	676	674	671
42.5°	564	574	572	571	569
45°	455	462	463	466	471
47.5°	358	360	362	361	362
50°	280	275	274	271	274
52.5°	226	218	214	210	208
55°	199	191	187	185	183
57.5°	192	184	178	174	173
60°	194	182	174	169	168
62.5°	199	183	172	167	166
65°	198	181	171	165	164
66°	195	179	169	164	163
67.5°	190	176	167	163	161
70°	181	172	165	160	158
72.5°	173	166	160	155	154
75°	164	158	152	148	147
77.5°	153	147	143	140	139
80°	135	131	127	123	123
82.5°	112	109	105	102	101
85°	86	86	83	80	79
87.5°	51	50	50	47	47
90°	0	0	0	0	0

(END OF REPORT)