

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: P151800

Luminaire Tested: **TLM-E03-LED-E1-SL4-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P151800  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)  
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-SL4-HSS  
Description: TALON MEDIUM LED SITE LUMINAIRE  
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND  
HOUSE SIDE SHIELD  
Light Source: (63) 4000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6104.4 lumens  
Efficiency: N/A  
Efficacy: 81.2 lumens/watt  
Spacing Criteria (0/90/45): 4.24 / 0.98 / 4.1  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
CIE Type: Direct

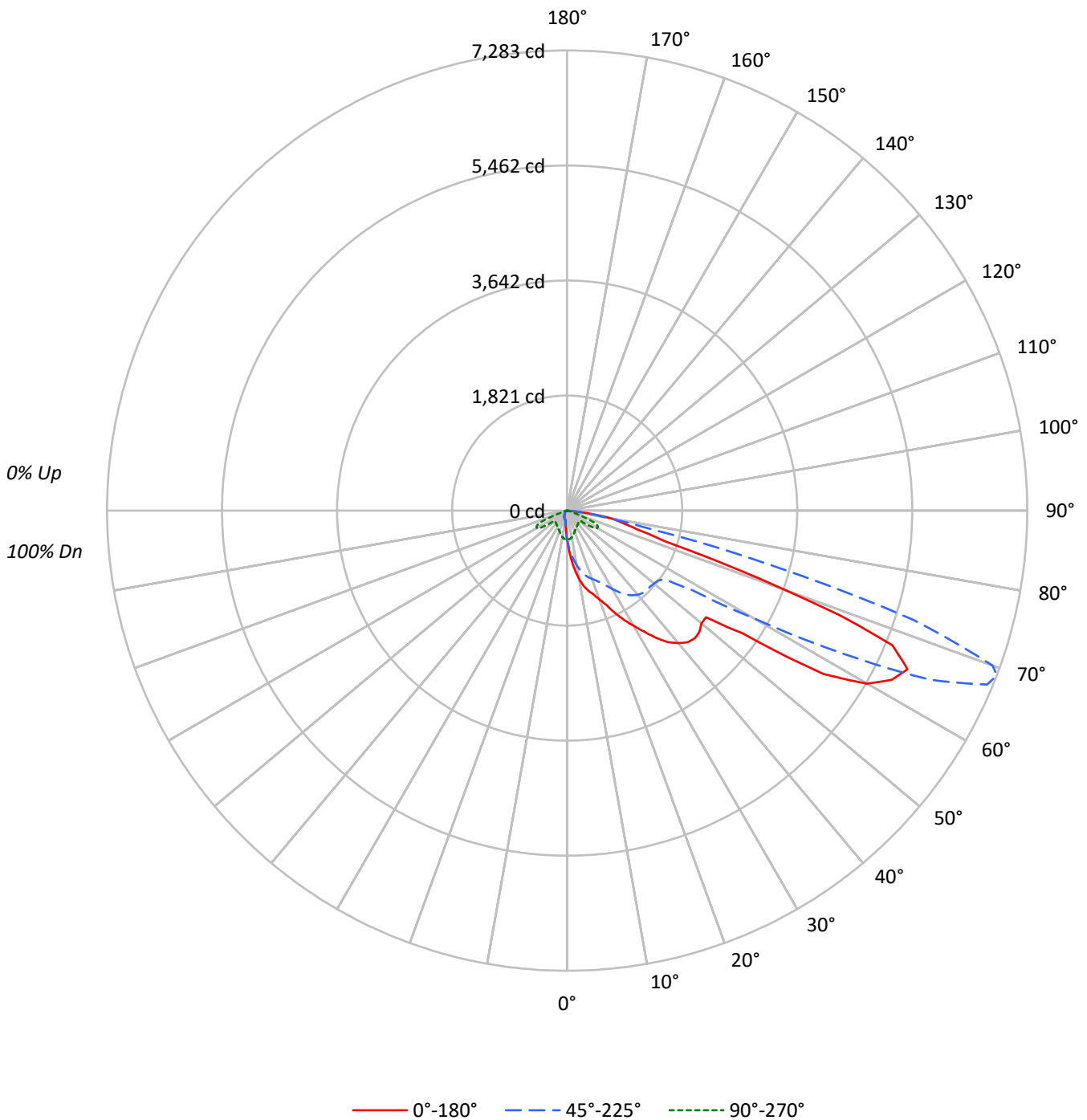
Input Watts (W): 75.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	105	99	93	88	102	96	91	86	92	87	83	88	84	81	84	81	78	76
2	91	80	71	63	88	78	70	62	74	67	61	71	65	59	68	62	58	55
3	80	66	55	47	77	64	54	46	61	52	45	58	51	44	55	49	43	41
4	71	56	44	36	68	54	44	35	51	42	35	49	41	34	46	39	33	31
5	64	48	36	28	61	46	36	28	44	35	27	42	33	27	40	32	27	24
6	58	42	31	23	56	40	30	22	38	29	22	37	28	22	35	27	22	19
7	53	37	26	19	51	36	26	19	34	25	18	32	24	18	31	24	18	16
8	49	33	23	16	47	32	22	16	31	22	16	29	21	15	28	21	15	13
9	45	30	20	14	44	29	20	14	28	19	13	27	19	13	25	18	13	11
10	42	27	18	12	41	27	18	12	25	17	12	24	17	12	23	17	12	10

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

	0°	90°	180°
0°	9924	9924	9924
5°	16964	9789	5208
10°	24155	9356	3345
15°	29375	8603	3031
20°	34273	8018	2749
25°	42423	7672	2423
30°	52351	7507	2063
35°	64703	7437	1735
40°	76973	7560	1602
45°	87012	7885	1644
50°	92972	8674	1507
55°	127048	15013	901
60°	235902	23810	646
65°	302681	25724	611
70°	228547	10637	692
75°	95155	4076	832
80°	86906	3843	1116
85°	7657	3458	1976



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	47.4	0.8
10°-20°	163.4	2.7
20°-30°	312.7	5.1
30°-40°	520.0	8.5
40°-50°	703.6	11.5
50°-60°	1100.4	18.0
60°-70°	2262.4	37.1
70°-80°	910.4	14.9
80°-90°	84.2	1.4
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°	523.4	8.6
0°-40°	1043.4	17.1
0°-60°	2847.5	46.6
0°-90°	6104.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6104.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	461	461	461	461	461	
5°	785	668	453	288	241	85
15°	1318	1045	386	143	136	377
25°	1786	1258	323	114	102	836
35°	2462	1624	283	81	66	1544
45°	2858	1778	259	53	54	2184
55°	3385	1890	400	35	24	3413
65°	5942	6336	505	17	12	5444
75°	1144	3336	49	7	10	1534
85°	31	134	14	5	8	192
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	461	461	461	461	461	461	461	461	461	461	461
2.5°	615	608	600	600	590	590	584	568	566	557	548
5°	785	779	769	760	752	738	728	709	688	668	650
7.5°	951	948	930	927	914	891	871	843	807	779	746
10°	1105	1098	1094	1077	1058	1033	1002	968	926	882	835
12.5°	1227	1223	1205	1198	1178	1153	1114	1070	1028	971	916
15°	1318	1311	1299	1288	1264	1242	1206	1158	1107	1045	979
17.5°	1394	1381	1378	1361	1336	1310	1270	1226	1166	1104	1032
20°	1496	1478	1472	1447	1418	1382	1336	1281	1218	1150	1076
22.5°	1616	1603	1590	1568	1531	1480	1413	1353	1273	1198	1118
25°	1786	1775	1754	1724	1678	1617	1536	1448	1354	1258	1164
27.5°	1951	1941	1926	1903	1851	1784	1684	1572	1453	1337	1233
30°	2106	2097	2082	2059	2013	1947	1834	1714	1566	1431	1306
32.5°	2273	2270	2253	2220	2180	2091	1968	1839	1689	1533	1387
35°	2462	2439	2423	2390	2322	2227	2083	1942	1784	1624	1461
37.5°	2622	2600	2580	2538	2455	2334	2171	2016	1853	1690	1524
40°	2739	2728	2704	2649	2556	2412	2236	2067	1903	1739	1575
42.5°	2826	2809	2782	2725	2615	2451	2262	2088	1926	1769	1608
45°	2858	2844	2819	2757	2638	2462	2261	2082	1927	1778	1630
47.5°	2839	2825	2803	2745	2628	2449	2243	2065	1917	1781	1650
50°	2776	2768	2751	2702	2597	2424	2227	2056	1915	1796	1678
52.5°	2770	2765	2744	2695	2588	2416	2225	2061	1932	1815	1698
55°	3385	3314	3155	3020	2798	2534	2326	2142	2004	1890	1808
57.5°	4811	4705	4496	4239	3729	3228	2827	2537	2394	2342	2373
60°	5479	5460	5427	5305	5044	4613	4133	3614	3406	3388	3451
62.5°	5796	5784	5794	5779	5698	5572	5434	5210	5004	4871	4589
65°	5942	5950	6007	6052	6062	6095	6196	6475	6679	6336	5553
67.5°	5571	5618	5749	5913	6105	6291	6591	7179	7598	7195	6083
69°	4612	4635	4955	5264	5733	6061	6496	7267	7738	7283	6041
70°	3631	3652	3995	4415	5208	5630	6199	7118	7607	7166	5825
72.5°	1638	1608	1729	1954	2816	3486	4481	5767	6276	5741	4358
75°	1144	1131	1144	1145	1279	1650	2082	3126	3866	3336	2082
77.5°	886	877	868	858	874	979	1021	1109	1440	1362	794
80°	701	693	715	708	708	720	712	679	617	572	512
82.5°	326	328	328	356	429	501	524	491	436	371	299
85°	31	35	59	91	181	204	205	170	170	134	108
87.5°	0	1	1	1	9	25	21	6	3	3	5
90°	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°	461	461	461	461	461	461	461	461	461	461	461
2.5°	532	529	517	505	494	482	471	460	448	439	428
5°	622	600	575	551	527	502	476	453	429	407	386
7.5°	713	670	636	593	554	515	479	442	408	376	346
10°	790	738	685	630	574	522	472	428	383	344	307
12.5°	853	787	722	653	590	524	462	409	356	312	274
15°	910	834	756	676	596	521	452	386	332	282	239
17.5°	956	869	781	691	605	517	439	370	307	255	213
20°	996	905	810	709	611	516	428	350	285	230	189
22.5°	1033	942	840	732	620	515	418	335	266	211	170
25°	1075	979	872	756	636	519	412	323	249	193	155
27.5°	1122	1021	910	786	657	527	410	310	234	176	143
30°	1188	1071	948	816	676	536	408	302	219	163	131
32.5°	1246	1120	990	847	697	545	407	291	205	150	122
35°	1307	1165	1026	877	715	555	406	283	192	137	113
37.5°	1360	1203	1054	903	735	564	407	276	180	126	105
40°	1405	1242	1085	927	756	578	408	269	168	116	98
42.5°	1445	1279	1118	954	780	594	414	263	158	107	91
45°	1476	1313	1154	992	819	620	425	259	148	99	85
47.5°	1508	1363	1215	1052	876	661	444	258	140	93	80
50°	1552	1413	1269	1113	928	703	467	259	130	87	75
52.5°	1584	1464	1339	1219	1052	831	556	277	125	82	69
55°	1773	1752	1755	1775	1646	1414	930	400	147	93	68
57.5°	2500	2574	2617	2616	2403	1993	1249	514	164	108	81
60°	3456	3400	3321	3126	2843	2275	1397	553	142	86	74
62.5°	4301	3973	3682	3366	2995	2373	1427	550	124	65	52
65°	4828	4238	3768	3372	2935	2291	1350	505	105	53	43
67.5°	4954	4095	3430	2925	2452	1783	991	380	82	44	38
69°	4679	3640	2842	2269	1784	1183	613	240	63	40	35
70°	4304	3166	2315	1821	1321	831	429	169	51	37	32
72.5°	2769	1663	1138	792	545	331	168	76	39	31	26
75°	1074	615	446	339	265	184	102	49	33	26	20
77.5°	529	405	331	227	132	82	55	38	27	19	13
80°	418	278	166	103	78	59	42	31	20	12	9
82.5°	214	117	86	70	58	46	34	22	13	8	7
85°	67	49	44	43	40	33	24	14	8	5	5
87.5°	5	7	9	7	8	7	9	6	4	4	3
90°	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°	461	461	461	461	461	461	461	461	461	461	461
2.5°	420	408	397	390	377	372	367	365	356	358	350
5°	367	346	330	314	299	288	279	268	259	255	247
7.5°	319	292	271	254	236	222	210	202	194	186	182
10°	277	248	224	207	190	178	169	163	158	155	154
12.5°	238	210	188	173	160	154	150	147	146	145	145
15°	208	180	163	152	146	143	142	140	138	137	137
17.5°	180	159	147	141	138	136	134	132	130	129	129
20°	161	144	138	134	131	129	126	124	123	122	121
22.5°	146	135	131	128	124	121	119	117	115	114	113
25°	135	128	125	121	117	114	111	108	106	105	103
27.5°	127	122	118	113	109	106	103	100	98	96	95
30°	120	115	110	106	101	98	94	91	90	88	86
32.5°	113	108	103	98	93	89	87	83	81	80	78
35°	105	100	94	90	85	81	78	75	73	71	70
37.5°	98	92	86	81	77	73	70	67	65	63	62
40°	90	84	78	73	69	66	63	60	58	57	57
42.5°	83	76	70	66	63	59	56	53	52	51	52
45°	76	69	64	60	57	53	50	48	47	48	49
47.5°	70	63	58	55	52	49	46	44	44	46	48
50°	64	57	53	51	48	45	41	40	41	43	45
52.5°	58	50	47	46	43	40	37	36	37	39	38
55°	52	44	43	42	39	35	32	32	32	31	29
57.5°	50	39	38	37	34	30	28	26	25	22	21
60°	52	35	35	33	30	26	23	20	18	16	16
62.5°	42	32	31	29	25	21	18	15	14	13	13
65°	34	29	27	24	21	17	14	12	11	11	12
67.5°	31	26	23	20	17	13	11	10	10	11	11
69°	29	24	21	18	15	12	10	10	10	10	11
70°	27	23	20	17	13	10	9	9	10	10	11
72.5°	21	18	17	14	10	9	8	9	9	10	10
75°	16	13	13	11	8	7	7	8	8	9	9
77.5°	11	9	9	8	7	6	6	7	8	8	9
80°	8	7	6	7	6	5	6	7	7	8	8
82.5°	6	6	6	6	5	5	6	6	7	8	8
85°	5	5	5	5	5	5	5	6	6	7	7
87.5°	3	3	3	4	4	5	5	5	5	6	6
90°	0	0	0	0	0	0	0	0	0	0	0





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**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	461	461	461	461
2.5°	348	347	343	344
5°	244	238	242	241
7.5°	179	178	177	179
10°	153	153	152	153
12.5°	144	144	144	144
15°	137	137	136	136
17.5°	129	129	129	128
20°	121	120	120	120
22.5°	112	111	111	111
25°	103	102	102	102
27.5°	94	93	92	92
30°	85	84	83	83
32.5°	76	75	74	74
35°	68	68	67	66
37.5°	61	61	61	61
40°	56	57	57	57
42.5°	53	54	55	56
45°	51	53	54	54
47.5°	50	51	52	52
50°	46	45	45	45
52.5°	37	35	34	33
55°	27	26	24	24
57.5°	19	19	18	18
60°	15	15	14	15
62.5°	13	13	13	13
65°	12	12	12	12
67.5°	12	12	12	12
69°	11	11	11	11
70°	11	11	11	11
72.5°	10	10	10	10
75°	9	10	10	10
77.5°	9	9	9	9
80°	8	8	9	9
82.5°	8	8	8	8
85°	7	7	8	8
87.5°	6	6	7	7
90°	0	0	0	0

(END OF REPORT)