

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: METALUX

Report Number: P34248

Luminaire Tested: **4BCLED-LD4-48HL-F-UNV-L835-CD1-U**

Test Date: 06/25/15



**Test Information**

Test Method: LM-79-08  
Report Number: P34248  
Test Lab: INNOVATION CENTER-P3  
Test Date: 06/25/15  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4BCLED-LD4-48HL-F-UNV-L835-CD1-U  
Description: METALUX 4FT BC LED WALL BRACKET CORRIDOR LUMINAIRE WITH A WHITE ACRYLIC CREPE LENNS  
Light Source: -  
Ballast/Driver: -

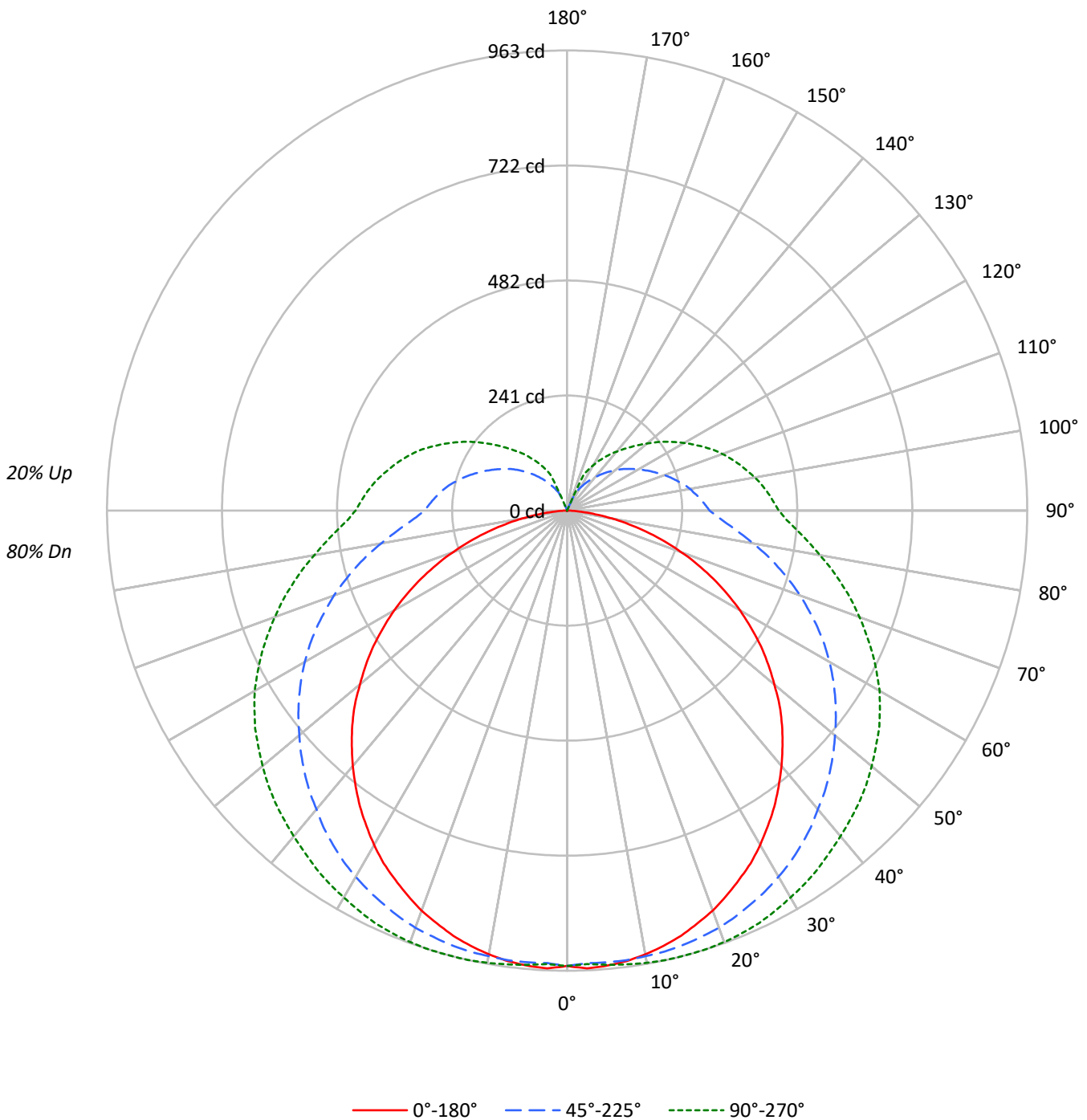
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4779.1 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.47 / 1.53  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.21')  
CIE Type: Semi-Direct  
  
Input Watts (W): 51.3  
Input Voltage (V): 277.1  
Input Current (Ain): 0.190  
Voltage Rise (V): NR  
Power Factor: 0.9799  
Total Harmonic Distortion (THDi): 14.7%  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: 5 HR  
Ambient Temperature (°C): 25.0  
Test Distance: 25 FT

TEST NUMBER: P34248

CATALOG NUMBER: 4BCLED-LD4-48HL-F-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P34248

CATALOG NUMBER: 4BCLED-LD4-48HL-F-UNV-L835-CD1-U

**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	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80
1	101	95	90	85	96	91	86	82	83	79	76	76	73	70	69	67	64	61
2	91	81	74	67	86	78	71	65	71	65	60	65	60	56	59	55	52	48
3	82	71	62	54	78	67	59	53	62	55	49	56	51	46	51	46	43	39
4	75	62	52	45	71	59	51	44	54	47	41	49	43	38	45	40	36	33
5	68	55	45	38	65	53	44	37	48	41	35	44	38	33	40	35	31	28
6	63	49	40	33	60	47	38	32	43	36	30	40	33	28	36	31	27	24
7	58	44	35	29	55	42	34	28	39	32	26	36	30	25	33	27	23	21
8	54	40	31	25	51	39	30	25	36	28	23	33	27	22	30	25	21	19
9	50	37	28	23	48	35	27	22	33	26	21	30	24	20	28	22	19	17
10	47	34	26	20	45	32	25	20	30	23	19	28	22	18	26	21	17	15

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

	0°	45°	90°
0°	6839	6839	6839
5°	6855	6588	6553
10°	6809	6414	6378
15°	6748	6269	6227
20°	6678	6135	6104
25°	6586	5996	5987
30°	6500	5876	5866
35°	6390	5751	5771
40°	6265	5618	5686
45°	6135	5515	5637
50°	5949	5404	5588
55°	5764	5311	5560
60°	5503	5217	5522
65°	5147	5108	5463
70°	4662	4994	5406
75°	3970	4867	5368
80°	2999	4750	5346
85°	1600	4722	5422



TEST NUMBER: P34248

CATALOG NUMBER: 4BCLED-LD4-48HL-F-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.0	1.9
10°-20°	266.8	5.6
20°-30°	419.3	8.8
30°-40°	530.9	11.1
40°-50°	591.9	12.4
50°-60°	598.3	12.5
60°-70°	547.7	11.5
70°-80°	450.0	9.4
80°-90°	337.0	7.1
90°-100°	272.9	5.7
100°-110°	228.2	4.8
110°-120°	177.5	3.7
120°-130°	126.7	2.7
130°-140°	81.2	1.7
140°-150°	45.3	0.9
150°-160°	14.4	0.3
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	777.1	16.3
0°-40°	1308.0	27.4
0°-60°	2498.2	52.3
0°-90°	3832.9	80.2
90°-120°	678.6	14.2
90°-150°	931.8	19.5
90°-180°	946.0	19.8
0°-180°	4779.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	953	953	953	953	953	
5°	956	955	949	956	954	91
15°	921	931	941	961	963	260
25°	852	876	909	944	952	393
35°	756	798	854	902	915	473
45°	636	697	777	843	864	490
55°	495	574	685	770	797	441
65°	337	439	578	675	705	333
75°	171	302	457	560	595	182
85°	31	176	339	446	484	39
90°	0	138	298	406	443	1
95°	0	123	280	385	422	0
105°	1	96	239	340	373	1
115°	1	77	194	285	315	1
125°	1	61	152	225	251	1
135°	1	42	111	170	188	1
145°	1	27	73	120	135	1
155°	1	13	41	65	84	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P34248

CATALOG NUMBER: 4BCLED-LD4-48HL-F-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	953	953	953	953	953	953	953	953	953	953	953
2.5°	959	958	956	956	957	957	957	956	954	951	948
5°	956	956	954	953	954	955	955	955	953	951	949
7.5°	951	950	948	949	951	951	952	952	952	950	949
10°	943	942	941	941	945	946	947	948	948	948	947
12.5°	933	932	932	933	937	939	940	943	944	944	945
15°	921	920	920	923	928	931	932	936	938	940	941
17.5°	906	906	906	910	916	919	921	927	930	932	935
20°	891	891	892	896	903	907	910	916	921	924	929
22.5°	872	873	876	880	888	892	897	903	909	914	920
25°	852	853	856	862	872	876	881	889	897	902	909
27.5°	832	832	837	844	854	860	865	874	883	890	898
30°	808	809	813	822	834	841	847	858	867	876	885
32.5°	782	785	791	801	813	820	827	838	850	859	871
35°	756	758	765	777	790	798	805	818	830	842	854
37.5°	727	730	738	751	766	775	782	796	809	823	837
40°	698	701	711	724	741	750	757	772	787	802	816
42.5°	667	672	681	696	715	725	733	750	765	781	798
45°	636	640	651	668	687	697	705	724	741	759	777
47.5°	603	606	618	637	657	668	678	696	714	735	755
50°	566	572	587	604	627	638	648	669	690	711	732
52.5°	531	537	552	573	595	607	618	641	664	686	709
55°	495	501	517	538	563	574	586	611	636	660	685
57.5°	456	464	481	502	529	541	555	581	607	634	660
60°	418	426	443	468	495	507	521	549	578	607	634
62.5°	378	386	405	430	458	473	488	520	549	578	607
65°	337	346	366	391	422	439	454	487	519	549	578
67.5°	296	304	327	353	387	404	421	456	489	520	548
70°	254	265	287	317	352	370	388	423	457	488	519
72.5°	214	224	248	280	317	335	354	390	426	459	488
75°	171	184	208	243	282	302	320	357	392	427	457
77.5°	133	145	172	207	248	268	287	325	361	395	427
80°	94	108	137	175	214	234	255	293	329	363	395
82.5°	60	74	106	143	184	204	223	262	300	334	366
85°	31	46	78	116	156	176	197	235	272	307	339
87.5°	10	26	57	94	134	154	174	213	249	284	316
90°	0	14	43	80	119	138	158	197	233	267	298
92.5°	0	11	38	73	111	130	150	187	223	257	289
95°	0	10	34	67	104	123	142	179	215	249	280
97.5°	0	9	31	62	97	115	134	171	206	239	270
100°	1	9	28	57	91	109	127	162	197	230	261
102.5°	0	8	27	53	85	102	119	154	187	220	251
105°	1	8	26	50	80	96	112	145	178	210	239
107.5°	1	7	25	48	75	90	106	137	169	200	228
110°	0	7	24	46	71	85	99	129	160	189	217



TEST NUMBER: P34248

CATALOG NUMBER: 4BCLED-LD4-48HL-F-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	1	6	22	44	68	81	94	122	150	179	205
115°	1	5	21	42	65	77	90	115	142	169	194
117.5°	1	5	20	40	62	74	86	109	134	159	183
120°	1	4	18	38	59	70	82	104	126	149	172
122.5°	1	3	17	35	55	66	77	98	119	141	162
125°	1	3	15	32	51	61	71	91	112	133	152
127.5°	1	2	13	29	47	56	65	85	104	123	142
130°	1	1	12	26	43	51	60	78	96	114	131
132.5°	1	1	10	23	39	47	55	71	88	105	121
135°	1	1	9	20	35	42	50	65	80	96	111
137.5°	1	1	7	18	31	38	45	59	73	87	101
140°	1	1	6	16	28	34	40	53	66	79	91
142.5°	1	1	5	14	24	30	36	47	59	70	82
145°	1	1	4	12	21	27	32	42	52	63	73
147.5°	1	1	3	10	18	23	28	37	46	55	64
150°	1	1	2	8	15	19	24	32	40	48	56
152.5°	1	1	1	6	13	16	20	28	35	41	48
155°	1	1	1	4	10	13	16	23	29	35	41
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
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



TEST NUMBER: P34248

CATALOG NUMBER: 4BCLED-LD4-48HL-F-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	953	953	953	953	953	953	953	953	953	953
2.5°	948	951	952	953	953	953	953	952	951	950
5°	950	953	955	956	956	956	956	956	955	954
7.5°	950	954	957	959	959	960	960	959	959	958
10°	950	955	958	960	961	961	962	962	961	961
12.5°	948	954	958	961	962	962	963	964	963	963
15°	946	952	957	960	961	962	964	964	964	963
17.5°	941	948	954	957	959	960	962	963	963	963
20°	935	944	950	955	956	958	961	961	961	961
22.5°	928	937	944	949	952	953	956	958	957	957
25°	918	929	936	942	944	947	950	952	952	952
27.5°	908	918	927	934	936	939	942	945	945	944
30°	896	907	916	923	926	929	933	935	936	935
32.5°	883	894	904	911	914	918	922	925	926	926
35°	867	880	889	898	902	905	911	914	915	915
37.5°	851	864	875	884	889	892	897	901	903	902
40°	833	847	859	868	873	878	884	888	890	890
42.5°	814	829	842	854	858	863	870	875	877	877
45°	794	810	824	837	843	848	855	861	863	864
47.5°	774	791	806	820	826	832	840	846	848	849
50°	753	771	788	803	809	814	823	829	832	832
52.5°	731	750	768	784	791	795	805	812	814	814
55°	708	728	747	763	770	776	786	792	796	797
57.5°	684	705	724	741	748	754	765	771	775	776
60°	659	681	701	717	725	731	742	749	752	755
62.5°	632	655	675	692	700	706	717	724	728	730
65°	605	628	649	666	675	681	692	699	703	705
67.5°	576	600	620	639	646	653	666	672	678	678
70°	545	570	591	610	618	626	637	645	648	651
72.5°	515	540	562	581	589	597	608	616	621	624
75°	484	510	533	551	560	567	579	587	594	595
77.5°	455	479	503	521	530	538	550	558	564	567
80°	424	450	472	492	501	508	521	530	537	537
82.5°	396	421	444	465	473	481	494	504	508	510
85°	368	394	418	438	446	454	468	476	482	484
87.5°	345	371	394	414	423	431	444	453	458	460
90°	327	354	377	397	406	413	427	436	441	443
92.5°	318	344	367	387	395	403	416	425	430	432
95°	309	335	358	377	385	393	406	415	420	422
97.5°	299	325	347	366	375	383	395	404	409	411
100°	289	314	337	355	364	371	384	392	398	399
102.5°	278	303	325	343	352	359	371	380	385	386
105°	267	291	313	331	340	347	359	367	372	373
107.5°	255	279	301	319	327	334	346	354	359	360
110°	243	267	287	306	313	320	332	340	344	346





TEST NUMBER: P34248

CATALOG NUMBER: 4BCLED-LD4-48HL-F-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	231	254	274	292	299	306	317	325	330	332
115°	218	240	260	278	285	292	302	309	314	315
117.5°	206	227	246	263	270	277	287	294	298	299
120°	194	214	232	248	255	261	271	279	283	283
122.5°	182	201	218	233	240	246	256	262	266	267
125°	171	189	205	219	225	231	240	246	250	251
127.5°	160	177	191	204	210	216	224	230	233	235
130°	150	165	179	191	196	201	209	215	217	218
132.5°	137	154	167	177	182	186	194	199	202	203
135°	126	141	155	165	170	174	180	185	188	188
137.5°	115	129	143	154	158	161	168	171	174	174
140°	104	117	129	142	146	150	154	158	161	161
142.5°	93	104	116	128	134	138	143	146	148	149
145°	83	93	103	114	120	125	130	134	135	135
147.5°	73	82	91	100	105	110	118	121	122	123
150°	64	71	79	87	91	95	105	108	109	110
152.5°	54	61	68	75	78	82	90	95	97	97
155°	46	52	57	63	65	68	75	83	84	84
157.5°	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)