

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: 113P102

Luminaire Tested: **BE-232**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: 113P102  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: BE-232  
Description: Wall Bracket with extruded acrylic lens  
Light Source: Two-F32T8/35K - 2850 Lumens ea. - 32 Watts ea.  
Ballast/Driver: Triad-Utrad B232I120RH Electronic

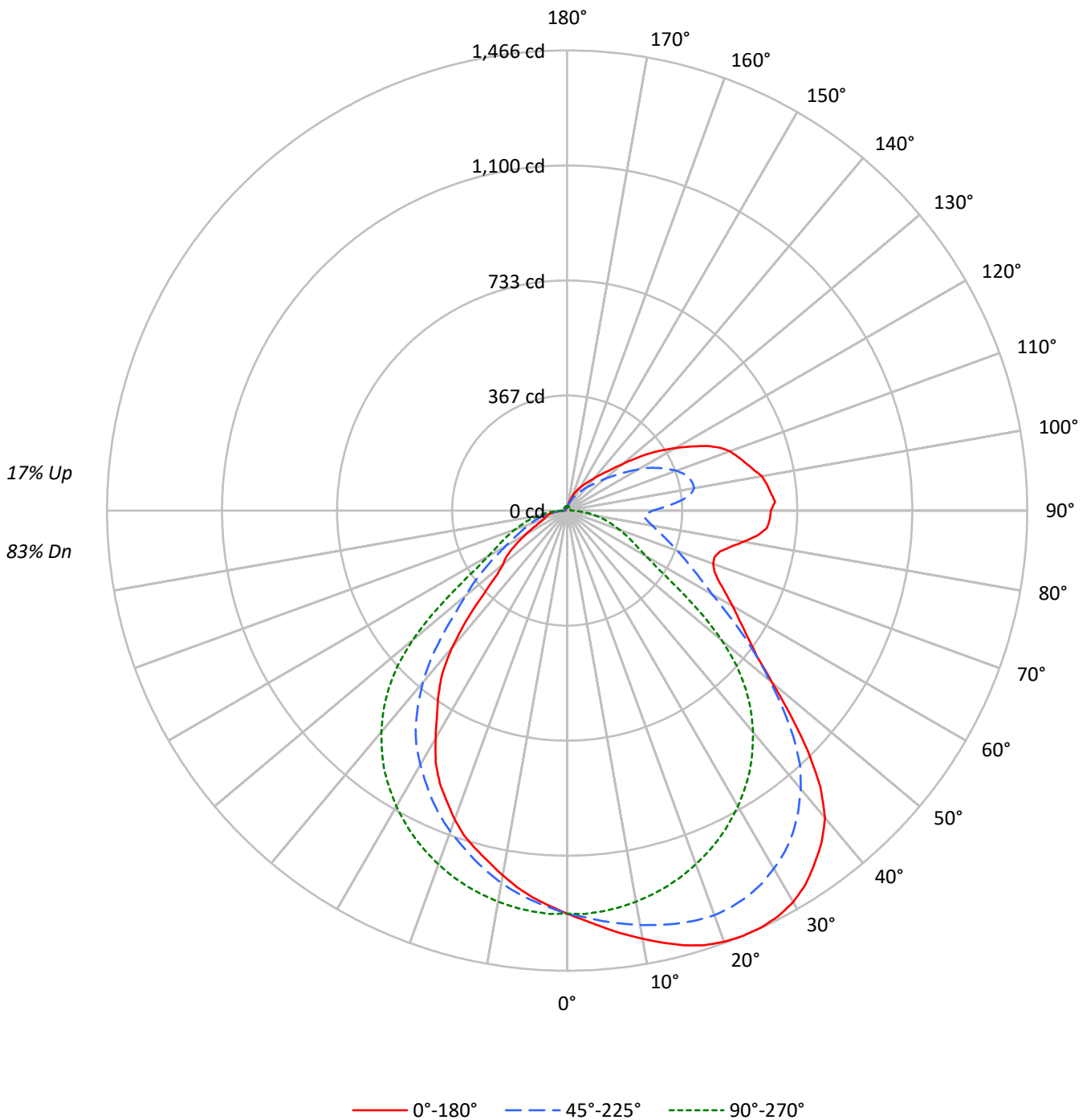
**Summary**

Lumens per Lamp: 2850 (2 lamps)  
Luminaire Lumens: 4097.9 lumens  
Efficiency: 71.9%  
Efficacy: 70.7 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.26 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 4.06' x L: 0.42' x H: 0.22')  
CIE Type: Semi-Direct

Input Watts (W): 58  
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	0
RCR																		
0	83	83	83	83	79	79	79	79	73	73	73	67	67	67	62	62	62	60
1	75	71	68	65	72	69	66	63	63	61	59	58	57	55	54	52	51	49
2	68	63	58	54	65	60	56	52	56	52	49	51	49	46	48	45	43	41
3	63	55	50	45	60	53	48	44	49	45	42	46	42	39	42	40	37	35
4	58	49	43	39	55	48	42	38	44	40	36	41	37	34	38	35	32	30
5	53	44	38	33	51	43	37	33	40	35	31	37	33	30	35	31	28	27
6	49	40	34	29	47	39	33	29	36	31	28	34	30	26	32	28	25	24
7	46	36	30	26	44	35	30	26	33	28	25	31	27	24	29	25	23	21
8	42	33	27	23	41	32	27	23	30	25	22	28	24	21	27	23	20	19
9	40	30	25	21	38	30	24	21	28	23	20	26	22	19	25	21	18	17
10	37	28	23	19	36	27	22	19	26	21	18	24	20	17	23	19	17	15

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

	0°	90°	180°
0°	8164	8164	8164
5°	8135	8144	7555
10°	8185	8091	6973
15°	8275	8034	6452
20°	8305	7957	5948
25°	8257	7871	5405
30°	8113	7747	4721
35°	7798	7585	4052
40°	7364	7314	3290
45°	6397	6869	2217
50°	5184	5986	1625
55°	4441	4385	1368
60°	4049	3362	1019
65°	3772	3048	743
70°	3767	2850	601
75°	4184	2741	573
80°	5256	2609	506
85°	6658	2348	292



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	122.1	3.0	2.1	0°	1284	1284	1284	1284	1284	
10°-20°	354.8	8.7	6.2	5°	1333	1313	1282	1248	1238	129
20°-30°	544.5	13.3	9.6	15°	1434	1362	1238	1149	1118	406
30°-40°	645.2	15.7	11.3	25°	1465	1357	1150	1017	959	675
40°-50°	596.8	14.6	10.5	35°	1374	1254	1014	842	714	858
50°-60°	428.3	10.5	7.5	45°	1085	1019	805	561	376	830
60°-70°	292.1	7.1	5.1	55°	701	678	426	316	216	636
70°-80°	220.4	5.4	3.9	65°	533	442	226	167	105	536
80°-90°	190.9	4.7	3.3	75°	504	318	134	96	69	546
90°-100°	192.1	4.7	3.4	85°	639	247	52	32	28	506
100°-110°	186.8	4.6	3.3	90°	649	272	12	7	5	357
110°-120°	146.3	3.6	2.6	95°	651	364	11	7	5	528
120°-130°	87.9	2.1	1.5	105°	588	403	11	7	5	623
130°-140°	46.2	1.1	0.8	115°	487	321	11	7	5	479
140°-150°	25.0	0.6	0.4	125°	316	204	12	8	6	283
150°-160°	12.5	0.3	0.2	135°	172	120	12	9	7	137
160°-170°	4.9	0.1	0.1	145°	108	76	13	9	7	69
170°-180°	1.1	0.0	0.0	155°	68	45	13	10	8	32
0°-30°	1021.3	24.9	17.9	165°	33	23	14	10	8	10
0°-40°	1666.5	40.7	29.2	175°	10	11	14	10	8	1
0°-60°	2691.6	65.7	47.2	180°	11	11	11	11	11	
0°-90°	3395.1	82.8	59.6							
90°-120°	525.2	12.8	9.2							
90°-150°	684.3	16.7	12.0							
90°-180°	703.0	17.2	12.3							
0°-180°	4097.9	100.0	71.9							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1284	1284	1284	1284	1284	1284	1284	1284	1284
2.5°	1307	1303	1297	1291	1286	1275	1266	1262	1261
5°	1333	1326	1313	1296	1282	1262	1248	1239	1238
7.5°	1360	1349	1327	1299	1275	1248	1228	1215	1211
10°	1385	1371	1341	1301	1265	1231	1205	1187	1180
12.5°	1410	1392	1352	1299	1253	1212	1178	1156	1148
15°	1434	1411	1362	1296	1238	1190	1149	1125	1118
17.5°	1452	1425	1369	1289	1220	1164	1118	1095	1087
20°	1462	1432	1372	1280	1199	1135	1088	1061	1047
22.5°	1466	1432	1367	1267	1176	1105	1055	1020	1002
25°	1465	1427	1357	1251	1150	1072	1017	977	959
27.5°	1457	1416	1341	1229	1120	1037	976	935	906
30°	1440	1397	1317	1204	1088	998	935	883	838
32.5°	1413	1367	1290	1172	1052	955	893	816	771
35°	1374	1328	1254	1136	1014	909	842	750	714
37.5°	1332	1282	1209	1094	969	859	780	693	653
40°	1278	1227	1158	1046	921	805	715	624	571
42.5°	1194	1148	1098	993	867	749	643	540	475
45°	1085	1041	1019	933	805	693	561	445	376
47.5°	965	921	931	860	733	626	482	356	301
50°	852	805	843	775	644	548	423	295	267
52.5°	762	715	759	695	539	478	371	254	246
55°	701	655	678	621	426	414	316	227	216
57.5°	651	610	600	545	341	348	267	202	183
60°	608	580	533	466	289	282	225	178	153
62.5°	569	553	483	396	253	224	193	153	127
65°	533	524	442	338	226	179	167	129	105
67.5°	508	495	406	292	201	148	145	109	89
70°	495	469	373	257	176	126	126	95	79
72.5°	492	446	344	230	153	109	111	84	74
75°	504	434	318	208	134	95	96	74	69
77.5°	533	440	295	190	113	82	81	63	63
80°	571	460	275	176	93	70	65	52	55
82.5°	611	489	259	165	72	57	48	41	43
85°	639	520	247	147	52	42	32	30	28
87.5°	646	544	250	122	30	24	18	17	12
90°	649	567	272	103	12	11	7	6	5
92.5°	663	589	317	105	11	10	7	6	5
95°	651	594	364	107	11	10	7	6	5
97.5°	642	588	397	109	11	10	7	6	5
100°	630	576	411	114	11	10	7	6	5
102.5°	607	560	409	127	11	10	7	6	5
105°	588	542	403	145	11	10	7	6	5
107.5°	570	525	389	158	11	10	7	5	5
110°	552	506	371	158	11	10	7	5	5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	525	477	346	153	11	10	7	6	5
115°	487	438	321	144	11	10	7	6	5
117.5°	441	399	295	134	11	10	7	6	5
120°	398	361	263	121	11	10	8	6	5
122.5°	356	324	231	107	11	11	8	6	6
125°	316	280	204	94	12	11	8	6	6
127.5°	270	240	179	83	12	11	8	7	6
130°	231	206	156	75	12	11	8	7	6
132.5°	197	178	136	67	12	11	8	7	7
135°	172	158	120	61	12	11	9	7	7
137.5°	153	139	107	56	12	12	9	7	7
140°	135	123	96	50	13	12	9	7	7
142.5°	119	110	85	44	13	12	9	7	7
145°	108	99	76	39	13	12	9	8	7
147.5°	96	88	69	35	13	12	9	8	7
150°	86	79	60	31	13	12	9	8	7
152.5°	78	71	52	28	13	12	9	8	7
155°	68	62	45	24	13	12	10	8	8
157.5°	59	52	38	22	14	13	10	8	8
160°	49	44	33	20	14	13	10	8	8
162.5°	41	36	27	18	14	13	10	8	8
165°	33	29	23	16	14	13	10	8	8
167.5°	26	23	19	15	14	13	10	8	8
170°	20	18	15	14	14	13	10	8	8
172.5°	14	13	13	13	14	13	10	8	8
175°	10	10	11	13	14	13	10	8	8
177.5°	8	8	10	13	14	13	10	8	8
180°	11	11	11	11	11	11	11	11	11

(END OF REPORT)