

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: 110P102

Luminaire Tested: **BA-232**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: 110P102
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: BA-232
Description: Wall Bracket with pattern 12 downlight lens.
Light Source: Two-F32T8/35K - 2850 Lumens ea. - 32 Watts ea.
Ballast/Driver: Triad-Utrad B232I120RH Electronic

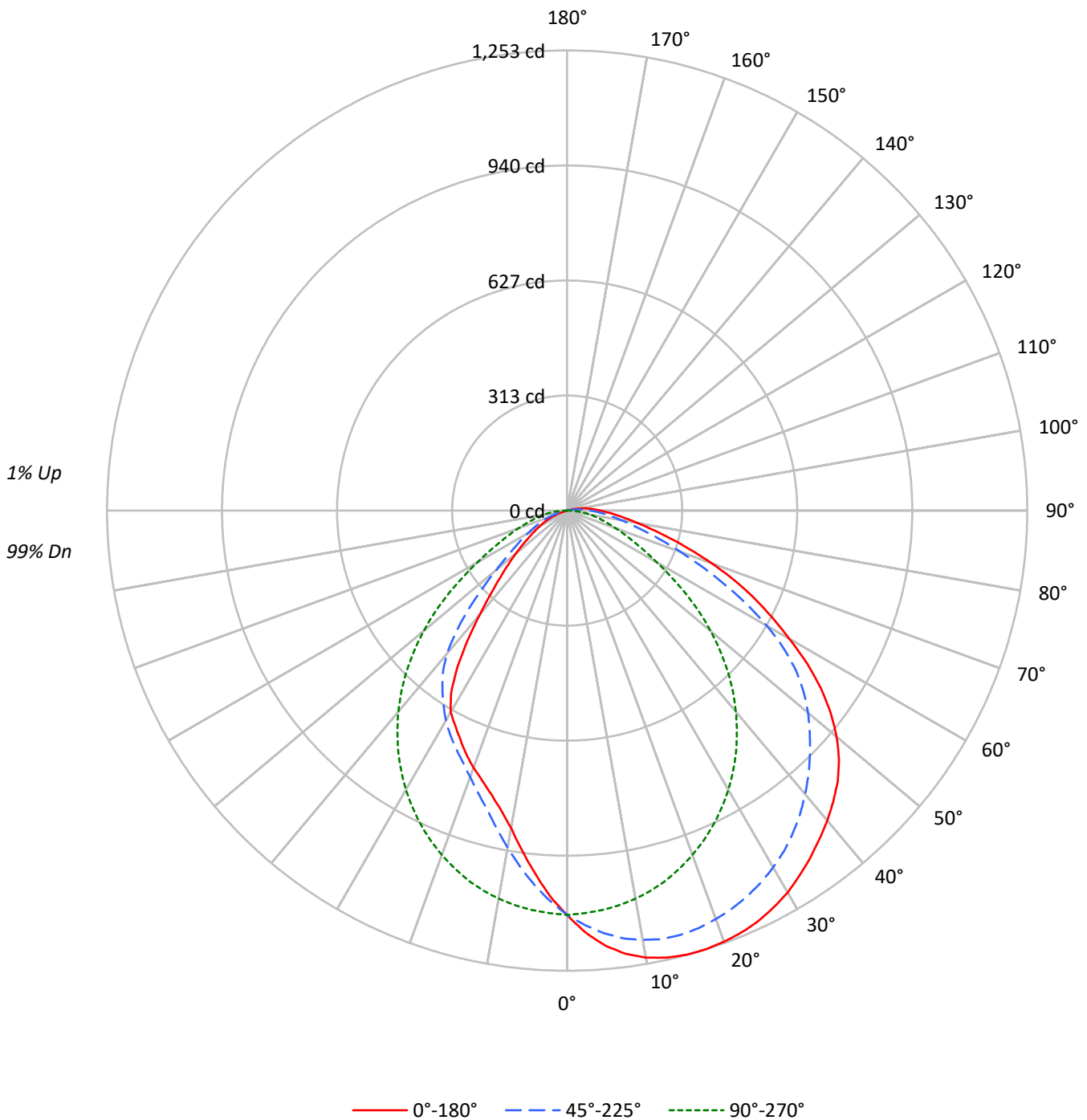
Summary

Lumens per Lamp: 2850 (2 lamps)
Luminaire Lumens: 2713.9 lumens
Efficiency: 47.6%
Efficacy: 46.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.19 / 1.32
Luminous Opening: Rectangular (W 3.99' x L: 0.42' x H: 0')
CIE Type: 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	57	57	57	57	55	55	55	55	53	53	53	50	50	50	48	48	48	47
1	52	50	48	46	51	49	47	45	47	45	44	45	44	43	43	42	41	40
2	48	44	41	38	46	43	40	38	41	39	37	40	38	36	38	37	35	34
3	44	39	35	32	42	38	35	32	37	34	31	35	33	31	34	32	30	29
4	40	35	31	28	39	34	30	27	33	29	27	32	29	27	31	28	26	25
5	37	31	27	24	36	31	27	24	29	26	23	29	26	23	28	25	23	22
6	34	28	24	21	33	28	24	21	27	23	21	26	23	20	25	22	20	19
7	32	26	21	19	31	25	21	19	24	21	18	24	21	18	23	20	18	17
8	30	23	19	17	29	23	19	17	22	19	17	22	19	16	21	18	16	15
9	28	21	18	15	27	21	18	15	21	17	15	20	17	15	20	17	15	14
10	26	20	16	14	25	20	16	14	19	16	14	19	16	14	18	15	13	13

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	7128	7128	7128
5°	7727	7097	6453
10°	8125	7054	5772
15°	8391	6984	5355
20°	8605	6876	5133
25°	8808	6736	4915
30°	8978	6564	4739
35°	9120	6338	4118
40°	9313	6043	3119
45°	9540	5658	2362
50°	9649	5137	1833
55°	9515	4447	1422
60°	9051	3651	1139
65°	8579	3064	873
70°	7912	2669	511
75°	7229	2426	0
80°	7233	2386	0
85°	9805	2451	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	103.1	3.8	1.8	0°	1101	1101	1101	1101	1101	
10°-20°	289.5	10.7	5.1	5°	1189	1155	1092	1023	993	115
20°-30°	433.9	16.0	7.6	15°	1252	1196	1042	842	799	354
30°-40°	513.9	18.9	9.0	25°	1233	1159	943	715	688	569
40°-50°	498.8	18.4	8.8	35°	1154	1072	802	592	521	723
50°-60°	407.0	15.0	7.1	45°	1042	935	618	379	258	802
60°-70°	264.4	9.7	4.6	55°	843	761	394	173	126	749
70°-80°	130.2	4.8	2.3	65°	560	469	200	84	57	553
80°-90°	53.9	2.0	0.9	75°	289	220	97	25	0	311
90°-100°	17.6	0.6	0.3	85°	132	100	33	0	0	121
100°-110°	1.4	0.1	0.0	90°	90	65	0	0	0	50
110°-120°	0.0	0.0	0.0	95°	61	36	0	0	0	44
120°-130°	0.0	0.0	0.0	105°	3	0	0	0	0	10
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	826.5	30.5	14.5	165°	0	0	0	0	0	0
0°-40°	1340.5	49.4	23.5	175°	0	0	0	0	0	0
0°-60°	2246.3	82.8	39.4	180°	0	0	0	0	0	0
0°-90°	2694.9	99.3	47.3							
90°-120°	19.0	0.7	0.3							
90°-150°	19.0	0.7	0.3							
90°-180°	19.0	0.7	0.3							
0°-180°	2713.9	100.0	47.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1101	1101	1101	1101	1101	1101	1101	1101	1101
2.5°	1150	1142	1130	1114	1097	1079	1064	1056	1052
5°	1189	1174	1155	1127	1092	1055	1023	1004	993
7.5°	1217	1198	1175	1134	1084	1028	979	948	935
10°	1236	1215	1187	1139	1073	998	932	893	878
12.5°	1247	1223	1195	1139	1059	965	886	845	834
15°	1252	1227	1196	1136	1042	929	842	807	799
17.5°	1253	1226	1192	1128	1021	891	806	775	770
20°	1249	1221	1184	1117	998	852	772	748	745
22.5°	1243	1212	1173	1101	972	814	742	722	718
25°	1233	1201	1159	1083	943	777	715	695	688
27.5°	1218	1186	1142	1061	912	741	689	664	660
30°	1201	1167	1122	1036	878	706	660	635	634
32.5°	1178	1144	1099	1008	841	671	627	606	588
35°	1154	1118	1072	977	802	638	592	558	521
37.5°	1128	1090	1042	943	759	605	556	495	444
40°	1102	1062	1008	906	715	570	509	421	369
42.5°	1073	1033	973	867	668	530	447	347	307
45°	1042	1000	935	825	618	485	379	284	258
47.5°	1004	963	896	780	565	435	311	233	217
50°	958	919	856	731	510	382	252	194	182
52.5°	904	868	812	679	453	324	207	163	152
55°	843	809	761	623	394	265	173	137	126
57.5°	774	741	700	563	335	216	147	115	105
60°	699	667	629	496	282	178	123	96	88
62.5°	628	594	550	423	237	148	102	79	73
65°	560	524	469	350	200	122	84	64	57
67.5°	489	455	394	285	168	100	68	49	42
70°	418	386	328	229	141	82	54	35	27
72.5°	349	321	270	183	117	68	39	20	9
75°	289	262	220	148	97	53	25	4	0
77.5°	236	211	181	121	80	39	9	0	0
80°	194	173	149	100	64	24	0	0	0
82.5°	160	143	122	82	48	8	0	0	0
85°	132	119	100	66	33	0	0	0	0
87.5°	109	98	81	51	15	0	0	0	0
90°	90	81	65	36	0	0	0	0	0
92.5°	75	66	50	20	0	0	0	0	0
95°	61	52	36	4	0	0	0	0	0
97.5°	47	38	21	0	0	0	0	0	0
100°	33	23	5	0	0	0	0	0	0
102.5°	18	9	0	0	0	0	0	0	0
105°	3	0	0	0	0	0	0	0	0
107.5°	0	0	0	0	0	0	0	0	0
110°	0	0	0	0	0	0	0	0	0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0	0	0	0	0	0	0	0	0
115°	0	0	0	0	0	0	0	0	0
117.5°	0	0	0	0	0	0	0	0	0
120°	0	0	0	0	0	0	0	0	0
122.5°	0	0	0	0	0	0	0	0	0
125°	0	0	0	0	0	0	0	0	0
127.5°	0	0	0	0	0	0	0	0	0
130°	0	0	0	0	0	0	0	0	0
132.5°	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0

(END OF REPORT)