

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: P236380

Luminaire Tested: **SKB2-LD5-9-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236380  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-365-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: SKB2-LD5-9-W-UNV-L840-CD1-U  
Description: METALUX SKYBAR LED WAVESTREAM LUMINAIRE  
2 BLADES WITH WIDE DISTRIBUTION LENS, ALL BLADES VERTICAL  
Light Source: (476) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

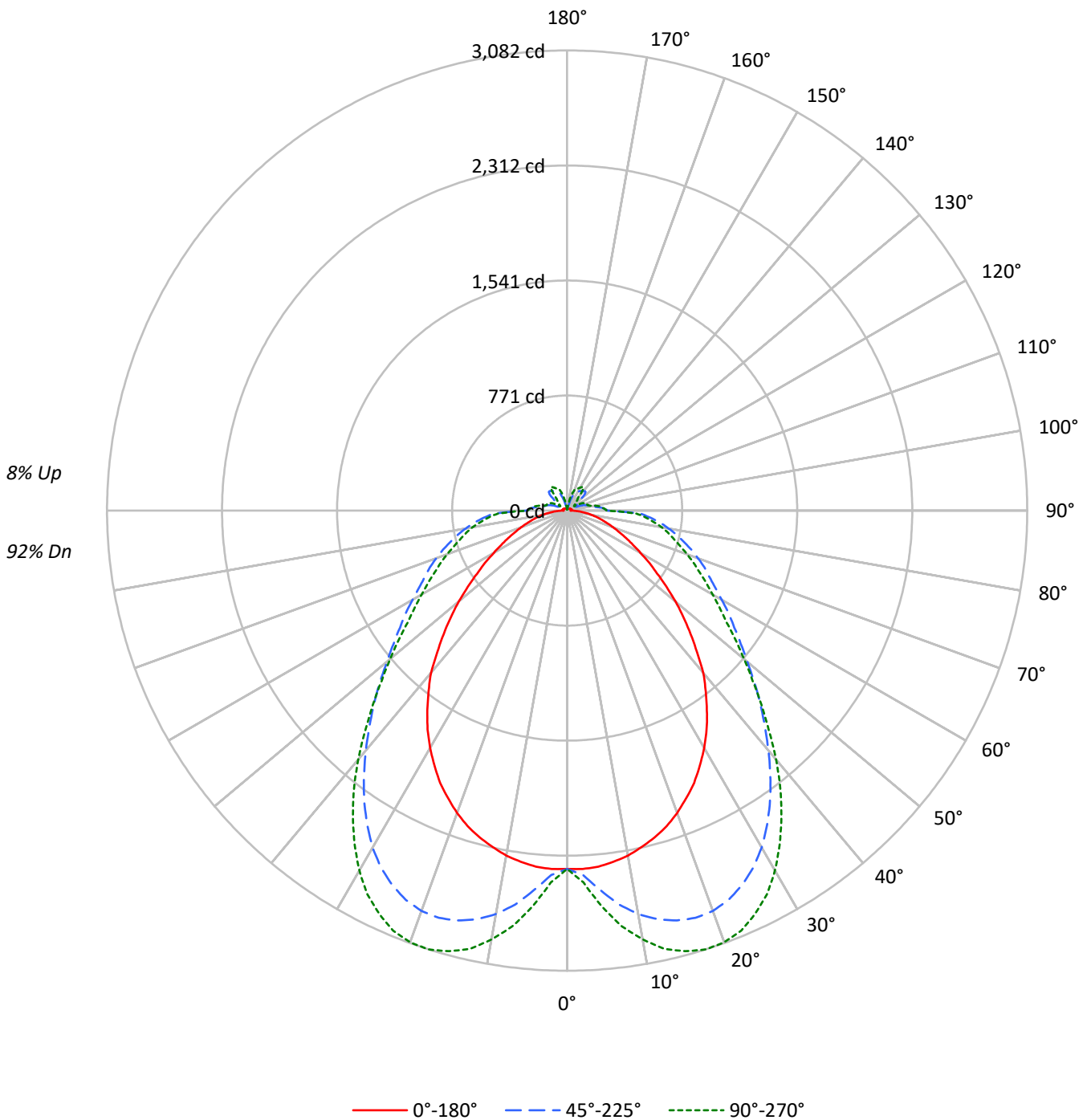
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8967.0 lumens  
Efficiency: N/A  
Efficacy: 118.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.51 / 1.46  
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 2' x H: 0.21')  
CIE Type: Direct

Input Watts (W): 75.4  
Input Voltage (V): 120  
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





TEST NUMBER: P236380

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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	117	117	117	117	113	113	113	113	107	107	107	100	100	100	95	95	95	92
1	105	100	95	91	102	97	92	88	91	87	84	86	83	80	81	78	76	74
2	95	87	79	73	92	84	77	72	79	74	69	75	70	66	70	67	63	61
3	87	76	68	61	84	74	66	60	70	63	58	66	60	56	62	58	54	51
4	80	67	58	52	77	66	57	51	62	55	49	59	53	48	56	50	46	44
5	73	60	51	45	71	59	50	44	56	48	43	53	46	41	50	45	40	38
6	68	54	45	39	65	53	45	38	50	43	37	48	41	36	46	40	36	33
7	63	49	41	34	61	48	40	34	46	39	33	44	37	32	42	36	32	30
8	59	45	37	31	57	44	36	30	42	35	30	40	34	29	38	33	28	26
9	55	41	33	28	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	34	28	24	33	27	23	22

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

	0°	45°	90°
0°	10333	10333	10333
5°	10253	10848	11336
10°	10072	11605	12385
15°	9826	12050	13035
20°	9513	12220	13292
25°	9116	12076	13136
30°	8605	11666	12626
35°	7995	10984	11776
40°	7329	10154	10740
45°	6452	9347	9603
50°	5637	8589	8640
55°	4816	8058	7894
60°	4144	7734	7524
65°	3622	7590	7340
70°	3210	7688	7374
75°	2887	7839	7589
80°	2587	8201	8196
85°	2165	8706	8962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	247.3	2.8
10°-20°	781.6	8.7
20°-30°	1224.2	13.7
30°-40°	1408.3	15.7
40°-50°	1316.7	14.7
50°-60°	1108.3	12.4
60°-70°	914.0	10.2
70°-80°	734.3	8.2
80°-90°	502.8	5.6
90°-100°	202.4	2.3
100°-110°	123.7	1.4
110°-120°	89.8	1.0
120°-130°	77.8	0.9
130°-140°	86.6	1.0
140°-150°	82.7	0.9
150°-160°	49.1	0.5
160°-170°	16.1	0.2
170°-180°	1.5	0.0
0°-30°	2253.1	25.1
0°-40°	3661.4	40.8
0°-60°	6086.4	67.9
0°-90°	8237.4	91.9
90°-120°	415.8	4.6
90°-150°	662.9	7.4
90°-180°	730.0	8.1
0°-180°	8967.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2400	2400	2400	2400	2400	
5°	2394	2447	2552	2641	2661	227
15°	2266	2570	2842	3008	3055	638
25°	2012	2442	2769	2934	2980	923
35°	1632	2077	2370	2489	2502	1019
45°	1170	1577	1829	1869	1840	904
55°	737	1155	1367	1343	1302	666
65°	435	873	1051	1002	978	435
75°	241	672	808	755	740	256
85°	96	474	562	528	527	93
90°	24	213	271	265	266	19
95°	30	146	227	233	234	24
105°	30	73	138	144	142	32
115°	25	116	62	107	119	26
125°	22	139	91	65	58	20
135°	17	129	174	104	92	14
145°	14	100	160	189	191	9
155°	13	40	137	155	159	6
165°	13	18	47	88	101	4
175°	12	12	14	15	12	1
180°	11	11	11	11	11	



TEST NUMBER: P236380

CATALOG NUMBER: SKB2-LD5-9-W-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
2.5°	2403	2405	2410	2418	2419	2416	2412	2419	2416	2431	2443
5°	2394	2396	2407	2430	2438	2447	2450	2475	2495	2524	2552
7.5°	2373	2385	2403	2442	2475	2489	2504	2543	2583	2625	2661
10°	2346	2361	2398	2455	2506	2531	2553	2609	2653	2699	2744
12.5°	2308	2330	2380	2461	2529	2556	2584	2646	2699	2755	2803
15°	2266	2295	2361	2460	2535	2570	2600	2666	2727	2787	2842
17.5°	2216	2250	2335	2444	2527	2564	2597	2667	2734	2797	2860
20°	2155	2198	2300	2415	2500	2541	2575	2651	2723	2793	2853
22.5°	2085	2137	2248	2371	2460	2500	2536	2619	2696	2761	2823
25°	2012	2068	2189	2313	2405	2442	2482	2569	2641	2708	2769
27.5°	1925	1986	2119	2244	2333	2376	2415	2497	2571	2641	2698
30°	1835	1901	2037	2152	2245	2294	2329	2408	2486	2550	2606
32.5°	1739	1802	1940	2059	2147	2193	2227	2305	2377	2436	2493
35°	1632	1702	1837	1950	2036	2077	2111	2196	2259	2319	2370
37.5°	1525	1591	1720	1837	1921	1959	1990	2074	2133	2187	2235
40°	1418	1475	1603	1708	1795	1828	1865	1936	2000	2055	2097
42.5°	1287	1358	1485	1588	1666	1706	1741	1815	1869	1918	1959
45°	1170	1244	1361	1465	1545	1577	1612	1682	1743	1786	1829
47.5°	1056	1130	1247	1344	1424	1465	1493	1564	1620	1667	1699
50°	946	1021	1133	1235	1311	1349	1385	1449	1511	1549	1575
52.5°	838	915	1035	1130	1210	1245	1278	1350	1407	1445	1466
55°	737	823	941	1038	1116	1155	1190	1261	1309	1342	1367
57.5°	653	735	854	955	1035	1070	1108	1177	1223	1258	1282
60°	568	657	780	876	959	1000	1035	1097	1148	1183	1196
62.5°	498	590	710	808	896	932	968	1030	1081	1108	1118
65°	435	529	649	747	836	873	905	972	1011	1039	1051
67.5°	377	474	597	695	780	814	849	912	956	984	996
70°	328	426	545	650	730	767	803	862	904	932	932
72.5°	281	381	501	602	686	722	751	816	855	874	872
75°	241	339	462	555	640	672	710	769	801	814	808
77.5°	202	300	424	519	598	641	669	717	745	757	750
80°	166	262	382	476	558	589	615	661	686	696	690
82.5°	131	227	344	436	505	531	558	602	629	638	631
85°	96	189	302	383	447	474	500	539	561	571	562
87.5°	65	153	254	327	384	408	432	466	491	497	494
90°	24	72	132	167	199	213	224	248	265	273	271
92.5°	27	57	101	137	166	182	199	223	242	251	252
95°	30	50	71	105	135	146	158	184	206	222	227
97.5°	29	51	68	77	109	123	134	154	168	178	188
100°	30	53	76	73	80	97	112	135	150	159	161
102.5°	30	54	85	80	73	74	80	114	133	145	150
105°	30	54	87	88	77	73	71	82	111	129	138
107.5°	30	54	88	107	86	80	75	69	76	105	122
110°	29	52	89	113	94	88	84	72	66	74	98



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	27	45	88	114	111	98	92	80	69	63	69
115°	25	40	87	114	129	116	101	88	77	67	62
117.5°	25	38	89	113	134	138	122	96	85	75	66
120°	24	33	83	113	133	143	143	108	92	84	75
122.5°	23	27	83	113	132	142	150	143	103	91	83
125°	22	26	75	112	130	139	148	156	123	101	91
127.5°	21	25	64	112	128	137	145	159	152	118	101
130°	20	23	57	104	125	133	142	156	169	155	118
132.5°	19	22	46	99	124	130	137	152	165	172	157
135°	17	20	39	89	125	129	134	148	161	172	174
137.5°	16	19	31	77	116	130	132	143	156	166	176
140°	15	18	23	65	109	121	133	139	151	162	171
142.5°	15	17	20	56	97	114	124	136	145	156	166
145°	14	16	19	40	79	100	117	137	141	150	160
147.5°	14	15	19	34	67	84	102	125	141	145	154
150°	13	15	18	22	54	70	84	120	133	143	148
152.5°	13	14	18	19	39	56	69	99	124	137	146
155°	13	14	17	19	29	40	55	77	105	127	137
157.5°	13	14	16	19	20	27	38	62	83	105	128
160°	13	13	16	18	19	20	25	41	64	79	99
162.5°	13	13	15	17	19	19	19	28	40	61	74
165°	13	13	14	16	18	18	19	19	23	36	47
167.5°	13	13	13	15	16	17	18	18	19	19	24
170°	12	13	13	14	15	15	16	17	18	18	19
172.5°	12	12	12	13	13	14	14	15	16	16	17
175°	12	12	12	12	12	12	12	13	13	13	14
177.5°	12	12	12	12	12	12	12	12	12	12	12
180°	11	11	11	11	11	11	11	11	11	11	11



TEST NUMBER: P236380

CATALOG NUMBER: SKB2-LD5-9-W-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400
2.5°	2450	2455	2466	2472	2476	2477	2489	2485	2492	2492
5°	2572	2590	2611	2633	2641	2648	2658	2661	2669	2661
7.5°	2693	2713	2737	2759	2772	2782	2796	2803	2810	2808
10°	2779	2805	2836	2865	2878	2888	2904	2912	2919	2916
12.5°	2841	2876	2910	2943	2956	2966	2982	2992	2998	3007
15°	2886	2919	2959	2995	3008	3022	3038	3046	3051	3055
17.5°	2904	2947	2982	3015	3029	3043	3063	3071	3077	3082
20°	2898	2938	2977	3012	3027	3042	3058	3072	3076	3077
22.5°	2865	2911	2954	2990	2997	3010	3025	3040	3044	3045
25°	2815	2856	2896	2924	2934	2950	2964	2976	2978	2980
27.5°	2739	2778	2813	2848	2861	2872	2885	2893	2894	2898
30°	2641	2683	2717	2747	2754	2759	2773	2784	2781	2784
32.5°	2529	2569	2602	2620	2629	2640	2649	2654	2654	2649
35°	2405	2440	2467	2482	2489	2498	2505	2508	2510	2502
37.5°	2267	2302	2323	2339	2343	2351	2343	2352	2349	2345
40°	2129	2158	2172	2190	2183	2187	2182	2191	2180	2178
42.5°	1993	2008	2022	2021	2023	2020	2016	2009	2007	2002
45°	1857	1872	1869	1868	1869	1864	1856	1855	1847	1840
47.5°	1718	1722	1726	1721	1720	1714	1709	1696	1690	1685
50°	1593	1598	1595	1590	1581	1578	1567	1558	1553	1546
52.5°	1477	1481	1472	1465	1456	1449	1439	1431	1421	1421
55°	1375	1373	1359	1352	1343	1337	1324	1314	1310	1302
57.5°	1280	1274	1259	1248	1242	1234	1227	1218	1213	1210
60°	1194	1183	1173	1163	1160	1150	1146	1130	1127	1126
62.5°	1116	1111	1099	1080	1074	1071	1062	1055	1048	1050
65°	1054	1037	1021	1009	1002	997	991	984	980	978
67.5°	986	970	954	942	937	933	926	920	918	917
70°	920	906	894	878	872	871	863	859	856	854
72.5°	858	842	827	816	811	808	804	801	798	794
75°	795	780	767	757	755	752	747	744	743	740
77.5°	734	722	709	705	701	699	699	695	693	693
80°	678	665	655	650	649	647	646	642	640	643
82.5°	616	604	597	590	589	587	587	584	585	583
85°	551	541	534	530	528	529	529	528	528	527
87.5°	479	473	467	464	465	467	465	464	464	466
90°	266	264	264	264	265	263	265	266	265	266
92.5°	250	248	249	250	252	250	252	252	251	252
95°	227	231	229	232	233	232	235	237	235	234
97.5°	196	200	205	209	213	213	214	216	216	218
100°	159	163	165	171	178	178	182	185	185	187
102.5°	151	151	150	149	149	148	148	150	150	153
105°	142	143	143	143	144	143	143	144	143	142
107.5°	130	135	137	138	138	138	139	140	140	140
110°	112	123	127	130	133	131	134	136	136	136





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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	87	103	113	119	122	123	126	129	129	129
115°	61	70	86	103	107	109	114	119	119	119
117.5°	60	57	63	69	71	78	95	101	104	102
120°	66	61	57	55	56	60	64	68	71	70
122.5°	76	67	62	59	59	57	57	56	55	54
125°	83	78	71	66	65	63	62	60	60	58
127.5°	91	85	81	78	75	73	71	68	66	64
130°	102	94	88	85	84	83	81	79	76	74
132.5°	119	107	99	95	93	91	88	87	85	83
135°	162	128	113	107	104	101	98	96	93	92
137.5°	176	166	145	126	119	116	111	108	105	104
140°	180	187	173	170	166	155	136	128	125	123
142.5°	173	182	188	192	180	179	175	172	172	167
145°	168	175	182	187	189	191	194	196	193	191
147.5°	161	169	173	180	181	183	186	187	188	187
150°	153	161	165	172	172	175	177	180	180	178
152.5°	147	153	158	163	165	166	168	170	170	170
155°	147	147	149	153	155	156	158	159	160	159
157.5°	132	142	149	149	148	148	149	151	152	151
160°	113	128	133	139	141	142	149	149	149	148
162.5°	85	99	110	121	123	128	131	130	133	128
165°	61	70	76	83	88	93	98	100	103	101
167.5°	33	39	49	56	59	61	65	67	71	68
170°	19	19	20	26	29	30	33	33	32	34
172.5°	17	18	18	18	18	18	17	17	16	15
175°	14	15	15	15	15	15	14	14	13	12
177.5°	12	12	12	12	11	11	11	10	9	8
180°	11	11	11	11	11	11	11	11	11	11

(END OF REPORT)