

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: P237819

Luminaire Tested: **4VRVT2-LD5-6-DR-W-UNV-L840-CD1-WL-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237819
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-355-19)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4VRVT2-LD5-6-DR-W-UNV-L840-CD1-WL-U
Description: METALUX VRVT2 LED LUMINAIRE
INTERNAL PRISMATIC LENS/15% DR HIGH IMPACT ADDITIVE WIDE DISTRIBUTION
4FT FIXTURE
Light Source: (112) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5930.8 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.6 / 1.58
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 4.17' x H: 0.17')
CIE Type: Semi-Direct

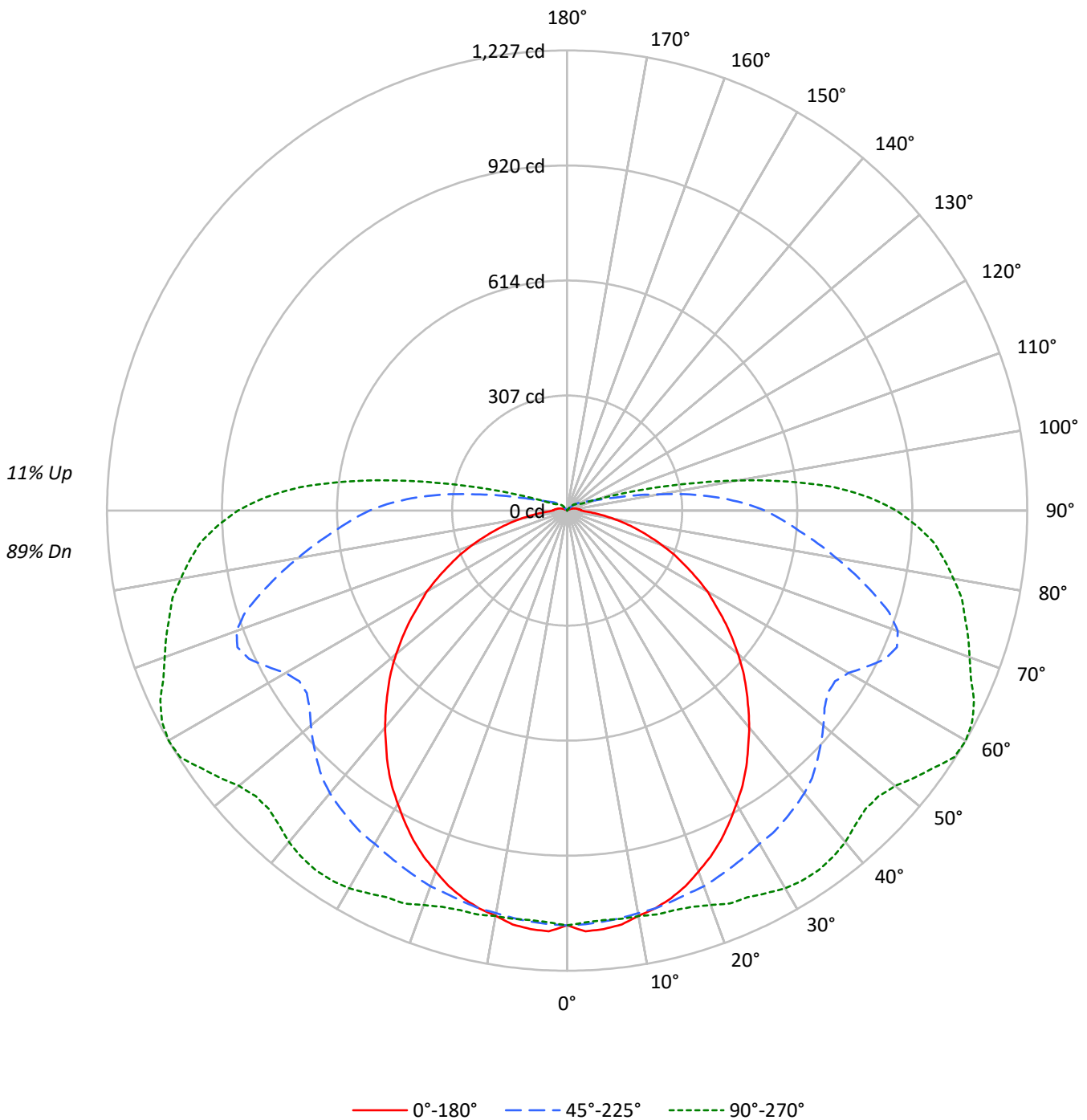
Input Watts (W): 50.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	101	94	88	82	97	91	85	80	84	80	75	78	75	71	73	70	67	64
2	90	79	70	63	86	76	68	61	71	64	58	66	60	55	61	56	52	49
3	81	68	58	50	77	65	56	49	61	53	47	56	50	44	52	47	42	39
4	73	59	49	41	70	57	48	40	53	45	38	49	42	37	46	40	35	32
5	67	52	42	35	64	51	41	34	47	39	32	44	37	31	41	35	30	27
6	62	47	37	30	59	45	36	29	42	34	28	39	32	27	37	30	26	23
7	57	42	32	26	54	41	32	25	38	30	24	36	29	23	33	27	22	20
8	53	38	29	23	51	37	28	22	35	27	21	33	26	21	31	24	20	18
9	49	35	26	20	47	34	25	20	32	24	19	30	23	18	28	22	18	16
10	46	32	24	18	44	31	23	18	29	22	17	28	21	17	26	20	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5714	5714	5714
5°	5789	5576	5523
10°	5715	5464	5441
15°	5663	5390	5416
20°	5549	5347	5487
25°	5429	5309	5615
30°	5266	5312	5819
35°	5111	5371	5983
40°	4927	5433	6082
45°	4749	5451	6165
50°	4565	5454	6570
55°	4354	5547	7293
60°	4175	6141	8038
65°	3907	7307	8534
70°	3661	8213	9005
75°	3387	8477	9768
80°	3007	8686	10767
85°	2766	9164	12103



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	1.8
10°-20°	306.9	5.2
20°-30°	486.5	8.2
30°-40°	630.0	10.6
40°-50°	713.2	12.0
50°-60°	774.5	13.1
60°-70°	828.1	14.0
70°-80°	788.3	13.3
80°-90°	647.6	10.9
90°-100°	426.0	7.2
100°-110°	148.1	2.5
110°-120°	43.8	0.7
120°-130°	21.8	0.4
130°-140°	9.2	0.2
140°-150°	1.5	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	898.6	15.2
0°-40°	1528.5	25.8
0°-60°	3016.3	50.9
0°-90°	5280.4	89.0
90°-120°	617.9	10.4
90°-150°	650.4	11.0
90°-180°	650.0	11.0
0°-180°	5930.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1106	1106	1106	1106	1106	
5°	1120	1113	1100	1101	1096	106
15°	1070	1071	1079	1103	1103	301
25°	970	990	1046	1116	1138	446
35°	833	885	1009	1130	1170	520
45°	676	762	943	1079	1125	522
55°	511	626	848	1111	1195	457
65°	347	494	936	1158	1197	346
75°	195	470	843	1027	1098	206
85°	68	340	621	885	982	68
90°	38	253	527	791	878	22
95°	33	181	403	624	715	26
105°	22	64	136	189	224	23
115°	11	29	57	53	45	11
125°	4	10	34	35	30	4
135°	2	0	14	21	20	1
145°	1	0	0	4	4	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106
2.5°	1123	1120	1117	1116	1116	1116	1116	1114	1111	1108	1104
5°	1120	1118	1115	1113	1113	1113	1113	1111	1108	1104	1100
7.5°	1113	1110	1106	1105	1104	1104	1105	1104	1101	1099	1096
10°	1097	1096	1093	1092	1094	1095	1095	1095	1094	1092	1090
12.5°	1086	1082	1080	1081	1082	1082	1084	1085	1085	1086	1086
15°	1070	1066	1065	1068	1069	1071	1071	1073	1074	1077	1079
17.5°	1050	1049	1045	1048	1053	1056	1056	1060	1063	1066	1071
20°	1024	1023	1021	1025	1031	1034	1039	1045	1049	1060	1066
22.5°	999	998	995	1001	1007	1014	1020	1028	1037	1047	1056
25°	970	969	968	978	985	990	997	1009	1020	1034	1046
27.5°	937	938	940	949	960	967	974	991	1003	1018	1036
30°	903	903	909	918	934	941	950	970	982	1005	1026
32.5°	870	870	873	884	905	914	925	944	964	992	1020
35°	833	833	839	854	875	885	897	921	946	978	1009
37.5°	793	795	805	821	846	859	869	896	927	962	997
40°	755	757	769	787	814	826	839	873	905	943	984
42.5°	715	721	732	753	779	792	810	845	881	922	967
45°	676	681	693	717	746	762	781	818	858	899	943
47.5°	637	641	656	679	710	731	751	790	833	879	918
50°	595	600	615	640	675	696	716	759	803	849	892
52.5°	553	558	578	606	642	661	684	730	774	821	865
55°	511	517	538	563	603	626	647	696	744	794	848
57.5°	468	477	496	527	565	589	612	664	715	776	847
60°	432	435	454	487	529	553	580	633	697	775	866
62.5°	389	399	415	449	492	522	549	614	693	797	901
65°	347	357	377	414	464	494	526	607	709	830	936
67.5°	310	318	340	383	439	473	516	617	739	861	952
70°	269	279	305	354	423	465	518	639	764	870	938
72.5°	229	242	275	333	414	466	528	654	767	846	900
75°	195	206	247	315	412	470	534	648	736	793	843
77.5°	159	174	226	303	408	466	520	611	683	738	786
80°	124	146	203	287	389	433	477	554	621	677	729
82.5°	95	119	181	265	348	388	427	496	556	619	675
85°	68	95	158	231	302	340	371	436	494	559	621
87.5°	47	75	130	195	260	290	321	383	444	510	575
90°	38	61	109	167	225	253	284	343	400	463	527
92.5°	36	50	91	140	193	220	245	298	354	415	469
95°	33	40	73	114	158	181	203	250	299	354	403
97.5°	30	33	56	88	125	144	162	198	242	281	330
100°	27	28	42	68	95	111	125	157	186	217	249
102.5°	24	24	32	51	74	84	96	119	141	161	187
105°	22	22	26	38	55	64	73	91	108	122	136
107.5°	19	19	21	30	43	51	57	71	84	94	102
110°	16	16	16	24	35	41	48	59	68	75	80



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	13	13	13	20	29	34	40	49	57	62	66
115°	11	11	10	15	24	29	34	42	49	54	57
117.5°	9	9	8	11	19	24	28	36	43	48	50
120°	7	7	6	7	15	19	24	31	37	42	45
122.5°	5	5	5	5	10	14	18	25	32	37	40
125°	4	4	4	3	7	10	14	21	26	31	34
127.5°	3	3	3	3	3	6	9	16	21	26	29
130°	3	3	2	2	2	3	6	11	16	20	24
132.5°	2	2	2	1	1	1	3	7	12	16	19
135°	2	2	1	1	0	0	0	4	8	11	14
137.5°	1	1	1	1	0	0	0	1	4	7	10
140°	1	1	1	1	0	0	0	0	1	4	6
142.5°	1	1	1	0	0	0	0	0	0	1	2
145°	1	1	1	0	0	0	0	0	0	0	0
147.5°	1	1	1	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1106	1106	1106	1106	1106	1106	1106	1106	1106	1106
2.5°	1103	1104	1105	1105	1104	1104	1102	1102	1100	1099
5°	1099	1101	1102	1102	1101	1101	1100	1099	1097	1096
7.5°	1096	1099	1101	1101	1101	1101	1100	1100	1099	1098
10°	1092	1095	1098	1102	1103	1103	1102	1101	1099	1098
12.5°	1088	1092	1096	1100	1101	1102	1104	1104	1103	1103
15°	1084	1091	1097	1102	1103	1106	1107	1108	1106	1103
17.5°	1080	1089	1094	1102	1104	1106	1108	1109	1109	1108
20°	1076	1087	1096	1104	1106	1109	1113	1116	1119	1119
22.5°	1070	1084	1094	1106	1113	1116	1124	1128	1130	1134
25°	1062	1077	1097	1111	1116	1122	1134	1140	1140	1138
27.5°	1058	1081	1101	1115	1122	1129	1140	1149	1152	1150
30°	1053	1078	1101	1119	1127	1136	1147	1161	1163	1163
32.5°	1047	1074	1101	1121	1131	1139	1152	1165	1170	1169
35°	1041	1071	1097	1119	1130	1140	1155	1165	1169	1170
37.5°	1032	1064	1090	1114	1126	1135	1151	1158	1164	1164
40°	1019	1052	1081	1104	1113	1122	1137	1145	1150	1154
42.5°	1004	1036	1064	1084	1096	1103	1120	1128	1136	1137
45°	981	1016	1043	1068	1079	1086	1105	1118	1125	1125
47.5°	957	990	1022	1053	1066	1078	1100	1116	1124	1127
50°	930	971	1009	1049	1066	1081	1107	1125	1135	1142
52.5°	913	966	1013	1060	1079	1099	1132	1151	1165	1169
55°	911	975	1033	1089	1111	1130	1165	1186	1197	1195
57.5°	926	1004	1072	1123	1147	1165	1197	1216	1224	1224
60°	959	1042	1108	1153	1172	1189	1212	1225	1229	1227
62.5°	993	1069	1124	1161	1175	1183	1202	1212	1216	1218
65°	1020	1082	1120	1147	1158	1166	1181	1193	1195	1197
67.5°	1017	1060	1094	1119	1128	1136	1151	1160	1167	1165
70°	989	1023	1055	1081	1091	1102	1120	1134	1137	1142
72.5°	940	975	1014	1040	1058	1069	1091	1109	1116	1121
75°	889	930	969	1008	1027	1045	1071	1084	1101	1098
77.5°	835	888	934	978	998	1017	1044	1062	1073	1078
80°	789	845	896	943	962	984	1012	1031	1043	1046
82.5°	737	798	856	905	925	944	976	996	1011	1015
85°	686	751	811	864	885	906	940	962	976	982
87.5°	643	704	765	815	840	860	894	920	933	933
90°	590	652	713	763	791	805	839	863	879	878
92.5°	534	593	644	694	717	735	771	789	803	806
95°	458	511	564	606	624	652	679	702	711	715
97.5°	369	422	459	510	522	541	569	588	597	594
100°	283	318	347	379	398	410	434	453	463	462
102.5°	201	229	250	275	277	288	303	322	326	331
105°	149	160	176	185	189	202	205	213	214	224
107.5°	111	117	123	128	131	132	140	139	141	143
110°	84	87	91	89	93	90	92	91	92	92



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	68	68	67	66	66	65	65	62	63	62
115°	58	57	55	53	53	51	50	47	46	45
117.5°	51	50	48	46	45	44	42	39	38	38
120°	46	45	44	42	41	40	37	36	34	34
122.5°	41	41	40	38	38	37	35	33	32	32
125°	36	37	36	35	35	34	33	31	30	30
127.5°	31	32	32	32	32	31	30	29	28	28
130°	26	28	28	28	29	28	28	27	26	26
132.5°	21	23	24	25	25	25	24	24	23	23
135°	16	18	20	20	21	21	21	21	20	20
137.5°	12	14	15	16	16	17	17	17	16	16
140°	8	10	11	12	12	13	13	13	12	12
142.5°	4	6	7	8	8	8	9	9	9	8
145°	1	2	3	4	4	4	5	5	5	4
147.5°	0	0	0	1	1	1	1	1	1	1
150°	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
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)