

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: P232454

Luminaire Tested: **4SRS-40-W-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P232454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1706-124-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SRS-40-W-UNV-L840-CD1-U
Description: WAVESTREAM LED RECESSED 4 FT FIXTURE
Light Source: -
Ballast/Driver: -

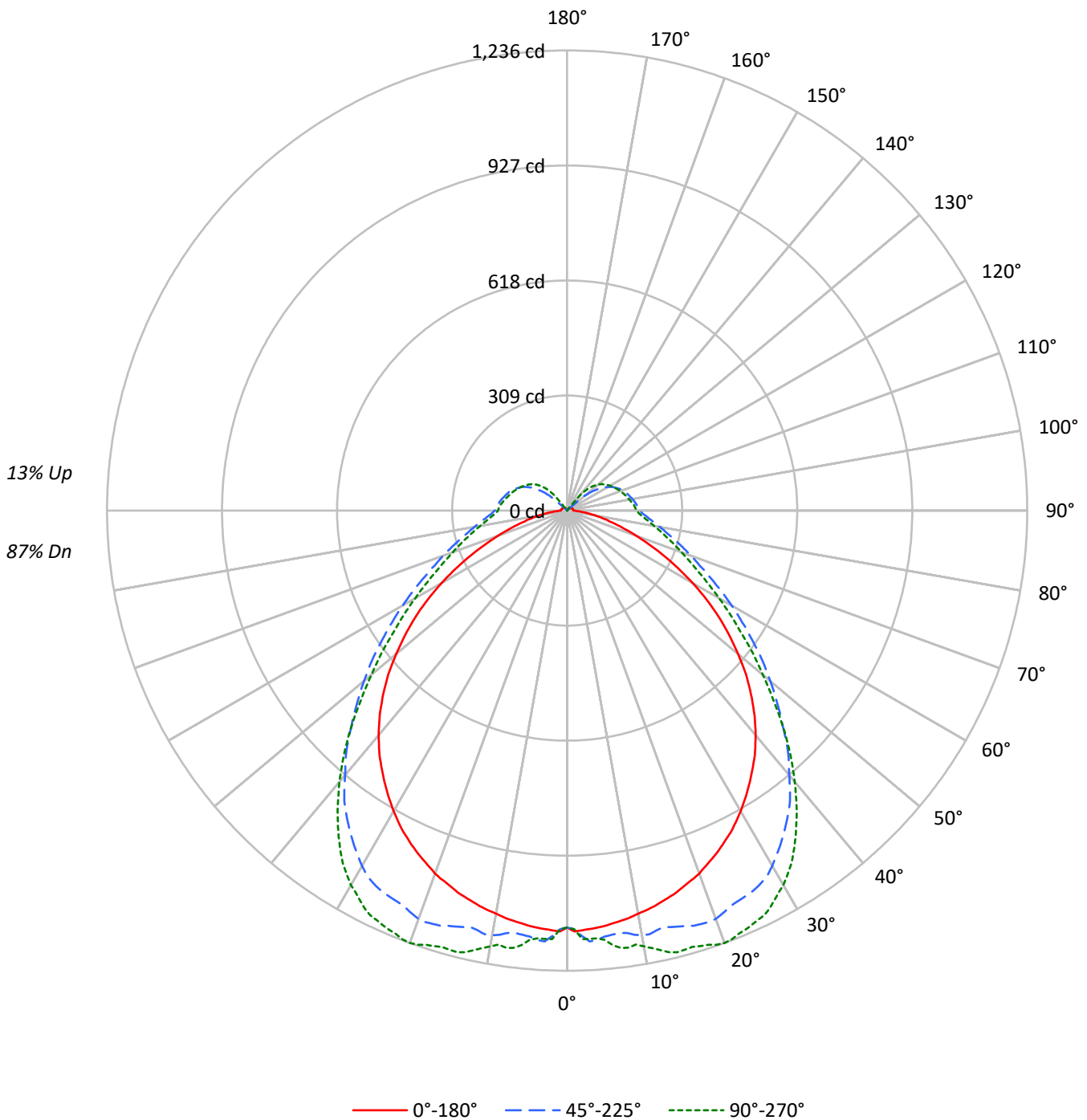
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4065.0 lumens
Efficiency: N/A
Efficacy: 150.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.44 / 1.44
Luminous Opening: Rectangular w/ Sides (W: 0.02' x L: 3.88' x H: 0.3')
CIE Type: Semi-Direct

Input Watts (W): 27
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	116	116	116	116	112	112	112	112	104	104	104	97	97	97	91	91	91	87
1	105	100	95	91	101	96	92	88	89	86	83	83	81	78	78	76	74	71
2	95	87	79	73	91	84	77	72	78	73	68	73	68	65	68	65	61	59
3	87	76	68	61	83	73	66	60	69	62	57	64	59	55	60	56	52	49
4	79	67	58	52	76	65	57	51	61	54	49	57	51	47	54	49	45	42
5	73	60	51	45	70	58	50	44	55	48	42	51	45	41	48	43	39	37
6	67	54	45	39	65	53	44	38	49	42	37	47	40	36	44	39	34	32
7	62	49	40	34	60	48	39	34	45	38	33	42	36	32	40	35	30	28
8	58	45	36	30	56	43	36	30	41	34	29	39	33	28	37	31	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	29	25	23
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	32	26	22	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	199134	199134	199134
5°	198674	93926	77488
10°	195813	61793	49232
15°	193491	46042	36829
20°	190993	37292	29475
25°	187460	30630	24082
30°	183338	25680	19876
35°	177948	21276	16201
40°	171788	17444	12999
45°	163238	14192	10281
50°	151935	11506	8008
55°	138820	9261	6255
60°	122192	7434	4926
65°	103311	5933	3918
70°	84384	4812	3184
75°	67298	3965	2640
80°	55291	3326	2228
85°	42470	2856	1920



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	2.7
10°-20°	326.1	8.0
20°-30°	515.5	12.7
30°-40°	622.0	15.3
40°-50°	609.7	15.0
50°-60°	512.3	12.6
60°-70°	384.4	9.5
70°-80°	276.1	6.8
80°-90°	199.5	4.9
90°-100°	164.9	4.1
100°-110°	140.4	3.5
110°-120°	103.7	2.6
120°-130°	68.5	1.7
130°-140°	28.5	0.7
140°-150°	3.0	0.1
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	951.2	23.4
0°-40°	1573.2	38.7
0°-60°	2695.2	66.3
0°-90°	3555.2	87.5
90°-120°	408.9	10.1
90°-150°	508.9	12.5
90°-180°	510.0	12.5
0°-180°	4065.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1121	1140	1149	1151	1158	106
15°	1073	1092	1156	1214	1221	303
25°	990	1034	1141	1194	1213	456
35°	864	930	1026	1068	1070	540
45°	699	754	820	829	820	538
55°	497	560	607	585	569	443
65°	286	382	423	398	390	285
75°	126	256	297	281	277	138
85°	39	177	218	206	206	40
90°	17	150	194	186	186	10
95°	16	143	187	178	179	13
105°	16	114	169	160	161	16
115°	14	49	144	145	143	14
125°	12	16	101	123	123	11
135°	10	11	7	78	88	8
145°	7	6	4	0	0	4
155°	4	3	1	0	0	2
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°	22.5°	45°	67.5°	90°
0°	1120.0	1120.0	1120.0	1120.0	1120.0
1°	1130.7	1118.7	1125.0	1127.5	1125.0
2°	1128.1	1121.9	1143.3	1155.8	1152.1
3°	1125.6	1129.4	1159.0	1157.7	1152.1
4°	1123.7	1136.3	1155.8	1154.0	1152.1
5°	1120.6	1140.1	1148.9	1151.4	1157.7
6°	1116.8	1138.2	1145.8	1160.3	1173.5
7°	1113.0	1132.6	1143.3	1172.8	1183.5
8°	1109.3	1126.9	1145.8	1180.4	1185.4
9°	1104.9	1121.9	1153.3	1178.5	1180.4
10°	1099.2	1117.4	1158.4	1174.1	1188.6
11°	1095.4	1111.2	1159.6	1180.4	1197.4
12°	1090.4	1103.6	1152.7	1189.2	1207.5
13°	1084.7	1097.9	1148.9	1199.9	1217.5
14°	1078.4	1093.5	1152.7	1208.1	1222.6
15°	1072.7	1092.3	1156.5	1213.8	1221.3
16°	1066.5	1091.6	1160.3	1212.5	1219.4
17°	1058.9	1090.4	1165.9	1207.5	1223.2
18°	1051.3	1088.5	1167.2	1207.5	1226.4
19°	1045.0	1085.3	1169.1	1210.0	1233.3
20°	1037.5	1078.4	1167.2	1212.5	1235.8
21°	1027.4	1069.6	1160.9	1215.0	1233.9
22°	1018.0	1059.5	1152.7	1213.1	1227.0
23°	1009.2	1048.8	1147.0	1208.1	1223.8
24°	999.7	1041.3	1143.9	1199.9	1218.2
25°	989.6	1034.3	1140.7	1194.3	1213.1
26°	978.9	1027.4	1137.0	1188.6	1208.7
27°	968.9	1020.5	1131.9	1181.7	1198.7
28°	956.9	1011.7	1124.4	1174.7	1185.4
29°	944.3	1002.2	1114.9	1164.7	1172.8
30°	932.4	992.8	1101.7	1149.6	1161.5
32.5°	899.0	964.5	1065.8	1113.0	1122.5
35°	863.7	929.8	1026.2	1067.7	1070.2
37.5°	827.9	891.4	983.4	1012.9	1012.9
40°	787.6	845.5	928.0	954.4	951.2
42.5°	744.8	801.4	878.2	894.0	887.0
45°	698.8	754.2	819.7	829.1	819.7
47.5°	651.6	705.7	765.5	766.2	750.4
50°	599.3	657.2	712.0	701.9	686.2
52.5°	548.3	608.8	661.0	640.9	628.3
55°	496.7	559.7	606.9	584.8	569.1
57.5°	443.2	511.2	557.1	533.2	519.4
60°	389.1	465.9	510.6	483.5	470.9
62.5°	335.5	421.2	464.6	438.8	428.1
65°	285.8	382.1	423.1	398.5	389.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	239.2	344.4	385.3	363.2	355.7
70°	196.4	311.6	353.2	332.4	326.7
72.5°	159.9	282.0	324.2	305.3	300.9
75°	125.9	256.2	297.1	280.8	277.0
77.5°	100.7	233.6	273.2	258.7	256.2
80°	77.4	212.8	252.4	239.2	237.3
82.5°	56.7	193.9	233.6	221.0	220.3
85°	39.0	176.9	217.8	205.9	205.9
87.5°	25.2	163.1	204.0	192.6	193.9
90°	17.0	150.5	194.5	185.7	185.7
92.5°	17.0	147.9	191.4	182.6	183.2
95°	16.4	142.9	187.0	178.2	179.4
97.5°	16.4	137.2	182.6	173.1	174.4
100°	15.7	130.3	178.2	168.7	170.0
102.5°	15.7	122.8	173.1	164.9	164.9
105°	15.7	113.9	168.7	160.5	161.2
107.5°	15.1	103.9	164.3	156.8	156.8
110°	14.5	90.0	159.3	153.0	152.4
112.5°	14.5	72.4	152.4	149.2	147.9
115°	13.9	49.1	144.2	144.8	142.9
117.5°	13.2	21.4	137.2	140.4	138.5
120°	12.6	19.5	127.2	136.0	133.5
122.5°	12.6	17.6	115.2	130.3	128.4
125°	12.0	15.7	101.4	123.4	122.8
127.5°	12.0	14.5	83.7	115.2	116.5
130°	11.3	13.2	61.7	105.8	108.9
132.5°	10.7	12.0	12.6	93.8	99.5
135°	10.1	10.7	6.9	78.1	88.1
137.5°	9.4	9.4	6.3	58.5	73.0
140°	8.8	8.2	5.0	8.8	54.1
142.5°	7.6	7.6	4.4	0.6	1.9
145°	6.9	6.3	3.8	0.0	0.0
147.5°	6.3	5.7	3.1	0.0	0.0
150°	5.7	5.0	2.5	0.0	0.0
152.5°	5.0	3.8	1.9	0.0	0.0
155°	3.8	3.1	1.3	0.0	0.0
157.5°	3.1	2.5	0.6	0.0	0.0
160°	2.5	1.9	0.6	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



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)