

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: P393164

Luminaire Tested: **14EN-LD2-47-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393164  
Test Lab: INNOVATION CENTER (G3)  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-47-UNV-L83050-W2A-1-U (3500K)  
Description: 1X4 ENCOUNTER, 4700 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4717.8 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

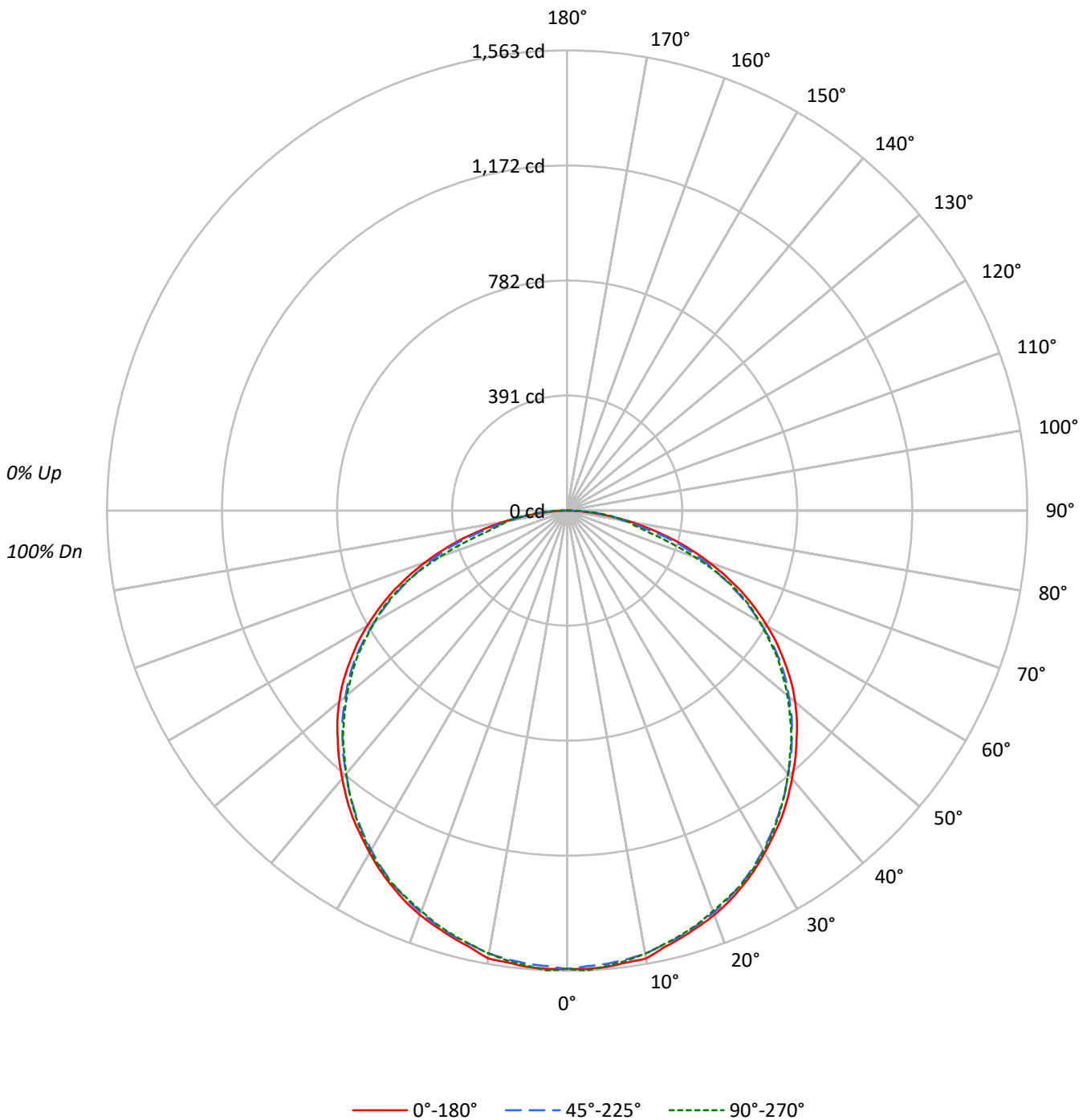
Input Watts (W): 47.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	4190	4190	4190
5°	4203	4173	4192
10°	4222	4175	4175
15°	4184	4168	4159
20°	4187	4161	4147
25°	4181	4154	4160
30°	4170	4136	4151
35°	4175	4119	4129
40°	4173	4099	4103
45°	4194	4106	4099
50°	4232	4115	4090
55°	4236	4124	4091
60°	4225	4058	4058
65°	4171	3961	4018
70°	4028	3847	3635
75°	3795	3556	2984
80°	3363	2944	3192
85°	2470	3180	3180



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.4	3.1
10°-20°	422.9	9.0
20°-30°	646.4	13.7
30°-40°	787.9	16.7
40°-50°	837.3	17.7
50°-60°	787.8	16.7
60°-70°	625.3	13.3
70°-80°	355.6	7.5
80°-90°	107.4	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1216.7	25.8
0°-40°	2004.6	42.5
0°-60°	3629.6	76.9
0°-90°	4717.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4717.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1557	1557	1557	1557	1557	
5°	1556	1554	1545	1547	1552	148
15°	1502	1501	1496	1494	1493	425
25°	1408	1405	1399	1402	1401	649
35°	1271	1269	1254	1251	1257	795
45°	1102	1094	1079	1076	1077	851
55°	903	894	879	873	872	807
65°	655	645	622	630	631	646
75°	365	357	342	302	287	384
85°	80	87	103	101	103	98
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1557	1557	1557	1557	1557
2.5°	1558	1559	1549	1555	1563
5°	1556	1554	1545	1547	1552
7.5°	1548	1546	1538	1538	1542
10°	1545	1535	1528	1526	1528
12.5°	1520	1520	1511	1512	1510
15°	1502	1501	1496	1494	1493
17.5°	1482	1480	1475	1479	1473
20°	1462	1459	1453	1456	1448
22.5°	1437	1432	1428	1433	1424
25°	1408	1405	1399	1402	1401
27.5°	1377	1375	1367	1367	1371
30°	1342	1341	1331	1332	1336
32.5°	1306	1304	1294	1291	1298
35°	1271	1269	1254	1251	1257
37.5°	1231	1228	1213	1208	1213
40°	1188	1186	1167	1163	1168
42.5°	1147	1140	1126	1120	1121
45°	1102	1094	1079	1076	1077
47.5°	1059	1048	1034	1031	1026
50°	1011	998	983	979	977
52.5°	960	946	934	926	924
55°	903	894	879	873	872
57.5°	847	836	819	813	812
60°	785	778	754	753	754
62.5°	721	711	691	693	699
65°	655	645	622	630	631
67.5°	584	576	553	558	552
70°	512	506	489	477	462
72.5°	440	431	420	385	372
75°	365	357	342	302	287
77.5°	288	286	258	231	234
80°	217	219	190	200	206
82.5°	144	145	153	162	158
85°	80	87	103	101	103
87.5°	29	44	45	48	47
90°	0	0	0	0	0

(END OF REPORT)