

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: P393178

Luminaire Tested: **14EN-LD2-47-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393178
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-55)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-47-UNV-L93050-W2A-1-U (2700K)
Description: 1X4 ENCOUNTER, 4700 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4073.5 lumens
Efficiency: N/A
Efficacy: 87.2 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

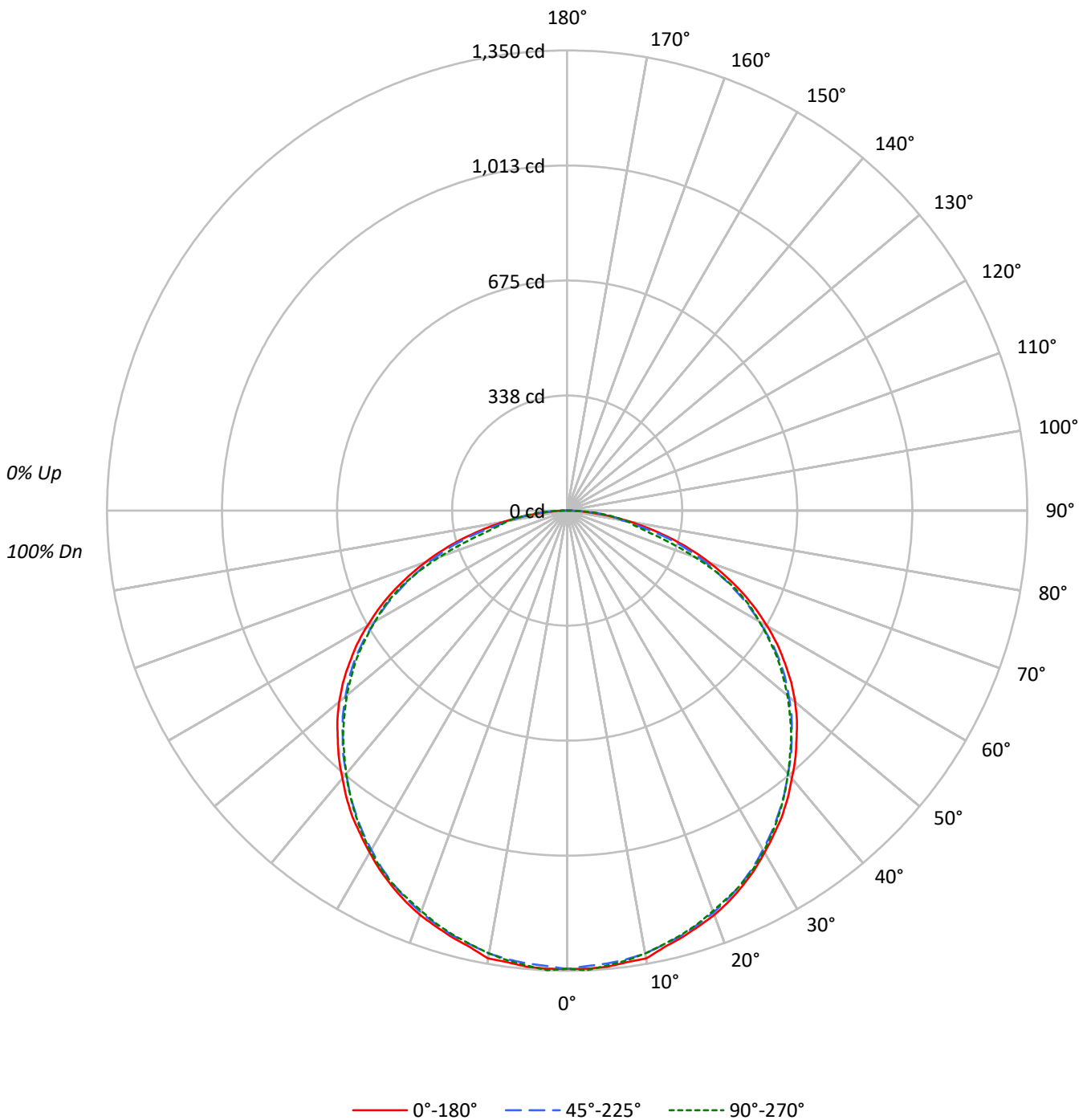
Input Watts (W): 46.7
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3618	3618	3618
5°	3629	3603	3620
10°	3645	3605	3605
15°	3613	3599	3591
20°	3615	3593	3580
25°	3610	3586	3592
30°	3600	3571	3584
35°	3605	3557	3565
40°	3603	3540	3543
45°	3621	3545	3539
50°	3654	3553	3532
55°	3658	3561	3532
60°	3648	3504	3504
65°	3601	3420	3469
70°	3478	3322	3139
75°	3277	3070	2576
80°	2904	2543	2757
85°	2133	2745	2745



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	3.1
10°-20°	365.2	9.0
20°-30°	558.1	13.7
30°-40°	680.3	16.7
40°-50°	722.9	17.7
50°-60°	680.2	16.7
60°-70°	539.9	13.3
70°-80°	307.0	7.5
80°-90°	92.7	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°	1050.5	25.8
0°-40°	1730.8	42.5
0°-60°	3133.9	76.9
0°-90°	4073.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4073.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1344	1344	1344	1344	1344	
5°	1344	1342	1334	1336	1340	128
15°	1297	1296	1292	1290	1289	367
25°	1216	1213	1208	1210	1210	561
35°	1097	1096	1083	1080	1085	686
45°	952	945	932	929	930	735
55°	780	772	759	754	753	697
65°	566	557	537	544	545	557
75°	315	308	295	261	248	332
85°	69	75	89	87	89	85
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1344.4	1344.4	1344.4	1344.4	1344.4
2.5°	1345.2	1346.1	1337.5	1342.6	1349.5
5°	1343.5	1341.8	1334.0	1335.7	1340.0
7.5°	1336.6	1334.9	1328.0	1328.0	1331.4
10°	1334.0	1325.4	1319.3	1317.6	1319.3
12.5°	1312.4	1312.4	1304.6	1305.5	1303.8
15°	1296.9	1296.0	1291.7	1290.0	1289.1
17.5°	1279.6	1277.9	1273.6	1277.0	1271.8
20°	1262.3	1259.7	1254.6	1257.2	1250.2
22.5°	1240.8	1236.4	1233.0	1237.3	1229.5
25°	1215.7	1213.1	1207.9	1210.5	1209.7
27.5°	1188.9	1187.2	1180.3	1180.3	1183.8
30°	1158.7	1157.9	1149.2	1150.1	1153.5
32.5°	1127.6	1125.9	1117.3	1114.7	1120.7
35°	1097.4	1095.7	1082.7	1080.2	1085.3
37.5°	1062.9	1060.3	1047.3	1043.0	1047.3
40°	1025.8	1024.0	1007.6	1004.2	1008.5
42.5°	990.4	984.3	972.2	967.0	967.9
45°	951.5	944.6	931.6	929.1	929.9
47.5°	914.4	904.9	892.8	890.2	885.9
50°	872.9	861.7	848.8	845.3	843.6
52.5°	828.9	816.8	806.4	799.5	797.8
55°	779.7	771.9	759.0	753.8	752.9
57.5°	731.3	721.8	707.2	702.0	701.1
60°	677.8	671.8	651.0	650.2	651.0
62.5°	622.5	613.9	596.6	598.4	603.5
65°	565.5	556.9	537.1	544.0	544.8
67.5°	504.2	497.3	477.5	481.8	476.6
70°	442.1	436.9	422.2	411.9	398.9
72.5°	379.9	372.1	362.6	332.4	321.2
75°	315.2	308.2	295.3	260.8	247.8
77.5°	248.7	246.9	222.8	199.5	202.0
80°	187.4	189.1	164.1	172.7	177.9
82.5°	124.3	125.2	132.1	139.9	136.4
85°	69.1	75.1	88.9	87.2	88.9
87.5°	25.0	38.0	38.9	41.4	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)