

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: P393181

Luminaire Tested: **14EN-LD2-47-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393181
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 (4000K)
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: 4121.1 lumens
Efficiency: N/A
Efficacy: 88.8 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

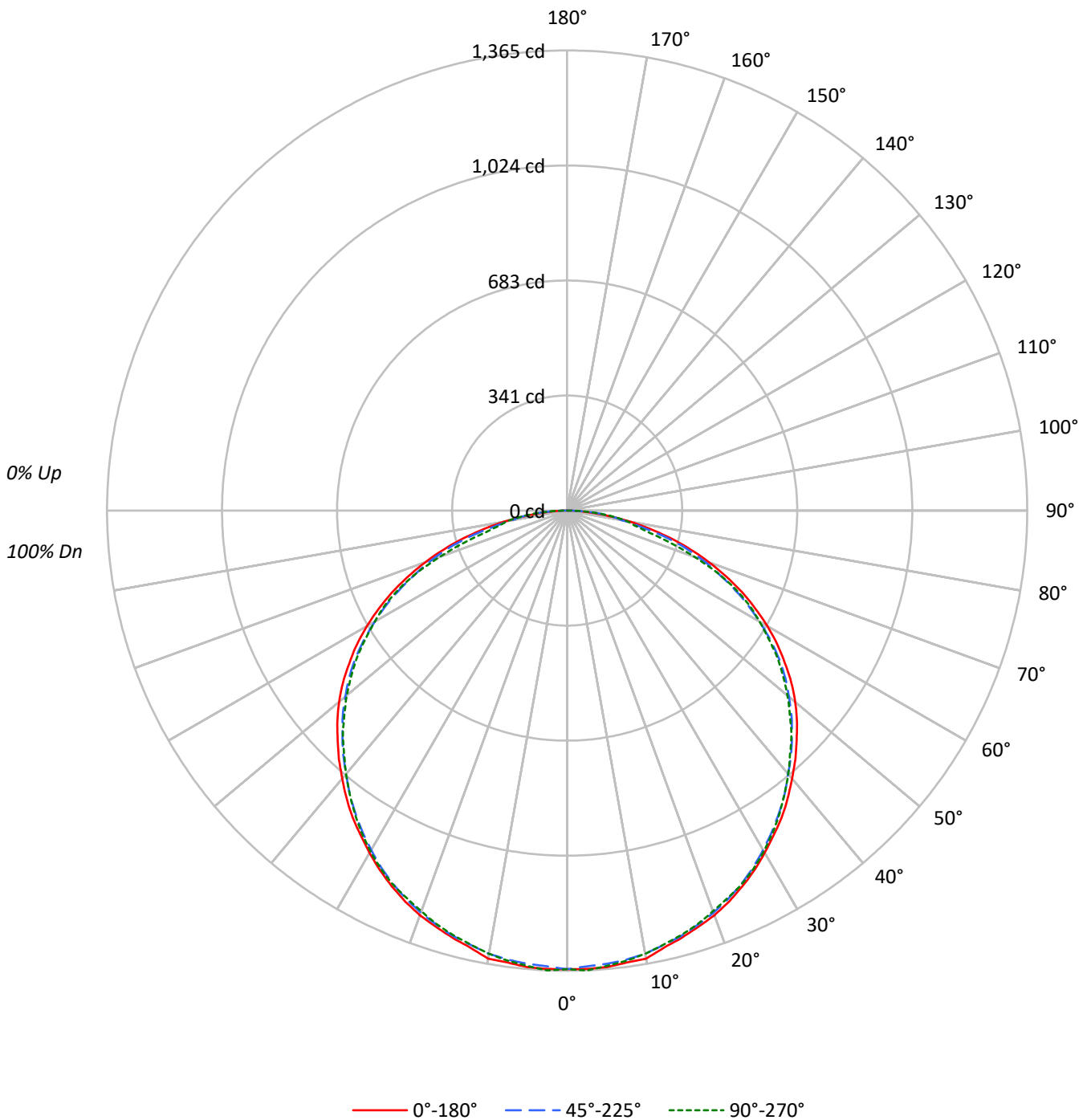
Input Watts (W): 46.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3660	3660	3660
5°	3672	3646	3662
10°	3688	3647	3647
15°	3655	3641	3633
20°	3657	3635	3622
25°	3652	3628	3634
30°	3642	3613	3626
35°	3647	3598	3607
40°	3645	3581	3584
45°	3663	3587	3580
50°	3697	3595	3573
55°	3701	3602	3574
60°	3690	3545	3545
65°	3643	3459	3510
70°	3519	3360	3175
75°	3315	3106	2607
80°	2938	2572	2788
85°	2158	2779	2779



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.7	3.1
10°-20°	369.4	9.0
20°-30°	564.6	13.7
30°-40°	688.3	16.7
40°-50°	731.4	17.7
50°-60°	688.1	16.7
60°-70°	546.2	13.3
70°-80°	310.6	7.5
80°-90°	93.8	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°	1062.8	25.8
0°-40°	1751.0	42.5
0°-60°	3170.5	76.9
0°-90°	4121.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4121.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1359	1357	1350	1351	1356	129
15°	1312	1311	1307	1305	1304	371
25°	1230	1227	1222	1225	1224	567
35°	1110	1108	1095	1093	1098	694
45°	963	956	942	940	941	744
55°	789	781	768	763	762	705
65°	572	563	543	550	551	564
75°	319	312	299	264	251	336
85°	70	76	90	88	90	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1360.1	1360.1	1360.1	1360.1	1360.1
2.5°	1360.9	1361.8	1353.1	1358.3	1365.3
5°	1359.2	1357.4	1349.6	1351.3	1355.7
7.5°	1352.2	1350.4	1343.5	1343.5	1346.9
10°	1349.6	1340.8	1334.7	1333.0	1334.7
12.5°	1327.7	1327.7	1319.9	1320.7	1319.0
15°	1312.0	1311.1	1306.8	1305.0	1304.1
17.5°	1294.5	1292.8	1288.4	1291.9	1286.7
20°	1277.1	1274.4	1269.2	1271.8	1264.8
22.5°	1255.2	1250.9	1247.4	1251.7	1243.9
25°	1229.9	1227.3	1222.0	1224.7	1223.8
27.5°	1202.8	1201.1	1194.1	1194.1	1197.6
30°	1172.2	1171.4	1162.6	1163.5	1167.0
32.5°	1140.8	1139.1	1130.3	1127.7	1133.8
35°	1110.2	1108.5	1095.4	1092.8	1098.0
37.5°	1075.3	1072.7	1059.6	1055.2	1059.6
40°	1037.7	1036.0	1019.4	1015.9	1020.3
42.5°	1001.9	995.8	983.6	978.3	979.2
45°	962.6	955.6	942.5	939.9	940.8
47.5°	925.0	915.4	903.2	900.6	896.2
50°	883.1	871.8	858.7	855.2	853.4
52.5°	838.6	826.3	815.9	808.9	807.1
55°	788.8	780.9	767.8	762.6	761.7
57.5°	739.9	730.3	715.4	710.2	709.3
60°	685.7	679.6	658.6	657.8	658.6
62.5°	629.8	621.1	603.6	605.3	610.6
65°	572.1	563.4	543.3	550.3	551.2
67.5°	510.1	503.1	483.0	487.4	482.2
70°	447.2	442.0	427.1	416.7	403.6
72.5°	384.3	376.5	366.9	336.3	324.9
75°	318.8	311.8	298.7	263.8	250.7
77.5°	251.6	249.8	225.4	201.8	204.4
80°	189.6	191.3	166.0	174.7	179.9
82.5°	125.8	126.7	133.6	141.5	138.0
85°	69.9	76.0	90.0	88.2	90.0
87.5°	25.3	38.4	39.3	41.9	41.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)