

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: P183151

Luminaire Tested: **12EN-LD2-31-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183151
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34480)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 12EN-LD2-31-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 1X2 TROFFER

Light Source: EATON LED 4000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3242.6 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 0.92' x L: 1.92' x H: 0')
CIE Type: Direct

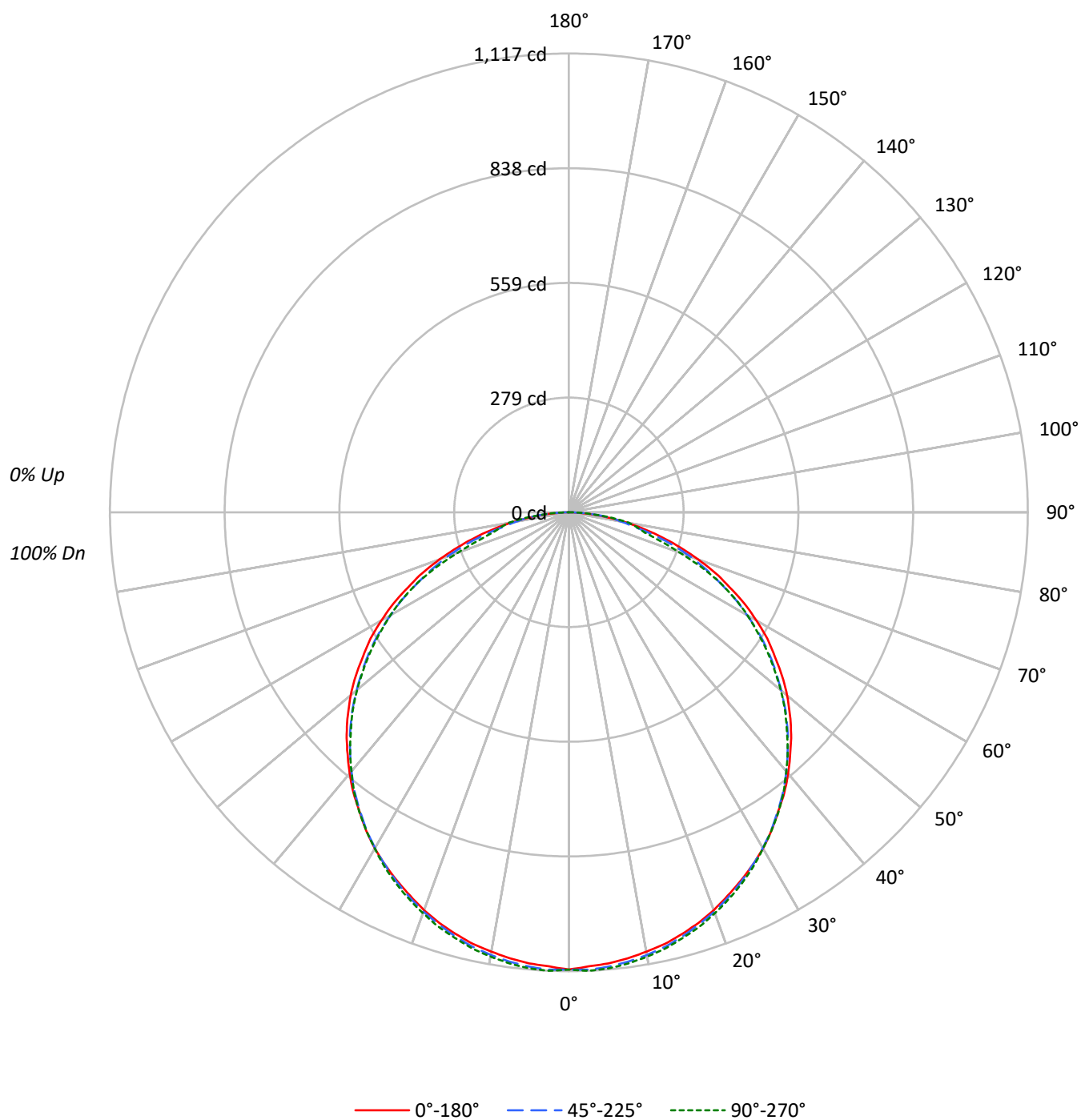
Input Watts (W): 27.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P183151

CATALOG NUMBER: 12EN-LD2-31-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P183151

CATALOG NUMBER: 12EN-LD2-31-UNV-L840-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20				
RC	80				70					50					30				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	0
RCR																			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83	
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69	
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58	
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49	
5	75	62	53	46	73	61	53	46	59	52	46	57	50	45	55	49	45	43	
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37	
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33	
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29	
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26	
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6819	6819	6819
5°	6778	6828	6853
10°	6756	6806	6831
15°	6742	6776	6802
20°	6718	6745	6771
25°	6691	6709	6737
30°	6686	6677	6686
35°	6644	6633	6653
40°	6638	6584	6584
45°	6628	6523	6500
50°	6608	6427	6414
55°	6537	6335	6291
60°	6454	6139	6156
65°	6261	5870	5888
70°	5992	5626	5143
75°	5546	5063	4519
80°	4968	4491	5253
85°	4000	4471	4471



TEST NUMBER: P183151

CATALOG NUMBER: 12EN-LD2-31-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.4	3.2
10°-20°	301.4	9.3
20°-30°	457.6	14.1
30°-40°	555.6	17.1
40°-50°	582.4	18.0
50°-60°	532.8	16.4
60°-70°	407.9	12.6
70°-80°	229.0	7.1
80°-90°	70.5	2.2
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°	864.4	26.7
0°-40°	1420.0	43.8
0°-60°	2535.1	78.2
0°-90°	3242.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3242.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1113	1113	1113	1113	1113	
5°	1102	1105	1110	1113	1114	105
15°	1063	1064	1068	1071	1072	300
25°	990	990	992	994	997	457
35°	888	888	887	887	890	557
45°	765	761	753	750	750	590
55°	612	608	593	586	589	548
65°	432	422	405	408	406	428
75°	234	226	214	194	191	249
85°	57	58	64	64	64	67
90°	0	0	0	0	0	



TEST NUMBER: P183151

CATALOG NUMBER: 12EN-LD2-31-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1113.0	1113.0	1113.0	1113.0	1113.0
2.5°	1106.3	1109.0	1114.4	1117.1	1117.1
5°	1102.2	1104.9	1110.3	1113.0	1114.4
7.5°	1095.4	1098.1	1103.6	1107.6	1107.6
10°	1086.0	1088.7	1094.1	1098.1	1098.1
12.5°	1076.5	1077.8	1083.2	1086.0	1087.3
15°	1062.9	1064.3	1068.4	1071.1	1072.4
17.5°	1048.0	1048.0	1052.1	1054.8	1057.5
20°	1030.4	1031.8	1034.5	1037.2	1038.6
22.5°	1010.1	1011.5	1014.2	1016.9	1018.3
25°	989.8	989.8	992.5	993.9	996.6
27.5°	968.2	968.2	968.2	969.5	972.2
30°	945.1	943.8	943.8	942.4	945.1
32.5°	918.1	918.1	916.7	915.3	918.1
35°	888.3	888.3	886.9	886.9	889.6
37.5°	861.2	859.8	857.1	854.4	858.5
40°	830.0	828.7	823.3	820.6	823.3
42.5°	797.5	794.8	788.1	785.4	788.1
45°	765.0	761.0	752.9	750.2	750.2
47.5°	729.8	725.8	714.9	710.9	713.6
50°	693.3	687.9	674.3	671.6	673.0
52.5°	654.0	647.2	633.7	631.0	631.0
55°	612.0	608.0	593.1	586.3	589.0
57.5°	572.8	564.6	548.4	540.3	544.3
60°	526.7	517.3	501.0	496.9	502.4
62.5°	482.0	471.2	455.0	452.3	456.3
65°	431.9	422.5	404.9	407.6	406.2
67.5°	385.9	375.1	360.2	353.4	349.3
70°	334.5	325.0	314.1	295.2	287.1
72.5°	284.4	276.2	265.4	239.7	234.3
75°	234.3	226.1	213.9	193.6	190.9
77.5°	186.9	181.4	163.8	163.8	170.6
80°	140.8	138.1	127.3	142.2	148.9
82.5°	94.8	92.1	102.9	108.3	107.0
85°	56.9	58.2	63.6	63.6	63.6
87.5°	24.4	27.1	28.4	28.4	29.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)