

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: P183149

Luminaire Tested: **12EN-LD2-31-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183149
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-L830-CD1-U
Description: METALUX ENCOUNTER 1X2 TROFFER

Light Source: EATON LED 3000K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3083.6 lumens
Efficiency: N/A
Efficacy: 111.3 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

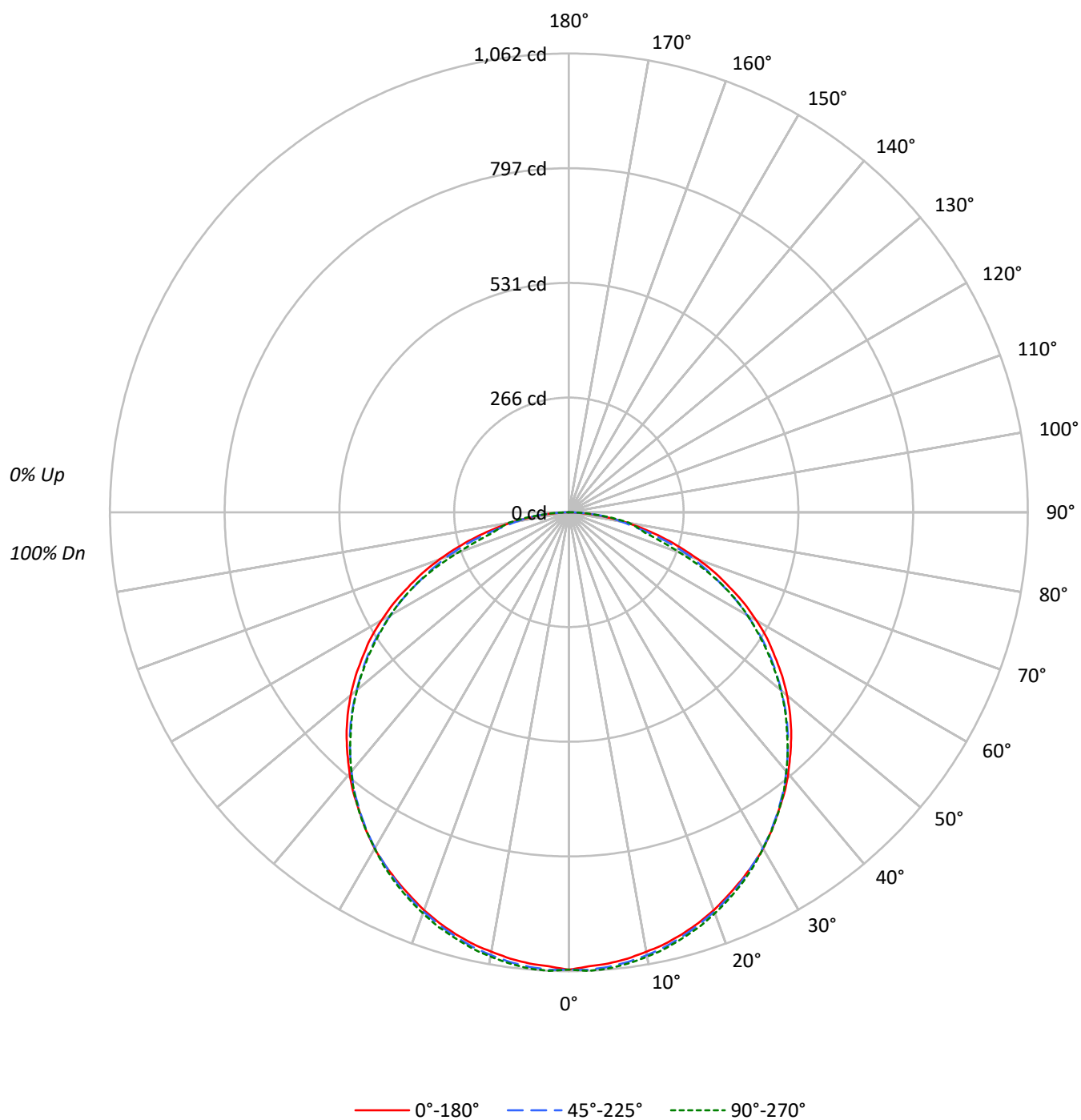
Input Watts (W): 27.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6485	6485	6485
5°	6446	6494	6518
10°	6424	6473	6497
15°	6411	6444	6468
20°	6389	6414	6439
25°	6363	6381	6406
30°	6358	6349	6358
35°	6318	6308	6327
40°	6313	6261	6261
45°	6303	6204	6181
50°	6284	6112	6100
55°	6216	6024	5983
60°	6138	5837	5853
65°	5955	5581	5600
70°	5698	5351	4890
75°	5274	4817	4299
80°	4724	4269	4996
85°	3803	4253	4253



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.2	3.2
10°-20°	286.7	9.3
20°-30°	435.1	14.1
30°-40°	528.3	17.1
40°-50°	553.9	18.0
50°-60°	506.6	16.4
60°-70°	387.9	12.6
70°-80°	217.8	7.1
80°-90°	67.1	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°	822.0	26.7
0°-40°	1350.4	43.8
0°-60°	2410.9	78.2
0°-90°	3083.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3083.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1058	1058	1058	1058	1058	
5°	1048	1051	1056	1058	1060	100
15°	1011	1012	1016	1019	1020	285
25°	941	941	944	945	948	434
35°	845	845	843	843	846	530
45°	728	724	716	713	713	561
55°	582	578	564	558	560	521
65°	411	402	385	388	386	407
75°	223	215	204	184	182	236
85°	54	55	60	60	60	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.5	1058.5	1058.5	1058.5	1058.5
2.5°	1052.0	1054.6	1059.8	1062.3	1062.3
5°	1048.2	1050.8	1055.9	1058.5	1059.8
7.5°	1041.7	1044.3	1049.5	1053.3	1053.3
10°	1032.7	1035.3	1040.5	1044.3	1044.3
12.5°	1023.7	1025.0	1030.1	1032.7	1034.0
15°	1010.8	1012.1	1016.0	1018.6	1019.8
17.5°	996.7	996.7	1000.5	1003.1	1005.7
20°	979.9	981.2	983.8	986.4	987.7
22.5°	960.6	961.9	964.5	967.1	968.3
25°	941.3	941.3	943.9	945.2	947.7
27.5°	920.7	920.7	920.7	922.0	924.6
30°	898.8	897.5	897.5	896.2	898.8
32.5°	873.1	873.1	871.8	870.5	873.1
35°	844.7	844.7	843.4	843.4	846.0
37.5°	819.0	817.7	815.1	812.5	816.4
40°	789.4	788.1	782.9	780.3	782.9
42.5°	758.4	755.9	749.4	746.9	749.4
45°	727.5	723.7	716.0	713.4	713.4
47.5°	694.1	690.2	679.9	676.0	678.6
50°	659.3	654.1	641.3	638.7	640.0
52.5°	622.0	615.5	602.6	600.1	600.1
55°	582.0	578.2	564.0	557.6	560.1
57.5°	544.7	537.0	521.5	513.8	517.6
60°	500.9	491.9	476.4	472.6	477.7
62.5°	458.4	448.1	432.7	430.1	434.0
65°	410.8	401.8	385.0	387.6	386.3
67.5°	367.0	356.7	342.5	336.1	332.2
70°	318.1	309.0	298.7	280.7	273.0
72.5°	270.4	262.7	252.4	227.9	222.8
75°	222.8	215.0	203.5	184.1	181.6
77.5°	177.7	172.5	155.8	155.8	162.2
80°	133.9	131.3	121.0	135.2	141.6
82.5°	90.1	87.6	97.9	103.0	101.7
85°	54.1	55.4	60.5	60.5	60.5
87.5°	23.2	25.8	27.0	27.0	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)