

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: P239010

Luminaire Tested: **24ENA-LD2-45-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239010
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1708-234-34)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24ENA-LD2-45-UNV-L935-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)3500K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3908.3 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.67' x L: 3.83' x H: 0')
CIE Type: Direct

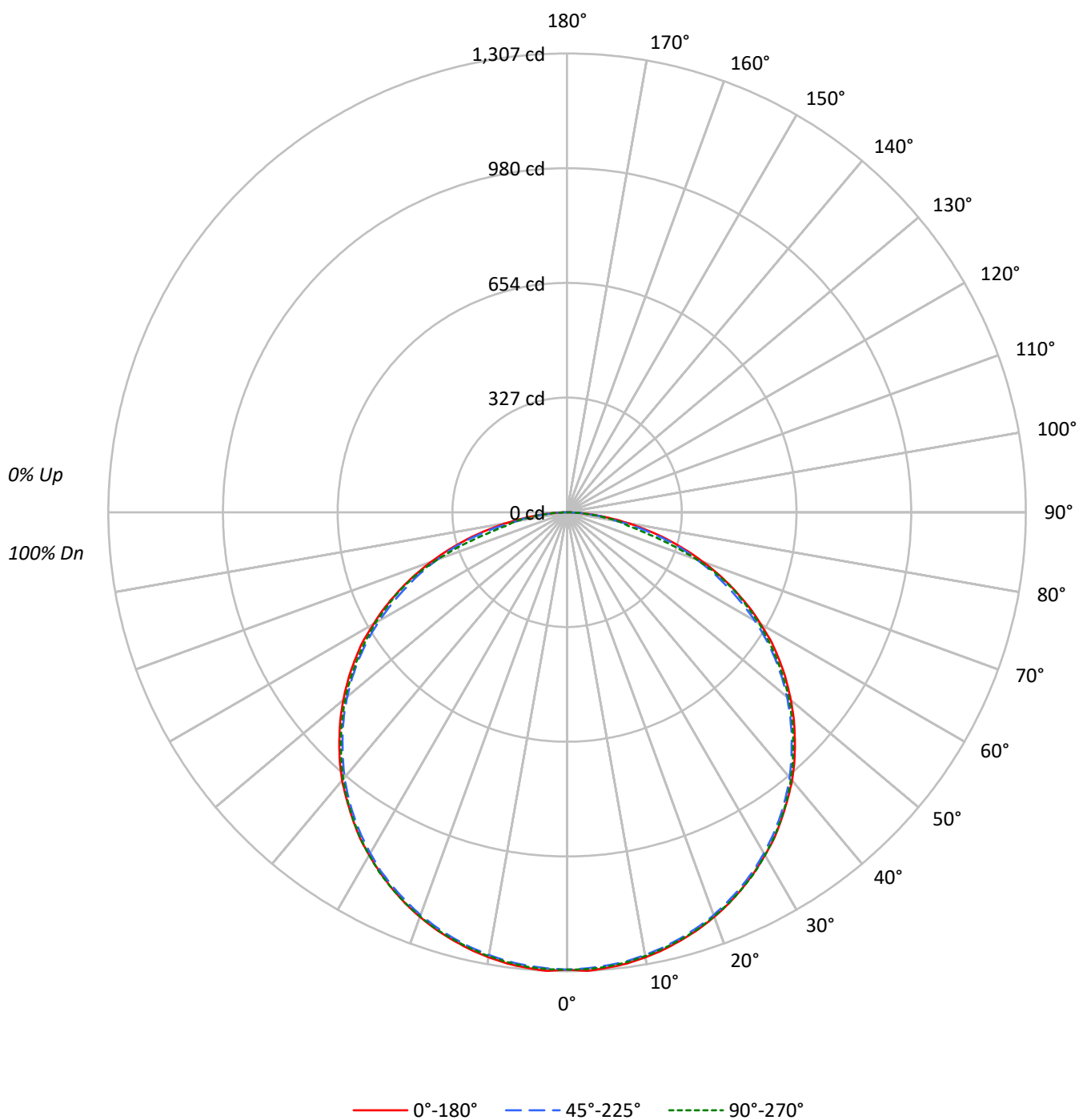
Input Watts (W): 38
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69		
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58		
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32		
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2194	2194	2194
5°	2203	2192	2197
10°	2202	2190	2196
15°	2199	2189	2195
20°	2199	2189	2196
25°	2197	2186	2197
30°	2194	2181	2194
35°	2192	2177	2188
40°	2193	2169	2182
45°	2187	2156	2171
50°	2181	2142	2162
55°	2173	2120	2142
60°	2146	2080	2124
65°	2103	2015	2090
70°	2028	1943	1939
75°	1909	1823	1541
80°	1679	1426	1466
85°	1326	1247	1152



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.4	3.2
10°-20°	354.8	9.1
20°-30°	542.9	13.9
30°-40°	663.6	17.0
40°-50°	701.2	17.9
50°-60°	649.7	16.6
60°-70°	509.0	13.0
70°-80°	287.8	7.4
80°-90°	75.8	1.9
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°	1021.1	26.1
0°-40°	1684.7	43.1
0°-60°	3035.7	77.7
0°-90°	3908.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3908.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1302	1302	1302	1302	1302	
5°	1302	1298	1296	1295	1299	124
15°	1261	1256	1255	1254	1258	356
25°	1182	1177	1176	1176	1182	545
35°	1066	1061	1058	1058	1064	667
45°	918	911	905	905	911	708
55°	740	732	722	724	729	661
65°	528	518	506	512	524	522
75°	293	285	280	250	237	308
85°	69	64	64	61	60	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1302.5	1302.5	1302.5	1302.5	1302.5
2.5°	1307.4	1301.6	1300.0	1298.4	1302.5
5°	1302.5	1298.4	1295.9	1295.1	1299.2
7.5°	1296.7	1291.8	1290.2	1288.6	1292.7
10°	1286.9	1282.0	1280.4	1279.6	1283.7
12.5°	1275.5	1269.8	1269.0	1268.2	1272.2
15°	1260.8	1255.9	1255.1	1254.3	1258.4
17.5°	1245.3	1240.4	1238.8	1238.0	1243.7
20°	1226.5	1221.6	1220.8	1220.0	1224.9
22.5°	1205.3	1200.4	1198.8	1199.6	1204.5
25°	1181.6	1176.7	1175.9	1175.9	1181.6
27.5°	1155.5	1150.6	1150.6	1150.6	1157.1
30°	1127.7	1123.6	1121.2	1122.0	1127.7
32.5°	1099.1	1092.6	1091.0	1091.8	1097.5
35°	1065.7	1060.8	1058.3	1058.3	1064.0
37.5°	1031.4	1026.5	1023.2	1023.2	1028.9
40°	997.1	989.7	986.4	984.8	992.2
42.5°	958.7	953.0	945.6	945.6	952.1
45°	917.8	911.3	904.8	904.8	911.3
47.5°	876.2	869.7	862.3	862.3	868.9
50°	832.1	825.6	817.4	817.4	824.8
52.5°	787.2	779.8	770.9	770.0	777.4
55°	739.8	731.7	721.9	723.5	729.2
57.5°	691.7	681.0	671.2	671.2	680.2
60°	636.9	628.0	617.3	619.0	630.4
62.5°	584.7	573.2	562.6	566.7	576.5
65°	527.5	517.7	505.5	512.0	524.3
67.5°	471.2	460.6	450.8	458.9	464.6
70°	411.6	401.8	394.4	394.4	393.6
72.5°	352.0	343.0	341.3	325.8	316.0
75°	293.2	285.0	280.1	249.9	236.8
77.5°	231.9	229.5	213.9	182.1	178.0
80°	173.1	174.8	147.0	147.8	151.1
82.5°	119.2	116.8	110.2	105.3	103.7
85°	68.6	64.5	64.5	61.2	59.6
87.5°	22.9	25.3	25.3	25.3	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)