

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: P238904

Luminaire Tested: **24EN-LD2-58-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238904
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: 24EN-LD2-58-UNV-L850-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)5000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6480.0 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.29 / 1.4
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

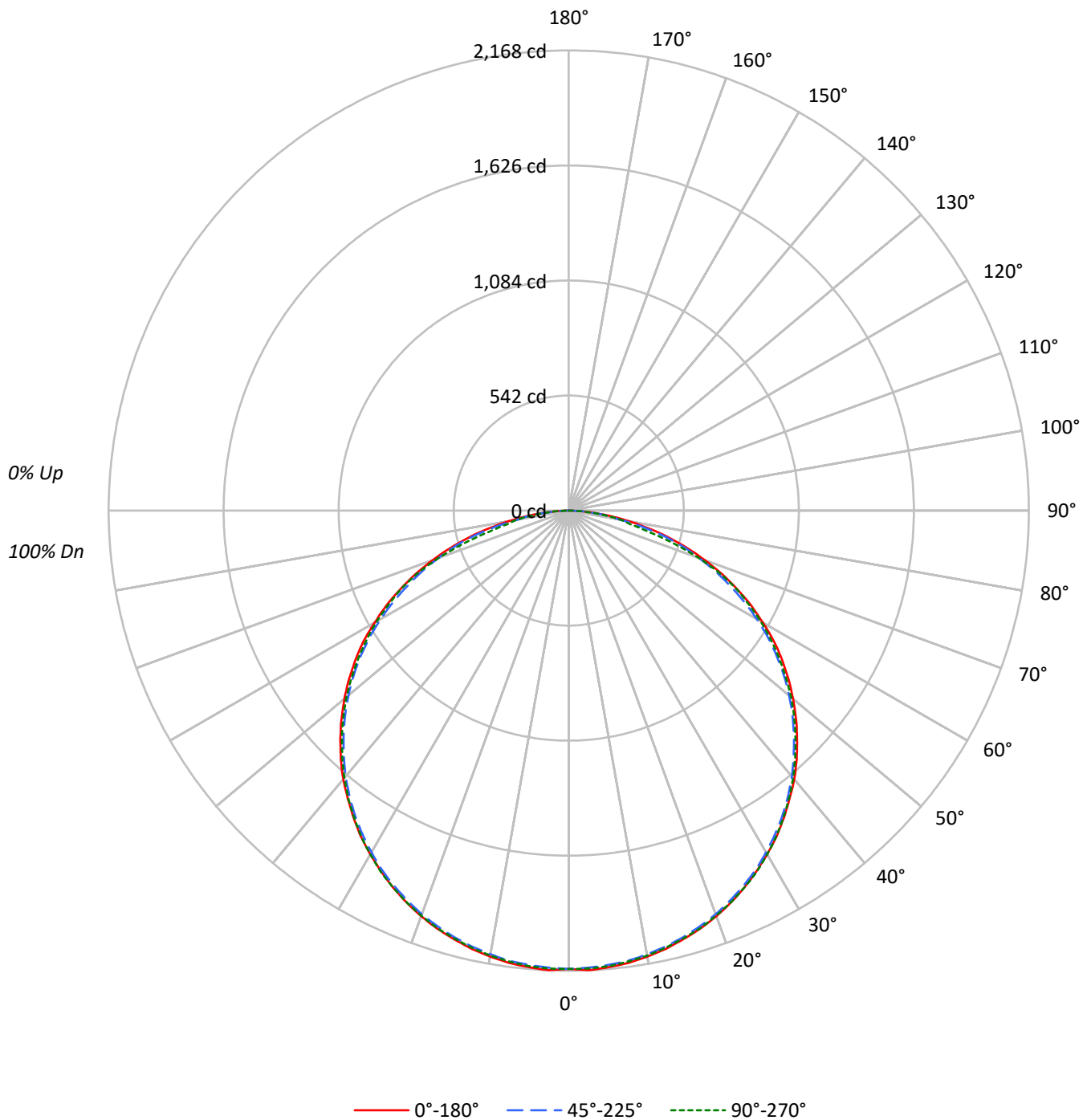
Input Watts (W): 47
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3308	3308	3308
5°	3320	3304	3312
10°	3319	3302	3310
15°	3315	3300	3308
20°	3315	3299	3310
25°	3311	3295	3311
30°	3307	3288	3307
35°	3304	3281	3299
40°	3305	3270	3289
45°	3296	3249	3273
50°	3288	3229	3258
55°	3276	3196	3229
60°	3235	3136	3202
65°	3170	3037	3150
70°	3056	2928	2922
75°	2877	2748	2323
80°	2531	2150	2209
85°	1998	1880	1736



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.5	3.2
10°-20°	588.3	9.1
20°-30°	900.2	13.9
30°-40°	1100.3	17.0
40°-50°	1162.7	17.9
50°-60°	1077.3	16.6
60°-70°	844.0	13.0
70°-80°	477.1	7.4
80°-90°	125.6	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°	1693.0	26.1
0°-40°	2793.3	43.1
0°-60°	5033.2	77.7
0°-90°	6480.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6480.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2160	2160	2160	2160	2160	
5°	2160	2153	2149	2147	2154	205
15°	2090	2082	2081	2080	2086	591
25°	1959	1951	1950	1950	1959	903
35°	1767	1759	1755	1755	1764	1106
45°	1522	1511	1500	1500	1511	1174
55°	1227	1213	1197	1200	1209	1096
65°	875	858	838	849	869	865
75°	486	472	464	414	393	511
85°	114	107	107	102	99	134
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2159.5	2159.5	2159.5	2159.5	2159.5
2.5°	2167.6	2158.2	2155.5	2152.7	2159.5
5°	2159.5	2152.7	2148.7	2147.3	2154.1
7.5°	2150.0	2141.9	2139.2	2136.5	2143.3
10°	2133.8	2125.7	2123.0	2121.6	2128.4
12.5°	2114.8	2105.4	2104.0	2102.7	2109.4
15°	2090.5	2082.3	2081.0	2079.6	2086.4
17.5°	2064.7	2056.6	2053.9	2052.6	2062.0
20°	2033.6	2025.5	2024.1	2022.8	2030.9
22.5°	1998.4	1990.3	1987.6	1988.9	1997.0
25°	1959.1	1951.0	1949.7	1949.7	1959.1
27.5°	1915.8	1907.7	1907.7	1907.7	1918.5
30°	1869.8	1863.0	1858.9	1860.3	1869.8
32.5°	1822.4	1811.6	1808.9	1810.2	1819.7
35°	1766.9	1758.8	1754.7	1754.7	1764.2
37.5°	1710.0	1701.9	1696.5	1696.5	1706.0
40°	1653.1	1641.0	1635.5	1632.8	1645.0
42.5°	1589.5	1580.0	1567.9	1567.9	1578.7
45°	1521.8	1511.0	1500.2	1500.2	1511.0
47.5°	1452.8	1441.9	1429.7	1429.7	1440.6
50°	1379.7	1368.8	1355.3	1355.3	1367.5
52.5°	1305.2	1293.0	1278.1	1276.8	1288.9
55°	1226.7	1213.1	1196.9	1199.6	1209.1
57.5°	1146.8	1129.2	1112.9	1112.9	1127.8
60°	1056.1	1041.2	1023.6	1026.3	1045.2
62.5°	969.4	950.5	932.9	939.6	955.9
65°	874.6	858.4	838.1	848.9	869.2
67.5°	781.2	763.6	747.4	760.9	770.4
70°	682.4	666.1	653.9	653.9	652.6
72.5°	583.5	568.7	565.9	540.2	524.0
75°	486.1	472.5	464.4	414.3	392.6
77.5°	384.5	380.5	354.7	301.9	295.2
80°	287.0	289.7	243.7	245.1	250.5
82.5°	197.7	193.6	182.8	174.7	171.9
85°	113.7	107.0	107.0	101.5	98.8
87.5°	37.9	42.0	42.0	42.0	43.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)