

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: P238911

Luminaire Tested: **24EN-LD2-70-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238911
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-LD2-70-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7163.0 lumens
Efficiency: N/A
Efficacy: 119.0 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

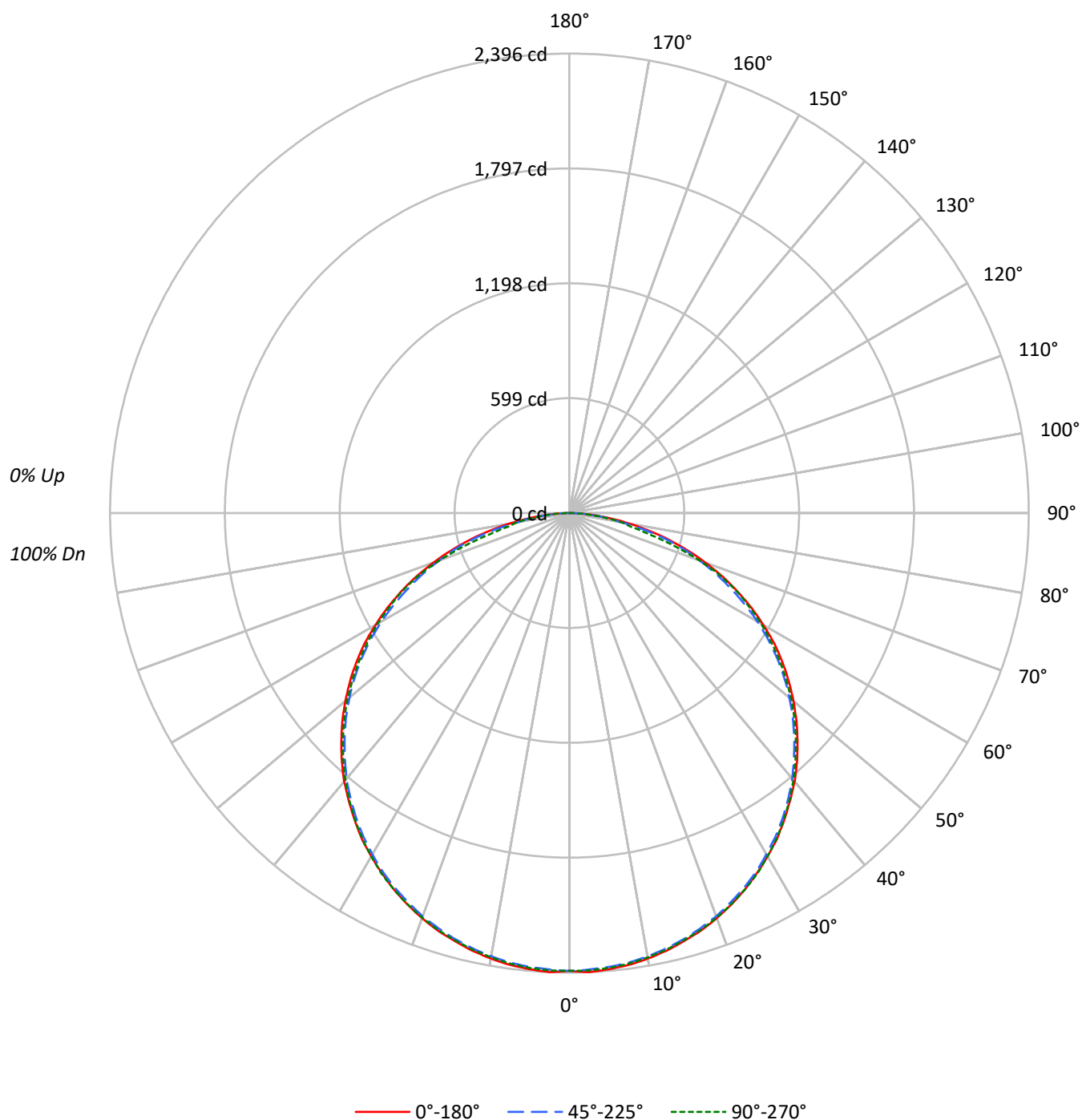
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3656	3656	3656
5°	3670	3652	3661
10°	3668	3650	3659
15°	3664	3647	3657
20°	3664	3647	3659
25°	3660	3642	3660
30°	3655	3634	3655
35°	3652	3627	3646
40°	3654	3615	3636
45°	3644	3592	3618
50°	3634	3570	3602
55°	3621	3533	3569
60°	3576	3466	3539
65°	3504	3357	3482
70°	3378	3237	3231
75°	3180	3038	2568
80°	2799	2376	2442
85°	2209	2077	1921



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.1	3.2
10°-20°	650.3	9.1
20°-30°	995.1	13.9
30°-40°	1216.2	17.0
40°-50°	1285.2	17.9
50°-60°	1190.8	16.6
60°-70°	932.9	13.0
70°-80°	527.4	7.4
80°-90°	138.9	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°	1871.4	26.1
0°-40°	3087.7	43.1
0°-60°	5563.7	77.7
0°-90°	7163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7163.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2387	2387	2387	2387	2387	
5°	2387	2380	2375	2374	2381	227
15°	2311	2302	2300	2299	2306	653
25°	2166	2157	2155	2155	2166	998
35°	1953	1944	1940	1940	1950	1223
45°	1682	1670	1658	1658	1670	1298
55°	1356	1341	1323	1326	1336	1211
65°	967	949	926	938	961	956
75°	537	522	513	458	434	565
85°	126	118	118	112	109	148
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2387.1	2387.1	2387.1	2387.1	2387.1
2.5°	2396.1	2385.6	2382.6	2379.7	2387.1
5°	2387.1	2379.7	2375.2	2373.7	2381.1
7.5°	2376.7	2367.7	2364.7	2361.7	2369.2
10°	2358.7	2349.7	2346.7	2345.2	2352.7
12.5°	2337.7	2327.3	2325.8	2324.3	2331.8
15°	2310.8	2301.8	2300.3	2298.8	2306.3
17.5°	2282.4	2273.4	2270.4	2268.9	2279.4
20°	2247.9	2239.0	2237.5	2236.0	2245.0
22.5°	2209.0	2200.1	2197.1	2198.6	2207.5
25°	2165.6	2156.7	2155.2	2155.2	2165.6
27.5°	2117.7	2108.8	2108.8	2108.8	2120.7
30°	2066.9	2059.4	2054.9	2056.4	2066.9
32.5°	2014.5	2002.5	1999.5	2001.0	2011.5
35°	1953.1	1944.1	1939.6	1939.6	1950.1
37.5°	1890.3	1881.3	1875.3	1875.3	1885.8
40°	1827.4	1813.9	1807.9	1804.9	1818.4
42.5°	1757.1	1746.6	1733.1	1733.1	1745.1
45°	1682.2	1670.2	1658.3	1658.3	1670.2
47.5°	1605.9	1593.9	1580.4	1580.4	1592.4
50°	1525.1	1513.1	1498.1	1498.1	1511.6
52.5°	1442.8	1429.3	1412.8	1411.3	1424.8
55°	1356.0	1341.0	1323.0	1326.0	1336.5
57.5°	1267.7	1248.2	1230.2	1230.2	1246.7
60°	1167.4	1150.9	1131.5	1134.4	1155.4
62.5°	1071.6	1050.6	1031.2	1038.7	1056.6
65°	966.8	948.9	926.4	938.4	960.8
67.5°	863.6	844.1	826.1	841.1	851.6
70°	754.3	736.3	722.9	722.9	721.4
72.5°	645.0	628.6	625.6	597.2	579.2
75°	537.3	522.3	513.3	458.0	434.0
77.5°	425.0	420.6	392.1	333.7	326.3
80°	317.3	320.3	269.4	270.9	276.9
82.5°	218.5	214.0	202.0	193.1	190.1
85°	125.7	118.2	118.2	112.2	109.3
87.5°	41.9	46.4	46.4	46.4	47.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)