

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: P238912

Luminaire Tested: **24EN-LD2-70-UNV-L850-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238912
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-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: 7796.0 lumens
Efficiency: N/A
Efficacy: 129.5 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

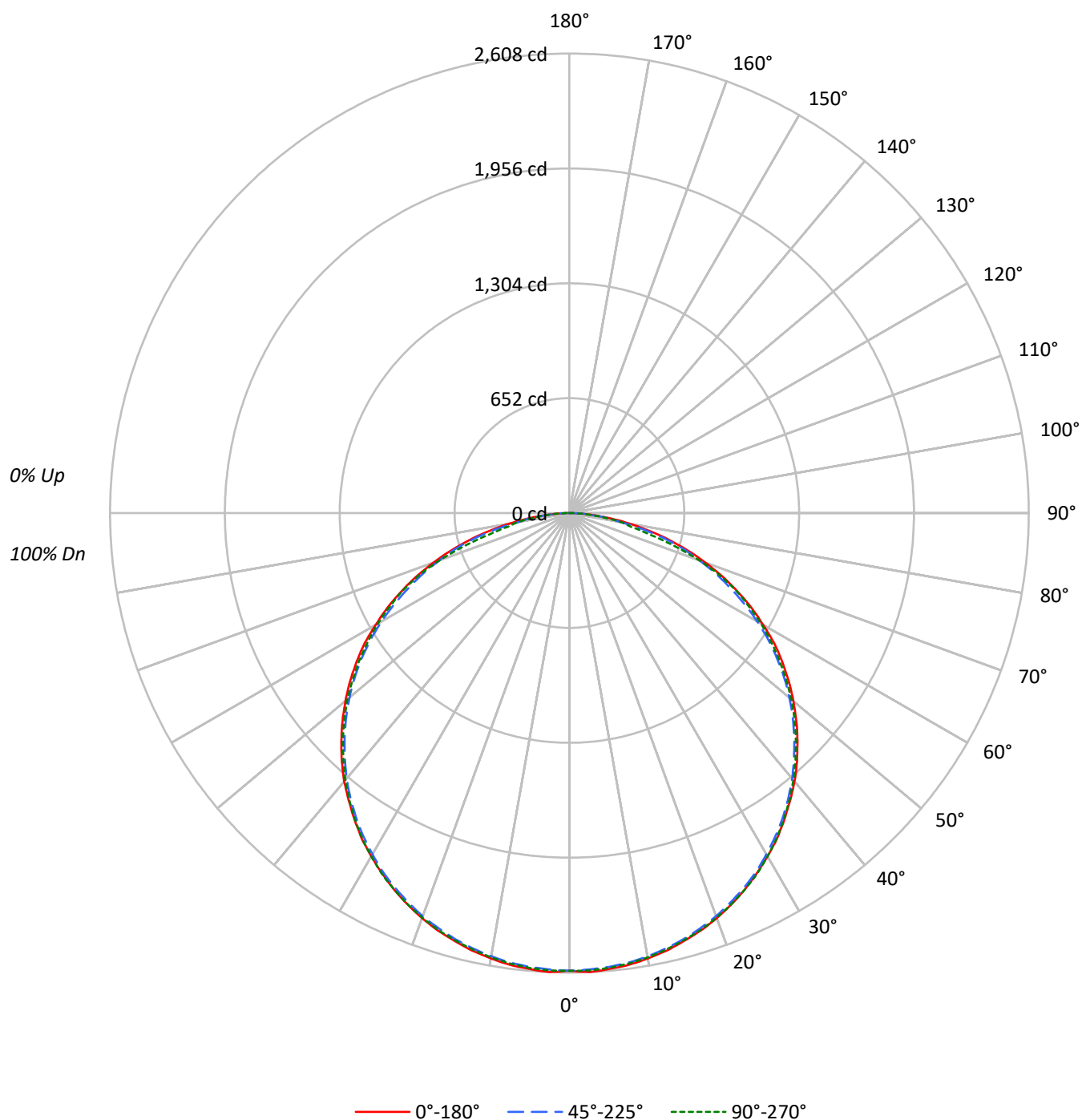
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	109	104	99	95	106	101	97	94	97	94	91		93	90	88		83
2	98	90	83	77	96	88	82	76	84	79	74		81	77	73		69
3	90	79	70	64	87	77	69	63	74	67	62		71	66	61		58
4	82	70	61	54	79	68	60	53	66	58	53		63	57	52		49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		37
7	64	50	42	35	62	50	41	35	48	40	35		47	40	35		32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		26
10	52	39	31	26	51	38	31	25	37	30	25		36	30	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3979	3979	3979
5°	3995	3975	3985
10°	3992	3972	3982
15°	3988	3970	3980
20°	3988	3969	3982
25°	3983	3964	3983
30°	3978	3955	3978
35°	3975	3947	3968
40°	3977	3934	3957
45°	3966	3909	3937
50°	3955	3885	3920
55°	3941	3845	3884
60°	3892	3772	3852
65°	3814	3654	3790
70°	3677	3523	3516
75°	3461	3306	2796
80°	3046	2586	2658
85°	2404	2262	2089



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.1	3.2
10°-20°	707.7	9.1
20°-30°	1083.0	13.9
30°-40°	1323.7	17.0
40°-50°	1398.8	17.9
50°-60°	1296.0	16.6
60°-70°	1015.4	13.0
70°-80°	574.0	7.4
80°-90°	151.2	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°	2036.8	26.1
0°-40°	3360.5	43.1
0°-60°	6055.4	77.7
0°-90°	7796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7796.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2598	2598	2598	2598	2598	
5°	2598	2590	2585	2583	2592	247
15°	2515	2505	2504	2502	2510	710
25°	2357	2347	2346	2346	2357	1087
35°	2126	2116	2111	2111	2122	1331
45°	1831	1818	1805	1805	1818	1413
55°	1476	1460	1440	1443	1455	1318
65°	1052	1033	1008	1021	1046	1040
75°	585	568	559	498	472	615
85°	137	129	129	122	119	161
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2598.1	2598.1	2598.1	2598.1	2598.1
2.5°	2607.9	2596.5	2593.2	2589.9	2598.1
5°	2598.1	2589.9	2585.1	2583.4	2591.6
7.5°	2586.7	2576.9	2573.7	2570.4	2578.5
10°	2567.1	2557.4	2554.1	2552.5	2560.6
12.5°	2544.3	2532.9	2531.3	2529.7	2537.8
15°	2515.0	2505.2	2503.6	2502.0	2510.1
17.5°	2484.1	2474.3	2471.0	2469.4	2480.8
20°	2446.6	2436.8	2435.2	2433.6	2443.3
22.5°	2404.2	2394.5	2391.2	2392.8	2402.6
25°	2357.0	2347.2	2345.6	2345.6	2357.0
27.5°	2304.9	2295.1	2295.1	2295.1	2308.1
30°	2249.5	2241.4	2236.5	2238.1	2249.5
32.5°	2192.5	2179.5	2176.2	2177.8	2189.2
35°	2125.7	2115.9	2111.0	2111.0	2122.4
37.5°	2057.3	2047.5	2041.0	2041.0	2052.4
40°	1988.9	1974.2	1967.7	1964.4	1979.1
42.5°	1912.3	1900.9	1886.3	1886.3	1899.3
45°	1830.9	1817.8	1804.8	1804.8	1817.8
47.5°	1747.8	1734.8	1720.1	1720.1	1733.1
50°	1659.8	1646.8	1630.5	1630.5	1645.2
52.5°	1570.3	1555.6	1537.7	1536.0	1550.7
55°	1475.8	1459.5	1439.9	1443.2	1454.6
57.5°	1379.7	1358.5	1339.0	1339.0	1356.9
60°	1270.5	1252.6	1231.4	1234.7	1257.5
62.5°	1166.3	1143.5	1122.3	1130.5	1150.0
65°	1052.3	1032.7	1008.3	1021.3	1045.8
67.5°	939.9	918.7	899.1	915.4	926.8
70°	821.0	801.4	786.8	786.8	785.1
72.5°	702.1	684.1	680.9	649.9	630.4
75°	584.8	568.5	558.7	498.4	472.4
77.5°	462.6	457.7	426.8	363.2	355.1
80°	345.3	348.6	293.2	294.8	301.3
82.5°	237.8	232.9	219.9	210.1	206.9
85°	136.8	128.7	128.7	122.2	118.9
87.5°	45.6	50.5	50.5	50.5	52.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)