

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: P238951

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238951
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-LD2-70-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (308)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6983.9 lumens
Efficiency: N/A
Efficacy: 116.0 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

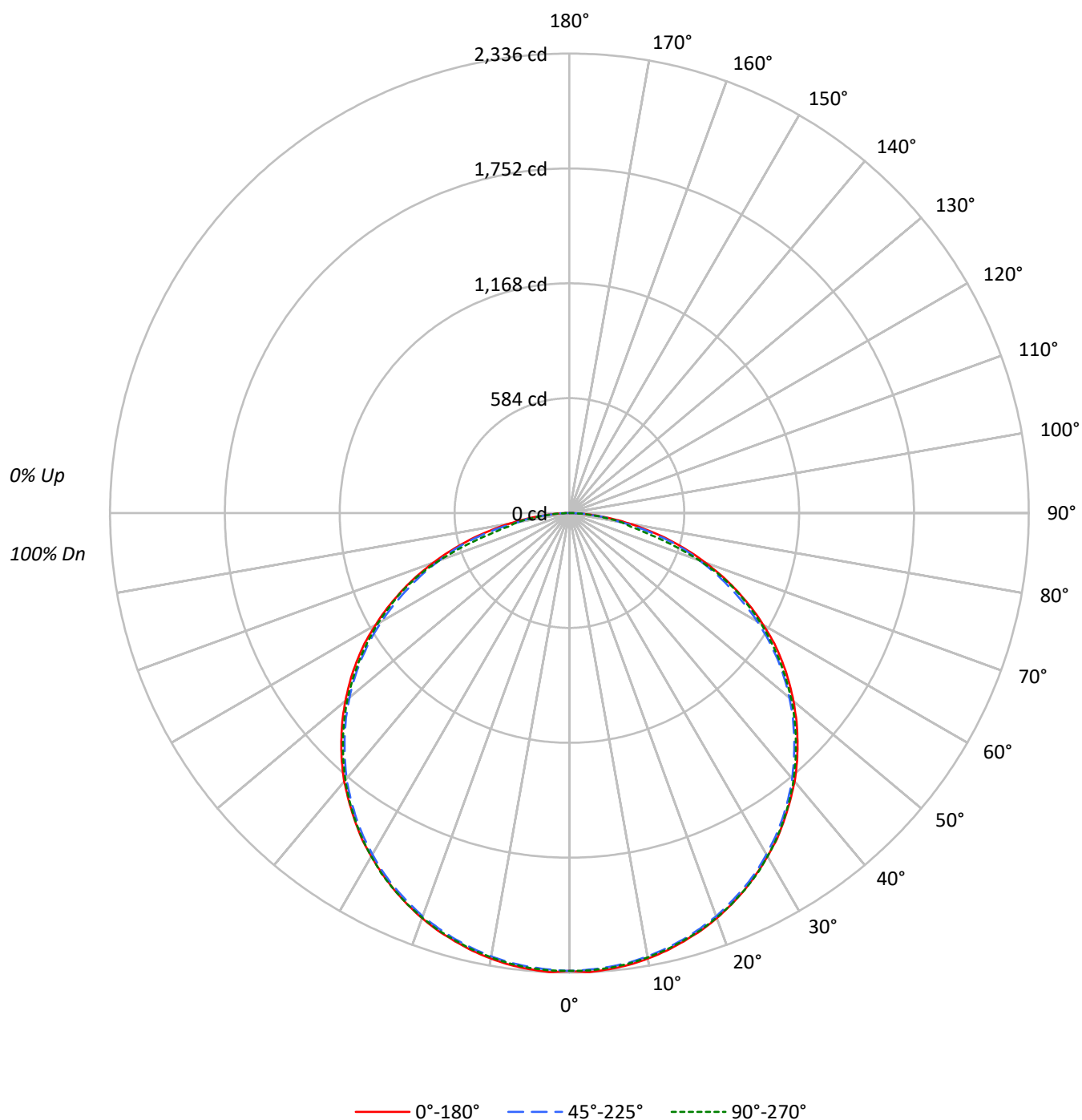
Input Watts (W): 60.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	90	88		90	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	70	61	54	79	68	60	53		66	58	53		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	36	31		43	36	31		41	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	25		37	30	25		36	30	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3921	3921	3921
5°	3936	3917	3926
10°	3934	3914	3924
15°	3930	3912	3922
20°	3930	3911	3924
25°	3925	3906	3925
30°	3920	3898	3920
35°	3917	3890	3911
40°	3919	3877	3899
45°	3908	3852	3880
50°	3897	3829	3863
55°	3883	3789	3828
60°	3835	3717	3796
65°	3758	3601	3735
70°	3623	3472	3464
75°	3410	3258	2755
80°	3002	2549	2620
85°	2370	2229	2059



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.5	3.2
10°-20°	634.0	9.1
20°-30°	970.2	13.9
30°-40°	1185.8	17.0
40°-50°	1253.1	17.9
50°-60°	1161.1	16.6
60°-70°	909.6	13.0
70°-80°	514.3	7.4
80°-90°	135.4	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°	1824.6	26.1
0°-40°	3010.5	43.1
0°-60°	5424.6	77.7
0°-90°	6983.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6983.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2328	2328	2328	2328	2328	
5°	2328	2320	2316	2314	2322	221
15°	2253	2244	2243	2241	2249	636
25°	2112	2103	2101	2101	2112	974
35°	1904	1896	1891	1891	1901	1192
45°	1640	1628	1617	1617	1628	1266
55°	1322	1308	1290	1293	1303	1181
65°	943	925	903	915	937	932
75°	524	509	500	446	423	551
85°	123	115	115	109	106	144
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2327.5	2327.5	2327.5	2327.5	2327.5
2.5°	2336.2	2326.0	2323.1	2320.2	2327.5
5°	2327.5	2320.2	2315.8	2314.3	2321.6
7.5°	2317.2	2308.5	2305.6	2302.6	2309.9
10°	2299.7	2291.0	2288.1	2286.6	2293.9
12.5°	2279.3	2269.1	2267.6	2266.2	2273.5
15°	2253.0	2244.3	2242.8	2241.4	2248.7
17.5°	2225.3	2216.6	2213.6	2212.2	2222.4
20°	2191.7	2183.0	2181.5	2180.1	2188.8
22.5°	2153.8	2145.1	2142.1	2143.6	2152.3
25°	2111.5	2102.7	2101.3	2101.3	2111.5
27.5°	2064.8	2056.0	2056.0	2056.0	2067.7
30°	2015.2	2007.9	2003.5	2005.0	2015.2
32.5°	1964.1	1952.4	1949.5	1951.0	1961.2
35°	1904.3	1895.5	1891.1	1891.1	1901.4
37.5°	1843.0	1834.2	1828.4	1828.4	1838.6
40°	1781.7	1768.6	1762.7	1759.8	1773.0
42.5°	1713.1	1702.9	1689.8	1689.8	1701.5
45°	1640.2	1628.5	1616.8	1616.8	1628.5
47.5°	1565.7	1554.1	1540.9	1540.9	1552.6
50°	1486.9	1475.3	1460.7	1460.7	1473.8
52.5°	1406.7	1393.6	1377.5	1376.0	1389.2
55°	1322.1	1307.5	1290.0	1292.9	1303.1
57.5°	1236.0	1217.0	1199.5	1199.5	1215.5
60°	1138.2	1122.1	1103.2	1106.1	1126.5
62.5°	1044.8	1024.4	1005.4	1012.7	1030.2
65°	942.7	925.1	903.3	914.9	936.8
67.5°	842.0	823.0	805.5	820.1	830.3
70°	735.4	717.9	704.8	704.8	703.3
72.5°	628.9	612.9	610.0	582.2	564.7
75°	523.9	509.3	500.5	446.5	423.2
77.5°	414.4	410.0	382.3	325.4	318.1
80°	309.4	312.3	262.7	264.1	270.0
82.5°	213.0	208.7	197.0	188.2	185.3
85°	122.6	115.3	115.3	109.4	106.5
87.5°	40.9	45.2	45.2	45.2	46.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)