

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: P239007

Luminaire Tested: **24ENA-LD2-40-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239007
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-LD2-40-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
AIR-VENTED OPTION
Light Source: (224)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3692.5 lumens
Efficiency: N/A
Efficacy: 108.9 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

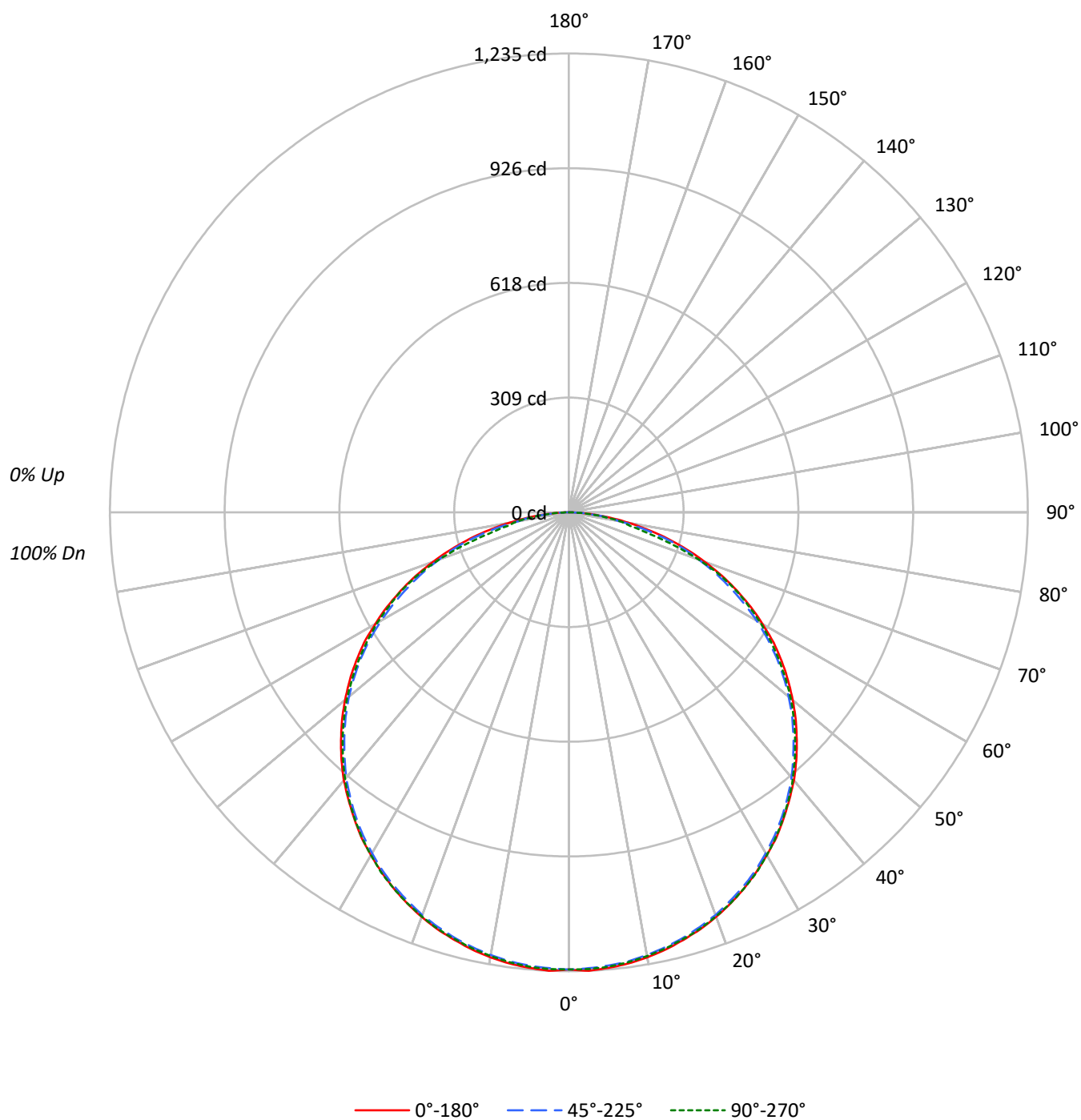
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2073	2073	2073
5°	2081	2071	2076
10°	2080	2070	2075
15°	2078	2068	2074
20°	2078	2068	2075
25°	2075	2065	2075
30°	2073	2061	2073
35°	2071	2057	2068
40°	2072	2050	2062
45°	2066	2037	2051
50°	2061	2024	2042
55°	2053	2003	2024
60°	2028	1965	2007
65°	1987	1904	1975
70°	1915	1835	1832
75°	1803	1722	1456
80°	1587	1348	1385
85°	1253	1177	1088



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.6	3.2
10°-20°	335.2	9.1
20°-30°	512.9	13.9
30°-40°	627.0	17.0
40°-50°	662.5	17.9
50°-60°	613.9	16.6
60°-70°	480.9	13.0
70°-80°	271.9	7.4
80°-90°	71.6	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°	964.7	26.1
0°-40°	1591.7	43.1
0°-60°	2868.1	77.7
0°-90°	3692.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3692.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1230	1230	1230	1230	1230	
5°	1230	1227	1224	1224	1228	117
15°	1191	1187	1186	1185	1189	337
25°	1116	1112	1111	1111	1116	515
35°	1007	1002	1000	1000	1005	630
45°	867	861	855	855	861	669
55°	699	691	682	684	689	624
65°	498	489	478	484	495	493
75°	277	269	265	236	224	291
85°	65	61	61	58	56	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1230.5	1230.5	1230.5	1230.5	1230.5
2.5°	1235.2	1229.8	1228.2	1226.7	1230.5
5°	1230.5	1226.7	1224.4	1223.6	1227.5
7.5°	1225.1	1220.5	1219.0	1217.4	1221.3
10°	1215.9	1211.3	1209.7	1208.9	1212.8
12.5°	1205.1	1199.7	1198.9	1198.1	1202.0
15°	1191.2	1186.6	1185.8	1185.0	1188.9
17.5°	1176.5	1171.9	1170.4	1169.6	1175.0
20°	1158.8	1154.2	1153.4	1152.6	1157.2
22.5°	1138.7	1134.1	1132.6	1133.3	1138.0
25°	1116.4	1111.7	1111.0	1111.0	1116.4
27.5°	1091.7	1087.0	1087.0	1087.0	1093.2
30°	1065.4	1061.6	1059.3	1060.0	1065.4
32.5°	1038.4	1032.3	1030.7	1031.5	1036.9
35°	1006.8	1002.2	999.9	999.9	1005.3
37.5°	974.4	969.8	966.7	966.7	972.1
40°	942.0	935.1	932.0	930.4	937.4
42.5°	905.7	900.3	893.4	893.4	899.6
45°	867.2	861.0	854.8	854.8	861.0
47.5°	827.8	821.6	814.7	814.7	820.9
50°	786.2	780.0	772.3	772.3	779.2
52.5°	743.7	736.8	728.3	727.5	734.5
55°	699.0	691.3	682.0	683.5	688.9
57.5°	653.5	643.4	634.2	634.2	642.7
60°	601.8	593.3	583.3	584.8	595.6
62.5°	552.4	541.6	531.6	535.4	544.7
65°	498.4	489.1	477.6	483.7	495.3
67.5°	445.2	435.1	425.9	433.6	439.0
70°	388.8	379.6	372.6	372.6	371.9
72.5°	332.5	324.0	322.5	307.8	298.6
75°	277.0	269.3	264.6	236.1	223.7
77.5°	219.1	216.8	202.1	172.0	168.2
80°	163.6	165.1	138.9	139.6	142.7
82.5°	112.6	110.3	104.2	99.5	98.0
85°	64.8	60.9	60.9	57.9	56.3
87.5°	21.6	23.9	23.9	23.9	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)