

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: P238967

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238967
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-LD2-40-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3787.1 lumens
Efficiency: N/A
Efficacy: 111.7 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

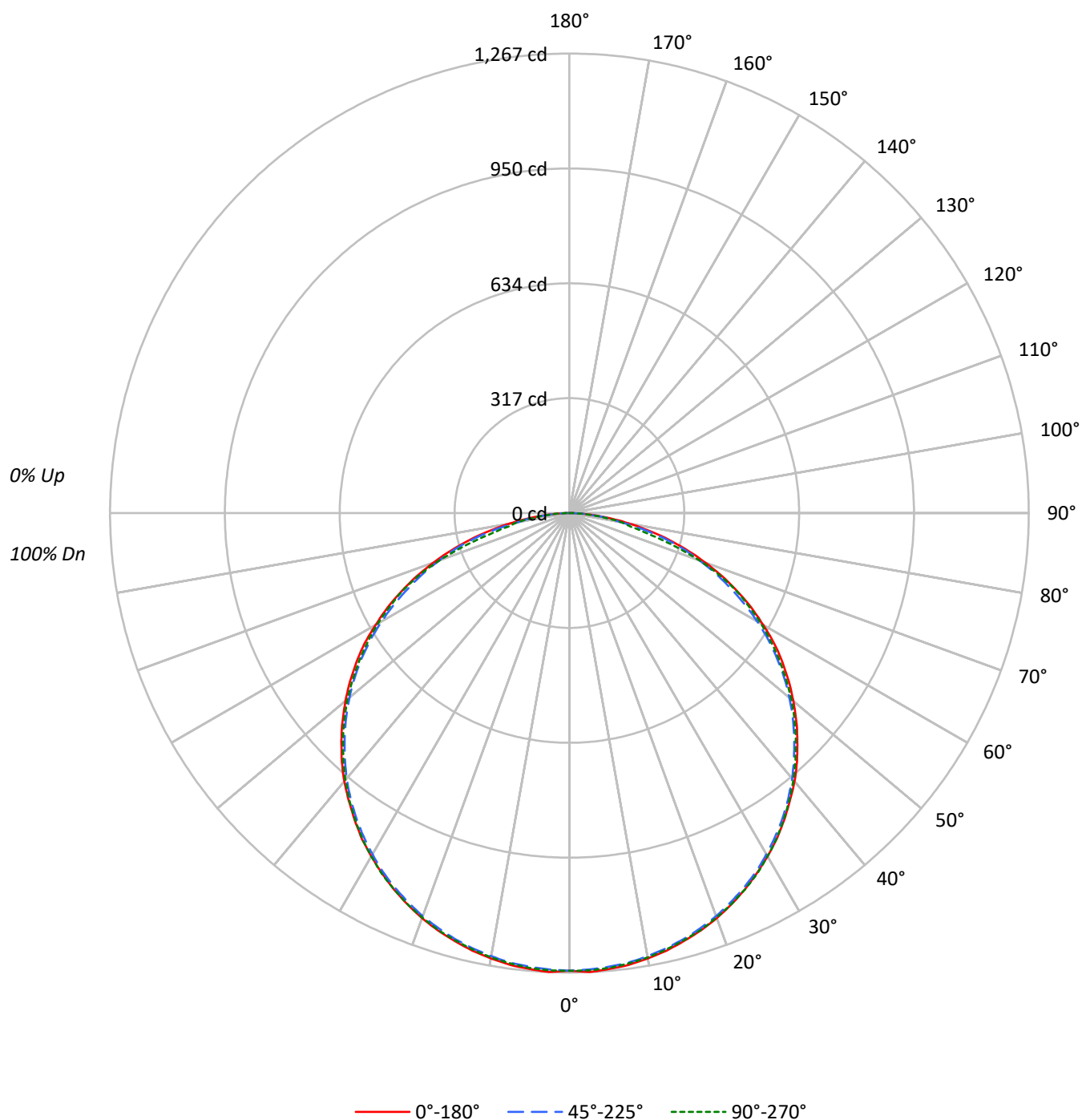
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1933	1933	1933
5°	1940	1931	1936
10°	1940	1930	1935
15°	1937	1928	1934
20°	1937	1928	1935
25°	1935	1926	1935
30°	1933	1921	1933
35°	1931	1917	1928
40°	1932	1911	1922
45°	1926	1899	1913
50°	1921	1887	1904
55°	1914	1868	1887
60°	1891	1832	1871
65°	1853	1775	1841
70°	1786	1712	1708
75°	1681	1606	1358
80°	1480	1256	1291
85°	1169	1098	1016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.5	3.2
10°-20°	343.8	9.1
20°-30°	526.1	13.9
30°-40°	643.0	17.0
40°-50°	679.5	17.9
50°-60°	629.6	16.6
60°-70°	493.3	13.0
70°-80°	278.9	7.4
80°-90°	73.4	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°	989.4	26.1
0°-40°	1632.5	43.1
0°-60°	2941.6	77.7
0°-90°	3787.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3787.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1262	1258	1256	1255	1259	120
15°	1222	1217	1216	1215	1219	345
25°	1145	1140	1139	1139	1145	528
35°	1033	1028	1026	1026	1031	647
45°	889	883	877	877	883	686
55°	717	709	700	701	707	640
65°	511	502	490	496	508	505
75°	284	276	271	242	230	299
85°	66	62	62	59	58	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1262.1	1262.1	1262.1	1262.1	1262.1
2.5°	1266.8	1261.3	1259.7	1258.1	1262.1
5°	1262.1	1258.1	1255.8	1255.0	1258.9
7.5°	1256.6	1251.8	1250.2	1248.6	1252.6
10°	1247.1	1242.3	1240.7	1239.9	1243.9
12.5°	1236.0	1230.4	1229.6	1228.9	1232.8
15°	1221.7	1217.0	1216.2	1215.4	1219.4
17.5°	1206.7	1202.0	1200.4	1199.6	1205.1
20°	1188.5	1183.8	1183.0	1182.2	1186.9
22.5°	1167.9	1163.2	1161.6	1162.4	1167.1
25°	1145.0	1140.2	1139.4	1139.4	1145.0
27.5°	1119.7	1114.9	1114.9	1114.9	1121.2
30°	1092.8	1088.8	1086.4	1087.2	1092.8
32.5°	1065.1	1058.7	1057.1	1057.9	1063.5
35°	1032.6	1027.9	1025.5	1025.5	1031.0
37.5°	999.4	994.6	991.5	991.5	997.0
40°	966.2	959.0	955.9	954.3	961.4
42.5°	929.0	923.4	916.3	916.3	922.6
45°	889.4	883.1	876.7	876.7	883.1
47.5°	849.0	842.7	835.6	835.6	841.9
50°	806.3	800.0	792.1	792.1	799.2
52.5°	762.8	755.7	747.0	746.2	753.3
55°	716.9	709.0	699.5	701.1	706.6
57.5°	670.2	659.9	650.4	650.4	659.1
60°	617.2	608.5	598.2	599.8	610.9
62.5°	566.6	555.5	545.2	549.1	558.6
65°	511.2	501.7	489.8	496.1	508.0
67.5°	456.6	446.3	436.8	444.7	450.2
70°	398.8	389.3	382.2	382.2	381.4
72.5°	341.0	332.3	330.8	315.7	306.2
75°	284.1	276.2	271.4	242.1	229.5
77.5°	224.7	222.3	207.3	176.5	172.5
80°	167.8	169.3	142.4	143.2	146.4
82.5°	115.5	113.2	106.8	102.1	100.5
85°	66.5	62.5	62.5	59.3	57.8
87.5°	22.2	24.5	24.5	24.5	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)