

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: P238968

Luminaire Tested: **24EN-LD2-40-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238968
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-L950-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)5000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4013.6 lumens
Efficiency: N/A
Efficacy: 118.4 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

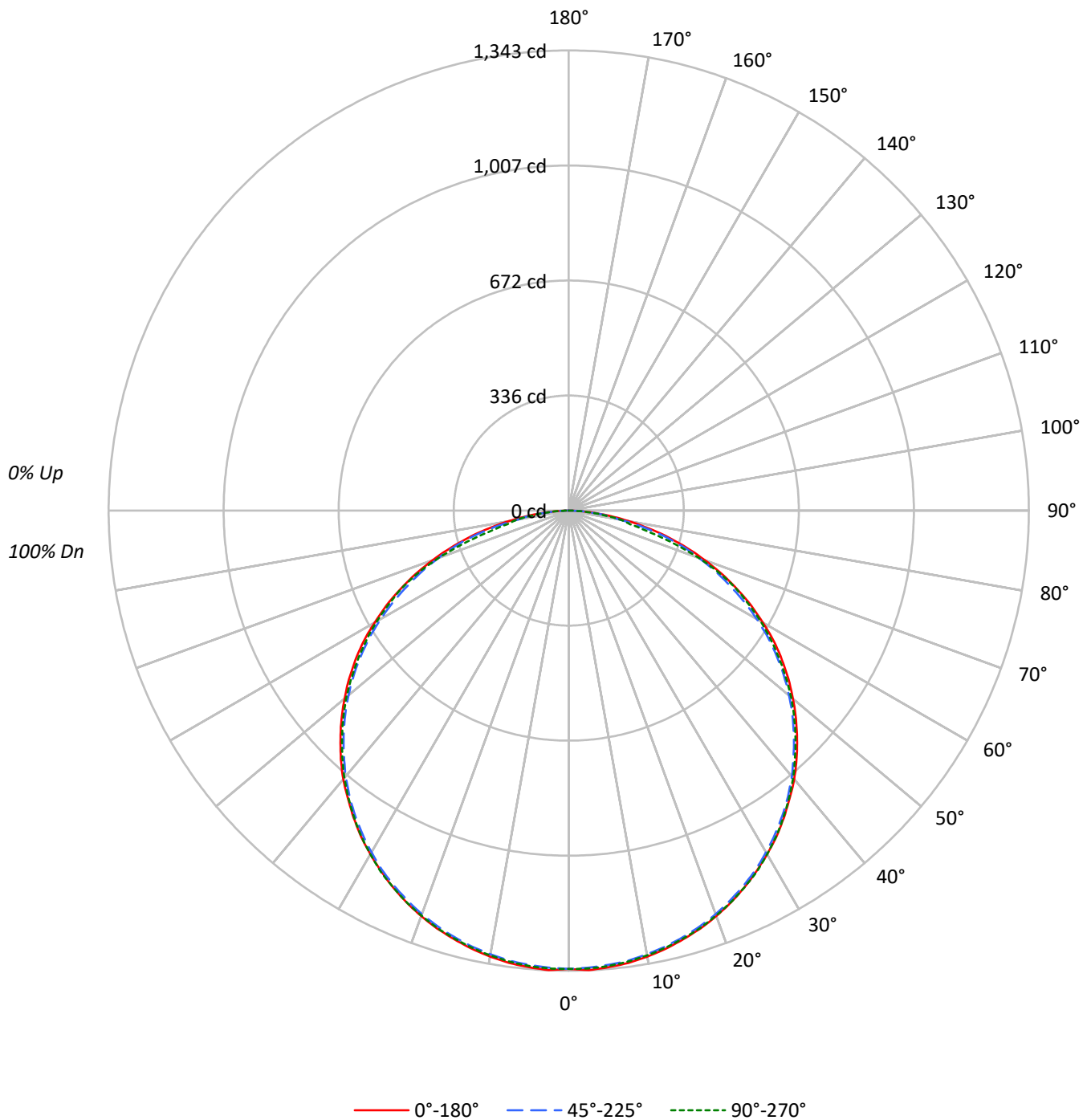
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238968

CATALOG NUMBER: 24EN-LD2-40-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238968

CATALOG NUMBER: 24EN-LD2-40-UNV-L950-CD1-U

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°	2049	2049	2049
5°	2057	2046	2051
10°	2055	2045	2050
15°	2053	2044	2049
20°	2053	2043	2050
25°	2051	2041	2051
30°	2048	2036	2048
35°	2046	2032	2043
40°	2047	2025	2037
45°	2042	2013	2027
50°	2036	2000	2018
55°	2029	1979	2000
60°	2004	1942	1983
65°	1963	1881	1951
70°	1893	1814	1810
75°	1782	1702	1439
80°	1568	1331	1368
85°	1237	1163	1075



TEST NUMBER: P238968

CATALOG NUMBER: 24EN-LD2-40-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.7	3.2
10°-20°	364.4	9.1
20°-30°	557.5	13.9
30°-40°	681.5	17.0
40°-50°	720.1	17.9
50°-60°	667.2	16.6
60°-70°	522.8	13.0
70°-80°	295.5	7.4
80°-90°	77.8	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°	1048.6	26.1
0°-40°	1730.1	43.1
0°-60°	3117.5	77.7
0°-90°	4013.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4013.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1338	1333	1331	1330	1334	127
15°	1295	1290	1289	1288	1292	366
25°	1213	1208	1208	1208	1213	559
35°	1094	1089	1087	1087	1093	685
45°	943	936	929	929	936	727
55°	760	751	741	743	749	679
65°	542	532	519	526	538	536
75°	301	293	288	257	243	317
85°	70	66	66	63	61	83
90°	0	0	0	0	0	



TEST NUMBER: P238968

CATALOG NUMBER: 24EN-LD2-40-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1337.6	1337.6	1337.6	1337.6	1337.6
2.5°	1342.6	1336.7	1335.0	1333.4	1337.6
5°	1337.6	1333.4	1330.8	1330.0	1334.2
7.5°	1331.7	1326.7	1325.0	1323.3	1327.5
10°	1321.6	1316.6	1314.9	1314.1	1318.3
12.5°	1309.9	1304.0	1303.2	1302.3	1306.5
15°	1294.8	1289.8	1288.9	1288.1	1292.3
17.5°	1278.9	1273.8	1272.1	1271.3	1277.2
20°	1259.6	1254.5	1253.7	1252.9	1257.9
22.5°	1237.8	1232.7	1231.1	1231.9	1236.9
25°	1213.4	1208.4	1207.6	1207.6	1213.4
27.5°	1186.6	1181.6	1181.6	1181.6	1188.3
30°	1158.1	1153.9	1151.4	1152.2	1158.1
32.5°	1128.7	1122.0	1120.4	1121.2	1127.1
35°	1094.4	1089.3	1086.8	1086.8	1092.7
37.5°	1059.1	1054.1	1050.8	1050.8	1056.6
40°	1023.9	1016.4	1013.0	1011.3	1018.9
42.5°	984.5	978.6	971.1	971.1	977.8
45°	942.6	935.9	929.2	929.2	935.9
47.5°	899.8	893.1	885.6	885.6	892.3
50°	854.5	847.8	839.4	839.4	847.0
52.5°	808.4	800.9	791.6	790.8	798.3
55°	759.8	751.4	741.3	743.0	748.9
57.5°	710.3	699.4	689.3	689.3	698.5
60°	654.1	644.9	634.0	635.7	647.4
62.5°	600.4	588.7	577.8	582.0	592.0
65°	541.7	531.7	519.1	525.8	538.4
67.5°	483.9	473.0	462.9	471.3	477.2
70°	422.7	412.6	405.0	405.0	404.2
72.5°	361.4	352.2	350.5	334.6	324.5
75°	301.1	292.7	287.6	256.6	243.2
77.5°	238.2	235.6	219.7	187.0	182.8
80°	177.8	179.5	150.9	151.8	155.1
82.5°	122.4	119.9	113.2	108.2	106.5
85°	70.4	66.2	66.2	62.9	61.2
87.5°	23.5	26.0	26.0	26.0	26.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)