

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: P238975

Luminaire Tested: **24EN-LD2-49-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238975
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-LD2-49-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (308)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4592.0 lumens
Efficiency: N/A
Efficacy: 108.8 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

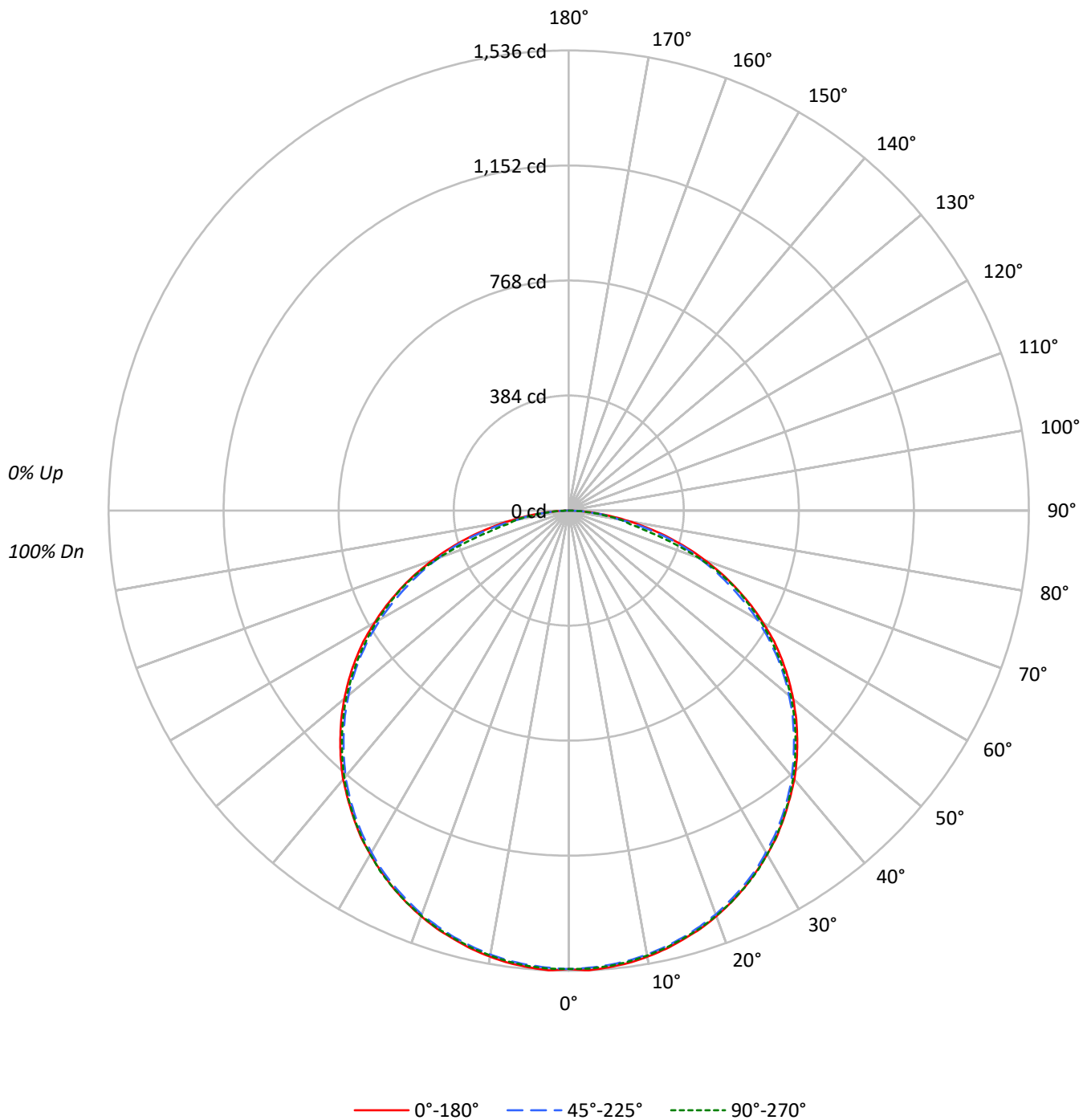
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238975

CATALOG NUMBER: 24EN-LD2-49-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238975

CATALOG NUMBER: 24EN-LD2-49-UNV-L940-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°	2344	2344	2344
5°	2353	2341	2347
10°	2352	2340	2346
15°	2349	2338	2344
20°	2349	2338	2346
25°	2346	2335	2346
30°	2343	2330	2343
35°	2341	2325	2338
40°	2342	2317	2331
45°	2336	2303	2319
50°	2330	2288	2309
55°	2321	2265	2288
60°	2293	2222	2269
65°	2246	2152	2232
70°	2166	2075	2071
75°	2038	1948	1646
80°	1794	1523	1566
85°	1416	1332	1230



TEST NUMBER: P238975

CATALOG NUMBER: 24EN-LD2-49-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.0	3.2
10°-20°	416.9	9.1
20°-30°	637.9	13.9
30°-40°	779.7	17.0
40°-50°	823.9	17.9
50°-60°	763.4	16.6
60°-70°	598.1	13.0
70°-80°	338.1	7.4
80°-90°	89.0	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°	1199.7	26.1
0°-40°	1979.4	43.1
0°-60°	3566.8	77.7
0°-90°	4592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4592.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1530	1530	1530	1530	1530	
5°	1530	1526	1523	1522	1526	146
15°	1481	1476	1475	1474	1478	418
25°	1388	1383	1382	1382	1388	640
35°	1252	1246	1244	1244	1250	784
45°	1078	1071	1063	1063	1071	832
55°	869	860	848	850	857	776
65°	620	608	594	602	616	613
75°	344	335	329	294	278	362
85°	81	76	76	72	70	95
90°	0	0	0	0	0	



TEST NUMBER: P238975

CATALOG NUMBER: 24EN-LD2-49-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1530.3	1530.3	1530.3	1530.3	1530.3
2.5°	1536.1	1529.4	1527.5	1525.5	1530.3
5°	1530.3	1525.5	1522.7	1521.7	1526.5
7.5°	1523.6	1517.9	1515.9	1514.0	1518.8
10°	1512.1	1506.3	1504.4	1503.5	1508.3
12.5°	1498.7	1492.0	1491.0	1490.0	1494.8
15°	1481.4	1475.6	1474.7	1473.7	1478.5
17.5°	1463.2	1457.4	1455.5	1454.5	1461.2
20°	1441.1	1435.3	1434.4	1433.4	1439.2
22.5°	1416.2	1410.4	1408.5	1409.4	1415.2
25°	1388.3	1382.6	1381.6	1381.6	1388.3
27.5°	1357.6	1351.9	1351.9	1351.9	1359.5
30°	1325.0	1320.2	1317.3	1318.3	1325.0
32.5°	1291.4	1283.8	1281.8	1282.8	1289.5
35°	1252.1	1246.3	1243.5	1243.5	1250.2
37.5°	1211.8	1206.0	1202.2	1202.2	1208.9
40°	1171.5	1162.9	1159.0	1157.1	1165.7
42.5°	1126.4	1119.7	1111.0	1111.0	1118.7
45°	1078.4	1070.8	1063.1	1063.1	1070.8
47.5°	1029.5	1021.8	1013.2	1013.2	1020.9
50°	977.7	970.0	960.4	960.4	969.0
52.5°	924.9	916.3	905.7	904.8	913.4
55°	869.3	859.7	848.2	850.1	856.8
57.5°	812.7	800.2	788.7	788.7	799.2
60°	748.4	737.8	725.3	727.3	740.7
62.5°	687.0	673.5	661.1	665.9	677.4
65°	619.8	608.3	593.9	601.6	616.0
67.5°	553.6	541.1	529.6	539.2	545.9
70°	483.6	472.1	463.4	463.4	462.5
72.5°	413.5	403.0	401.1	382.8	371.3
75°	344.4	334.8	329.1	293.6	278.2
77.5°	272.5	269.6	251.4	214.0	209.2
80°	203.4	205.3	172.7	173.7	177.5
82.5°	140.1	137.2	129.5	123.8	121.9
85°	80.6	75.8	75.8	72.0	70.0
87.5°	26.9	29.7	29.7	29.7	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)