

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: P238771

Luminaire Tested: **14EN-LD2-43-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238771
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1710-395-5)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14EN-LD2-43-UNV-L840-CD1-U
Description: METALUX ENCOUNTER 1X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4421.7 lumens
Efficiency: N/A
Efficacy: 117.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 1' x L: 3.83' x H: 0')
CIE Type: Direct

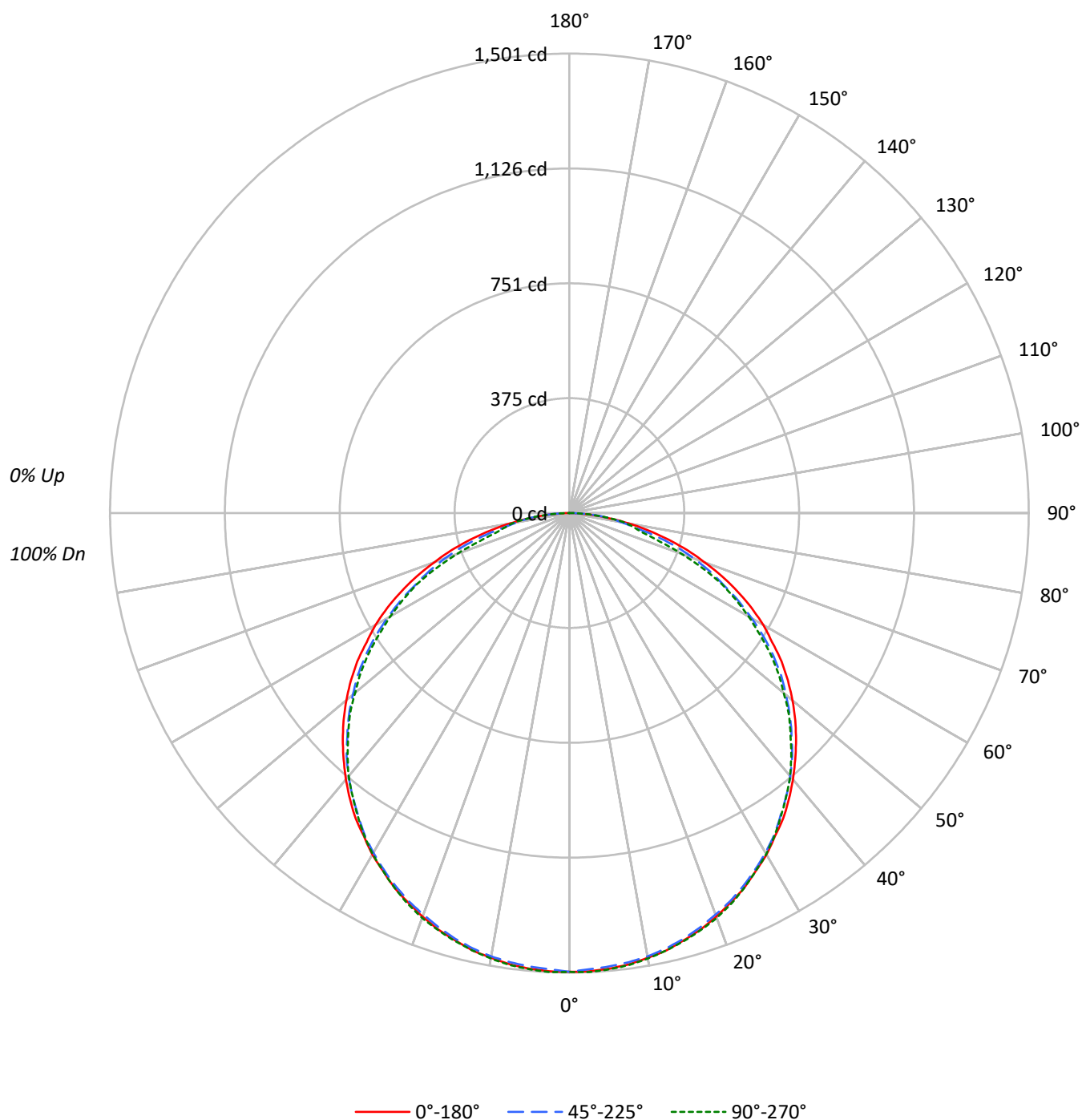
Input Watts (W): 37.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P238771

CATALOG NUMBER: 14EN-LD2-43-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P238771

CATALOG NUMBER: 14EN-LD2-43-UNV-L840-CD1-U

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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	109	104	99	95	106	101	97	94		97	94	91			93	90	88			90
2	99	90	83	77	96	88	82	76		85	79	75			81	77	73			78
3	90	79	71	64	87	77	70	63		74	68	62			72	66	61			69
4	82	70	61	54	80	68	60	54		66	59	53			64	57	52			61
5	75	62	53	46	73	61	53	46		59	51	46			57	50	45			55
6	69	56	47	40	68	55	46	40		53	46	40			51	45	39			50
7	64	51	42	36	63	50	41	35		48	41	35			47	40	35			45
8	60	46	38	32	58	45	37	32		44	37	31			43	36	31			42
9	56	42	34	28	54	42	34	28		41	33	28			40	33	28			38
10	52	39	31	26	51	39	31	26		38	30	26			37	30	25			36

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4208	4208	4208
5°	4211	4191	4217
10°	4206	4193	4213
15°	4200	4186	4207
20°	4192	4171	4206
25°	4187	4165	4187
30°	4177	4154	4169
35°	4175	4127	4135
40°	4165	4113	4113
45°	4159	4076	4057
50°	4157	4034	3993
55°	4143	3983	3926
60°	4109	3860	3794
65°	4023	3697	3650
70°	3858	3551	3205
75°	3627	3196	2688
80°	3213	2760	3024
85°	2484	2861	2713



TEST NUMBER: P238771

CATALOG NUMBER: 14EN-LD2-43-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.9	3.2
10°-20°	407.6	9.2
20°-30°	621.2	14.0
30°-40°	756.5	17.1
40°-50°	795.4	18.0
50°-60°	730.1	16.5
60°-70°	560.9	12.7
70°-80°	313.1	7.1
80°-90°	95.0	2.1
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°	1170.7	26.5
0°-40°	1927.1	43.6
0°-60°	3452.6	78.1
0°-90°	4421.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4421.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1498	1498	1498	1498	1498	
5°	1494	1494	1487	1494	1496	142
15°	1445	1445	1440	1445	1447	408
25°	1351	1347	1344	1349	1351	622
35°	1218	1213	1204	1206	1206	761
45°	1047	1040	1026	1022	1022	808
55°	846	839	814	800	802	755
65°	606	589	556	549	549	598
75°	334	318	295	255	248	353
85°	77	80	89	86	84	93
90°	0	0	0	0	0	



TEST NUMBER: P238771

CATALOG NUMBER: 14EN-LD2-43-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1498.5	1498.5	1498.5	1498.5	1498.5
2.5°	1498.5	1498.5	1491.5	1498.5	1500.9
5°	1493.9	1493.9	1486.8	1493.9	1496.2
7.5°	1486.8	1486.8	1479.8	1484.5	1489.2
10°	1475.2	1475.2	1470.5	1475.2	1477.5
12.5°	1463.5	1461.1	1456.5	1461.1	1463.5
15°	1444.8	1444.8	1440.1	1444.8	1447.1
17.5°	1426.1	1423.7	1419.0	1426.1	1428.4
20°	1402.7	1400.3	1395.7	1402.7	1407.4
22.5°	1377.0	1374.6	1372.3	1379.3	1381.6
25°	1351.3	1346.6	1344.2	1348.9	1351.3
27.5°	1318.5	1316.2	1313.8	1316.2	1318.5
30°	1288.1	1283.5	1281.1	1281.1	1285.8
32.5°	1250.7	1248.4	1246.0	1248.4	1248.4
35°	1218.0	1213.3	1204.0	1206.3	1206.3
37.5°	1178.3	1171.2	1164.2	1164.2	1164.2
40°	1136.2	1131.5	1122.1	1119.8	1122.1
42.5°	1091.8	1087.1	1077.7	1070.7	1073.1
45°	1047.3	1040.3	1026.3	1021.6	1021.6
47.5°	1000.6	993.6	977.2	970.2	972.5
50°	951.5	942.1	923.4	914.1	914.1
52.5°	900.1	890.7	872.0	860.3	860.3
55°	846.3	839.3	813.6	799.5	801.9
57.5°	785.5	778.5	752.8	736.4	736.4
60°	731.7	717.7	687.3	675.6	675.6
62.5°	670.9	654.6	624.2	610.2	612.5
65°	605.5	589.1	556.4	549.4	549.4
67.5°	540.0	526.0	495.6	483.9	472.2
70°	469.9	455.9	432.5	404.4	390.4
72.5°	404.4	388.1	367.0	325.0	310.9
75°	334.3	317.9	294.6	254.8	247.8
77.5°	266.5	252.5	219.8	210.4	215.1
80°	198.7	194.0	170.7	180.0	187.0
82.5°	133.3	130.9	135.6	140.3	140.3
85°	77.1	79.5	88.8	86.5	84.2
87.5°	32.7	39.7	37.4	37.4	37.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)