

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: P238851

Luminaire Tested: **22EN-LD2-43-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238851
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22EN-LD2-43-UNV-L940-CD1-U
Description: METALUX ENCOUNTER 2X2 LED TROFFER
STANDARD OPTION
Light Source: (168)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4033.6 lumens
Efficiency: N/A
Efficacy: 105.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

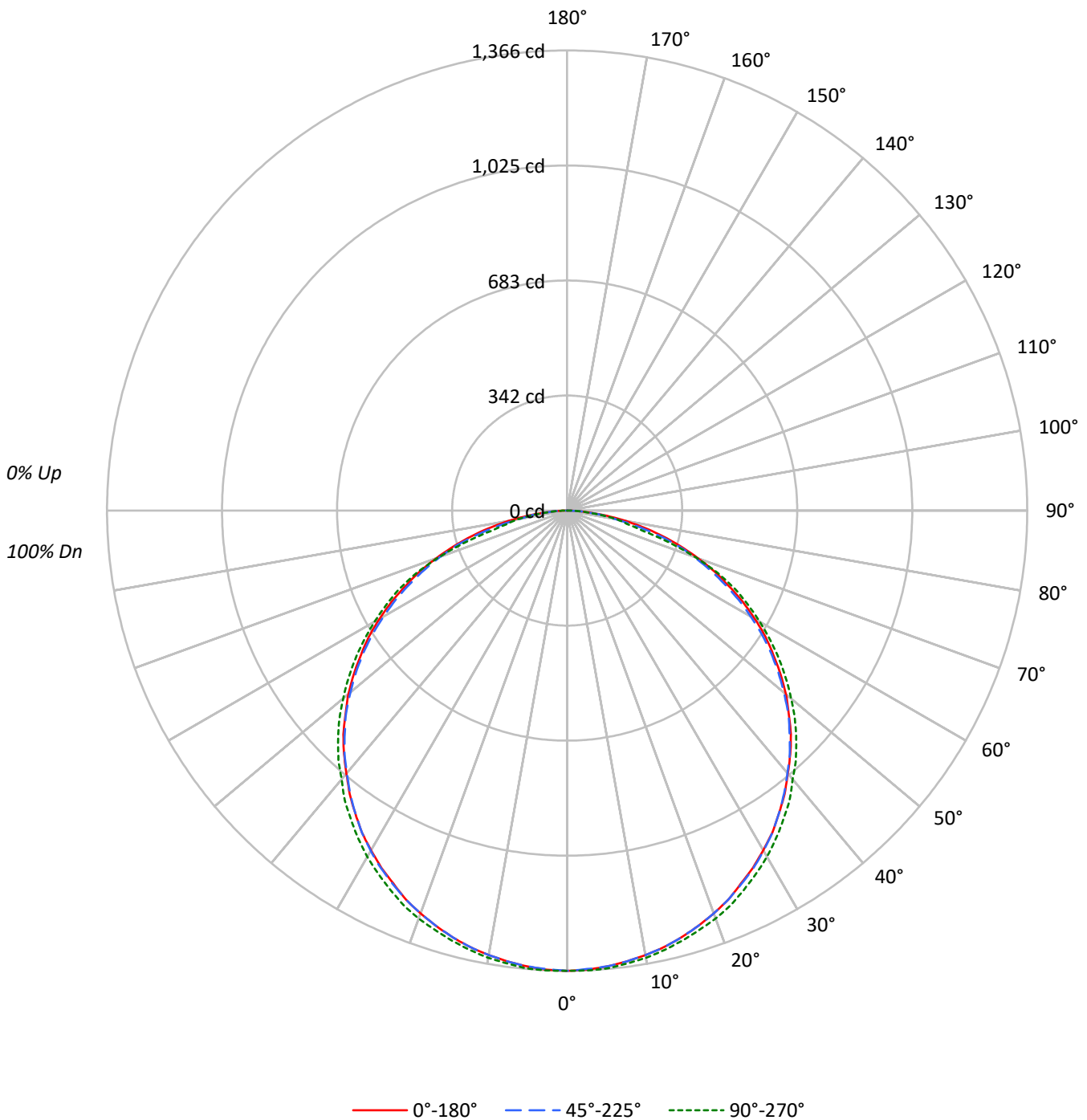
Input Watts (W): 38.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	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	102	102	102	100				100
1	109	104	99	95	106	101	98	94	97	94	91	93	91	88	90	88	86	83				83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69				69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58				58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49				49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37				37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33				33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29				29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26				26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24				24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4376	4376	4376
5°	4367	4367	4386
10°	4357	4357	4384
15°	4348	4348	4381
20°	4337	4337	4392
25°	4316	4323	4388
30°	4305	4313	4388
35°	4288	4288	4376
40°	4261	4252	4355
45°	4255	4227	4357
50°	4223	4183	4325
55°	4174	4128	4288
60°	4121	4029	4225
65°	4009	3900	4163
70°	3863	3748	3806
75°	3639	3411	2907
80°	3202	2674	2787
85°	2326	2252	2175



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.2	3.2
10°-20°	370.9	9.2
20°-30°	566.3	14.0
30°-40°	689.7	17.1
40°-50°	725.9	18.0
50°-60°	668.4	16.6
60°-70°	520.2	12.9
70°-80°	288.8	7.2
80°-90°	74.2	1.8
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°	1066.4	26.4
0°-40°	1756.1	43.5
0°-60°	3150.4	78.1
0°-90°	4033.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4033.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1366	1366	1366	1366	1366	
5°	1358	1358	1358	1362	1364	129
15°	1311	1311	1311	1317	1322	370
25°	1221	1224	1224	1234	1242	564
35°	1097	1097	1097	1109	1119	686
45°	940	933	933	948	962	723
55°	748	746	739	752	768	669
65°	529	523	515	531	549	524
75°	294	288	276	245	235	310
85°	63	59	61	59	59	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1366.4	1366.4	1366.4	1366.4	1366.4
2.5°	1364.4	1362.3	1362.3	1366.4	1366.4
5°	1358.3	1358.3	1358.3	1362.3	1364.4
7.5°	1350.1	1350.1	1350.1	1356.2	1356.2
10°	1339.9	1337.8	1339.9	1344.0	1348.0
12.5°	1327.6	1325.6	1327.6	1331.7	1335.8
15°	1311.3	1311.3	1311.3	1317.4	1321.5
17.5°	1292.9	1290.9	1292.9	1299.0	1305.2
20°	1272.5	1272.5	1272.5	1280.6	1288.8
22.5°	1250.0	1248.0	1250.0	1260.2	1268.4
25°	1221.4	1223.5	1223.5	1233.7	1241.8
27.5°	1194.9	1192.8	1196.9	1205.1	1215.3
30°	1164.2	1164.2	1166.3	1176.5	1186.7
32.5°	1133.6	1131.5	1133.6	1143.8	1154.0
35°	1096.8	1096.8	1096.8	1109.1	1119.3
37.5°	1060.1	1058.0	1058.0	1070.3	1084.6
40°	1019.2	1017.2	1017.2	1031.5	1041.7
42.5°	980.4	978.4	978.4	990.6	1004.9
45°	939.5	933.4	933.4	947.7	962.0
47.5°	892.6	888.5	890.5	902.8	917.1
50°	847.6	841.5	839.5	853.8	868.1
52.5°	798.6	796.6	790.4	802.7	819.0
55°	747.6	745.5	739.4	751.6	768.0
57.5°	698.5	692.4	686.3	696.5	714.9
60°	643.4	637.3	629.1	643.4	659.7
62.5°	588.2	580.1	573.9	586.2	604.6
65°	529.0	522.9	514.7	531.0	549.4
67.5°	473.9	467.7	457.5	471.8	484.1
70°	412.6	404.4	400.3	402.4	406.5
72.5°	353.4	349.3	343.1	326.8	322.7
75°	294.1	288.0	275.7	245.1	234.9
77.5°	234.9	230.8	208.3	181.8	181.8
80°	173.6	171.6	145.0	149.1	151.1
82.5°	118.5	114.4	106.2	104.2	104.2
85°	63.3	59.2	61.3	59.2	59.2
87.5°	24.5	24.5	26.6	24.5	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)