

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: P238887

Luminaire Tested: **24EN-LD2-40-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P238887
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-L840-CD1-U
Description: METALUX ENCOUNTER 2X4 LED TROFFER
STANDARD OPTION
Light Source: (224)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4288.9 lumens
Efficiency: N/A
Efficacy: 126.5 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

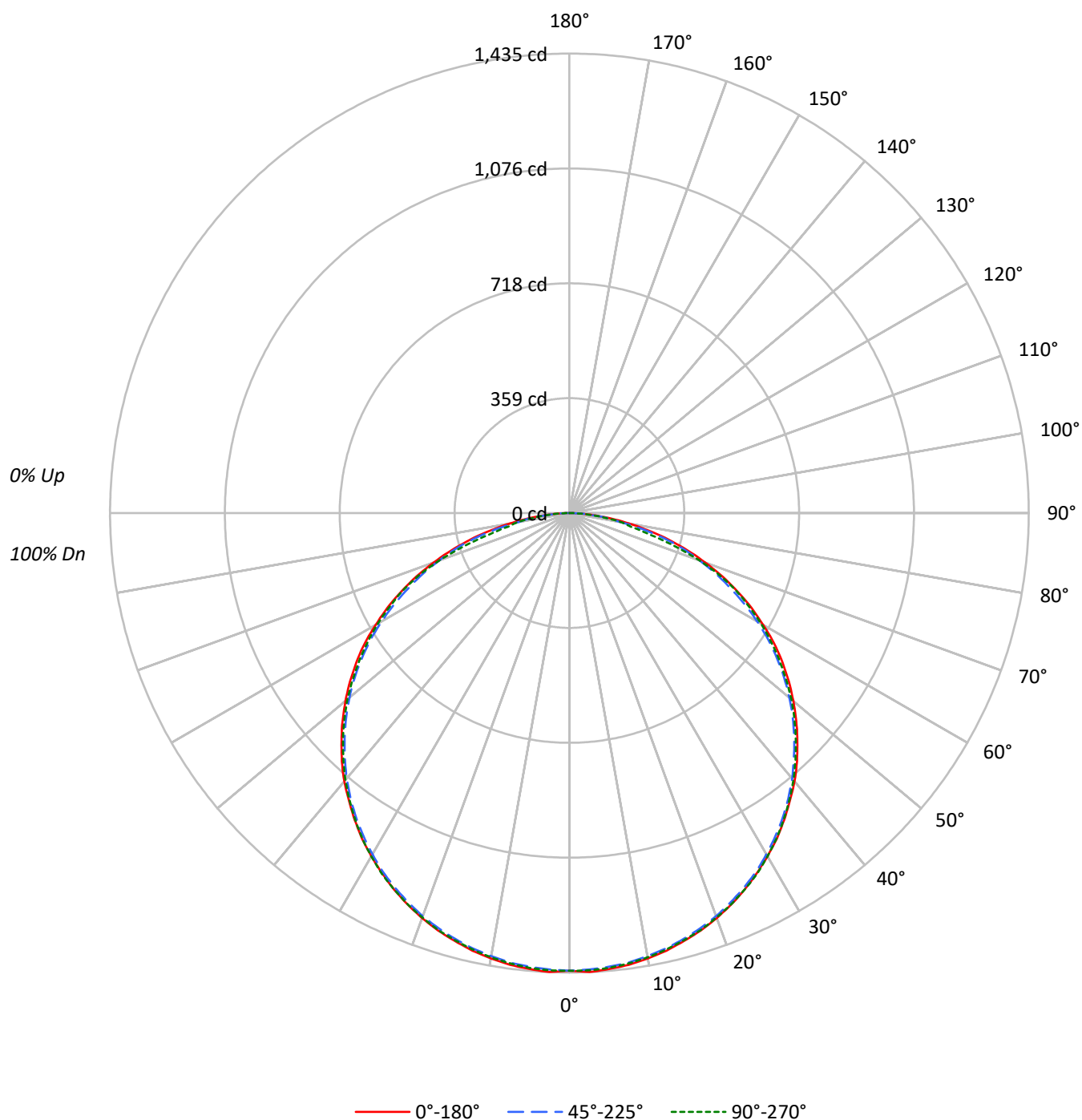
Input Watts (W): 33.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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	98	90	83	77	96	88	82	76		84	79	74			81	77	73			78
3	90	79	70	64	87	77	69	63		74	67	62			71	66	61			69
4	82	70	61	54	79	68	60	53		66	58	53			63	57	52			61
5	75	62	53	46	73	61	52	46		59	51	45			57	50	45			55
6	69	56	47	40	67	55	46	40		53	45	40			51	44	39			50
7	64	50	42	35	62	50	41	35		48	40	35			47	40	35			45
8	60	46	37	31	58	45	37	31		44	36	31			43	36	31			41
9	56	42	34	28	54	42	34	28		40	33	28			39	33	28			38
10	52	39	31	26	51	38	31	25		37	30	25			36	30	25			35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2189	2189	2189
5°	2198	2187	2192
10°	2196	2185	2191
15°	2194	2184	2190
20°	2194	2184	2191
25°	2191	2181	2191
30°	2189	2176	2189
35°	2187	2172	2183
40°	2188	2164	2177
45°	2182	2151	2166
50°	2176	2137	2157
55°	2168	2115	2137
60°	2141	2075	2119
65°	2098	2010	2085
70°	2022	1938	1934
75°	1904	1819	1538
80°	1676	1423	1462
85°	1323	1244	1149



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	3.2
10°-20°	389.4	9.1
20°-30°	595.8	13.9
30°-40°	728.2	17.0
40°-50°	769.5	17.9
50°-60°	713.0	16.6
60°-70°	558.6	13.0
70°-80°	315.8	7.4
80°-90°	83.2	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°	1120.5	26.1
0°-40°	1848.8	43.1
0°-60°	3331.3	77.7
0°-90°	4288.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4288.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1429	1425	1422	1421	1426	136
15°	1384	1378	1377	1376	1381	391
25°	1297	1291	1290	1290	1297	598
35°	1169	1164	1161	1161	1168	732
45°	1007	1000	993	993	1000	777
55°	812	803	792	794	800	725
65°	579	568	555	562	575	572
75°	322	313	307	274	260	338
85°	75	71	71	67	65	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.3	1429.3	1429.3	1429.3	1429.3
2.5°	1434.7	1428.4	1426.6	1424.8	1429.3
5°	1429.3	1424.8	1422.2	1421.3	1425.7
7.5°	1423.0	1417.7	1415.9	1414.1	1418.6
10°	1412.3	1406.9	1405.1	1404.2	1408.7
12.5°	1399.7	1393.5	1392.6	1391.7	1396.2
15°	1383.6	1378.2	1377.3	1376.4	1380.9
17.5°	1366.6	1361.2	1359.4	1358.5	1364.8
20°	1346.0	1340.6	1339.7	1338.8	1344.2
22.5°	1322.7	1317.3	1315.5	1316.4	1321.8
25°	1296.7	1291.3	1290.4	1290.4	1296.7
27.5°	1268.0	1262.6	1262.6	1262.6	1269.8
30°	1237.5	1233.1	1230.4	1231.3	1237.5
32.5°	1206.2	1199.0	1197.2	1198.1	1204.4
35°	1169.4	1164.1	1161.4	1161.4	1167.7
37.5°	1131.8	1126.4	1122.8	1122.8	1129.1
40°	1094.2	1086.1	1082.5	1080.7	1088.8
42.5°	1052.1	1045.8	1037.7	1037.7	1044.9
45°	1007.2	1000.1	992.9	992.9	1000.1
47.5°	961.5	954.4	946.3	946.3	953.5
50°	913.2	906.0	897.0	897.0	905.1
52.5°	863.9	855.8	845.9	845.0	853.1
55°	811.9	802.9	792.2	794.0	800.2
57.5°	759.0	747.4	736.6	736.6	746.5
60°	699.0	689.1	677.5	679.3	691.8
62.5°	641.6	629.1	617.4	621.9	632.7
65°	578.9	568.1	554.7	561.9	575.3
67.5°	517.1	505.4	494.7	503.6	509.9
70°	451.6	440.9	432.8	432.8	431.9
72.5°	386.2	376.4	374.6	357.6	346.8
75°	321.7	312.7	307.4	274.2	259.9
77.5°	254.5	251.8	234.8	199.8	195.4
80°	190.0	191.8	161.3	162.2	165.8
82.5°	130.8	128.1	121.0	115.6	113.8
85°	75.3	70.8	70.8	67.2	65.4
87.5°	25.1	27.8	27.8	27.8	28.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)