

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: P35047

Luminaire Tested: **24EN-LD2-40HP-UNV-L835-CD1-U**

Test Date: 08/25/16

Test Information

Test Method: LM-79-08
Report Number: P35047
Test Lab: INNOVATION CENTER-P3
Test Date: 08/25/16
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-40HP-UNV-L835-CD1-U
Description: ENCOUNTER 2X4 LED TROFFER
Light Source: (308) EATON 3500K LEDS
EL236N077E835
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 660 mA
OT50W/PRG1400C/UNV/DIM/L

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4020.3 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.4 / 1.41
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

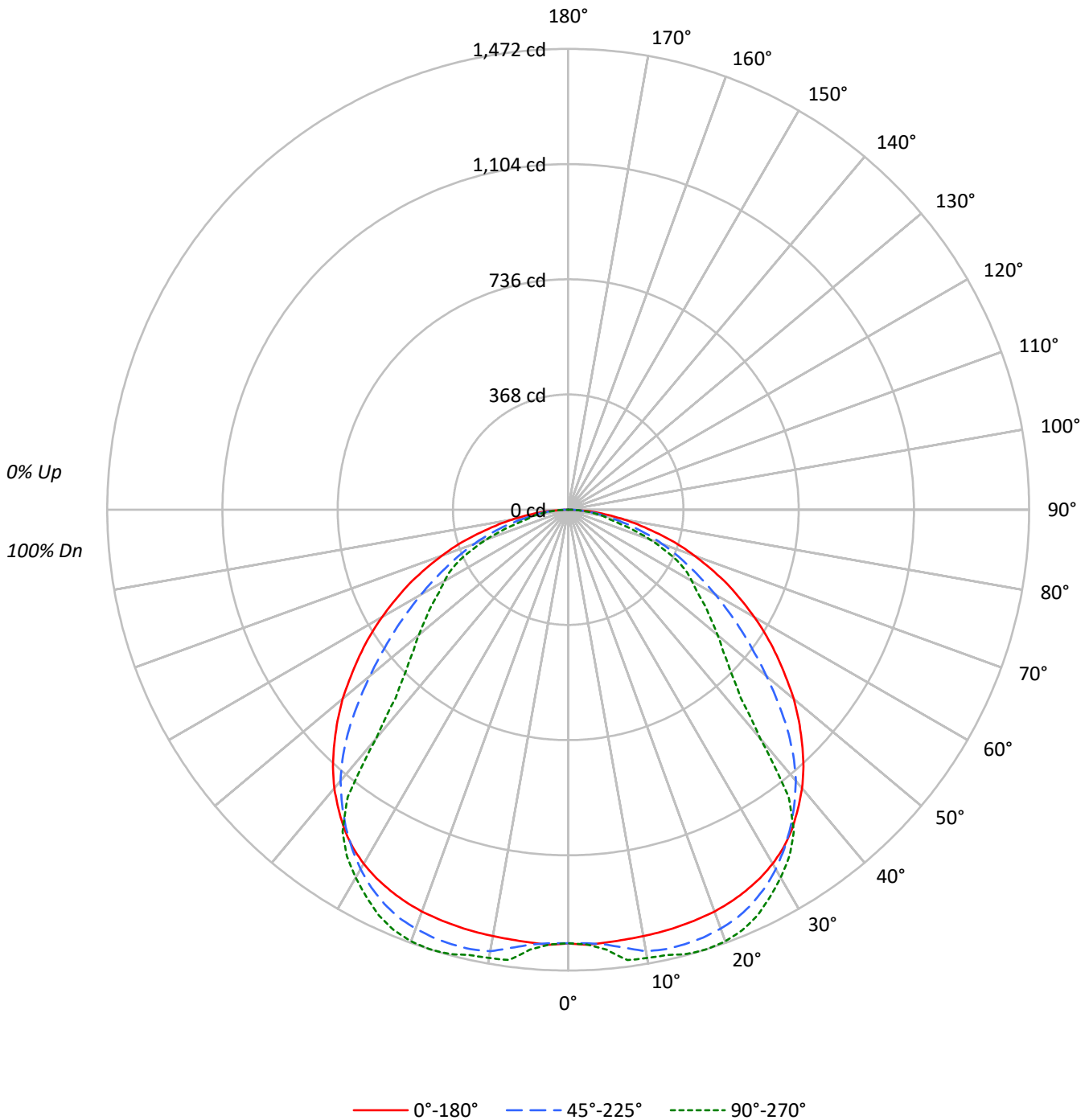
Input Watts (W): 29.5
Input Voltage (V): 120.0
Input Current (A_{in}): 0.247
Voltage Rise (V): NR
Power Factor: 0.9988
Total Harmonic Distortion (THDi): 7.58%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 5 HR
Ambient Temperature (°C): 24.6
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	63	60
4	84	72	63	57	81	70	62	56	68	61	55	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2121	2121	2121
5°	2134	2143	2169
10°	2151	2227	2261
15°	2183	2279	2329
20°	2226	2321	2391
25°	2270	2347	2417
30°	2310	2345	2400
35°	2330	2315	2348
40°	2323	2261	1909
45°	2287	2142	1592
50°	2240	1971	1484
55°	2171	1808	1421
60°	2104	1663	1397
65°	2026	1537	1388
70°	1917	1429	1245
75°	1775	1284	982
80°	1614	1041	988
85°	1476	1002	931



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.3	3.3
10°-20°	404.0	10.0
20°-30°	638.8	15.9
30°-40°	770.8	19.2
40°-50°	724.6	18.0
50°-60°	599.7	14.9
60°-70°	439.4	10.9
70°-80°	239.7	6.0
80°-90°	69.1	1.7
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°	1177.1	29.3
0°-40°	1947.9	48.5
0°-60°	3272.2	81.4
0°-90°	4020.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4020.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1385	1385	1385	1385	1385	
5°	1388	1387	1394	1400	1411	132
15°	1377	1398	1437	1453	1469	390
25°	1343	1360	1389	1417	1430	620
35°	1246	1230	1238	1254	1256	778
45°	1056	1018	989	842	735	814
55°	813	766	677	559	532	727
65°	559	505	424	377	383	552
75°	300	261	217	177	166	319
85°	84	65	57	53	53	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1385	1385	1385	1385	1385
2.5°	1391	1386	1386	1385	1390
5°	1388	1387	1394	1400	1411
7.5°	1385	1389	1412	1438	1451
10°	1383	1394	1432	1449	1454
12.5°	1381	1397	1438	1447	1457
15°	1377	1398	1437	1453	1469
17.5°	1372	1395	1433	1456	1472
20°	1366	1389	1424	1450	1467
22.5°	1356	1378	1411	1439	1454
25°	1343	1360	1389	1417	1430
27.5°	1327	1338	1361	1384	1395
30°	1306	1308	1326	1345	1357
32.5°	1280	1271	1284	1303	1314
35°	1246	1230	1238	1254	1256
37.5°	1205	1182	1186	1178	1156
40°	1162	1132	1131	1062	955
42.5°	1112	1074	1064	942	816
45°	1056	1018	989	842	735
47.5°	999	961	907	758	672
50°	940	896	827	680	623
52.5°	875	831	749	618	574
55°	813	766	677	559	532
57.5°	751	702	608	507	488
60°	687	637	543	462	456
62.5°	621	575	480	420	425
65°	559	505	424	377	383
67.5°	492	443	371	332	330
70°	428	379	319	281	278
72.5°	368	320	269	229	223
75°	300	261	217	177	166
77.5°	238	213	168	133	130
80°	183	168	118	109	112
82.5°	127	115	90	82	81
85°	84	65	57	53	53
87.5°	29	28	27	26	29
90°	0	0	0	0	0

(END OF REPORT)