

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: P35235

Luminaire Tested: **14EN-LD2-43HP-UNV-L835-CD1-U**

Test Date: 10/08/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35235  
Test Lab: INNOVATION CENTER-P3  
Test Date: 10/08/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-43HP-UNV-L835-CD1-U  
Description: ENCOUNTER 1X4 LED TROFFER  
Light Source: (392) EATON 3500K LEDS  
EL232N098E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 800 mA  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

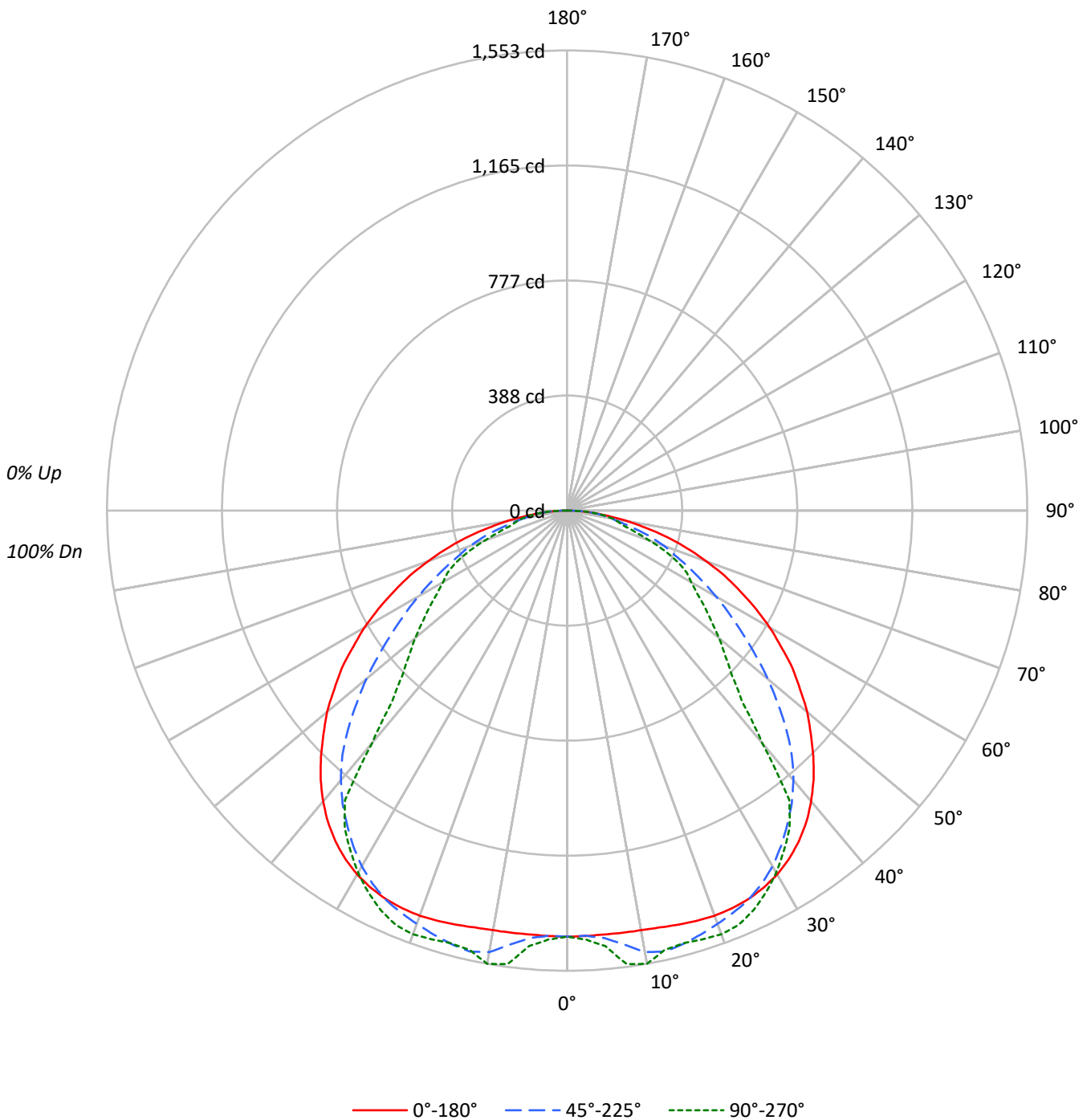
Lumens per Lamp: N/A  
Luminaire Lumens: 4328.4 lumens  
Efficiency: N/A  
Efficacy: 121.2 lumens/watt  
Spacing Criteria (0/90/45): 1.45 / 1.4 / 1.42  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 35.7  
Input Voltage (V): 120.0  
Input Current (A<sub>in</sub>): 0.299  
Voltage Rise (V): NR  
Power Factor: 0.9986  
Total Harmonic Distortion (THDi): 7.98%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.5  
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	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4845	4845	4845
5°	4857	4898	4989
10°	4920	5177	5314
15°	5048	5281	5275
20°	5217	5321	5458
25°	5380	5387	5532
30°	5517	5393	5490
35°	5607	5327	5385
40°	5635	5226	4509
45°	5599	4989	3750
50°	5546	4639	3507
55°	5458	4242	3325
60°	5324	3909	3255
65°	5135	3596	3301
70°	4906	3428	2906
75°	4609	3072	2578
80°	4056	2814	3027
85°	3402	3364	3364



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.7	3.3
10°-20°	424.0	9.8
20°-30°	672.1	15.5
30°-40°	817.6	18.9
40°-50°	779.3	18.0
50°-60°	650.9	15.0
60°-70°	480.5	11.1
70°-80°	271.2	6.3
80°-90°	92.1	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°	1236.8	28.6
0°-40°	2054.3	47.5
0°-60°	3484.6	80.5
0°-90°	4328.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4328.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1436	1441	1448	1465	1475	137
15°	1447	1482	1514	1508	1512	410
25°	1447	1447	1449	1478	1488	667
35°	1363	1320	1295	1310	1309	852
45°	1175	1097	1047	897	787	906
55°	929	836	722	600	566	828
65°	644	556	451	409	414	639
75°	354	287	236	205	198	371
85°	88	79	87	86	87	101
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1438	1438	1438	1438	1438
2.5°	1437	1438	1436	1444	1449
5°	1436	1441	1448	1465	1475
7.5°	1437	1449	1477	1521	1544
10°	1438	1463	1513	1553	1553
12.5°	1441	1476	1524	1522	1519
15°	1447	1482	1514	1508	1512
17.5°	1452	1481	1500	1505	1517
20°	1455	1475	1484	1506	1522
22.5°	1453	1464	1468	1499	1513
25°	1447	1447	1449	1478	1488
27.5°	1435	1426	1421	1447	1453
30°	1418	1399	1386	1405	1411
32.5°	1394	1363	1343	1361	1361
35°	1363	1320	1295	1310	1309
37.5°	1326	1271	1245	1247	1231
40°	1281	1216	1188	1127	1025
42.5°	1231	1158	1123	1009	874
45°	1175	1097	1047	897	787
47.5°	1115	1037	964	815	723
50°	1058	972	885	732	669
52.5°	991	904	801	662	614
55°	929	836	722	600	566
57.5°	856	768	649	540	520
60°	790	698	580	490	483
62.5°	718	626	513	450	456
65°	644	556	451	409	414
67.5°	576	489	394	362	359
70°	498	418	348	305	295
72.5°	426	353	295	253	241
75°	354	287	236	205	198
77.5°	274	229	185	171	176
80°	209	184	145	152	156
82.5°	140	125	121	125	126
85°	88	79	87	86	87
87.5°	39	43	45	47	48
90°	0	0	0	0	0

(END OF REPORT)