

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: P35234

Luminaire Tested: **14EN-LD2-38HP-UNV-L835-CD1-U**

Test Date: 10/08/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35234  
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-LD2-38HP-UNV-L835-CD1-U  
Description: ENCOUNTER 1X4 LED TROFFER  
Light Source: (392) EATON 3500K LEDS  
EL232N098E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 720 mA  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

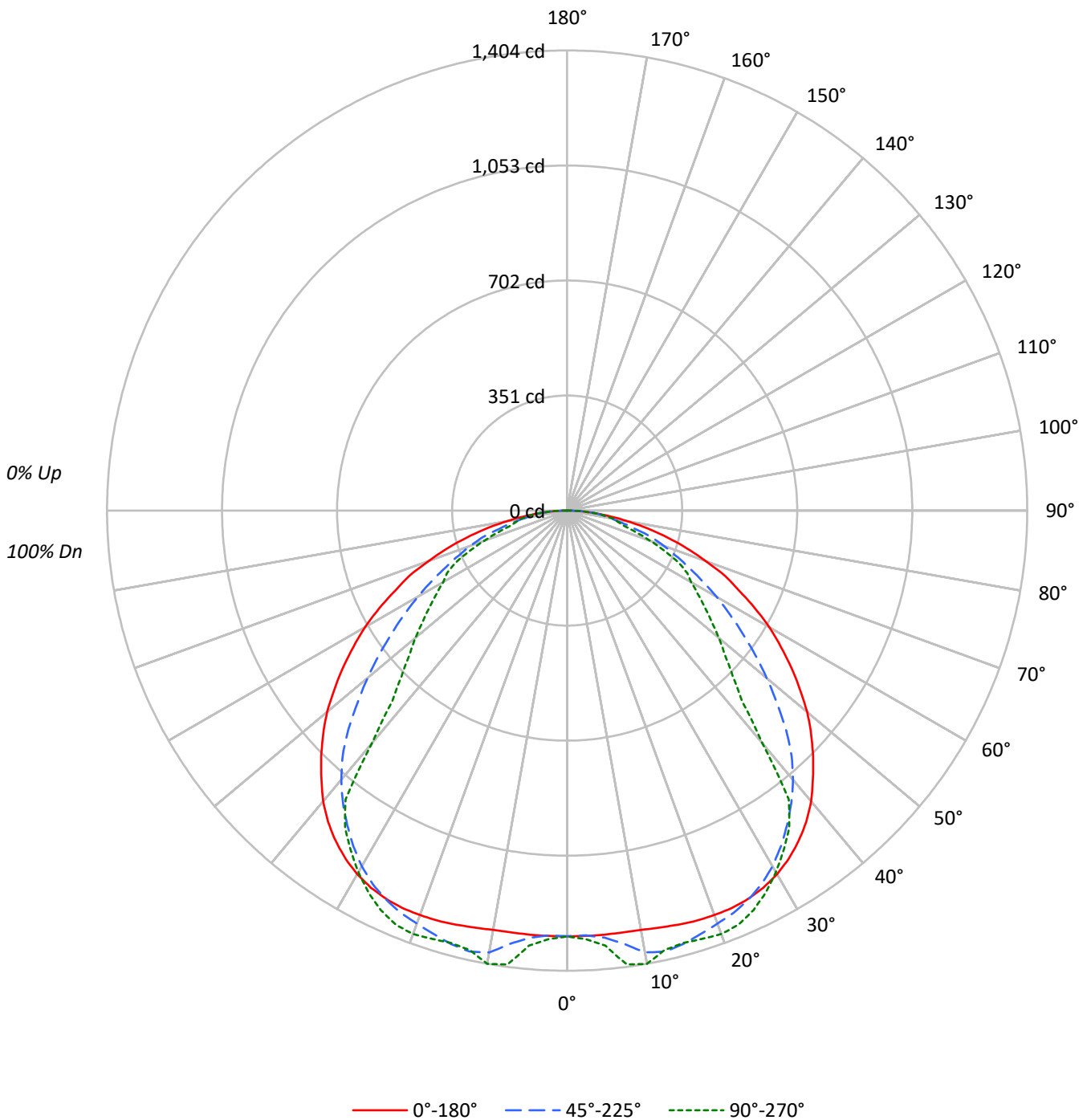
Lumens per Lamp: N/A  
Luminaire Lumens: 3910.4 lumens  
Efficiency: N/A  
Efficacy: 122.6 lumens/watt  
Spacing Criteria (0/90/45): 1.45 / 1.4 / 1.42  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 31.9  
Input Voltage (V): 120.0  
Input Current (Ain): 0.268  
Voltage Rise (V): NR  
Power Factor: 0.9981  
Total Harmonic Distortion (THDi): 8.04%  
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°	4377	4377	4377
5°	4394	4424	4505
10°	4445	4684	4804
15°	4563	4776	4765
20°	4708	4809	4931
25°	4859	4867	5001
30°	4984	4875	4957
35°	5064	4813	4858
40°	5094	4715	4073
45°	5056	4498	3407
50°	5011	4167	3166
55°	4905	3836	3008
60°	4805	3545	2945
65°	4624	3253	2998
70°	4424	3084	2660
75°	4127	2786	2330
80°	3609	2542	2755
85°	3093	3093	3016



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.2	3.3
10°-20°	383.1	9.8
20°-30°	607.2	15.5
30°-40°	738.3	18.9
40°-50°	704.0	18.0
50°-60°	588.1	15.0
60°-70°	434.2	11.1
70°-80°	245.2	6.3
80°-90°	83.1	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°	1117.5	28.6
0°-40°	1855.8	47.5
0°-60°	3148.0	80.5
0°-90°	3910.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3910.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1299	1299	1299	1299	1299	
5°	1299	1302	1308	1324	1332	124
15°	1308	1339	1369	1363	1366	371
25°	1307	1308	1309	1334	1345	603
35°	1231	1191	1170	1182	1181	769
45°	1061	993	944	815	715	818
55°	835	756	653	541	512	746
65°	580	503	408	370	376	576
75°	317	260	214	186	179	334
85°	80	72	80	77	78	92
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1299	1299	1299	1299	1299
2.5°	1299	1300	1297	1304	1309
5°	1299	1302	1308	1324	1332
7.5°	1298	1309	1333	1376	1397
10°	1299	1322	1369	1402	1404
12.5°	1303	1333	1378	1375	1373
15°	1308	1339	1369	1363	1366
17.5°	1312	1338	1355	1360	1370
20°	1313	1332	1341	1360	1375
22.5°	1313	1322	1328	1354	1367
25°	1307	1308	1309	1334	1345
27.5°	1297	1289	1285	1306	1313
30°	1281	1263	1253	1270	1274
32.5°	1259	1231	1214	1227	1229
35°	1231	1191	1170	1182	1181
37.5°	1198	1149	1124	1124	1111
40°	1158	1101	1072	1021	926
42.5°	1110	1050	1014	908	791
45°	1061	993	944	815	715
47.5°	1010	938	867	732	653
50°	956	878	795	662	604
52.5°	895	818	723	597	555
55°	835	756	653	541	512
57.5°	773	694	588	489	472
60°	713	631	526	442	437
62.5°	646	566	464	406	413
65°	580	503	408	370	376
67.5°	522	440	358	327	322
70°	449	377	313	274	270
72.5°	383	320	269	225	221
75°	317	260	214	186	179
77.5°	251	207	168	155	159
80°	186	164	131	137	142
82.5°	128	113	109	112	113
85°	80	72	80	77	78
87.5°	37	39	41	42	42
90°	0	0	0	0	0

(END OF REPORT)