

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: P35060

Luminaire Tested: **12EN-LD2-31-HP-UNV-L835-CD1-U**

Test Date: 09/25/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35060  
Test Lab: INNOVATION CENTER-P3  
Test Date: 09/25/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12EN-LD2-31-HP-UNV-L835-CD1-U  
Description: ENCOUNTER 1X2 LED TROFFER  
Light Source: (196) EATON 3500K LEDS  
EL232N098E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 600 mA  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

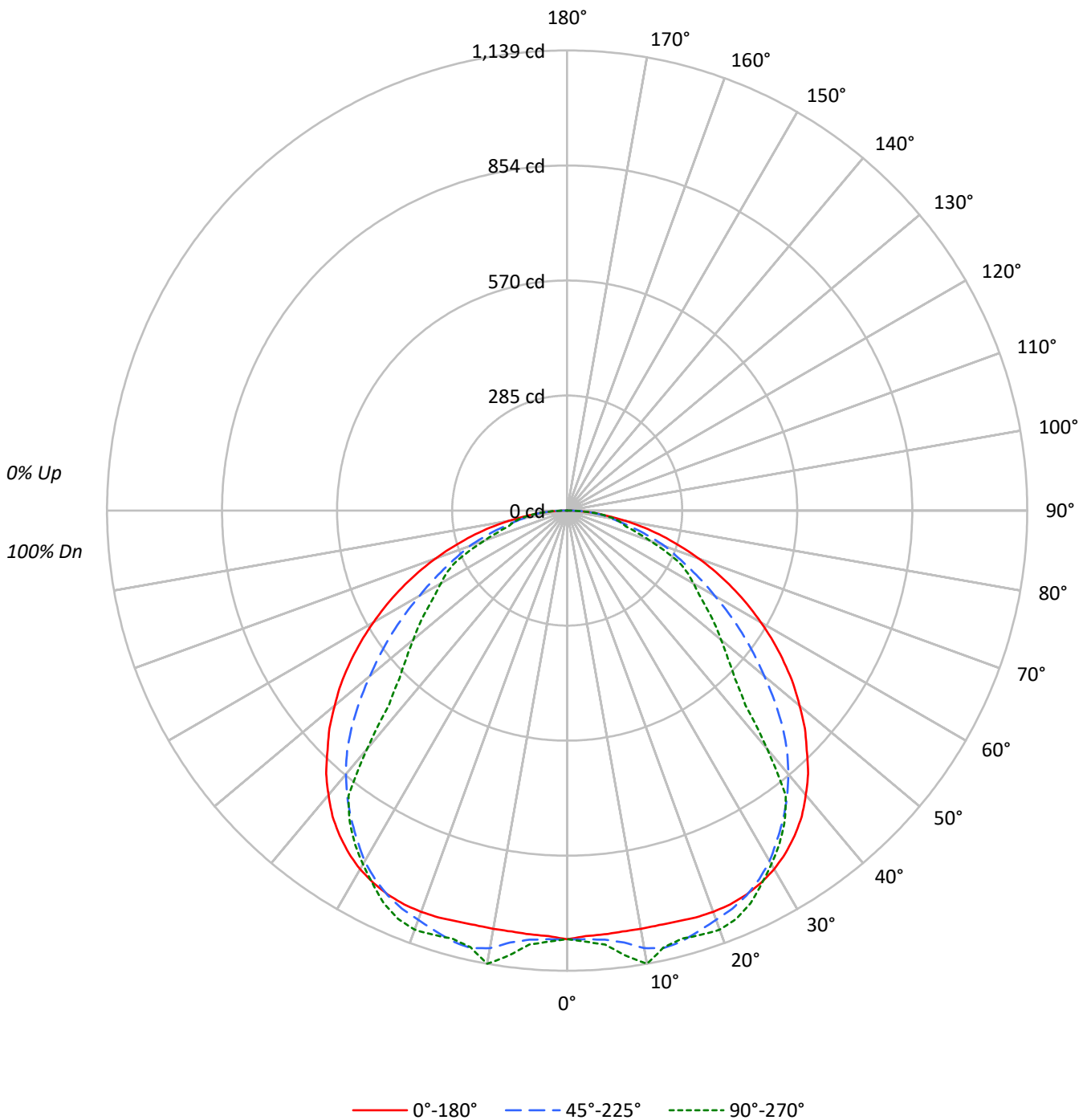
Lumens per Lamp: N/A  
Luminaire Lumens: 3137.3 lumens  
Efficiency: N/A  
Efficacy: 114.9 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.37 / 1.41  
Luminous Opening: Rectangular (W 0.83' x L: 1.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 27.3  
Input Voltage (V): 120.0  
Input Current (Ain): 0.229  
Voltage Rise (V): NR  
Power Factor: 0.9971  
Total Harmonic Distortion (THDi): 8.21%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.8  
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	67	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	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	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°	7475	7475	7475
5°	7447	7539	7624
10°	7519	7870	8149
15°	7681	8045	8002
20°	7925	8082	8277
25°	8155	8170	8341
30°	8339	8152	8225
35°	8446	8016	8076
40°	8452	7836	7082
45°	8360	7503	5849
50°	8232	6982	5448
55°	8058	6486	5184
60°	7806	5946	5087
65°	7519	5501	5135
70°	7148	5294	4511
75°	6669	4737	4083
80°	5964	4422	4909
85°	5416	5174	5497



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.8	3.3
10°-20°	308.2	9.8
20°-30°	485.9	15.5
30°-40°	588.7	18.8
40°-50°	565.2	18.0
50°-60°	472.6	15.1
60°-70°	347.8	11.1
70°-80°	197.9	6.3
80°-90°	68.3	2.2
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°	896.9	28.6
0°-40°	1485.6	47.4
0°-60°	2523.4	80.4
0°-90°	3137.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3137.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1053	1057	1066	1074	1078	100
15°	1053	1075	1103	1096	1097	299
25°	1049	1045	1051	1068	1073	484
35°	982	951	932	938	939	613
45°	839	790	753	664	587	648
55°	656	598	528	446	422	586
65°	451	396	330	304	308	446
75°	245	206	174	155	150	259
85°	67	57	64	65	68	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1061	1061	1061	1061	1061
2.5°	1054	1057	1062	1067	1068
5°	1053	1057	1066	1074	1078
7.5°	1051	1058	1078	1100	1111
10°	1051	1065	1100	1134	1139
12.5°	1051	1073	1109	1113	1107
15°	1053	1075	1103	1096	1097
17.5°	1056	1072	1090	1093	1101
20°	1057	1066	1078	1093	1104
22.5°	1055	1058	1067	1086	1094
25°	1049	1045	1051	1068	1073
27.5°	1039	1029	1029	1042	1042
30°	1025	1009	1002	1009	1011
32.5°	1006	982	967	976	978
35°	982	951	932	938	939
37.5°	954	914	894	897	889
40°	919	875	852	826	770
42.5°	883	833	806	741	653
45°	839	790	753	664	587
47.5°	798	744	696	600	539
50°	751	695	637	543	497
52.5°	706	649	582	493	460
55°	656	598	528	446	422
57.5°	606	547	474	402	387
60°	554	498	422	364	361
62.5°	503	447	375	335	337
65°	451	396	330	304	308
67.5°	398	349	291	264	264
70°	347	299	257	222	219
72.5°	294	252	214	185	181
75°	245	206	174	155	150
77.5°	195	168	138	133	137
80°	147	130	109	116	121
82.5°	101	89	90	94	96
85°	67	57	64	65	68
87.5°	29	30	35	36	37
90°	0	0	0	0	0

(END OF REPORT)