

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: P35059

Luminaire Tested: **12EN-LD2-27-HP-UNV-L835-CD1-U**

Test Date: 09/25/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35059  
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-LD2-27-HP-UNV-L835-CD1-U  
Description: ENCOUNTER 1X2 LED TROFFER  
Light Source: (196) EATON 3500K LEDS  
EL232N098E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 520 mA  
OT50W/PRG1400C/UNV/DIM/L

**Summary**

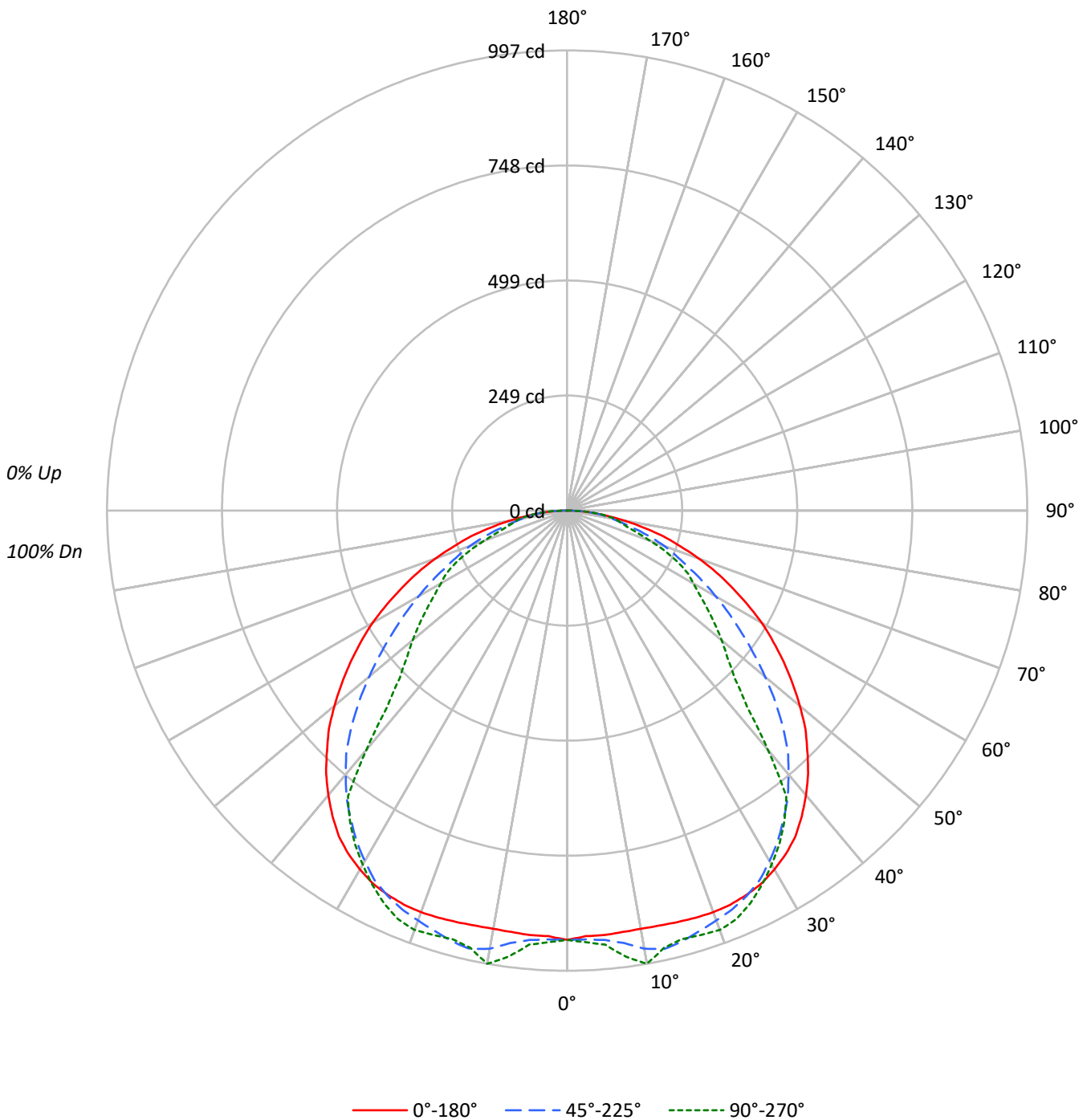
Lumens per Lamp: N/A  
Luminaire Lumens: 2747.9 lumens  
Efficiency: N/A  
Efficacy: 116.4 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.37 / 1.41  
Luminous Opening: Rectangular (W 0.83' x L: 1.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 23.6  
Input Voltage (V): 120.0  
Input Current (Ain): 0.199  
Voltage Rise (V): NR  
Power Factor: 0.9958  
Total Harmonic Distortion (THDi): 8.52%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.9  
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	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	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	33	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	6552	6552	6552
5°	6528	6606	6676
10°	6582	6897	7133
15°	6732	7046	7010
20°	6943	7085	7250
25°	7144	7160	7300
30°	7306	7135	7208
35°	7414	7027	7061
40°	7404	6861	6227
45°	7333	6576	5111
50°	7212	6138	4790
55°	7038	5663	4557
60°	6862	5242	4453
65°	6568	4818	4418
70°	6242	4614	3935
75°	5880	4138	3620
80°	5112	3895	4301
85°	4527	4527	4769



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	3.3
10°-20°	270.1	9.8
20°-30°	425.7	15.5
30°-40°	515.9	18.8
40°-50°	495.2	18.0
50°-60°	413.8	15.1
60°-70°	304.3	11.1
70°-80°	173.0	6.3
80°-90°	59.8	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°	785.9	28.6
0°-40°	1301.8	47.4
0°-60°	2210.8	80.5
0°-90°	2747.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2747.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	923	926	934	942	944	88
15°	923	943	966	960	961	262
25°	919	916	921	936	939	424
35°	862	833	817	822	821	538
45°	736	692	660	581	513	568
55°	573	523	461	389	371	512
65°	394	347	289	266	265	391
75°	216	180	152	135	133	226
85°	56	51	56	57	59	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	930	930	930	930	930
2.5°	923	926	930	934	936
5°	923	926	934	942	944
7.5°	921	927	945	966	975
10°	920	933	964	993	997
12.5°	921	940	973	975	970
15°	923	943	966	960	961
17.5°	925	940	955	957	964
20°	926	935	945	957	967
22.5°	924	926	935	951	958
25°	919	916	921	936	939
27.5°	911	901	903	912	914
30°	898	884	877	884	886
32.5°	882	860	849	855	856
35°	862	833	817	822	821
37.5°	835	800	785	784	780
40°	805	767	746	727	677
42.5°	773	729	708	646	577
45°	736	692	660	581	513
47.5°	700	651	611	525	471
50°	658	609	560	475	437
52.5°	616	567	510	431	403
55°	573	523	461	389	371
57.5°	530	479	416	352	341
60°	487	436	372	319	316
62.5°	440	391	330	293	295
65°	394	347	289	266	265
67.5°	350	304	255	231	230
70°	303	261	224	195	191
72.5°	257	221	188	161	159
75°	216	180	152	135	133
77.5°	169	147	121	115	118
80°	126	114	96	102	106
82.5°	87	80	79	82	85
85°	56	51	56	57	59
87.5°	26	27	29	31	32
90°	0	0	0	0	0

(END OF REPORT)