

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: P35056

Luminaire Tested: **12EN-LD2-13-HP-UNV-L835-CD1-U**

Test Date: 09/25/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35056  
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-LD2-13-HP-UNV-L835-CD1-U  
Description: ENCOUNTER 1X2 LED TROFFER  
Light Source: (196) EATON 3500K LEDS  
EL232N098E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @260 mA  
OTi30W/PRG1050C/UNV/DIM/L

**Summary**

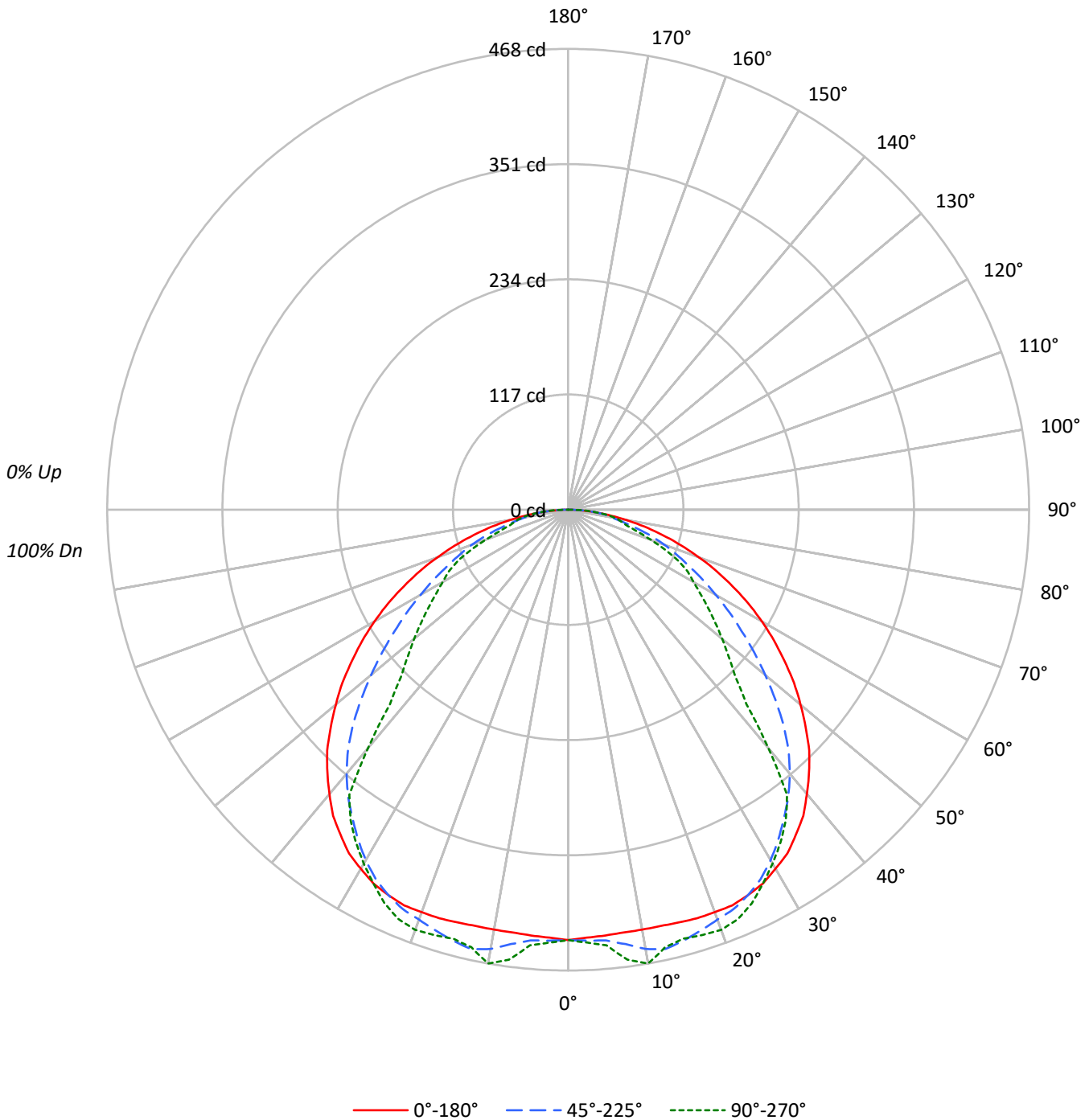
Lumens per Lamp: N/A  
Luminaire Lumens: 1285.2 lumens  
Efficiency: N/A  
Efficacy: 113.7 lumens/watt  
Spacing Criteria (0/90/45): 1.42 / 1.37 / 1.41  
Luminous Opening: Rectangular (W 0.83' x L: 1.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.3  
Input Voltage (V): 120.1  
Input Current (Ain): 0.0960  
Voltage Rise (V): NR  
Power Factor: 0.9886  
Total Harmonic Distortion (THDi): 6.58%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 25.0  
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	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	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	68	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	47	41	52	46	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	37	35
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	32	27	37	31	27	25

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

	0°	45°	90°
0°	3079	3079	3079
5°	3069	3105	3140
10°	3098	3241	3348
15°	3166	3304	3290
20°	3261	3321	3404
25°	3358	3358	3428
30°	3425	3344	3376
35°	3466	3286	3311
40°	3467	3219	2906
45°	3447	3079	2391
50°	3376	2861	2236
55°	3292	2641	2125
60°	3199	2438	2071
65°	3067	2251	2067
70°	2905	2142	1833
75°	2695	1906	1661
80°	2394	1785	1988
85°	2102	2102	2183



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.4	3.3
10°-20°	126.8	9.9
20°-30°	199.8	15.5
30°-40°	241.6	18.8
40°-50°	231.6	18.0
50°-60°	193.3	15.0
60°-70°	141.9	11.0
70°-80°	80.3	6.2
80°-90°	27.4	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°	369.1	28.7
0°-40°	610.7	47.5
0°-60°	1035.6	80.6
0°-90°	1285.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1285.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	437	437	437	437	437	
5°	434	435	439	443	444	41
15°	434	443	453	451	451	123
25°	432	430	432	440	441	199
35°	403	390	382	385	385	252
45°	346	323	309	272	240	266
55°	268	245	215	182	173	240
65°	184	162	135	124	124	182
75°	99	84	70	62	61	105
85°	26	23	26	26	27	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	437	437	437	437	437
2.5°	435	435	438	439	440
5°	434	435	439	443	444
7.5°	433	436	445	455	461
10°	433	439	453	467	468
12.5°	433	442	457	457	455
15°	434	443	453	451	451
17.5°	435	442	448	450	453
20°	435	439	443	450	454
22.5°	435	436	439	447	450
25°	432	430	432	440	441
27.5°	428	423	423	428	428
30°	421	414	411	414	415
32.5°	414	403	397	401	401
35°	403	390	382	385	385
37.5°	392	376	367	368	365
40°	377	359	350	337	316
42.5°	362	342	331	303	268
45°	346	323	309	272	240
47.5°	327	305	285	245	221
50°	308	285	261	222	204
52.5°	289	265	238	201	188
55°	268	245	215	182	173
57.5°	248	224	194	164	159
60°	227	203	173	149	147
62.5°	206	182	154	137	137
65°	184	162	135	124	124
67.5°	163	142	119	107	107
70°	141	122	104	91	89
72.5°	120	102	88	75	73
75°	99	84	70	62	61
77.5°	79	68	56	54	55
80°	59	53	44	47	49
82.5°	41	36	37	38	39
85°	26	23	26	26	27
87.5°	11	12	13	14	14
90°	0	0	0	0	0

(END OF REPORT)