

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: P35039

Luminaire Tested: **22EN-LD2-19-HP-UNV-L835-CD1-U**

Test Date: 09/25/16

**Test Information**

Test Method: LM-79-08  
Report Number: P35039  
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: 22EN-LD2-19-HP-UNV-L835-CD1-U  
Description: ENCOUNTER 2X2 LED TROFFER  
Light Source: (196) EATON 3500K LEDS  
EL232N098E835  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER @ 320 mA  
OTi30W/PRG1050C/UNV/DIM/L

**Summary**

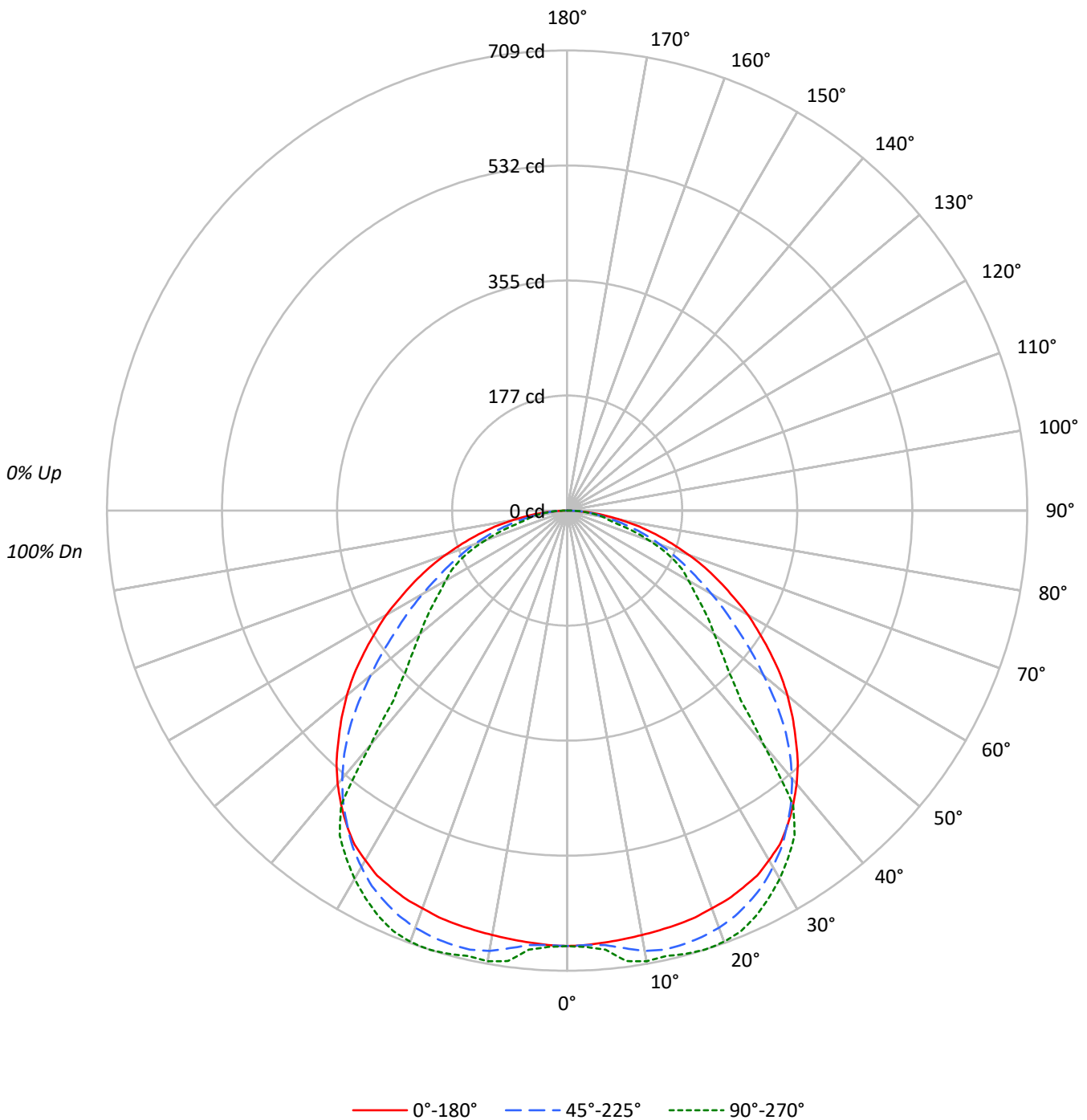
Lumens per Lamp: N/A  
Luminaire Lumens: 1922.2 lumens  
Efficiency: N/A  
Efficacy: 131.7 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.4 / 1.4  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 14.6  
Input Voltage (V): 120.0  
Input Current (Ain): 0.123  
Voltage Rise (V): NR  
Power Factor: 0.993  
Total Harmonic Distortion (THDi): 5.83%  
Frequency (hertz): 60  
Stabilization Time: 0.5 HR  
Operation Time: 5 HR  
Ambient Temperature (°C): 24.6  
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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	35	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

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

	0°	45°	90°
0°	2149	2149	2149
5°	2147	2160	2183
10°	2159	2241	2293
15°	2188	2294	2344
20°	2222	2331	2409
25°	2265	2350	2435
30°	2300	2344	2422
35°	2314	2311	2389
40°	2299	2253	1969
45°	2255	2147	1599
50°	2207	1968	1475
55°	2133	1792	1407
60°	2062	1646	1383
65°	1963	1523	1387
70°	1863	1423	1255
75°	1745	1299	1002
80°	1568	1088	1033
85°	1323	1102	1066



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	64.8	3.4
10°-20°	194.4	10.1
20°-30°	306.4	15.9
30°-40°	369.9	19.2
40°-50°	346.5	18.0
50°-60°	284.1	14.8
60°-70°	207.2	10.8
70°-80°	114.6	6.0
80°-90°	34.4	1.8
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°	565.6	29.4
0°-40°	935.5	48.7
0°-60°	1566.2	81.5
0°-90°	1922.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1922.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	671	671	671	671	671	
5°	668	669	672	676	679	64
15°	660	671	692	701	707	187
25°	641	651	665	682	689	296
35°	592	585	591	605	611	370
45°	498	482	474	408	353	384
55°	382	362	321	266	252	342
65°	259	237	201	177	183	257
75°	141	124	105	86	81	149
85°	36	31	30	28	29	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	671	671	671	671	671
2.5°	670	670	670	672	673
5°	668	669	672	676	679
7.5°	666	669	680	694	700
10°	664	671	689	702	705
12.5°	662	672	693	700	703
15°	660	671	692	701	707
17.5°	657	670	689	701	709
20°	652	665	684	699	707
22.5°	648	660	676	693	701
25°	641	651	665	682	689
27.5°	634	639	652	667	673
30°	622	625	634	648	655
32.5°	610	607	615	629	634
35°	592	585	591	605	611
37.5°	572	562	567	572	572
40°	550	537	539	518	471
42.5°	526	512	508	462	396
45°	498	482	474	408	353
47.5°	471	454	435	364	322
50°	443	423	395	327	296
52.5°	414	392	358	295	274
55°	382	362	321	266	252
57.5°	351	331	289	240	232
60°	322	299	257	218	216
62.5°	289	269	227	198	202
65°	259	237	201	177	183
67.5°	230	208	176	158	161
70°	199	178	152	134	134
72.5°	169	151	128	111	109
75°	141	124	105	86	81
77.5°	114	101	82	65	64
80°	85	77	59	55	56
82.5°	60	55	45	42	43
85°	36	31	30	28	29
87.5°	15	14	15	15	16
90°	0	0	0	0	0

(END OF REPORT)