

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: P238783

Luminaire Tested: **22EN-LD2-19-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238783  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-118-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22EN-LD2-19-UNV-L840-CD1-U  
Description: METALUX ENCOUNTER 2X2 LED TROFFER  
STANDARD OPTION  
Light Source: (168)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2133.1 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

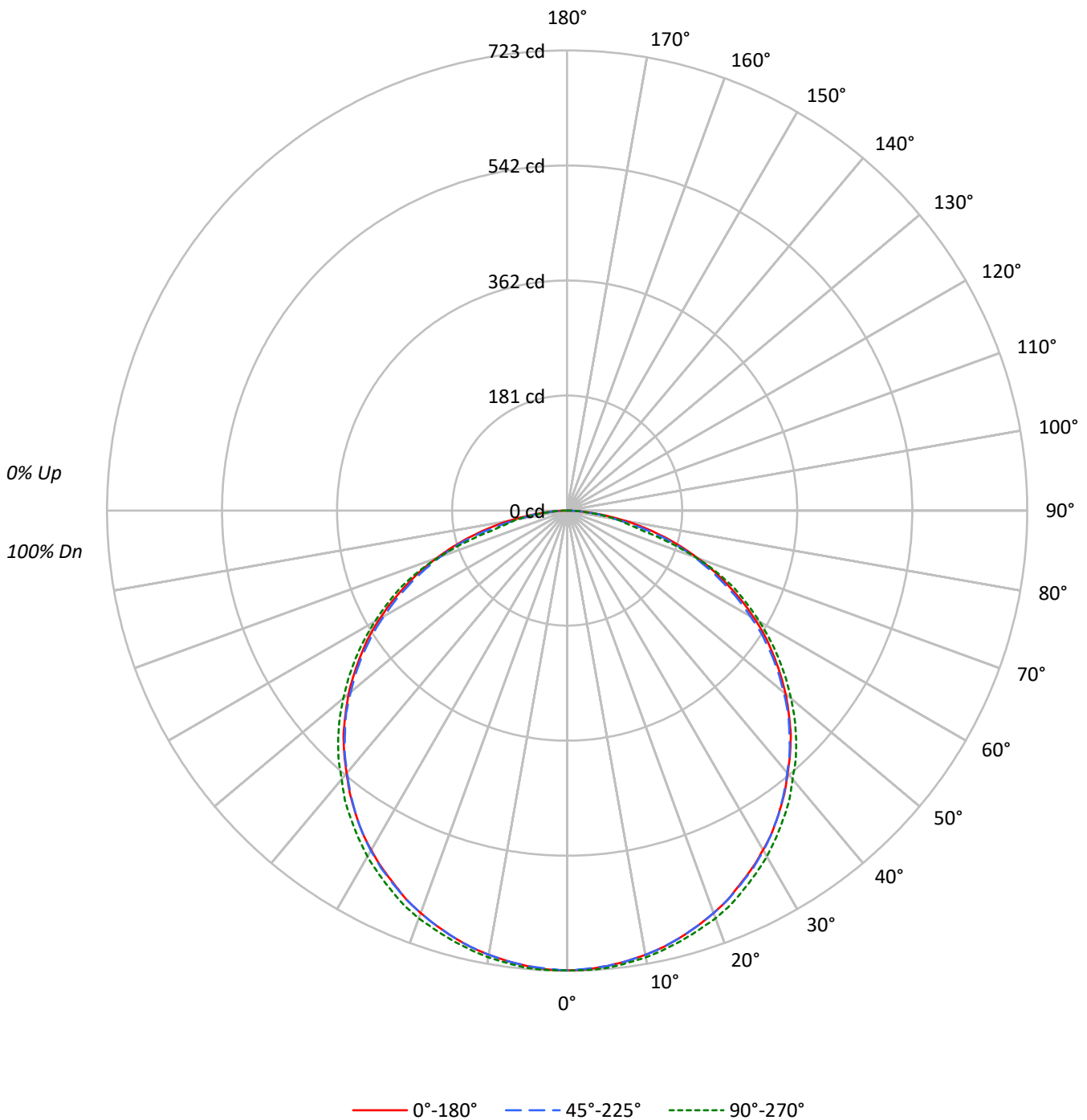
Input Watts (W): 16.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2314	2314	2314
5°	2309	2309	2319
10°	2304	2304	2318
15°	2299	2299	2317
20°	2293	2293	2323
25°	2282	2286	2320
30°	2277	2281	2321
35°	2268	2268	2314
40°	2253	2249	2303
45°	2250	2236	2304
50°	2234	2212	2287
55°	2207	2183	2267
60°	2179	2131	2235
65°	2120	2063	2202
70°	2043	1982	2013
75°	1924	1804	1537
80°	1693	1415	1474
85°	1231	1191	1150



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.3	3.2
10°-20°	196.2	9.2
20°-30°	299.5	14.0
30°-40°	364.7	17.1
40°-50°	383.9	18.0
50°-60°	353.5	16.6
60°-70°	275.1	12.9
70°-80°	152.7	7.2
80°-90°	39.2	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°	564.0	26.4
0°-40°	928.7	43.5
0°-60°	1666.1	78.1
0°-90°	2133.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2133.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	723	723	723	723	723	
5°	718	718	718	720	722	68
15°	694	694	694	697	699	196
25°	646	647	647	652	657	298
35°	580	580	580	586	592	363
45°	497	494	494	501	509	383
55°	395	394	391	398	406	354
65°	280	276	272	281	291	277
75°	156	152	146	130	124	164
85°	34	31	32	31	31	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	722.6	722.6	722.6	722.6	722.6
2.5°	721.5	720.5	720.5	722.6	722.6
5°	718.3	718.3	718.3	720.5	721.5
7.5°	714.0	714.0	714.0	717.2	717.2
10°	708.6	707.5	708.6	710.7	712.9
12.5°	702.1	701.0	702.1	704.3	706.4
15°	693.5	693.5	693.5	696.7	698.9
17.5°	683.7	682.7	683.7	687.0	690.2
20°	672.9	672.9	672.9	677.3	681.6
22.5°	661.1	660.0	661.1	666.5	670.8
25°	645.9	647.0	647.0	652.4	656.7
27.5°	631.9	630.8	633.0	637.3	642.7
30°	615.7	615.7	616.8	622.2	627.6
32.5°	599.5	598.4	599.5	604.9	610.3
35°	580.0	580.0	580.0	586.5	591.9
37.5°	560.6	559.5	559.5	566.0	573.6
40°	539.0	537.9	537.9	545.5	550.9
42.5°	518.5	517.4	517.4	523.9	531.4
45°	496.9	493.6	493.6	501.2	508.8
47.5°	472.0	469.9	470.9	477.4	485.0
50°	448.3	445.0	443.9	451.5	459.1
52.5°	422.3	421.3	418.0	424.5	433.1
55°	395.3	394.3	391.0	397.5	406.1
57.5°	369.4	366.2	362.9	368.3	378.1
60°	340.2	337.0	332.7	340.2	348.9
62.5°	311.1	306.8	303.5	310.0	319.7
65°	279.8	276.5	272.2	280.8	290.6
67.5°	250.6	247.4	242.0	249.5	256.0
70°	218.2	213.9	211.7	212.8	215.0
72.5°	186.9	184.7	181.5	172.8	170.7
75°	155.5	152.3	145.8	129.6	124.2
77.5°	124.2	122.1	110.2	96.1	96.1
80°	91.8	90.7	76.7	78.9	79.9
82.5°	62.6	60.5	56.2	55.1	55.1
85°	33.5	31.3	32.4	31.3	31.3
87.5°	13.0	13.0	14.0	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)