

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: P238830

Luminaire Tested: **22EN-LD2-19-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P238830  
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-L935-CD1-U  
Description: METALUX ENCOUNTER 2X2 LED TROFFER  
STANDARD OPTION  
Light Source: (168)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1800.2 lumens  
Efficiency: N/A  
Efficacy: 109.1 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

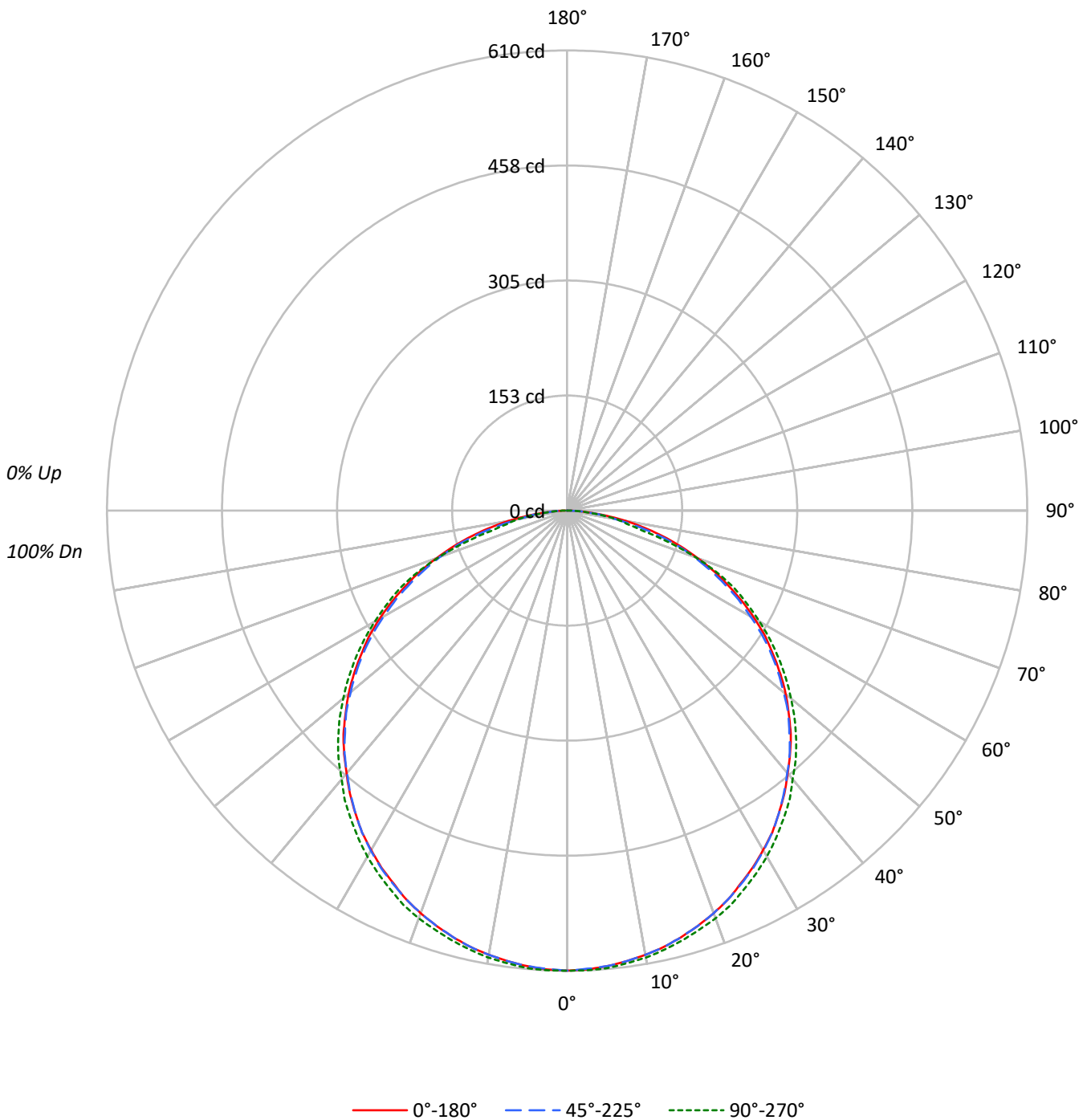
Input Watts (W): 16.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1953	1953	1953
5°	1949	1949	1957
10°	1945	1945	1957
15°	1940	1940	1955
20°	1935	1935	1960
25°	1926	1929	1959
30°	1921	1925	1958
35°	1914	1914	1953
40°	1902	1898	1944
45°	1899	1887	1945
50°	1885	1867	1930
55°	1863	1843	1914
60°	1840	1799	1886
65°	1789	1741	1858
70°	1724	1673	1699
75°	1625	1523	1297
80°	1429	1193	1245
85°	1040	1003	970



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.7	3.2
10°-20°	165.5	9.2
20°-30°	252.7	14.0
30°-40°	307.8	17.1
40°-50°	324.0	18.0
50°-60°	298.3	16.6
60°-70°	232.2	12.9
70°-80°	128.9	7.2
80°-90°	33.1	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°	476.0	26.4
0°-40°	783.8	43.5
0°-60°	1406.1	78.1
0°-90°	1800.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1800.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	610	610	610	610	610	
5°	606	606	606	608	609	58
15°	585	585	585	588	590	165
25°	545	546	546	551	554	252
35°	490	490	490	495	500	306
45°	419	417	417	423	429	323
55°	334	333	330	336	343	299
65°	236	233	230	237	245	234
75°	131	128	123	109	105	138
85°	28	26	27	26	26	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	609.9	609.9	609.9	609.9	609.9
2.5°	608.9	608.0	608.0	609.9	609.9
5°	606.2	606.2	606.2	608.0	608.9
7.5°	602.6	602.6	602.6	605.3	605.3
10°	598.0	597.1	598.0	599.8	601.7
12.5°	592.5	591.6	592.5	594.4	596.2
15°	585.2	585.2	585.2	588.0	589.8
17.5°	577.0	576.1	577.0	579.8	582.5
20°	567.9	567.9	567.9	571.6	575.2
22.5°	557.9	557.0	557.9	562.5	566.1
25°	545.1	546.0	546.0	550.6	554.3
27.5°	533.3	532.4	534.2	537.8	542.4
30°	519.6	519.6	520.5	525.1	529.6
32.5°	505.9	505.0	505.9	510.5	515.1
35°	489.5	489.5	489.5	495.0	499.6
37.5°	473.1	472.2	472.2	477.7	484.1
40°	454.9	454.0	454.0	460.4	464.9
42.5°	437.6	436.7	436.7	442.1	448.5
45°	419.3	416.6	416.6	423.0	429.4
47.5°	398.4	396.5	397.5	402.9	409.3
50°	378.3	375.6	374.7	381.0	387.4
52.5°	356.4	355.5	352.8	358.3	365.6
55°	333.6	332.7	330.0	335.5	342.8
57.5°	311.8	309.0	306.3	310.9	319.1
60°	287.2	284.4	280.8	287.2	294.4
62.5°	262.5	258.9	256.2	261.6	269.8
65°	236.1	233.4	229.7	237.0	245.2
67.5°	211.5	208.8	204.2	210.6	216.0
70°	184.1	180.5	178.7	179.6	181.4
72.5°	157.7	155.9	153.1	145.9	144.0
75°	131.3	128.5	123.1	109.4	104.8
77.5°	104.8	103.0	93.0	81.1	81.1
80°	77.5	76.6	64.7	66.5	67.5
82.5°	52.9	51.0	47.4	46.5	46.5
85°	28.3	26.4	27.3	26.4	26.4
87.5°	10.9	10.9	11.9	10.9	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)