

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: P232278

Luminaire Tested: **22RDIA-20-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P232278  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1706-078-16-R2)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RDIA-20-UNV-L840-CD1-U  
Description: METALUX 2X2 OVATION LED TROFFER  
AIR VENTED VERSION  
Light Source: (196) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

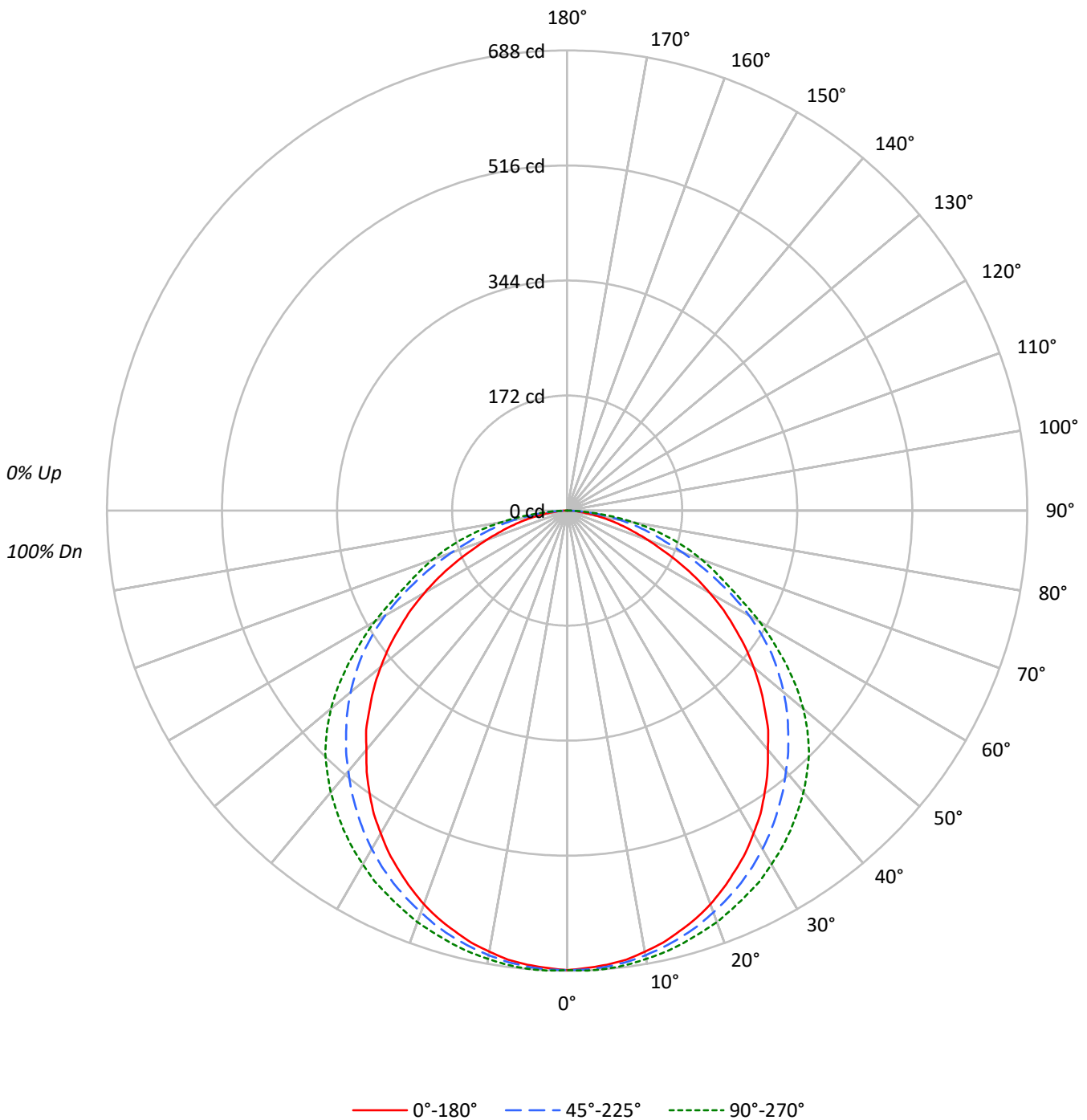
Lumens per Lamp: N/A  
Luminaire Lumens: 1966.0 lumens  
Efficiency: N/A  
Efficacy: 98.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.32 / 1.39  
Luminous Opening: Rectangular (W 1.67' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 19.9  
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	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2219	2219	2219
5°	2209	2219	2229
10°	2196	2214	2232
15°	2176	2207	2239
20°	2153	2197	2250
25°	2117	2189	2260
30°	2078	2178	2278
35°	2030	2162	2297
40°	1968	2146	2318
45°	1907	2134	2336
50°	1828	2123	2315
55°	1721	2102	2247
60°	1593	2032	2148
65°	1409	1896	2029
70°	1211	1741	2023
75°	1029	1607	1997
80°	831	1488	1848
85°	626	1160	1419



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.1	3.3
10°-20°	186.4	9.5
20°-30°	283.3	14.4
30°-40°	343.4	17.5
40°-50°	359.3	18.3
50°-60°	323.5	16.5
60°-70°	236.5	12.0
70°-80°	133.6	6.8
80°-90°	34.9	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°	534.8	27.2
0°-40°	878.1	44.7
0°-60°	1560.9	79.4
0°-90°	1966.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1966.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	687	687	687	687	687	
5°	682	683	685	687	688	65
15°	651	654	660	667	670	184
25°	594	601	614	629	634	274
35°	515	525	548	573	583	322
45°	418	434	467	499	512	322
55°	306	331	373	394	399	274
65°	184	217	248	263	266	183
75°	82	103	129	152	160	88
85°	17	22	31	36	38	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	687.1	687.1	687.1	687.1	687.1
2.5°	684.6	685.1	686.6	688.5	688.5
5°	681.6	682.6	684.6	686.6	687.6
7.5°	677.1	678.1	680.6	684.1	685.1
10°	669.7	671.6	675.1	679.1	680.6
12.5°	661.7	663.7	668.2	673.6	676.1
15°	650.8	653.7	660.2	667.2	669.7
17.5°	639.8	642.3	650.8	659.2	662.2
20°	626.4	629.4	639.3	650.3	654.7
22.5°	611.0	616.0	627.4	640.3	644.8
25°	594.1	600.6	614.5	629.4	634.4
27.5°	577.2	583.2	600.1	617.0	624.4
30°	557.3	565.3	584.1	603.5	611.0
32.5°	537.9	546.4	567.2	588.6	597.6
35°	515.0	525.0	548.4	572.7	582.7
37.5°	492.2	503.1	529.5	555.8	566.2
40°	466.8	480.2	509.1	538.4	549.8
42.5°	444.9	456.9	489.2	520.0	531.0
45°	417.6	434.0	467.3	498.6	511.6
47.5°	391.7	408.2	445.9	476.8	487.2
50°	363.9	383.3	422.6	452.9	460.9
52.5°	335.6	358.4	398.2	425.6	431.5
55°	305.7	330.6	373.4	394.2	399.2
57.5°	277.4	303.8	344.5	361.9	364.9
60°	246.6	275.4	314.7	328.1	332.6
62.5°	216.3	246.6	281.9	293.8	296.8
65°	184.4	217.3	248.1	263.0	265.5
67.5°	153.6	187.4	215.8	230.2	239.1
70°	128.3	159.1	184.4	204.3	214.3
72.5°	103.4	130.7	152.6	178.5	187.9
75°	82.5	102.9	128.8	151.6	160.1
77.5°	63.1	77.6	104.9	123.8	131.2
80°	44.7	56.2	80.0	95.0	99.4
82.5°	28.3	37.8	54.7	65.6	68.6
85°	16.9	22.4	31.3	35.8	38.3
87.5°	8.9	8.5	9.9	10.4	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)