

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: P229644

Luminaire Tested: **22RLN-LD5-20-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229644  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36063)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RLN-LD5-20-UNV-L830-CD1-SVPD1-U  
Description: METALUX 2X2 RLN LED TROFFER WITH SENSOR  
Light Source: (126)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1864.0 lumens  
Efficiency: N/A  
Efficacy: 113.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.21 / 1.29  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

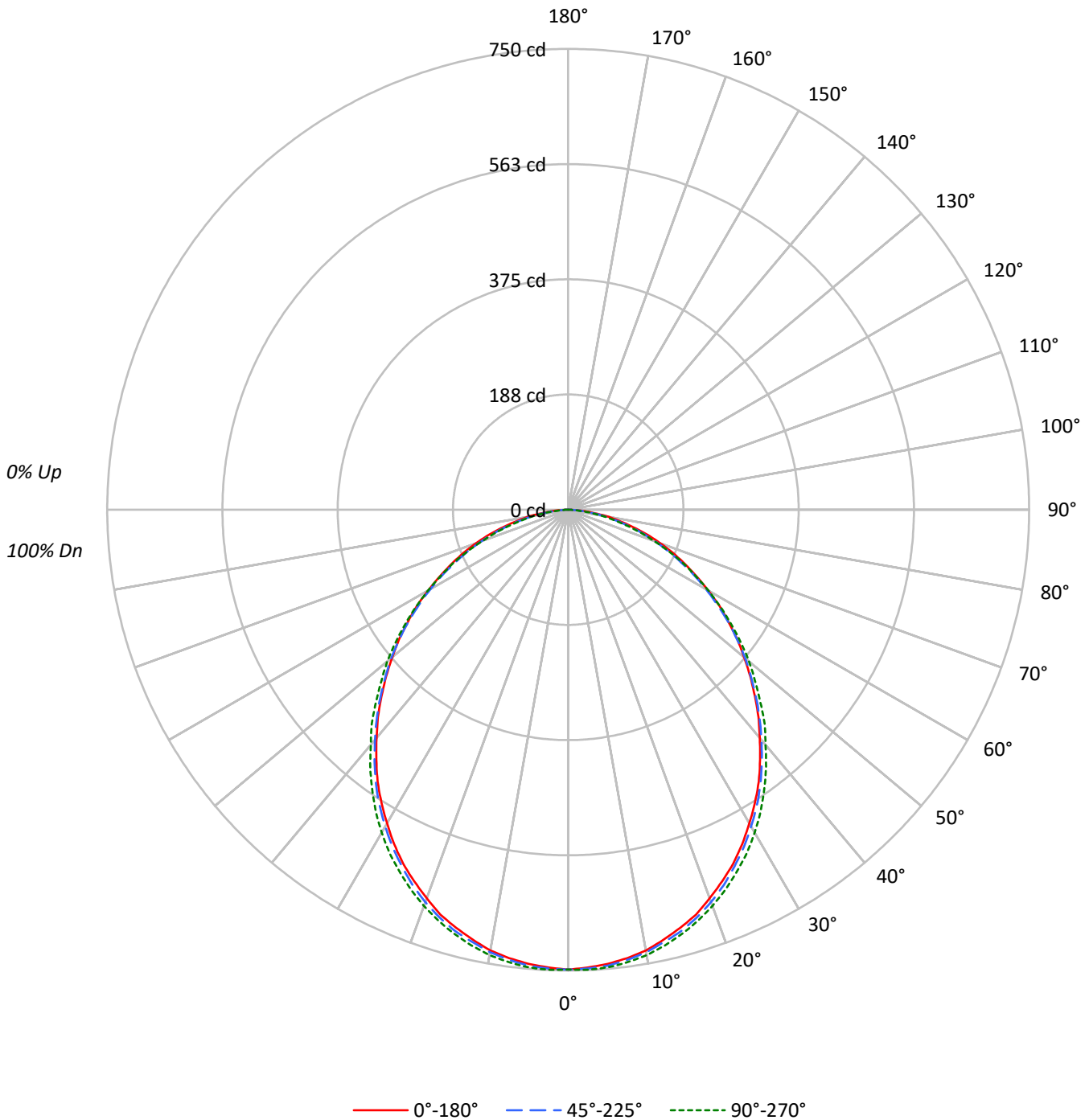
Input Watts (W): 16.43  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	58	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	38	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

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

	0°	45°	90°
0°	2397	2397	2397
5°	2385	2394	2403
10°	2369	2378	2393
15°	2335	2355	2371
20°	2293	2316	2339
25°	2245	2262	2296
30°	2180	2201	2244
35°	2113	2132	2173
40°	2027	2044	2087
45°	1945	1958	2001
50°	1862	1872	1915
55°	1777	1771	1803
60°	1682	1658	1688
65°	1591	1532	1569
70°	1490	1409	1382
75°	1352	1245	1198
80°	1219	1060	990
85°	952	739	636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.6	3.8
10°-20°	200.0	10.7
20°-30°	295.3	15.8
30°-40°	341.5	18.3
40°-50°	334.9	18.0
50°-60°	284.8	15.3
60°-70°	202.9	10.9
70°-80°	108.2	5.8
80°-90°	25.7	1.4
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°	565.9	30.4
0°-40°	907.4	48.7
0°-60°	1527.1	81.9
0°-90°	1864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1864.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	748	748	748	748	748	
5°	742	743	745	747	748	70
15°	704	705	710	714	715	199
25°	635	636	640	647	650	292
35°	540	539	545	554	556	337
45°	429	428	432	440	442	332
55°	318	315	317	321	323	285
65°	210	203	202	203	207	208
75°	109	104	101	99	97	117
85°	26	23	20	17	17	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	748.5	748.5	748.5	748.5	748.5
2.5°	745.6	746.6	747.5	749.5	749.5
5°	741.8	742.7	744.7	746.6	747.5
7.5°	736.0	736.0	738.9	740.8	742.7
10°	728.4	729.3	731.2	734.1	736.0
12.5°	716.9	718.8	720.7	724.5	726.5
15°	704.4	705.4	710.2	714.0	715.0
17.5°	691.0	691.0	695.8	699.6	701.5
20°	672.8	674.7	679.5	684.3	686.2
22.5°	654.6	656.5	661.3	666.1	668.9
25°	635.4	636.4	640.2	646.9	649.8
27.5°	613.4	615.3	619.1	625.8	629.7
30°	589.4	591.3	595.2	602.8	606.7
32.5°	565.4	567.4	571.2	578.9	582.7
35°	540.5	538.6	545.3	553.9	555.9
37.5°	512.7	513.7	517.5	525.2	529.0
40°	484.9	484.9	488.8	497.4	499.3
42.5°	458.1	457.1	461.0	468.6	473.4
45°	429.4	428.4	432.2	439.9	441.8
47.5°	401.6	399.6	403.5	410.2	412.1
50°	373.8	371.9	375.7	381.4	384.3
52.5°	346.9	343.1	346.0	350.8	353.6
55°	318.2	315.3	317.2	321.1	323.0
57.5°	292.3	286.6	287.5	291.3	293.3
60°	262.6	257.8	258.8	262.6	263.6
62.5°	235.8	231.0	231.0	231.9	233.8
65°	209.9	203.2	202.2	203.2	207.0
67.5°	185.0	178.3	176.3	176.3	177.3
70°	159.1	152.4	150.5	149.5	147.6
72.5°	135.1	126.5	125.5	122.7	123.6
75°	109.3	103.5	100.6	98.7	96.8
77.5°	86.3	81.5	77.6	74.8	74.8
80°	66.1	59.4	57.5	53.7	53.7
82.5°	44.1	41.2	37.4	34.5	33.5
85°	25.9	23.0	20.1	17.3	17.3
87.5°	9.6	7.7	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)