

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: P229646

Luminaire Tested: **22RLN-LD5-31-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229646  
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-LD5-31-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: 2918.0 lumens  
Efficiency: N/A  
Efficacy: 109.7 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

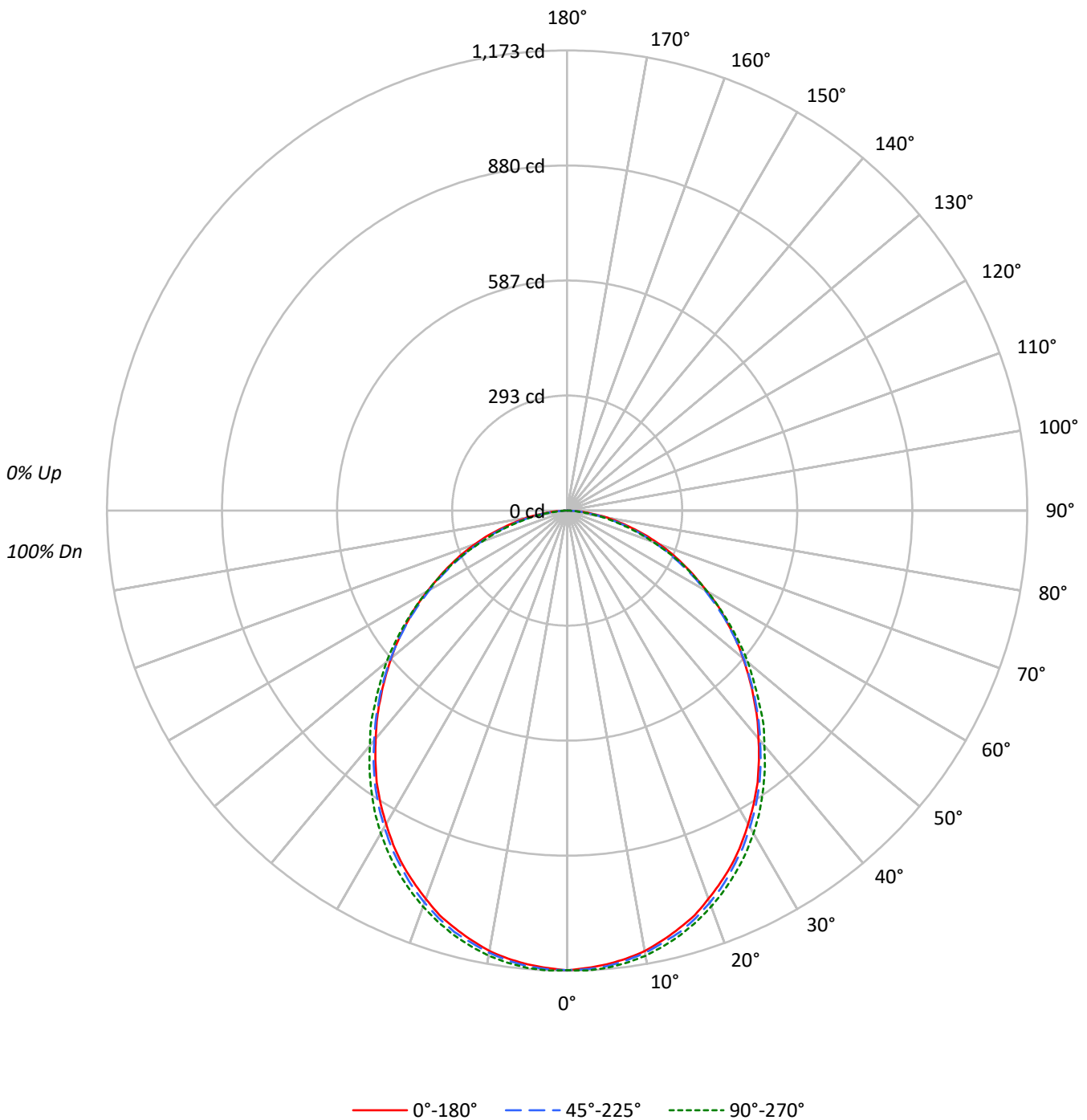
Input Watts (W): 26.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	59	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°	3752	3752	3752
5°	3733	3748	3762
10°	3708	3723	3747
15°	3656	3686	3711
20°	3589	3625	3661
25°	3515	3541	3594
30°	3412	3445	3512
35°	3308	3338	3402
40°	3174	3199	3268
45°	3044	3064	3132
50°	2915	2930	2997
55°	2781	2773	2823
60°	2633	2595	2643
65°	2490	2399	2456
70°	2332	2205	2163
75°	2116	1949	1875
80°	1909	1660	1549
85°	1488	1157	992



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.6	3.8
10°-20°	313.1	10.7
20°-30°	462.3	15.8
30°-40°	534.6	18.3
40°-50°	524.3	18.0
50°-60°	445.9	15.3
60°-70°	317.7	10.9
70°-80°	169.4	5.8
80°-90°	40.3	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°	885.9	30.4
0°-40°	1420.5	48.7
0°-60°	2390.7	81.9
0°-90°	2918.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2918.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1172	1172	1172	1172	1172	
5°	1161	1163	1166	1169	1170	110
15°	1103	1104	1112	1118	1119	311
25°	995	996	1002	1013	1017	457
35°	846	843	854	867	870	528
45°	672	671	677	689	692	519
55°	498	494	497	503	506	446
65°	329	318	317	318	324	326
75°	171	162	158	154	152	183
85°	40	36	32	27	27	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1171.7	1171.7	1171.7	1171.7	1171.7
2.5°	1167.2	1168.7	1170.2	1173.2	1173.2
5°	1161.2	1162.7	1165.7	1168.7	1170.2
7.5°	1152.2	1152.2	1156.7	1159.7	1162.7
10°	1140.2	1141.7	1144.7	1149.2	1152.2
12.5°	1122.2	1125.2	1128.2	1134.2	1137.2
15°	1102.7	1104.2	1111.7	1117.7	1119.2
17.5°	1081.7	1081.7	1089.2	1095.2	1098.2
20°	1053.2	1056.2	1063.7	1071.2	1074.2
22.5°	1024.7	1027.7	1035.2	1042.7	1047.2
25°	994.7	996.2	1002.2	1012.7	1017.2
27.5°	960.2	963.2	969.2	979.7	985.7
30°	922.7	925.7	931.7	943.7	949.7
32.5°	885.2	888.2	894.2	906.2	912.2
35°	846.2	843.2	853.7	867.2	870.2
37.5°	802.7	804.2	810.2	822.2	828.2
40°	759.1	759.1	765.2	778.7	781.7
42.5°	717.1	715.6	721.6	733.6	741.1
45°	672.1	670.6	676.6	688.6	691.6
47.5°	628.6	625.6	631.6	642.1	645.1
50°	585.1	582.1	588.1	597.1	601.6
52.5°	543.1	537.1	541.6	549.1	553.6
55°	498.1	493.6	496.6	502.6	505.6
57.5°	457.6	448.6	450.1	456.1	459.1
60°	411.1	403.6	405.1	411.1	412.6
62.5°	369.1	361.6	361.6	363.1	366.1
65°	328.6	318.1	316.6	318.1	324.1
67.5°	289.6	279.1	276.1	276.1	277.6
70°	249.0	238.5	235.5	234.0	231.0
72.5°	211.5	198.0	196.5	192.0	193.5
75°	171.0	162.0	157.5	154.5	151.5
77.5°	135.0	127.5	121.5	117.0	117.0
80°	103.5	93.0	90.0	84.0	84.0
82.5°	69.0	64.5	58.5	54.0	52.5
85°	40.5	36.0	31.5	27.0	27.0
87.5°	15.0	12.0	10.5	10.5	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)