

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: P229674

Luminaire Tested: **22RLN-LD5-20-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229674  
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-L940-CD1-SVPD1-U  
Description: METALUX 2X2 RLN LED TROFFER WITH SENSOR  
Light Source: (126)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1716.0 lumens  
Efficiency: N/A  
Efficacy: 104.4 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

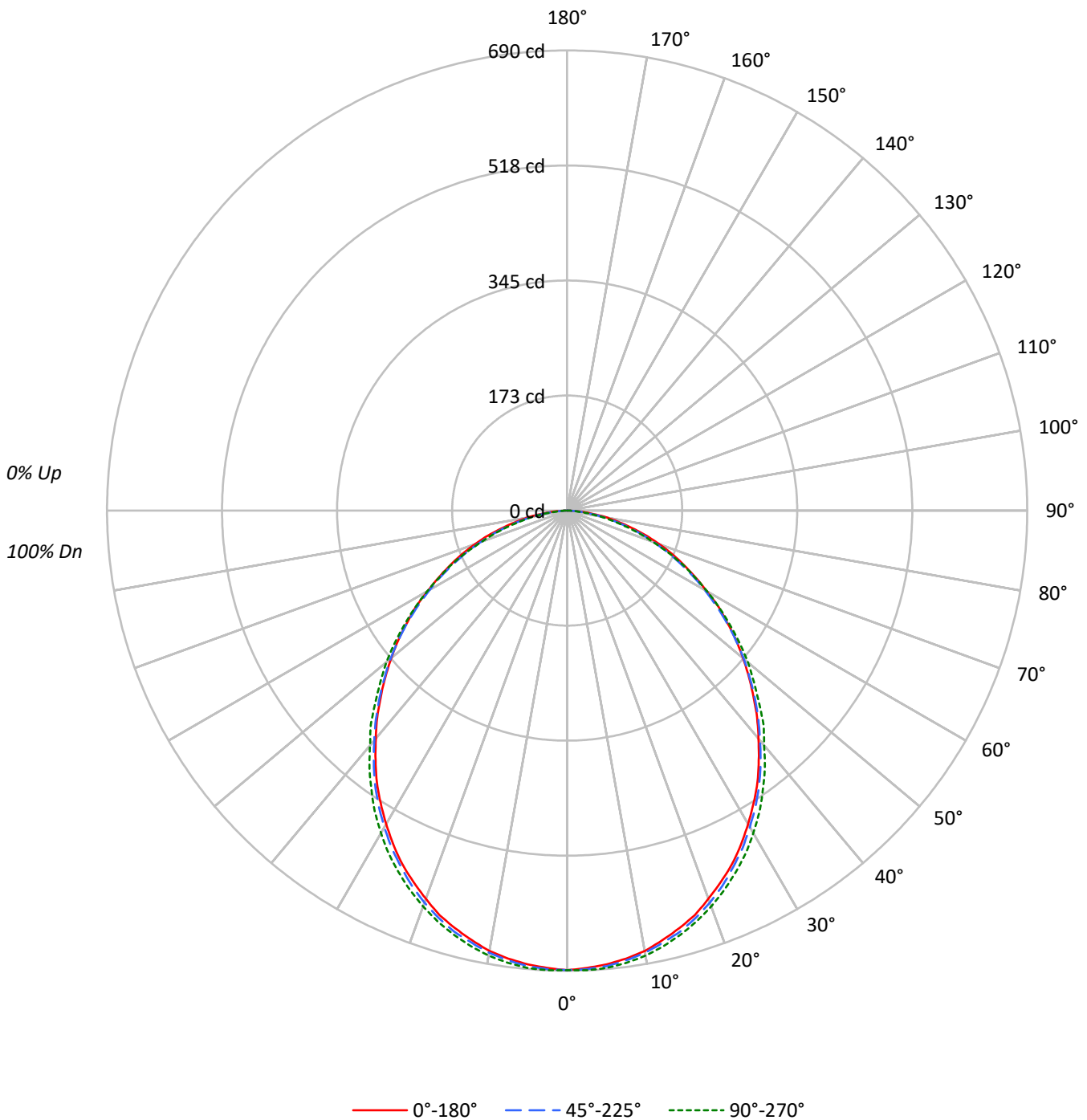
Input Watts (W): 16.43  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2207	2207	2207
5°	2195	2204	2212
10°	2180	2189	2204
15°	2150	2168	2182
20°	2111	2132	2153
25°	2067	2083	2114
30°	2007	2026	2065
35°	1945	1963	2001
40°	1866	1881	1922
45°	1790	1802	1842
50°	1714	1723	1763
55°	1635	1630	1660
60°	1548	1526	1554
65°	1464	1411	1444
70°	1372	1297	1273
75°	1245	1146	1103
80°	1123	976	911
85°	875	680	584



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	65.0	3.8
10°-20°	184.1	10.7
20°-30°	271.8	15.8
30°-40°	314.3	18.3
40°-50°	308.3	18.0
50°-60°	262.2	15.3
60°-70°	186.8	10.9
70°-80°	99.6	5.8
80°-90°	23.7	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°	521.0	30.4
0°-40°	835.3	48.7
0°-60°	1405.9	81.9
0°-90°	1716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1716.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	689	689	689	689	689	
5°	683	684	686	687	688	65
15°	648	649	654	657	658	183
25°	585	586	589	596	598	269
35°	498	496	502	510	512	310
45°	395	394	398	405	407	305
55°	293	290	292	296	297	263
65°	193	187	186	187	191	192
75°	101	95	93	91	89	108
85°	24	21	18	16	16	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	689.1	689.1	689.1	689.1	689.1
2.5°	686.4	687.3	688.2	689.9	689.9
5°	682.9	683.8	685.5	687.3	688.2
7.5°	677.6	677.6	680.2	682.0	683.8
10°	670.5	671.4	673.2	675.8	677.6
12.5°	659.9	661.7	663.5	667.0	668.8
15°	648.5	649.4	653.8	657.3	658.2
17.5°	636.1	636.1	640.5	644.1	645.8
20°	619.4	621.1	625.5	630.0	631.7
22.5°	602.6	604.4	608.8	613.2	615.8
25°	585.0	585.8	589.4	595.5	598.2
27.5°	564.7	566.4	570.0	576.1	579.7
30°	542.6	544.4	547.9	555.0	558.5
32.5°	520.5	522.3	525.8	532.9	536.4
35°	497.6	495.8	502.0	510.0	511.7
37.5°	472.0	472.9	476.4	483.5	487.0
40°	446.4	446.4	450.0	457.9	459.7
42.5°	421.7	420.8	424.4	431.4	435.8
45°	395.3	394.4	397.9	405.0	406.7
47.5°	369.7	367.9	371.4	377.6	379.4
50°	344.1	342.3	345.9	351.1	353.8
52.5°	319.4	315.9	318.5	322.9	325.6
55°	292.9	290.3	292.0	295.6	297.3
57.5°	269.1	263.8	264.7	268.2	270.0
60°	241.7	237.3	238.2	241.7	242.6
62.5°	217.0	212.6	212.6	213.5	215.3
65°	193.2	187.0	186.2	187.0	190.6
67.5°	170.3	164.1	162.3	162.3	163.2
70°	146.5	140.3	138.5	137.6	135.9
72.5°	124.4	116.5	115.6	112.9	113.8
75°	100.6	95.3	92.6	90.9	89.1
77.5°	79.4	75.0	71.5	68.8	68.8
80°	60.9	54.7	52.9	49.4	49.4
82.5°	40.6	37.9	34.4	31.8	30.9
85°	23.8	21.2	18.5	15.9	15.9
87.5°	8.8	7.1	6.2	6.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)