

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: P229638

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229638  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36060)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RLN-LD5-20-RDP-UNV-L940-CD1-U  
Description: METALUX 2X2 RLN LED TROFFER WITH RDP LENS  
Light Source: (126)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1444.0 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.38 / 1.41  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

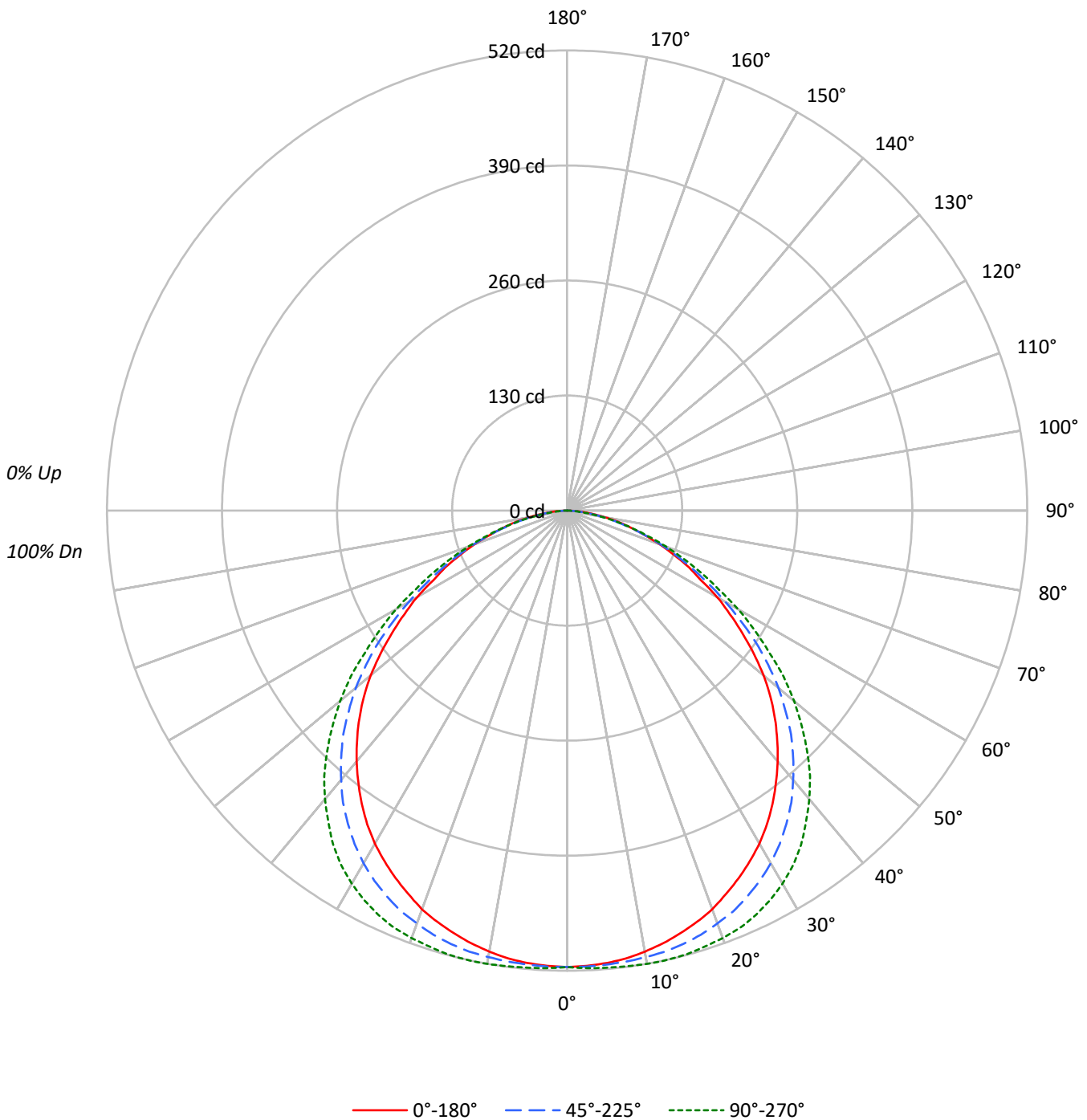
Input Watts (W): 16.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	37	49	42	37	47	41	37	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	1652	1652	1652
5°	1650	1655	1667
10°	1646	1666	1692
15°	1640	1681	1722
20°	1635	1692	1752
25°	1620	1701	1782
30°	1607	1702	1800
35°	1581	1689	1802
40°	1547	1661	1780
45°	1504	1620	1736
50°	1443	1554	1668
55°	1351	1455	1553
60°	1256	1324	1432
65°	1151	1191	1272
70°	1042	1059	1109
75°	918	896	929
80°	799	732	701
85°	650	485	423



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.1	3.4
10°-20°	143.2	9.9
20°-30°	221.9	15.4
30°-40°	270.0	18.7
40°-50°	275.0	19.0
50°-60°	231.9	16.1
60°-70°	156.9	10.9
70°-80°	78.4	5.4
80°-90°	17.4	1.2
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°	414.2	28.7
0°-40°	684.3	47.4
0°-60°	1191.3	82.5
0°-90°	1444.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1444.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	516	516	516	516	516	
5°	513	514	515	518	518	49
15°	495	498	507	516	519	140
25°	458	466	481	497	504	211
35°	404	413	432	452	461	253
45°	332	338	358	376	383	256
55°	242	246	261	273	278	217
65°	152	149	157	164	168	150
75°	74	72	72	73	75	80
85°	18	15	13	12	12	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	515.8	515.8	515.8	515.8	515.8
2.5°	514.9	514.9	515.8	516.7	517.6
5°	513.2	514.0	514.9	517.6	518.5
7.5°	510.5	511.4	514.0	517.6	519.3
10°	506.1	507.9	512.3	517.6	520.2
12.5°	500.8	503.4	510.5	516.7	520.2
15°	494.6	498.1	507.0	515.8	519.3
17.5°	487.5	492.0	502.6	512.3	516.7
20°	479.6	484.9	496.4	508.7	514.0
22.5°	469.0	476.1	490.2	504.3	510.5
25°	458.4	465.5	481.4	497.3	504.3
27.5°	446.9	454.9	471.6	489.3	496.4
30°	434.5	441.6	460.2	478.7	486.7
32.5°	420.4	427.5	446.9	466.3	475.2
35°	404.5	413.3	431.9	452.2	461.0
37.5°	387.7	395.7	416.0	435.4	443.4
40°	370.1	378.0	397.4	417.8	425.7
42.5°	351.5	359.5	378.0	397.4	406.3
45°	332.1	338.3	357.7	376.3	383.3
47.5°	311.8	316.2	334.7	352.4	359.5
50°	289.7	294.1	311.8	327.7	334.7
52.5°	265.8	269.4	286.2	300.3	308.2
55°	242.0	245.5	260.6	272.9	278.2
57.5°	218.2	219.9	233.2	245.5	250.8
60°	196.1	196.1	206.7	216.4	223.5
62.5°	170.5	173.1	181.1	190.8	193.4
65°	151.9	149.3	157.2	164.3	167.8
67.5°	130.7	129.0	134.2	140.4	142.2
70°	111.3	108.6	113.1	116.6	118.4
72.5°	91.0	90.1	91.9	94.5	95.4
75°	74.2	71.5	72.4	73.3	75.1
77.5°	59.2	54.8	55.6	54.8	55.6
80°	43.3	39.7	39.7	38.9	38.0
82.5°	29.1	27.4	25.6	23.8	23.0
85°	17.7	15.0	13.2	11.5	11.5
87.5°	7.1	5.3	4.4	4.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)