

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: P229598

Luminaire Tested: **22RLN-LD5-31-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229598  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36050)  
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-L935-CD1-U  
Description: METALUX 2X2 RLN LED TROFFER  
Light Source: (126)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

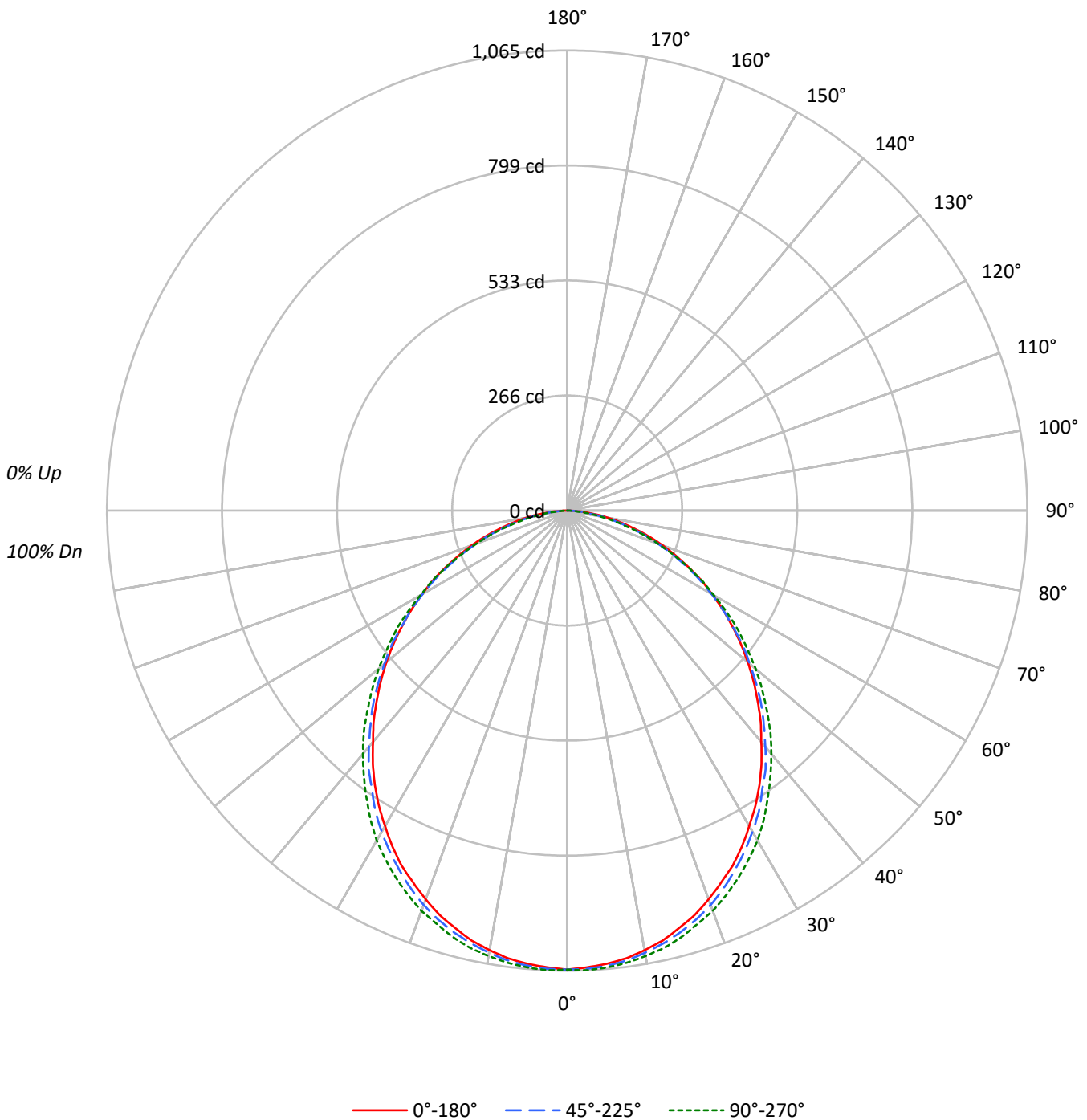
Lumens per Lamp: N/A  
Luminaire Lumens: 2716.0 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

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	102	99	95	98	95	92		94	92	90		91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80	77	73	71
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	43		54	47	42		52	46	42	40
7	66	53	44	38	64	52	44	38	51	43	38		49	42	38		48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44	38	33	32
9	58	44	36	31	56	44	36	31	43	36	31		42	35	30		41	35	30	28
10	54	41	33	28	53	41	33	28	40	33	28		39	32	28		38	32	28	26

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

	0°	45°	90°
0°	3402	3402	3402
5°	3385	3399	3413
10°	3360	3379	3405
15°	3317	3351	3389
20°	3263	3310	3360
25°	3204	3246	3313
30°	3117	3174	3260
35°	3033	3080	3168
40°	2923	2984	3074
45°	2823	2878	2960
50°	2719	2750	2835
55°	2605	2610	2702
60°	2481	2470	2509
65°	2348	2297	2329
70°	2200	2088	2096
75°	1992	1833	1779
80°	1763	1540	1429
85°	1422	1077	919



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.4	3.7
10°-20°	285.1	10.5
20°-30°	423.7	15.6
30°-40°	494.6	18.2
40°-50°	490.9	18.1
50°-60°	421.3	15.5
60°-70°	302.4	11.1
70°-80°	160.2	5.9
80°-90°	37.5	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°	809.1	29.8
0°-40°	1303.7	48.0
0°-60°	2215.9	81.6
0°-90°	2716.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2716.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1062	1062	1062	1062	1062	
5°	1053	1055	1057	1061	1062	100
15°	1000	1004	1011	1018	1022	282
25°	907	909	919	932	938	417
35°	776	778	788	805	810	485
45°	623	626	635	647	654	481
55°	467	464	468	478	484	417
65°	310	302	303	306	307	308
75°	161	153	148	146	144	171
85°	39	34	29	25	25	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1062.4	1062.4	1062.4	1062.4	1062.4
2.5°	1058.1	1059.0	1061.6	1064.1	1065.0
5°	1053.0	1054.7	1057.3	1060.7	1061.6
7.5°	1045.2	1046.9	1050.4	1053.8	1055.5
10°	1033.2	1035.7	1039.2	1045.2	1046.9
12.5°	1019.4	1021.1	1026.3	1033.2	1036.6
15°	1000.4	1003.9	1010.8	1018.5	1022.0
17.5°	981.5	984.1	992.7	1000.4	1003.0
20°	957.4	962.6	971.2	980.6	985.8
22.5°	931.6	935.9	946.2	957.4	962.6
25°	906.6	909.2	918.6	932.4	937.6
27.5°	876.5	879.0	889.4	903.1	910.0
30°	842.9	847.2	858.4	873.9	881.6
32.5°	811.0	814.5	825.7	839.4	847.2
35°	775.7	778.3	787.8	805.0	810.2
37.5°	738.7	741.3	754.2	767.1	773.1
40°	699.1	702.5	713.7	726.7	735.3
42.5°	662.9	664.7	674.1	688.8	696.5
45°	623.3	625.9	635.4	646.6	653.5
47.5°	585.5	584.6	594.1	607.0	612.1
50°	545.8	544.1	551.9	564.8	569.1
52.5°	506.2	503.7	512.3	521.7	525.2
55°	466.6	464.1	467.5	477.8	483.9
57.5°	427.9	423.6	427.9	433.1	438.2
60°	387.4	380.5	385.7	391.7	391.7
62.5°	350.4	342.7	345.2	349.5	352.1
65°	309.9	302.2	303.1	305.6	307.4
67.5°	272.1	264.3	262.6	263.5	264.3
70°	235.0	226.4	223.0	221.3	223.8
72.5°	197.2	188.6	186.8	183.4	184.2
75°	161.0	153.3	148.1	146.4	143.8
77.5°	126.6	119.7	115.4	110.2	109.3
80°	95.6	87.0	83.5	80.1	77.5
82.5°	67.2	59.4	53.4	49.9	47.4
85°	38.7	33.6	29.3	25.0	25.0
87.5°	15.5	12.1	10.3	9.5	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)