

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: P229592

Luminaire Tested: **22RLN-LD5-31-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229592  
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-L930-CD1-U  
Description: METALUX 2X2 RLN LED TROFFER  
Light Source: (126)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2619.0 lumens  
Efficiency: N/A  
Efficacy: 98.5 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

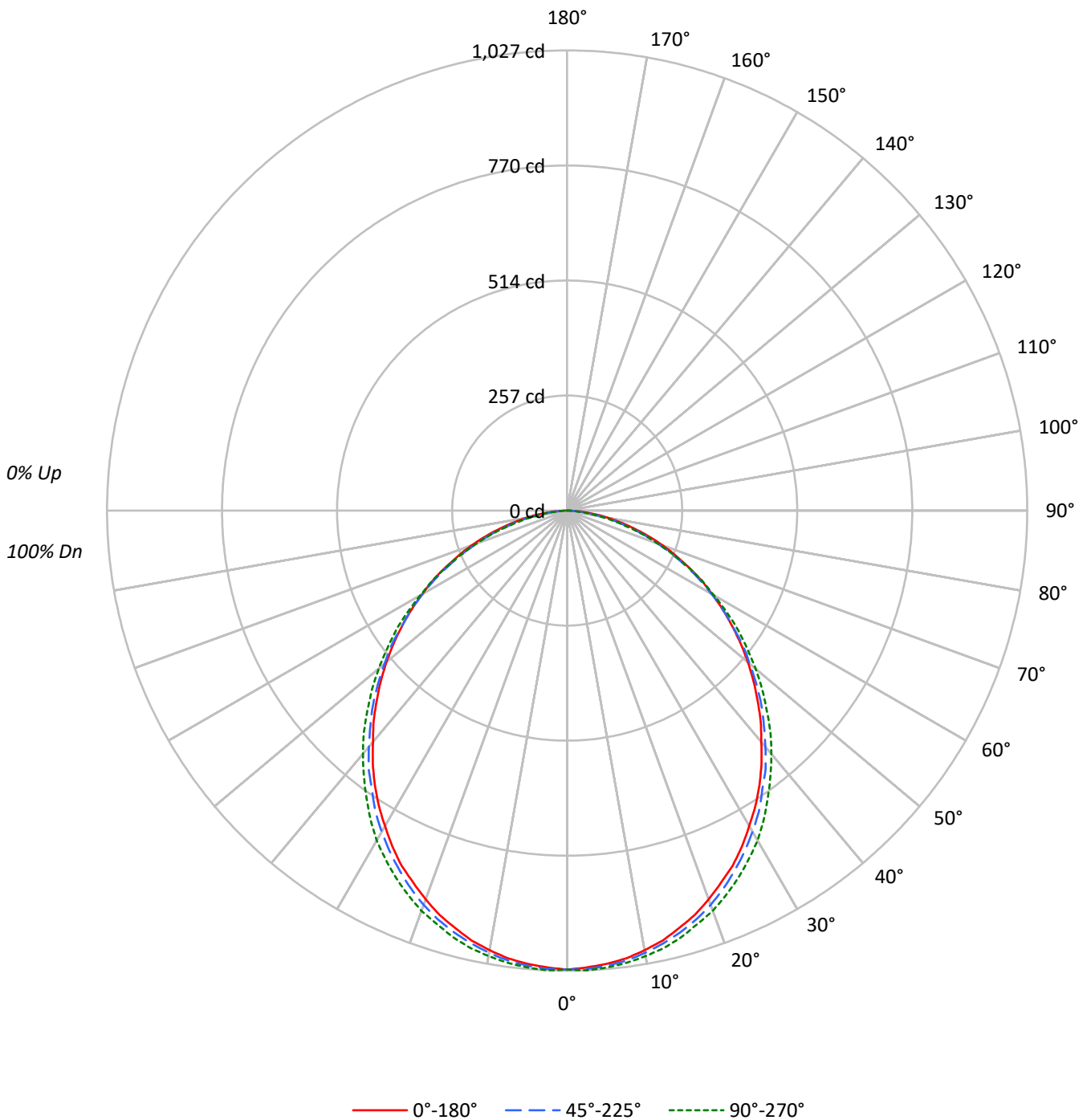
Input Watts (W): 26.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3281	3281	3281
5°	3264	3278	3291
10°	3240	3259	3283
15°	3199	3232	3268
20°	3146	3192	3240
25°	3089	3130	3195
30°	3006	3061	3144
35°	2924	2970	3054
40°	2818	2877	2964
45°	2722	2775	2854
50°	2623	2652	2734
55°	2513	2517	2605
60°	2393	2382	2419
65°	2265	2214	2246
70°	2122	2013	2022
75°	1920	1767	1715
80°	1700	1485	1378
85°	1374	1036	886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.8	3.7
10°-20°	274.9	10.5
20°-30°	408.5	15.6
30°-40°	476.9	18.2
40°-50°	473.4	18.1
50°-60°	406.2	15.5
60°-70°	291.6	11.1
70°-80°	154.5	5.9
80°-90°	36.2	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°	780.2	29.8
0°-40°	1257.1	48.0
0°-60°	2136.7	81.6
0°-90°	2619.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2619.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1024	1024	1024	1024	1024	
5°	1015	1017	1020	1023	1024	96
15°	965	968	975	982	986	272
25°	874	877	886	899	904	402
35°	748	750	760	776	781	467
45°	601	604	613	624	630	464
55°	450	448	451	461	467	403
65°	299	291	292	295	296	297
75°	155	148	143	141	139	165
85°	37	32	28	24	24	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1024.5	1024.5	1024.5	1024.5	1024.5
2.5°	1020.3	1021.2	1023.7	1026.1	1027.0
5°	1015.3	1017.0	1019.5	1022.8	1023.7
7.5°	1007.9	1009.5	1012.9	1016.2	1017.8
10°	996.3	998.7	1002.1	1007.9	1009.5
12.5°	983.0	984.6	989.6	996.3	999.6
15°	964.7	968.0	974.7	982.1	985.5
17.5°	946.4	948.9	957.2	964.7	967.2
20°	923.2	928.2	936.5	945.6	950.6
22.5°	898.3	902.4	912.4	923.2	928.2
25°	874.2	876.7	885.8	899.1	904.1
27.5°	845.2	847.6	857.6	870.9	877.5
30°	812.8	816.9	827.7	842.7	850.1
32.5°	782.1	785.4	796.2	809.5	816.9
35°	748.0	750.5	759.6	776.2	781.2
37.5°	712.3	714.8	727.3	739.7	745.5
40°	674.1	677.5	688.2	700.7	709.0
42.5°	639.3	640.9	650.1	664.2	671.6
45°	601.1	603.6	612.7	623.5	630.1
47.5°	564.5	563.7	572.8	585.3	590.3
50°	526.4	524.7	532.2	544.6	548.8
52.5°	488.2	485.7	494.0	503.1	506.4
55°	450.0	447.5	450.8	460.8	466.6
57.5°	412.6	408.5	412.6	417.6	422.6
60°	373.6	367.0	371.9	377.7	377.7
62.5°	337.9	330.4	332.9	337.1	339.6
65°	298.9	291.4	292.2	294.7	296.4
67.5°	262.3	254.9	253.2	254.0	254.9
70°	226.6	218.3	215.0	213.4	215.9
72.5°	190.1	181.8	180.2	176.8	177.7
75°	155.2	147.8	142.8	141.1	138.6
77.5°	122.0	115.4	111.2	106.3	105.4
80°	92.2	83.9	80.5	77.2	74.7
82.5°	64.8	57.3	51.5	48.2	45.7
85°	37.4	32.4	28.2	24.1	24.1
87.5°	14.9	11.6	10.0	9.1	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)