

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: P229591

Luminaire Tested: **22RLN-LD5-25-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229591  
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-LD5-25-UNV-L930-CD1-U  
Description: METALUX 2X2 RLN LED TROFFER  
Light Source: (126)3000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

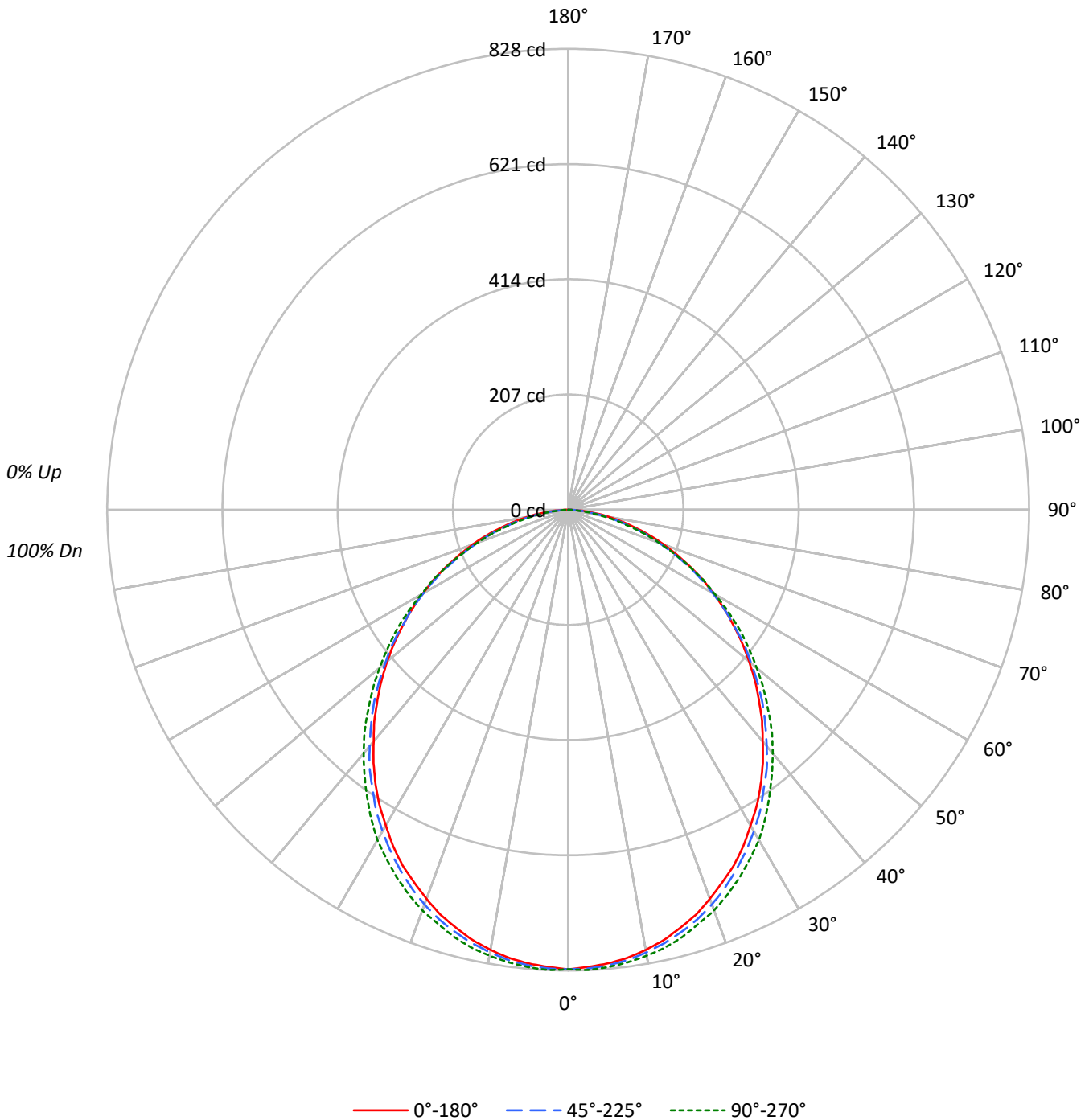
Lumens per Lamp: N/A  
Luminaire Lumens: 2111.0 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 20.9  
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



TEST NUMBER: P229591  
CATALOG NUMBER: 22RLN-LD5-25-UNV-L930-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P229591

CATALOG NUMBER: 22RLN-LD5-25-UNV-L930-CD1-U

**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°	2645	2645	2645
5°	2631	2642	2653
10°	2611	2627	2646
15°	2578	2605	2634
20°	2536	2572	2611
25°	2490	2523	2575
30°	2423	2467	2534
35°	2357	2394	2462
40°	2272	2319	2389
45°	2194	2237	2300
50°	2114	2137	2204
55°	2025	2029	2100
60°	1929	1920	1950
65°	1826	1785	1810
70°	1711	1623	1629
75°	1548	1424	1383
80°	1370	1197	1110
85°	1106	838	713



TEST NUMBER: P229591

CATALOG NUMBER: 22RLN-LD5-25-UNV-L930-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.0	3.7
10°-20°	221.6	10.5
20°-30°	329.3	15.6
30°-40°	384.4	18.2
40°-50°	381.6	18.1
50°-60°	327.4	15.5
60°-70°	235.0	11.1
70°-80°	124.5	5.9
80°-90°	29.2	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°	628.9	29.8
0°-40°	1013.3	48.0
0°-60°	1722.3	81.6
0°-90°	2111.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2111.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	826	826	826	826	826	
5°	818	820	822	824	825	78
15°	778	780	786	792	794	219
25°	705	707	714	725	729	324
35°	603	605	612	626	630	377
45°	484	486	494	503	508	374
55°	363	361	363	371	376	325
65°	241	235	236	238	239	239
75°	125	119	115	114	112	133
85°	30	26	23	19	19	36
90°	0	0	0	0	0	



TEST NUMBER: P229591

CATALOG NUMBER: 22RLN-LD5-25-UNV-L930-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	825.8	825.8	825.8	825.8	825.8
2.5°	822.4	823.1	825.1	827.1	827.8
5°	818.4	819.7	821.8	824.4	825.1
7.5°	812.4	813.7	816.4	819.1	820.4
10°	803.0	805.0	807.7	812.4	813.7
12.5°	792.3	793.6	797.7	803.0	805.7
15°	777.6	780.3	785.6	791.6	794.3
17.5°	762.9	764.9	771.6	777.6	779.6
20°	744.1	748.1	754.8	762.2	766.2
22.5°	724.1	727.4	735.4	744.1	748.1
25°	704.6	706.7	714.0	724.7	728.7
27.5°	681.2	683.2	691.3	702.0	707.3
30°	655.1	658.5	667.2	679.2	685.2
32.5°	630.4	633.0	641.7	652.4	658.5
35°	602.9	604.9	612.3	625.7	629.7
37.5°	574.2	576.2	586.2	596.2	600.9
40°	543.4	546.0	554.7	564.8	571.5
42.5°	515.3	516.6	524.0	535.3	541.4
45°	484.5	486.5	493.9	502.6	507.9
47.5°	455.0	454.4	461.7	471.8	475.8
50°	424.3	422.9	428.9	439.0	442.3
52.5°	393.5	391.5	398.2	405.5	408.2
55°	362.7	360.7	363.4	371.4	376.1
57.5°	332.6	329.2	332.6	336.6	340.6
60°	301.1	295.8	299.8	304.5	304.5
62.5°	272.4	266.3	268.3	271.7	273.7
65°	240.9	234.9	235.6	237.6	238.9
67.5°	211.5	205.4	204.1	204.8	205.4
70°	182.7	176.0	173.3	172.0	174.0
72.5°	153.2	146.6	145.2	142.5	143.2
75°	125.1	119.1	115.1	113.8	111.8
77.5°	98.4	93.0	89.7	85.7	85.0
80°	74.3	67.6	64.9	62.2	60.2
82.5°	52.2	46.2	41.5	38.8	36.8
85°	30.1	26.1	22.8	19.4	19.4
87.5°	12.0	9.4	8.0	7.4	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)