

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: P296638

Luminaire Tested: **22RLN-LD5-31-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296638
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36060-R2)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RLN-LD5-31-RDP-UNV-L93050-W2A1-U-4500K
Description: RLN LED 2x2 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (252) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2382.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.38 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

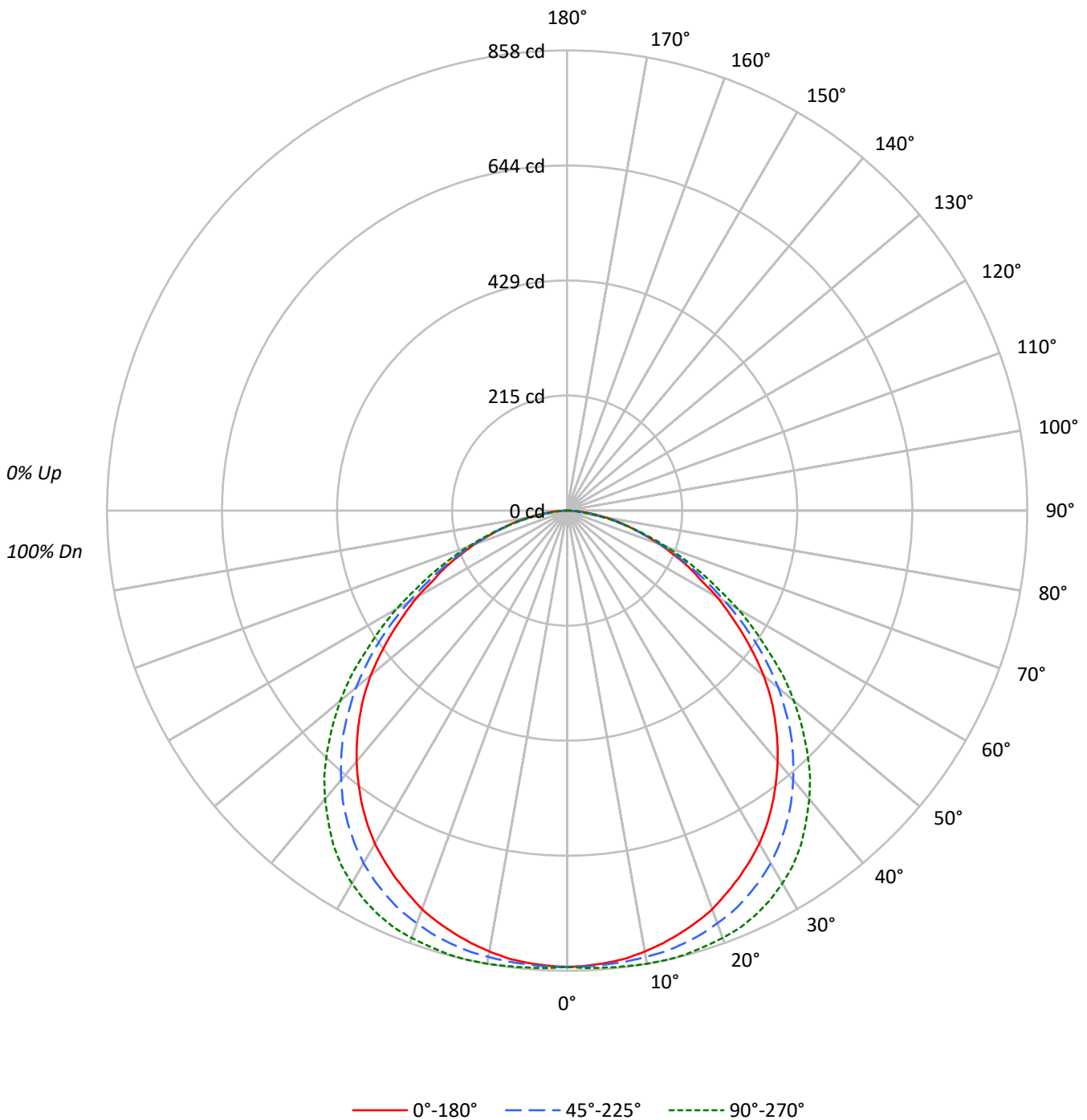
Input Watts (W): 25.482
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2290	2290	2290
5°	2287	2294	2310
10°	2281	2309	2345
15°	2273	2330	2387
20°	2265	2345	2428
25°	2245	2358	2470
30°	2227	2359	2495
35°	2192	2340	2498
40°	2145	2303	2467
45°	2085	2246	2406
50°	2001	2153	2312
55°	1873	2016	2153
60°	1741	1835	1984
65°	1596	1651	1762
70°	1445	1467	1536
75°	1273	1242	1287
80°	1106	1017	970
85°	898	676	584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.0	3.4
10°-20°	236.2	9.9
20°-30°	366.0	15.4
30°-40°	445.5	18.7
40°-50°	453.7	19.0
50°-60°	382.6	16.1
60°-70°	258.8	10.9
70°-80°	129.3	5.4
80°-90°	28.8	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°	683.3	28.7
0°-40°	1128.8	47.4
0°-60°	1965.1	82.5
0°-90°	2382.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2382.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	851	851	851	851	851	
5°	846	848	849	854	855	80
15°	816	822	836	851	857	230
25°	756	768	794	820	832	349
35°	667	682	712	746	760	417
45°	548	558	590	621	632	422
55°	399	405	430	450	459	357
65°	251	246	259	271	277	248
75°	122	118	120	121	124	131
85°	29	25	22	19	19	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	850.9	850.9	850.9	850.9	850.9
2.5°	849.4	849.4	850.9	852.3	853.8
5°	846.5	847.9	849.4	853.8	855.2
7.5°	842.1	843.6	847.9	853.8	856.7
10°	834.8	837.7	845.0	853.8	858.1
12.5°	826.1	830.5	842.1	852.3	858.1
15°	815.9	821.7	836.3	850.9	856.7
17.5°	804.2	811.5	829.0	845.0	852.3
20°	791.1	799.9	818.8	839.2	847.9
22.5°	773.6	785.3	808.6	831.9	842.1
25°	756.2	767.8	794.0	820.3	831.9
27.5°	737.2	750.3	778.0	807.2	818.8
30°	716.8	728.5	759.1	789.7	802.8
32.5°	693.5	705.2	737.2	769.3	783.8
35°	667.3	681.9	712.4	746.0	760.5
37.5°	639.6	652.7	686.2	718.3	731.4
40°	610.5	623.6	655.6	689.1	702.2
42.5°	579.9	593.0	623.6	655.6	670.2
45°	547.8	558.0	590.1	620.7	632.3
47.5°	514.3	521.6	552.2	581.3	593.0
50°	477.9	485.2	514.3	540.5	552.2
52.5°	438.5	444.4	472.1	495.4	508.5
55°	399.2	405.0	429.8	450.2	458.9
57.5°	359.9	362.8	384.6	405.0	413.8
60°	323.4	323.4	340.9	357.0	368.6
62.5°	281.2	285.6	298.7	314.7	319.1
65°	250.6	246.2	259.3	271.0	276.8
67.5°	215.6	212.7	221.5	231.7	234.6
70°	183.6	179.2	186.5	192.3	195.2
72.5°	150.1	148.6	151.5	155.9	157.4
75°	122.4	118.0	119.5	120.9	123.8
77.5°	97.6	90.3	91.8	90.3	91.8
80°	71.4	65.6	65.6	64.1	62.6
82.5°	48.1	45.2	42.3	39.3	37.9
85°	29.1	24.8	21.9	18.9	18.9
87.5°	11.7	8.7	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)