

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: P295756

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295756
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36061-R2)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-31-RDP-UNV-L93050-W2A1-U-4500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2472.0 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

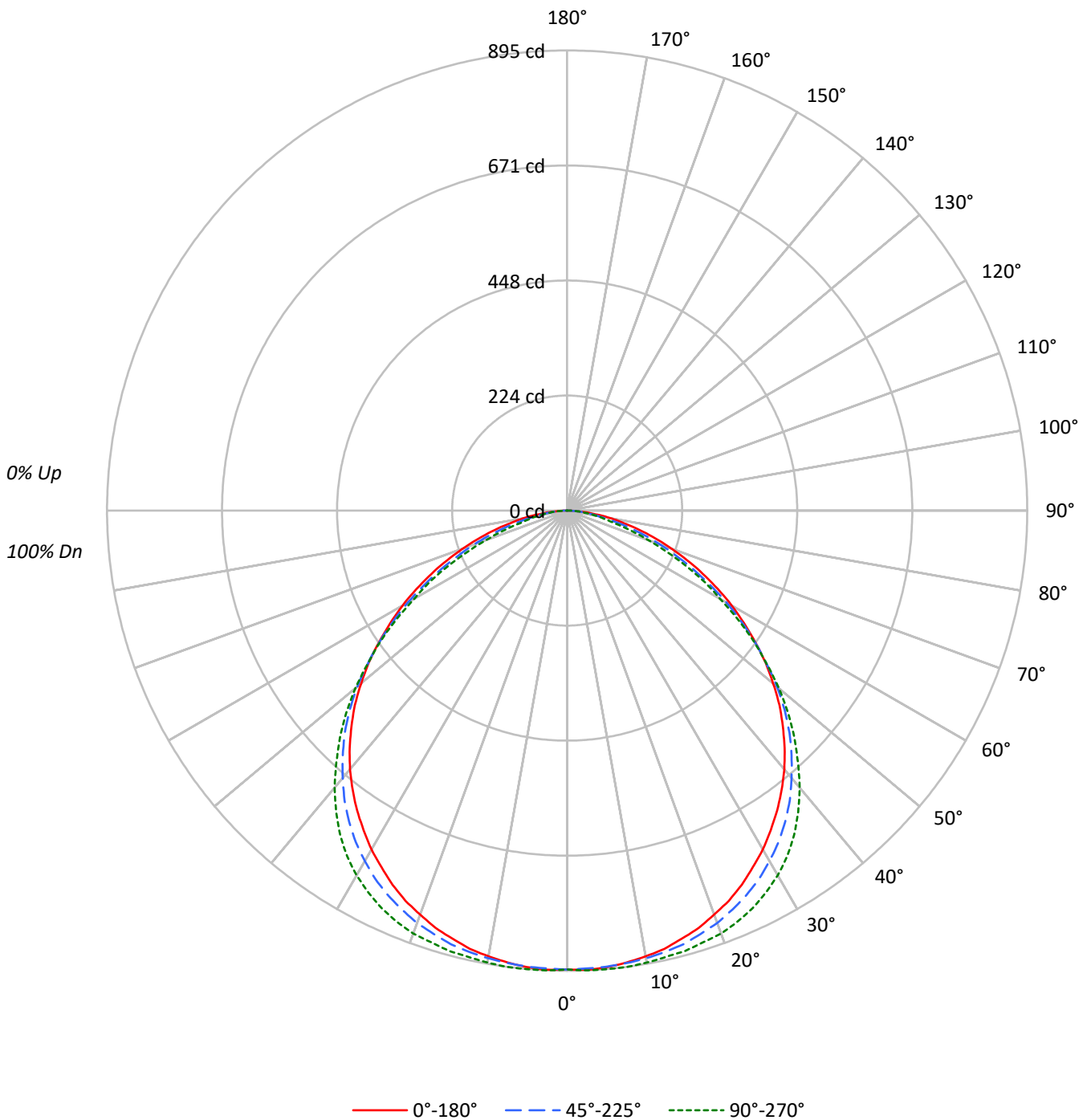
Input Watts (W): 29.481
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	59	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	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	30	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2402	2402	2402
5°	2408	2405	2418
10°	2406	2416	2439
15°	2401	2432	2470
20°	2395	2444	2507
25°	2385	2450	2534
30°	2366	2446	2545
35°	2340	2428	2529
40°	2308	2386	2472
45°	2257	2327	2379
50°	2190	2231	2251
55°	2097	2092	2080
60°	1989	1923	1850
65°	1853	1720	1626
70°	1691	1507	1314
75°	1519	1251	984
80°	1351	913	857
85°	1062	760	760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.0	3.4
10°-20°	247.0	10.0
20°-30°	381.2	15.4
30°-40°	462.3	18.7
40°-50°	469.3	19.0
50°-60°	397.0	16.1
60°-70°	268.6	10.9
70°-80°	129.9	5.3
80°-90°	31.7	1.3
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°	713.1	28.8
0°-40°	1175.4	47.5
0°-60°	2041.8	82.6
0°-90°	2472.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2472.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	892	892	890	894	895	85
15°	862	867	873	883	887	243
25°	803	809	825	846	853	370
35°	712	720	739	763	770	445
45°	593	594	612	624	625	457
55°	447	443	446	446	443	400
65°	291	279	270	259	255	289
75°	146	135	120	104	95	156
85°	34	27	25	25	25	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	892.7	892.7	892.7	892.7	892.7
2.5°	894.0	894.0	891.5	894.0	895.2
5°	891.5	891.5	890.3	894.0	895.2
7.5°	886.6	887.8	887.8	892.7	895.2
10°	880.4	882.9	884.1	891.5	892.7
12.5°	873.1	875.5	879.2	887.8	889.0
15°	862.0	866.9	873.1	882.9	886.6
17.5°	851.0	855.9	863.3	876.8	880.4
20°	836.2	842.4	853.4	869.4	875.5
22.5°	821.5	826.4	839.9	859.6	865.7
25°	803.1	809.2	825.2	846.1	853.4
27.5°	782.2	790.8	808.0	830.1	837.5
30°	761.3	768.7	787.1	811.7	819.1
32.5°	736.8	744.1	765.0	788.4	796.9
35°	712.2	719.6	739.2	762.6	769.9
37.5°	685.2	690.1	711.0	730.6	738.0
40°	657.0	660.6	679.1	698.7	703.6
42.5°	626.3	628.7	645.9	663.1	664.3
45°	593.1	594.3	611.5	623.8	625.0
47.5°	560.0	558.7	573.5	582.1	583.3
50°	523.1	523.1	532.9	537.8	537.8
52.5°	486.3	483.8	488.7	492.4	488.7
55°	447.0	443.3	445.8	445.8	443.3
57.5°	407.7	400.3	401.5	399.1	392.9
60°	369.6	361.0	357.3	348.7	343.8
62.5°	330.3	320.5	313.1	303.3	302.1
65°	291.0	278.7	270.2	259.1	255.4
67.5°	253.0	241.9	229.6	217.3	210.0
70°	214.9	202.6	191.6	175.6	167.0
72.5°	180.5	169.5	156.0	137.5	131.4
75°	146.1	135.1	120.3	104.4	94.6
77.5°	113.0	104.4	88.4	74.9	73.7
80°	87.2	77.4	58.9	55.3	55.3
82.5°	56.5	50.3	41.8	39.3	39.3
85°	34.4	27.0	24.6	24.6	24.6
87.5°	13.5	12.3	12.3	12.3	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)