

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: P295613

Luminaire Tested: **14RLN-LD5-31-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295613
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-085-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-31-UNV-L93050-W2A1-U-3000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2427.0 lumens
Efficiency: N/A
Efficacy: 83.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.01 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

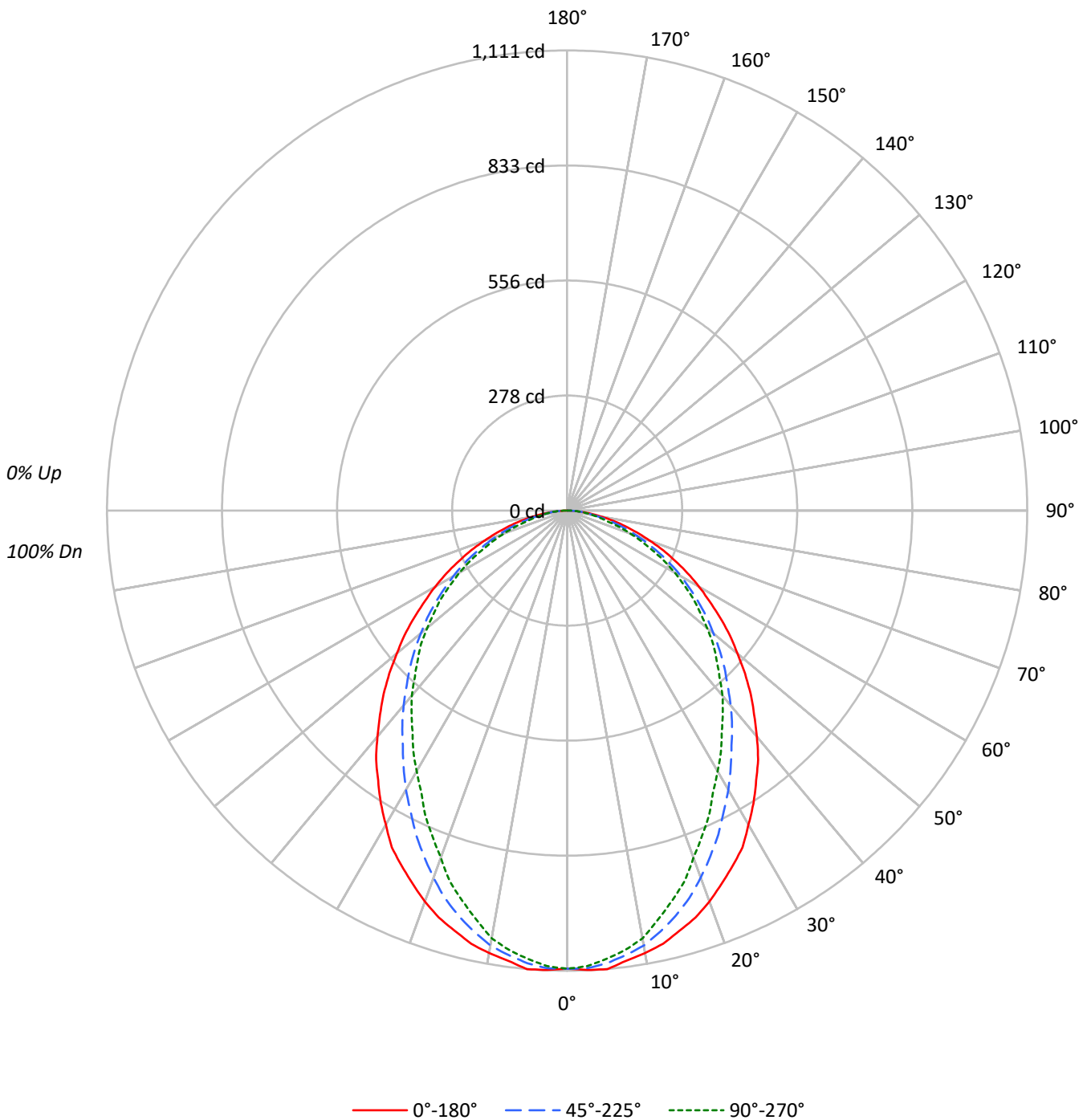
Input Watts (W): 28.923
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47					47			
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33					33			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2976	2976	2976
5°	3002	2963	2935
10°	2964	2913	2866
15°	2924	2822	2719
20°	2877	2701	2554
25°	2809	2563	2408
30°	2720	2418	2258
35°	2613	2273	2139
40°	2503	2157	2049
45°	2384	2044	1943
50°	2244	1931	1845
55°	2116	1823	1746
60°	1981	1710	1617
65°	1834	1580	1449
70°	1670	1419	1282
75°	1502	1268	1045
80°	1286	1032	986
85°	1044	982	982



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.6	4.3
10°-20°	284.3	11.7
20°-30°	399.0	16.4
30°-40°	442.5	18.2
40°-50°	424.8	17.5
50°-60°	356.0	14.7
60°-70°	249.9	10.3
70°-80°	130.5	5.4
80°-90°	36.5	1.5
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°	786.8	32.4
0°-40°	1229.3	50.6
0°-60°	2010.1	82.8
0°-90°	2427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2427.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1106	1106	1106	1106	1106	
5°	1111	1097	1097	1090	1087	105
15°	1050	1031	1013	986	976	296
25°	946	912	863	821	811	435
35°	796	751	692	658	651	498
45°	626	578	537	517	510	482
55°	451	417	388	376	372	403
65°	288	269	248	233	228	286
75°	144	133	122	108	100	153
85°	34	32	32	32	32	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1106.1	1106.1	1106.1	1106.1	1106.1
2.5°	1110.2	1104.1	1106.1	1106.1	1101.0
5°	1111.3	1096.9	1096.9	1089.7	1086.7
7.5°	1095.9	1084.6	1082.6	1073.3	1070.2
10°	1084.6	1073.3	1066.1	1053.8	1048.7
12.5°	1071.3	1053.8	1040.5	1020.0	1011.8
15°	1049.7	1031.3	1012.8	986.2	975.9
17.5°	1030.3	1008.7	981.1	951.3	940.1
20°	1004.6	979.0	943.1	902.1	891.9
22.5°	974.9	945.2	903.2	859.1	850.9
25°	946.2	912.4	863.2	821.1	810.9
27.5°	916.5	875.5	819.1	774.0	763.7
30°	875.5	833.4	778.1	734.0	726.8
32.5°	837.5	795.5	735.0	699.1	690.9
35°	795.5	751.4	692.0	658.1	651.0
37.5°	757.6	706.3	654.0	621.2	617.1
40°	712.5	666.3	614.1	589.5	583.3
42.5°	668.4	622.3	573.1	551.5	544.4
45°	626.4	578.2	537.2	516.7	510.5
47.5°	582.3	538.2	499.2	482.8	478.7
50°	536.1	497.2	461.3	445.9	440.8
52.5°	495.1	455.2	425.4	411.1	404.9
55°	451.1	417.2	388.5	376.2	372.1
57.5°	407.0	379.3	351.6	340.3	334.2
60°	368.0	340.3	317.8	304.5	300.4
62.5°	328.0	304.5	282.9	270.6	265.5
65°	288.1	268.6	248.1	232.7	227.6
67.5°	251.2	229.6	213.2	199.9	194.8
70°	212.2	196.8	180.4	168.1	163.0
72.5°	176.3	165.0	150.7	137.4	132.2
75°	144.5	133.3	122.0	107.6	100.5
77.5°	112.8	105.6	94.3	82.0	82.0
80°	83.0	78.9	66.6	64.6	63.6
82.5°	57.4	55.4	48.2	47.2	47.2
85°	33.8	31.8	31.8	31.8	31.8
87.5°	14.4	15.4	16.4	16.4	17.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)