

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: P295546

Luminaire Tested: **14RLN-LD5-31-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295546
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-L83050-W2A1-U-4500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3307.0 lumens
Efficiency: N/A
Efficacy: 111.5 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

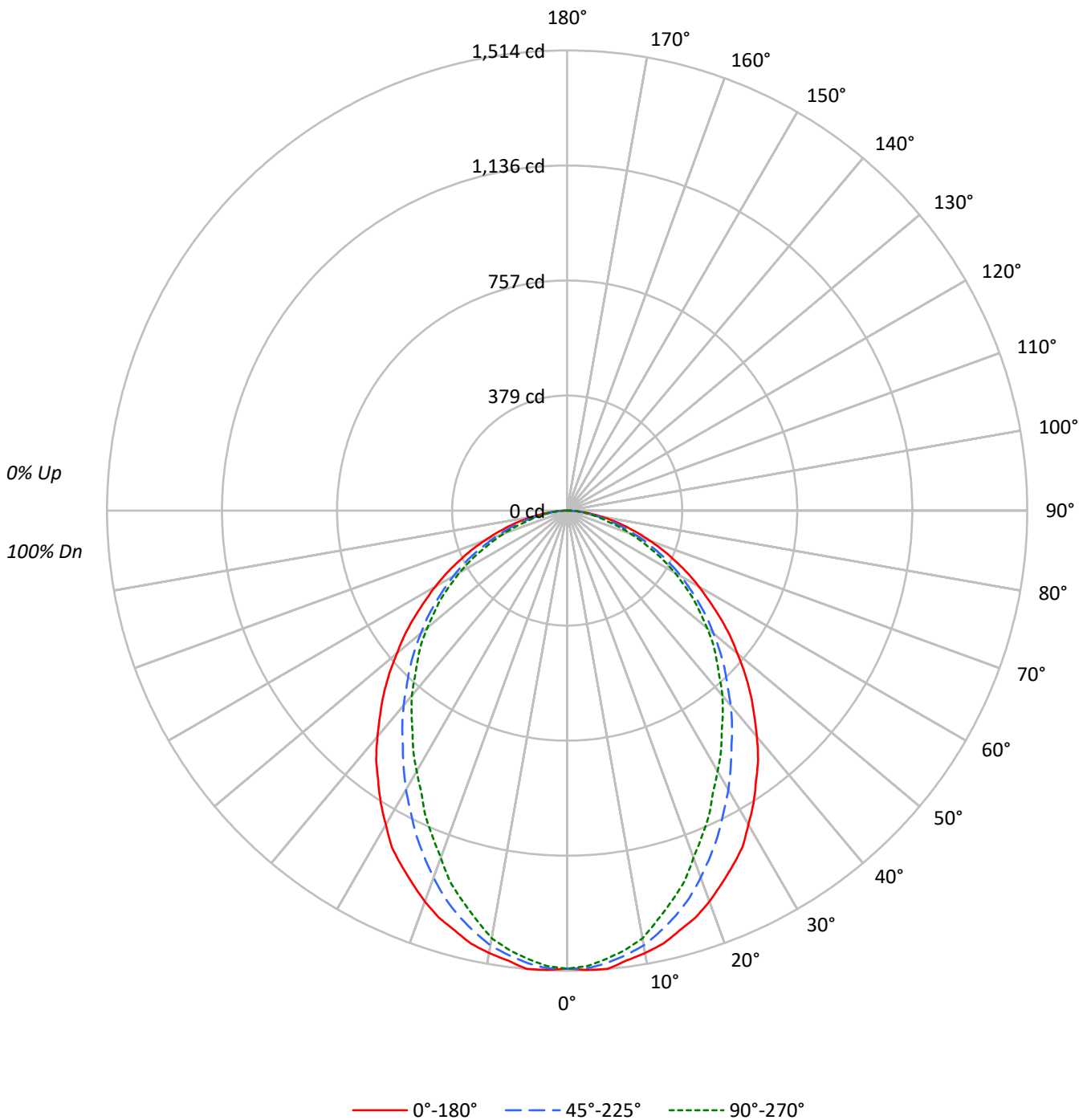
Input Watts (W): 29.667
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4056	4056	4056
5°	4090	4037	4000
10°	4038	3969	3905
15°	3985	3845	3705
20°	3920	3680	3480
25°	3828	3492	3281
30°	3707	3294	3077
35°	3561	3098	2914
40°	3410	2939	2792
45°	3248	2785	2647
50°	3059	2632	2514
55°	2883	2484	2379
60°	2699	2330	2203
65°	2499	2152	1975
70°	2275	1934	1747
75°	2048	1728	1423
80°	1753	1407	1342
85°	1423	1337	1337



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.1	4.3
10°-20°	387.3	11.7
20°-30°	543.6	16.4
30°-40°	602.9	18.2
40°-50°	578.8	17.5
50°-60°	485.1	14.7
60°-70°	340.5	10.3
70°-80°	177.8	5.4
80°-90°	49.8	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°	1072.1	32.4
0°-40°	1675.0	50.6
0°-60°	2738.9	82.8
0°-90°	3307.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3307.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1507	1507	1507	1507	1507	
5°	1514	1495	1495	1485	1481	143
15°	1430	1405	1380	1344	1330	404
25°	1289	1243	1176	1119	1105	593
35°	1084	1024	943	897	887	679
45°	854	788	732	704	696	657
55°	615	568	529	513	507	550
65°	392	366	338	317	310	390
75°	197	182	166	147	137	209
85°	46	43	43	43	43	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1507.2	1507.2	1507.2	1507.2	1507.2
2.5°	1512.8	1504.4	1507.2	1507.2	1500.2
5°	1514.2	1494.6	1494.6	1484.8	1480.7
7.5°	1493.2	1477.9	1475.1	1462.5	1458.3
10°	1477.9	1462.5	1452.7	1436.0	1429.0
12.5°	1459.7	1436.0	1417.8	1389.9	1378.7
15°	1430.4	1405.2	1380.1	1343.8	1329.8
17.5°	1403.8	1374.5	1336.8	1296.3	1280.9
20°	1368.9	1334.0	1285.1	1229.2	1215.3
22.5°	1328.4	1287.9	1230.6	1170.6	1159.4
25°	1289.3	1243.2	1176.1	1118.9	1104.9
27.5°	1248.8	1192.9	1116.1	1054.6	1040.7
30°	1192.9	1135.6	1060.2	1000.1	990.4
32.5°	1141.2	1084.0	1001.5	952.6	941.5
35°	1084.0	1023.9	942.9	896.8	887.0
37.5°	1032.3	962.4	891.2	846.5	840.9
40°	970.8	908.0	836.7	803.2	794.8
42.5°	910.7	847.9	780.8	751.5	741.7
45°	853.5	787.8	731.9	704.0	695.6
47.5°	793.4	733.3	680.3	657.9	652.3
50°	730.6	677.5	628.6	607.6	600.6
52.5°	674.7	620.2	579.7	560.1	551.8
55°	614.6	568.5	529.4	512.6	507.1
57.5°	554.5	516.8	479.1	463.8	455.4
60°	501.5	463.8	433.0	414.9	409.3
62.5°	447.0	414.9	385.5	368.8	361.8
65°	392.5	366.0	338.0	317.1	310.1
67.5°	342.2	312.9	290.5	272.4	265.4
70°	289.1	268.2	245.8	229.1	222.1
72.5°	240.3	224.9	205.3	187.2	180.2
75°	197.0	181.6	166.2	146.7	136.9
77.5°	153.7	143.9	128.5	111.7	111.7
80°	113.1	107.6	90.8	88.0	86.6
82.5°	78.2	75.4	65.7	64.3	64.3
85°	46.1	43.3	43.3	43.3	43.3
87.5°	19.6	21.0	22.3	22.3	23.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)