

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: P295766

Luminaire Tested: **14RLN-LD5-40-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295766
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-LD5-40-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: 3214.0 lumens
Efficiency: N/A
Efficacy: 78.2 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

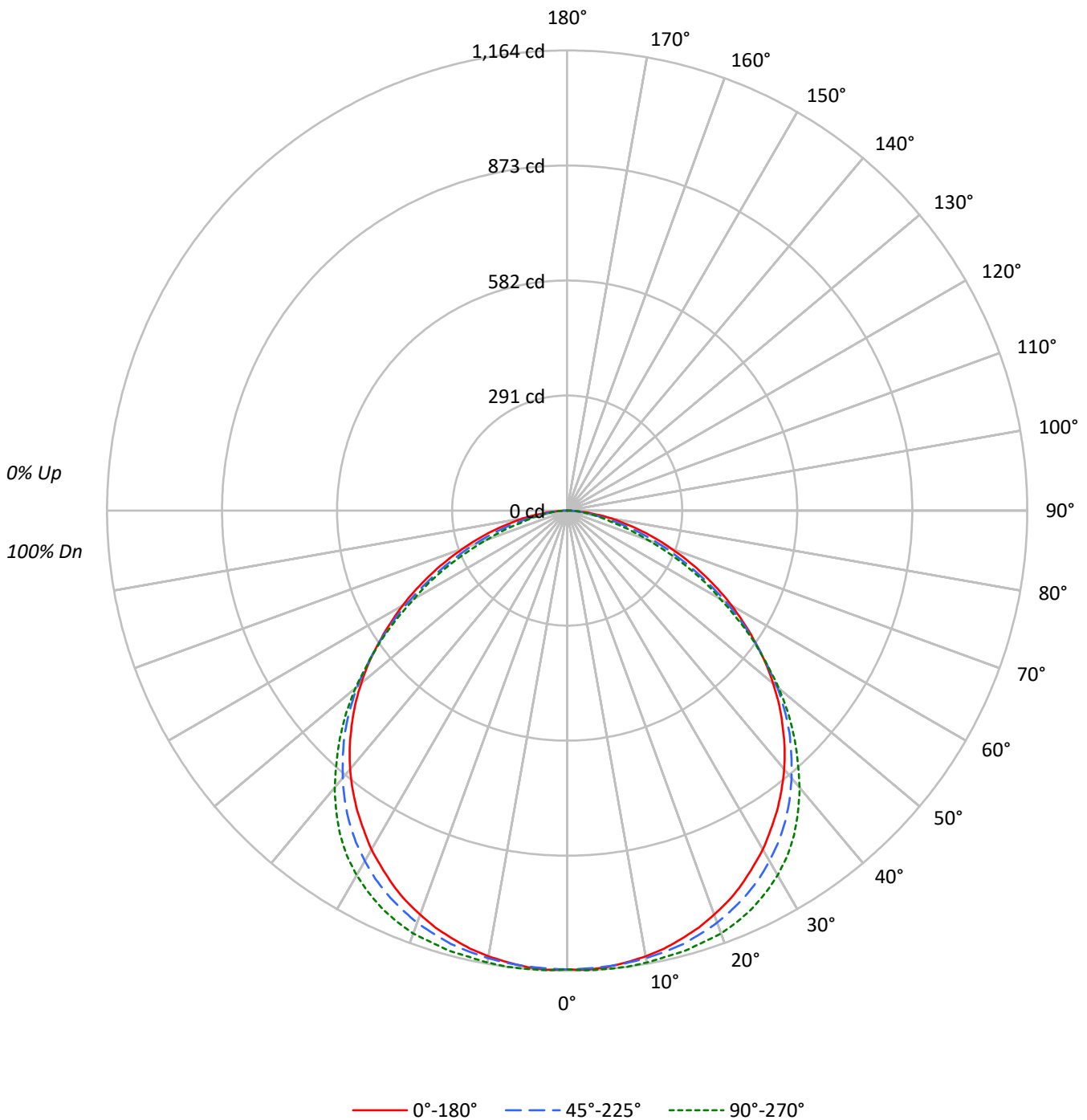
Input Watts (W): 41.106
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3123	3123	3123
5°	3131	3127	3144
10°	3128	3141	3172
15°	3122	3162	3211
20°	3114	3178	3260
25°	3100	3186	3295
30°	3076	3180	3309
35°	3042	3157	3288
40°	3001	3101	3214
45°	2935	3026	3092
50°	2847	2901	2928
55°	2726	2719	2704
60°	2587	2500	2406
65°	2409	2236	2115
70°	2198	1960	1708
75°	1975	1627	1278
80°	1757	1187	1113
85°	1380	985	985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.5	3.4
10°-20°	321.1	10.0
20°-30°	495.6	15.4
30°-40°	601.0	18.7
40°-50°	610.2	19.0
50°-60°	516.2	16.1
60°-70°	349.3	10.9
70°-80°	168.9	5.3
80°-90°	41.2	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°	927.2	28.8
0°-40°	1528.2	47.5
0°-60°	2654.6	82.6
0°-90°	3214.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3214.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1161	1161	1161	1161	1161	
5°	1159	1159	1158	1162	1164	110
15°	1121	1127	1135	1148	1153	317
25°	1044	1052	1073	1100	1110	481
35°	926	936	961	992	1001	579
45°	771	773	795	811	813	595
55°	581	576	580	580	576	519
65°	378	362	351	337	332	375
75°	190	176	156	136	123	202
85°	45	35	32	32	32	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1160.7	1160.7	1160.7	1160.7	<i>1160.7</i>
2.5°	<i>1162.3</i>	<i>1162.3</i>	<i>1159.1</i>	<i>1162.3</i>	<i>1163.9</i>
5°	1159.1	1159.1	1157.5	1162.3	<i>1163.9</i>
7.5°	1152.7	1154.3	1154.3	1160.7	<i>1163.9</i>
10°	1144.7	1147.9	1149.5	1159.1	<i>1160.7</i>
12.5°	1135.1	1138.3	1143.1	1154.3	<i>1155.9</i>
15°	1120.8	1127.2	1135.1	1147.9	<i>1152.7</i>
17.5°	1106.4	1112.8	1122.4	1139.9	<i>1144.7</i>
20°	1087.3	1095.2	1109.6	1130.4	<i>1138.3</i>
22.5°	1068.1	1074.5	1092.0	1117.6	<i>1125.6</i>
25°	1044.1	1052.1	1072.9	1100.0	<i>1109.6</i>
27.5°	1017.0	1028.2	1050.5	1079.3	<i>1088.8</i>
30°	989.9	999.4	1023.4	1055.3	<i>1064.9</i>
32.5°	957.9	967.5	994.7	1025.0	<i>1036.2</i>
35°	926.0	935.6	961.1	991.5	<i>1001.0</i>
37.5°	890.9	897.3	924.4	949.9	<i>959.5</i>
40°	854.2	858.9	882.9	908.4	<i>914.8</i>
42.5°	814.2	817.4	839.8	862.1	<i>863.7</i>
45°	771.1	772.7	795.1	811.0	<i>812.6</i>
47.5°	728.0	726.4	745.6	756.8	<i>758.4</i>
50°	680.1	680.1	692.9	699.3	<i>699.3</i>
52.5°	632.2	629.0	635.4	640.2	<i>635.4</i>
55°	581.1	576.4	579.5	579.5	<i>576.4</i>
57.5°	530.1	520.5	522.1	518.9	<i>510.9</i>
60°	480.6	469.4	464.6	453.4	<i>447.0</i>
62.5°	429.5	416.7	407.1	394.3	<i>392.8</i>
65°	378.4	362.4	351.2	336.9	<i>332.1</i>
67.5°	328.9	314.5	298.6	282.6	<i>273.0</i>
70°	279.4	263.4	249.1	228.3	<i>217.1</i>
72.5°	234.7	220.3	202.8	178.8	<i>170.8</i>
75°	190.0	175.6	156.5	135.7	<i>122.9</i>
77.5°	146.9	135.7	115.0	97.4	<i>95.8</i>
80°	113.4	100.6	76.6	71.8	<i>71.8</i>
82.5°	73.4	65.5	54.3	51.1	<i>51.1</i>
85°	44.7	35.1	31.9	31.9	<i>31.9</i>
87.5°	17.6	16.0	16.0	16.0	<i>16.0</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)