

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: P296007

Luminaire Tested: **24RLN-LD5-31-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296007
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-UNV-L92765-W2A1-U-4500K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2809.0 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

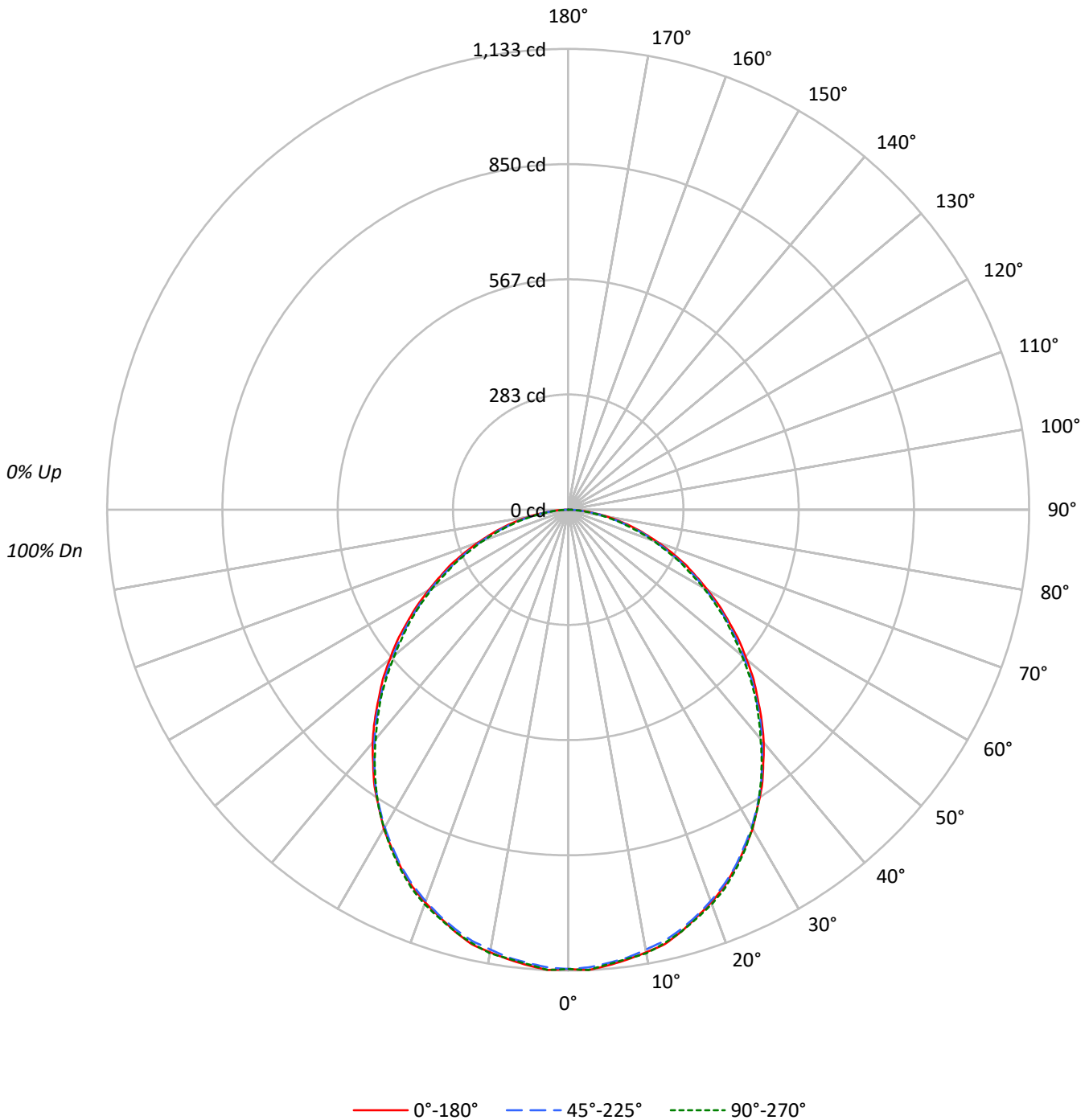
Input Watts (W): 21.576
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	99	95	98	95	92	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	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1519	1519	1519
5°	1519	1512	1515
10°	1509	1501	1513
15°	1496	1488	1496
20°	1471	1466	1478
25°	1442	1439	1448
30°	1408	1401	1405
35°	1363	1358	1355
40°	1313	1300	1292
45°	1254	1242	1236
50°	1197	1178	1165
55°	1133	1116	1105
60°	1066	1046	1034
65°	1007	969	961
70°	923	887	870
75°	848	796	763
80°	745	695	653
85°	602	559	475



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.5	3.8
10°-20°	302.0	10.8
20°-30°	446.8	15.9
30°-40°	515.6	18.4
40°-50°	503.6	17.9
50°-60°	425.3	15.1
60°-70°	302.9	10.8
70°-80°	164.0	5.8
80°-90°	42.3	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°	855.3	30.4
0°-40°	1370.9	48.8
0°-60°	2299.8	81.9
0°-90°	2809.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2809.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1129	1129	1129	1129	1129	
5°	1125	1125	1119	1122	1122	107
15°	1074	1069	1068	1073	1074	302
25°	972	966	970	973	975	447
35°	830	824	826	824	825	518
45°	659	653	652	650	650	509
55°	483	477	476	471	471	433
65°	316	310	304	301	302	312
75°	163	158	153	150	147	173
85°	39	38	36	32	31	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1129.1	1129.1	1129.1	1129.1	1129.1
2.5°	1132.8	1128.2	1126.4	1127.3	1132.8
5°	1124.6	1124.6	1119.2	1121.9	1121.9
7.5°	1115.5	1116.5	1111.0	1115.5	1113.7
10°	1104.7	1102.0	1098.3	1105.6	1107.4
12.5°	1094.7	1088.4	1086.5	1091.1	1092.0
15°	1073.9	1069.3	1068.4	1073.0	1073.9
17.5°	1050.3	1051.2	1047.6	1053.9	1053.0
20°	1027.6	1025.8	1024.0	1031.3	1032.2
22.5°	1002.3	996.8	998.6	1005.0	1006.8
25°	971.5	966.0	969.6	973.3	975.1
27.5°	938.8	936.1	935.2	939.7	941.6
30°	906.2	901.7	901.7	907.1	904.4
32.5°	866.3	862.7	864.5	866.3	867.2
35°	830.1	823.7	826.5	823.7	824.7
37.5°	787.5	783.0	782.1	781.2	781.2
40°	747.6	744.0	740.4	740.4	735.8
42.5°	704.1	699.6	697.8	695.1	692.3
45°	658.8	653.4	652.5	649.8	649.8
47.5°	618.0	609.9	609.0	603.5	603.5
50°	571.8	566.4	562.8	559.1	556.4
52.5°	530.1	524.7	519.3	515.6	512.9
55°	483.0	476.7	475.8	471.2	471.2
57.5°	440.4	435.0	431.4	425.9	426.8
60°	396.0	390.6	388.8	384.2	384.2
62.5°	354.3	349.8	347.1	342.5	338.9
65°	316.3	309.9	304.5	300.9	301.8
67.5°	274.6	267.3	264.6	261.0	258.3
70°	234.7	230.2	225.6	221.1	221.1
72.5°	197.6	193.0	190.3	184.9	183.1
75°	163.1	157.7	153.1	149.5	146.8
77.5°	128.7	123.2	120.5	116.0	116.0
80°	96.1	92.4	89.7	87.9	84.3
82.5°	66.2	64.3	61.6	58.9	56.2
85°	39.0	38.1	36.2	31.7	30.8
87.5°	15.4	15.4	13.6	12.7	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)