

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: P296095

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296095
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-RDP-UNV-L83050-W2A1-U-4000K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2699.0 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

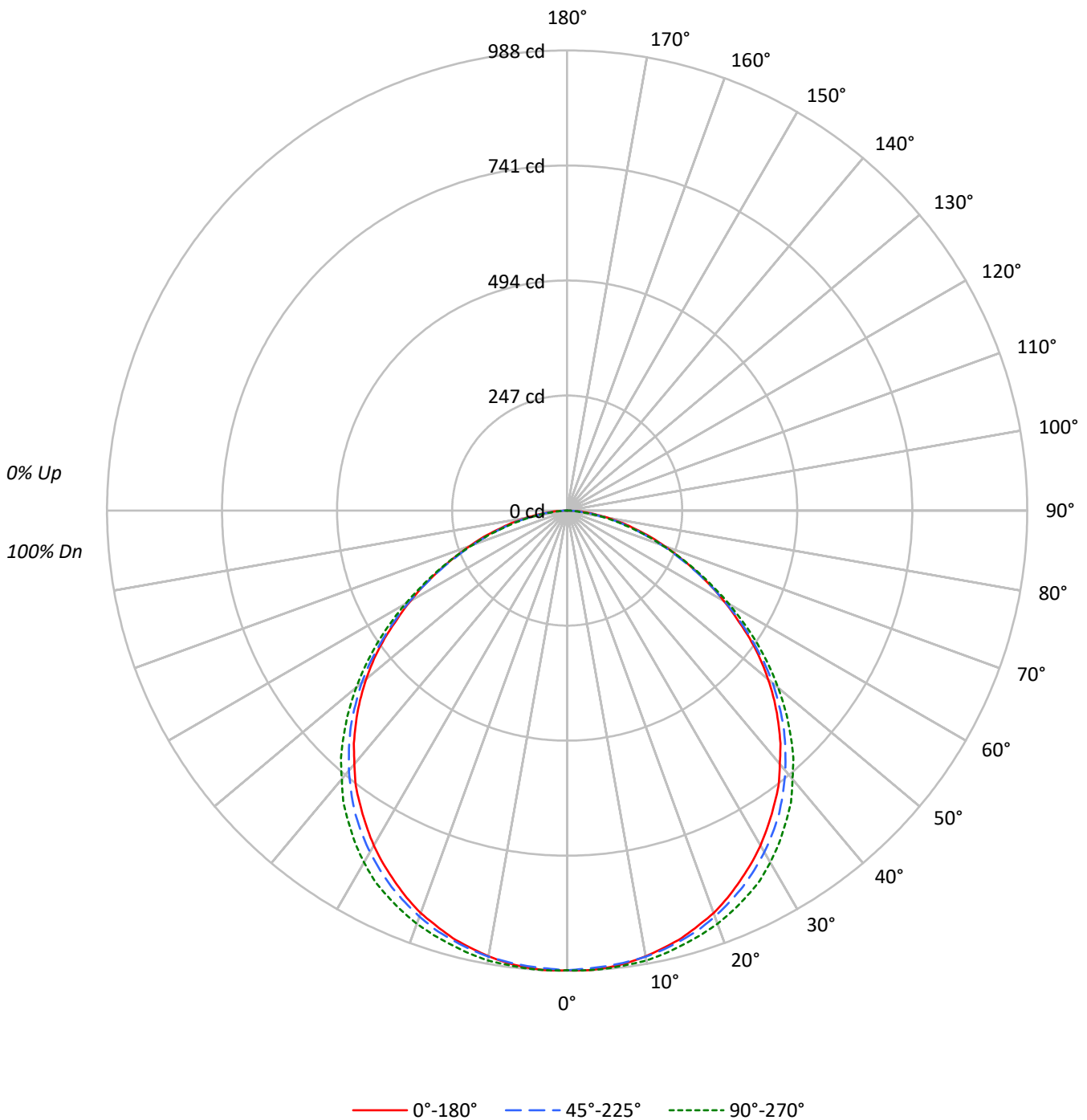
Input Watts (W): 21.669
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	73	71																												
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60																												
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52																												
5	77	64	55	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	53	47	42	52	46	41	39																												
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35																												
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31																												
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28																												
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1328	1328	1328
5°	1330	1326	1333
10°	1328	1329	1340
15°	1324	1329	1344
20°	1317	1328	1352
25°	1303	1324	1356
30°	1290	1316	1355
35°	1271	1303	1344
40°	1248	1280	1322
45°	1220	1251	1290
50°	1179	1207	1239
55°	1122	1136	1170
60°	1047	1052	1080
65°	961	955	978
70°	874	850	854
75°	777	735	729
80°	674	603	587
85°	553	426	332



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	93.6	3.5
10°-20°	269.9	10.0
20°-30°	411.9	15.3
30°-40°	496.6	18.4
40°-50°	506.4	18.8
50°-60°	433.4	16.1
60°-70°	298.5	11.1
70°-80°	153.0	5.7
80°-90°	35.6	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°	775.4	28.7
0°-40°	1272.0	47.1
0°-60°	2211.8	81.9
0°-90°	2699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2699.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	987	987	987	987	987	
5°	985	983	982	985	987	94
15°	950	949	954	961	964	268
25°	878	880	892	907	913	405
35°	774	777	794	811	818	484
45°	641	642	657	674	678	494
55°	478	475	484	494	499	427
65°	302	295	300	302	307	300
75°	150	143	141	141	140	161
85°	36	32	28	25	22	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	987.0	987.0	987.0	987.0	987.0
2.5°	988.1	986.0	984.0	986.0	988.1
5°	985.0	982.9	981.9	985.0	987.0
7.5°	979.9	977.8	977.8	981.9	984.0
10°	971.7	970.7	972.7	976.8	980.9
12.5°	961.4	961.4	964.5	969.6	973.7
15°	950.2	949.2	954.3	961.4	964.5
17.5°	934.8	935.8	943.0	951.2	955.3
20°	919.5	920.5	927.6	938.9	944.0
22.5°	900.0	902.1	910.2	924.6	929.7
25°	877.5	880.5	891.8	907.2	913.3
27.5°	855.0	858.0	870.3	887.7	895.9
30°	830.4	834.5	846.8	865.2	872.4
32.5°	802.7	805.8	821.2	839.6	846.8
35°	774.1	777.1	793.5	810.9	818.1
37.5°	745.4	745.4	761.8	782.3	789.4
40°	710.6	711.6	729.0	748.5	752.6
42.5°	677.8	677.8	693.2	711.6	718.8
45°	641.0	642.0	657.3	673.7	677.8
47.5°	603.1	603.1	616.4	631.7	635.8
50°	563.1	561.1	576.5	588.7	591.8
52.5°	522.2	519.1	531.4	541.6	545.7
55°	478.2	475.1	484.3	494.5	498.6
57.5°	432.1	428.0	438.2	447.4	449.5
60°	389.1	382.9	391.1	396.2	401.4
62.5°	346.1	338.9	345.1	348.1	352.2
65°	302.0	294.9	300.0	302.0	307.2
67.5°	260.1	254.9	256.0	259.0	261.1
70°	222.2	216.0	216.0	216.0	217.1
72.5°	187.4	178.2	177.1	178.2	178.2
75°	149.5	143.3	141.3	141.3	140.3
77.5°	119.8	111.6	110.6	108.5	106.5
80°	87.0	79.9	77.8	76.8	75.8
82.5°	60.4	54.3	52.2	50.2	47.1
85°	35.8	31.7	27.6	24.6	21.5
87.5°	13.3	12.3	10.2	9.2	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)