

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: P296165

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296165
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-LD5-42-RDP-UNV-L82765-W2A1-U-4500K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3550.0 lumens
Efficiency: N/A
Efficacy: 119.7 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

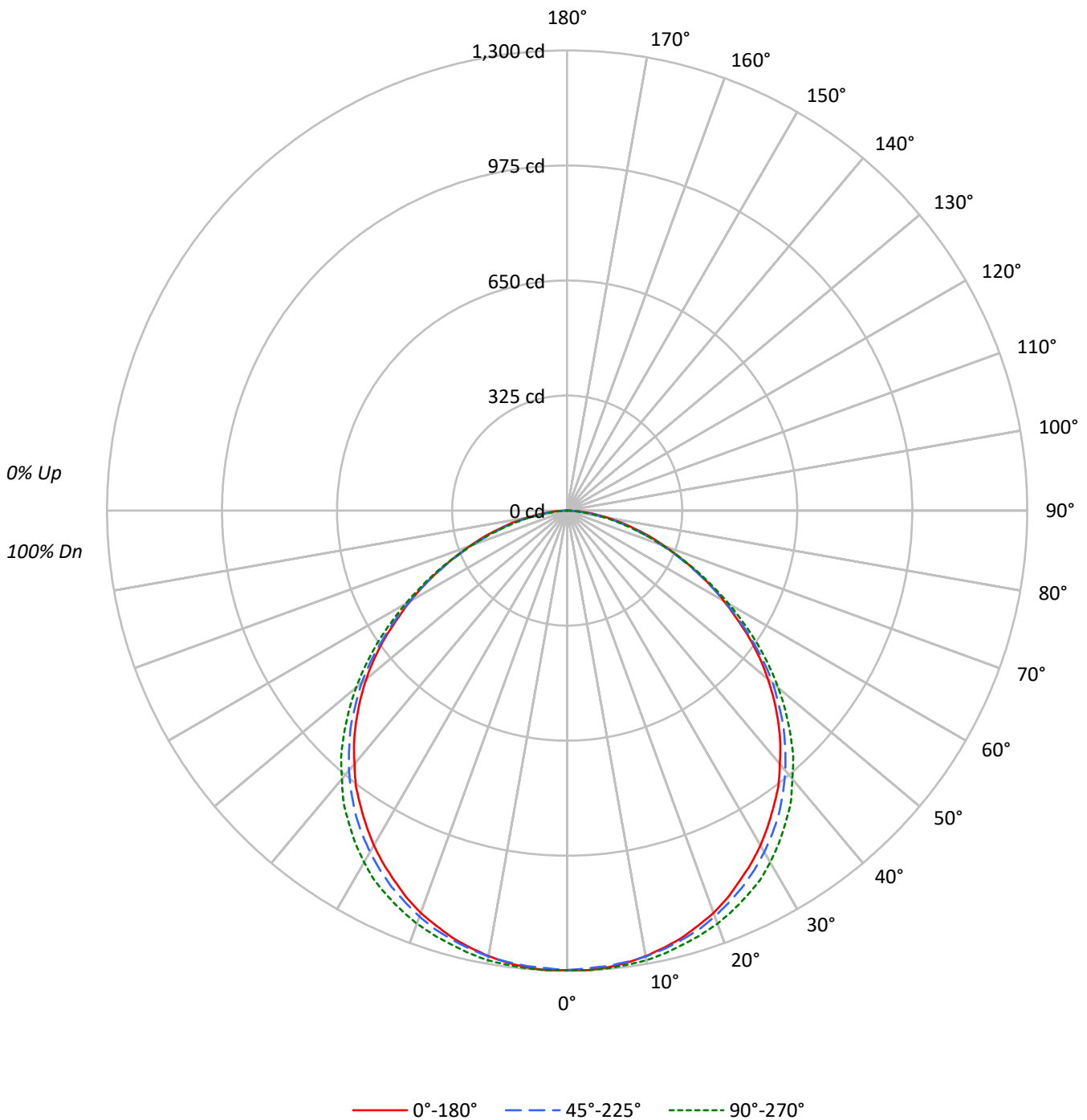
Input Watts (W): 29.667
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1747	1747	1747
5°	1750	1744	1753
10°	1746	1748	1763
15°	1741	1748	1767
20°	1732	1747	1778
25°	1713	1741	1783
30°	1697	1730	1783
35°	1672	1714	1767
40°	1642	1684	1738
45°	1604	1645	1696
50°	1550	1587	1629
55°	1475	1494	1539
60°	1377	1385	1421
65°	1265	1256	1286
70°	1149	1118	1123
75°	1022	966	959
80°	887	793	773
85°	727	562	437



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.1	3.5
10°-20°	354.9	10.0
20°-30°	541.8	15.3
30°-40°	653.2	18.4
40°-50°	666.1	18.8
50°-60°	570.1	16.1
60°-70°	392.7	11.1
70°-80°	201.3	5.7
80°-90°	46.9	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°	1019.9	28.7
0°-40°	1673.0	47.1
0°-60°	2909.2	81.9
0°-90°	3550.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3550.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1296	1293	1292	1296	1298	123
15°	1250	1248	1255	1265	1269	352
25°	1154	1158	1173	1193	1201	532
35°	1018	1022	1044	1067	1076	637
45°	843	844	865	886	892	650
55°	629	625	637	650	656	561
65°	397	388	395	397	404	395
75°	197	188	186	186	184	212
85°	47	42	36	32	28	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1298.2	1298.2	1298.2	1298.2	1298.2
2.5°	1299.6	1296.9	1294.2	1296.9	1299.6
5°	1295.6	1292.9	1291.5	1295.6	1298.2
7.5°	1288.8	1286.1	1286.1	1291.5	1294.2
10°	1278.0	1276.7	1279.4	1284.8	1290.2
12.5°	1264.6	1264.6	1268.6	1275.4	1280.7
15°	1249.8	1248.4	1255.2	1264.6	1268.6
17.5°	1229.6	1230.9	1240.3	1251.1	1256.5
20°	1209.4	1210.7	1220.1	1235.0	1241.7
22.5°	1183.8	1186.5	1197.2	1216.1	1222.8
25°	1154.1	1158.2	1173.0	1193.2	1201.3
27.5°	1124.5	1128.6	1144.7	1167.6	1178.4
30°	1092.2	1097.6	1113.7	1138.0	1147.4
32.5°	1055.8	1059.9	1080.1	1104.3	1113.7
35°	1018.1	1022.2	1043.7	1066.6	1076.0
37.5°	980.4	980.4	1002.0	1028.9	1038.3
40°	934.6	936.0	958.9	984.5	989.8
42.5°	891.5	891.5	911.7	936.0	945.4
45°	843.1	844.4	864.6	886.1	891.5
47.5°	793.2	793.2	810.7	830.9	836.3
50°	740.7	738.0	758.2	774.4	778.4
52.5°	686.8	682.8	699.0	712.4	717.8
55°	628.9	624.9	637.0	650.5	655.9
57.5°	568.3	562.9	576.4	588.5	591.2
60°	511.8	503.7	514.5	521.2	527.9
62.5°	455.2	445.8	453.8	457.9	463.3
65°	397.3	387.9	394.6	397.3	404.0
67.5°	342.1	335.3	336.7	340.7	343.4
70°	292.2	284.2	284.2	284.2	285.5
72.5°	246.5	234.3	233.0	234.3	234.3
75°	196.6	188.5	185.8	185.8	184.5
77.5°	157.6	146.8	145.4	142.8	140.1
80°	114.5	105.0	102.4	101.0	99.7
82.5°	79.5	71.4	68.7	66.0	61.9
85°	47.1	41.7	36.4	32.3	28.3
87.5°	17.5	16.2	13.5	12.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)