

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: P295828

Luminaire Tested: **24RLN-LD5-45-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295828
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-LD5-45-UNV-L83050-W2A1-U-3000K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4297.0 lumens
Efficiency: N/A
Efficacy: 136.7 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

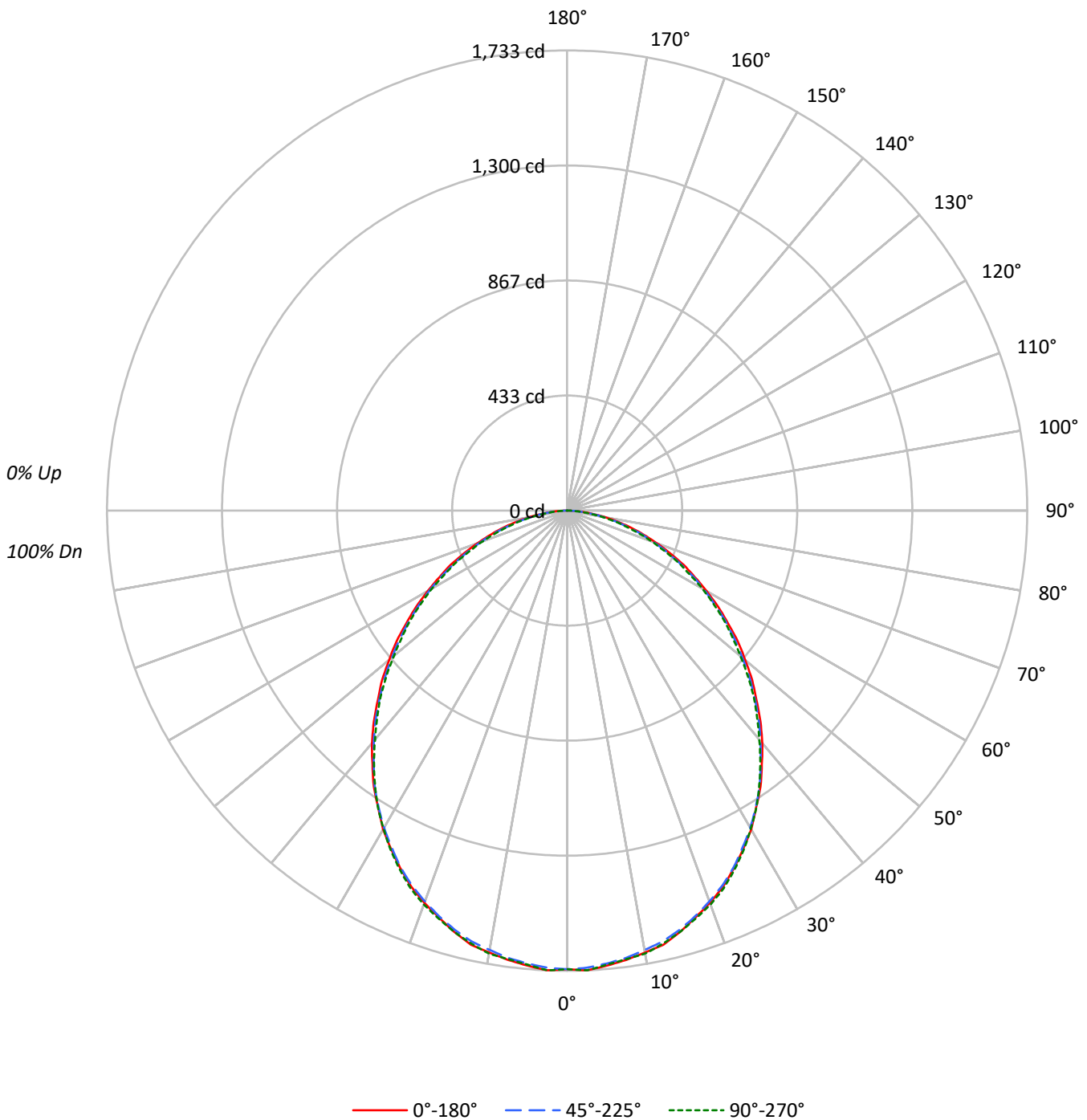
Input Watts (W): 31.434
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2324	2324	2324
5°	2323	2312	2318
10°	2309	2295	2314
15°	2288	2277	2288
20°	2251	2243	2261
25°	2206	2202	2214
30°	2154	2143	2149
35°	2086	2077	2072
40°	2009	1989	1977
45°	1918	1899	1891
50°	1831	1802	1782
55°	1733	1707	1691
60°	1630	1600	1582
65°	1540	1483	1470
70°	1412	1358	1330
75°	1297	1218	1168
80°	1138	1063	999
85°	920	857	727



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.0	3.8
10°-20°	462.0	10.8
20°-30°	683.4	15.9
30°-40°	788.7	18.4
40°-50°	770.4	17.9
50°-60°	650.5	15.1
60°-70°	463.3	10.8
70°-80°	250.9	5.8
80°-90°	64.7	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°	1308.4	30.4
0°-40°	2097.2	48.8
0°-60°	3518.0	81.9
0°-90°	4297.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4297.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1727	1727	1727	1727	1727	
5°	1720	1720	1712	1716	1716	163
15°	1643	1636	1634	1641	1643	463
25°	1486	1478	1483	1489	1492	684
35°	1270	1260	1264	1260	1262	792
45°	1008	1000	998	994	994	779
55°	739	729	728	721	721	662
65°	484	474	466	460	462	477
75°	250	241	234	229	225	264
85°	60	58	56	48	47	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1727.3	1727.3	1727.3	1727.3	1727.3
2.5°	1732.8	1725.9	1723.1	1724.5	1732.8
5°	1720.3	1720.3	1712.0	1716.2	1716.2
7.5°	1706.5	1707.9	1699.5	1706.5	1703.7
10°	1689.8	1685.7	1680.1	1691.2	1694.0
12.5°	1674.6	1664.9	1662.1	1669.0	1670.4
15°	1642.7	1635.8	1634.4	1641.3	1642.7
17.5°	1606.7	1608.1	1602.5	1612.2	1610.8
20°	1572.0	1569.2	1566.5	1577.6	1578.9
22.5°	1533.2	1524.9	1527.7	1537.4	1540.1
25°	1486.1	1477.7	1483.3	1488.8	1491.6
27.5°	1436.2	1432.0	1430.6	1437.5	1440.3
30°	1386.3	1379.3	1379.3	1387.6	1383.5
32.5°	1325.3	1319.7	1322.5	1325.3	1326.6
35°	1269.8	1260.1	1264.3	1260.1	1261.5
37.5°	1204.7	1197.7	1196.3	1195.0	1195.0
40°	1143.7	1138.1	1132.6	1132.6	1125.6
42.5°	1077.1	1070.2	1067.4	1063.3	1059.1
45°	1007.8	999.5	998.1	993.9	993.9
47.5°	945.4	932.9	931.6	923.2	923.2
50°	874.7	866.4	860.9	855.3	851.2
52.5°	811.0	802.6	794.3	788.8	784.6
55°	738.9	729.2	727.8	720.9	720.9
57.5°	673.7	665.4	659.9	651.5	652.9
60°	605.8	597.5	594.7	587.8	587.8
62.5°	542.0	535.1	530.9	524.0	518.5
65°	483.8	474.1	465.8	460.2	461.6
67.5°	420.0	408.9	404.8	399.2	395.1
70°	359.0	352.1	345.2	338.2	338.2
72.5°	302.2	295.3	291.1	282.8	280.0
75°	249.5	241.2	234.3	228.7	224.6
77.5°	196.8	188.5	184.4	177.4	177.4
80°	146.9	141.4	137.2	134.5	128.9
82.5°	101.2	98.4	94.3	90.1	85.9
85°	59.6	58.2	55.5	48.5	47.1
87.5°	23.6	23.6	20.8	19.4	18.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)