

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: P295820

Luminaire Tested: **24RLN-LD5-36-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295820  
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-LD5-36-UNV-L83050-W2A1-U-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3857.0 lumens  
Efficiency: N/A  
Efficacy: 149.7 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

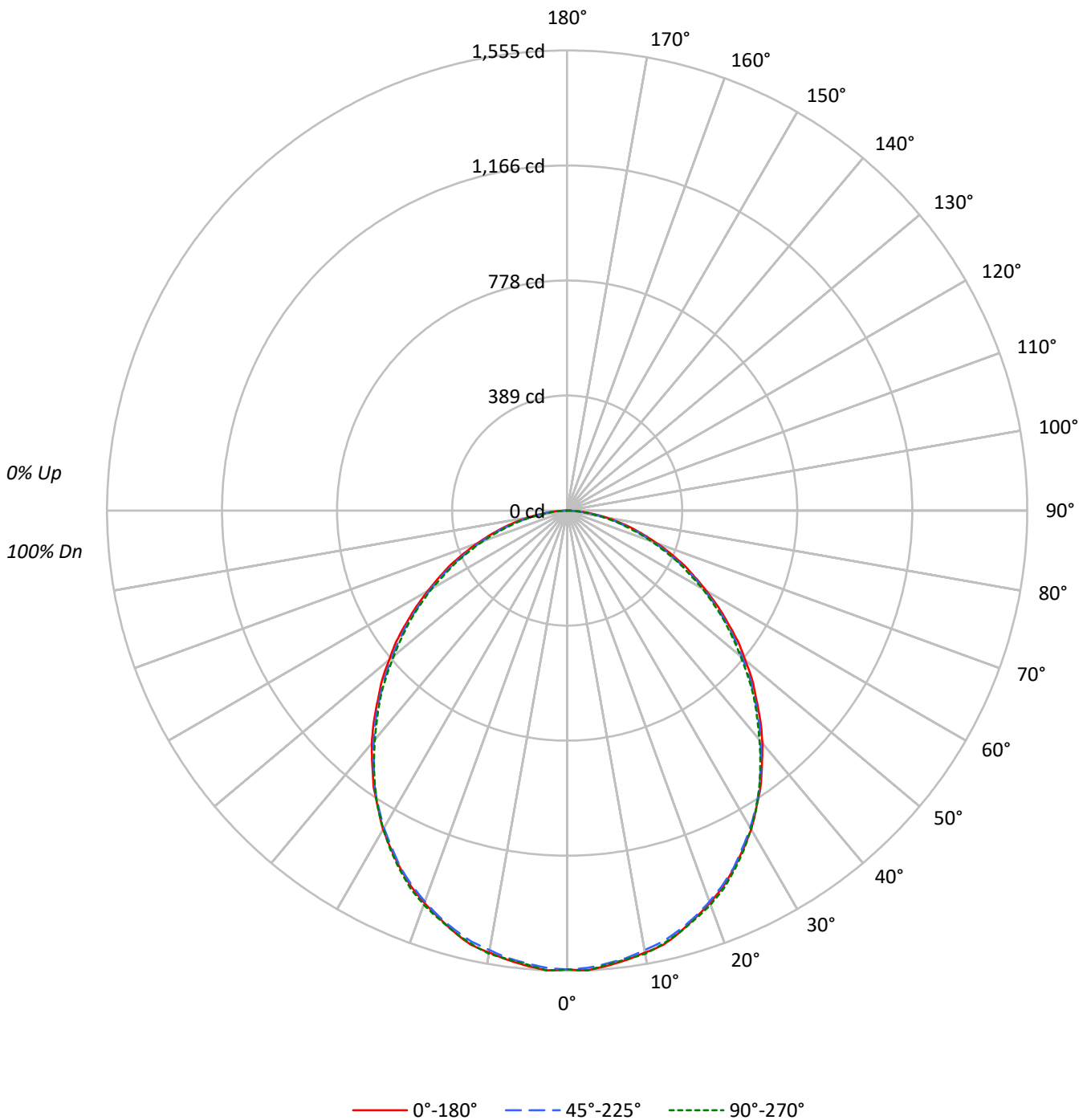
Input Watts (W): 25.761  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2086	2086	2086
5°	2086	2076	2081
10°	2072	2060	2077
15°	2054	2043	2054
20°	2020	2013	2029
25°	1980	1977	1988
30°	1933	1924	1929
35°	1872	1864	1860
40°	1803	1786	1775
45°	1721	1705	1698
50°	1644	1617	1599
55°	1556	1533	1518
60°	1463	1436	1420
65°	1383	1331	1319
70°	1268	1219	1194
75°	1164	1093	1048
80°	1022	955	896
85°	826	769	653



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	146.3	3.8
10°-20°	414.7	10.8
20°-30°	613.4	15.9
30°-40°	708.0	18.4
40°-50°	691.5	17.9
50°-60°	583.9	15.1
60°-70°	415.9	10.8
70°-80°	225.2	5.8
80°-90°	58.1	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°	1174.4	30.4
0°-40°	1882.4	48.8
0°-60°	3157.8	81.9
0°-90°	3857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3857.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1550	1550	1550	1550	1550	
5°	1544	1544	1537	1540	1540	147
15°	1474	1468	1467	1473	1474	415
25°	1334	1326	1331	1336	1339	614
35°	1140	1131	1135	1131	1132	711
45°	905	897	896	892	892	699
55°	663	654	653	647	647	595
65°	434	426	418	413	414	428
75°	224	216	210	205	202	237
85°	54	52	50	44	42	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1550.4	1550.4	1550.4	1550.4	1550.4
2.5°	1555.4	1549.2	1546.7	1547.9	1555.4
5°	1544.2	1544.2	1536.7	1540.4	1540.4
7.5°	1531.7	1533.0	1525.5	1531.7	1529.3
10°	1516.8	1513.1	1508.1	1518.1	1520.5
12.5°	1503.1	1494.4	1491.9	1498.1	1499.4
15°	1474.5	1468.3	1467.0	1473.3	1474.5
17.5°	1442.1	1443.4	1438.4	1447.1	1445.9
20°	1411.0	1408.6	1406.1	1416.0	1417.3
22.5°	1376.2	1368.7	1371.2	1379.9	1382.4
25°	1333.9	1326.4	1331.4	1336.4	1338.9
27.5°	1289.1	1285.4	1284.1	1290.3	1292.8
30°	1244.3	1238.1	1238.1	1245.5	1241.8
32.5°	1189.6	1184.6	1187.1	1189.6	1190.8
35°	1139.8	1131.1	1134.8	1131.1	1132.3
37.5°	1081.3	1075.1	1073.8	1072.6	1072.6
40°	1026.6	1021.6	1016.6	1016.6	1010.4
42.5°	966.8	960.6	958.1	954.4	950.6
45°	904.6	897.1	895.9	892.2	892.2
47.5°	848.6	837.4	836.2	828.7	828.7
50°	785.2	777.7	772.7	767.7	764.0
52.5°	727.9	720.5	713.0	708.0	704.3
55°	663.2	654.5	653.3	647.0	647.0
57.5°	604.7	597.3	592.3	584.8	586.1
60°	543.8	536.3	533.8	527.6	527.6
62.5°	486.5	480.3	476.6	470.3	465.4
65°	434.3	425.6	418.1	413.1	414.4
67.5°	377.0	367.1	363.3	358.4	354.6
70°	322.3	316.1	309.8	303.6	303.6
72.5°	271.3	265.0	261.3	253.8	251.3
75°	224.0	216.5	210.3	205.3	201.6
77.5°	176.7	169.2	165.5	159.3	159.3
80°	131.9	126.9	123.2	120.7	115.7
82.5°	90.8	88.3	84.6	80.9	77.1
85°	53.5	52.3	49.8	43.6	42.3
87.5°	21.2	21.2	18.7	17.4	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)