

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: P296110

Luminaire Tested: **24RLN-LD5-45-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296110  
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-LD5-45-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: 3959.0 lumens  
Efficiency: N/A  
Efficacy: 122.7 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

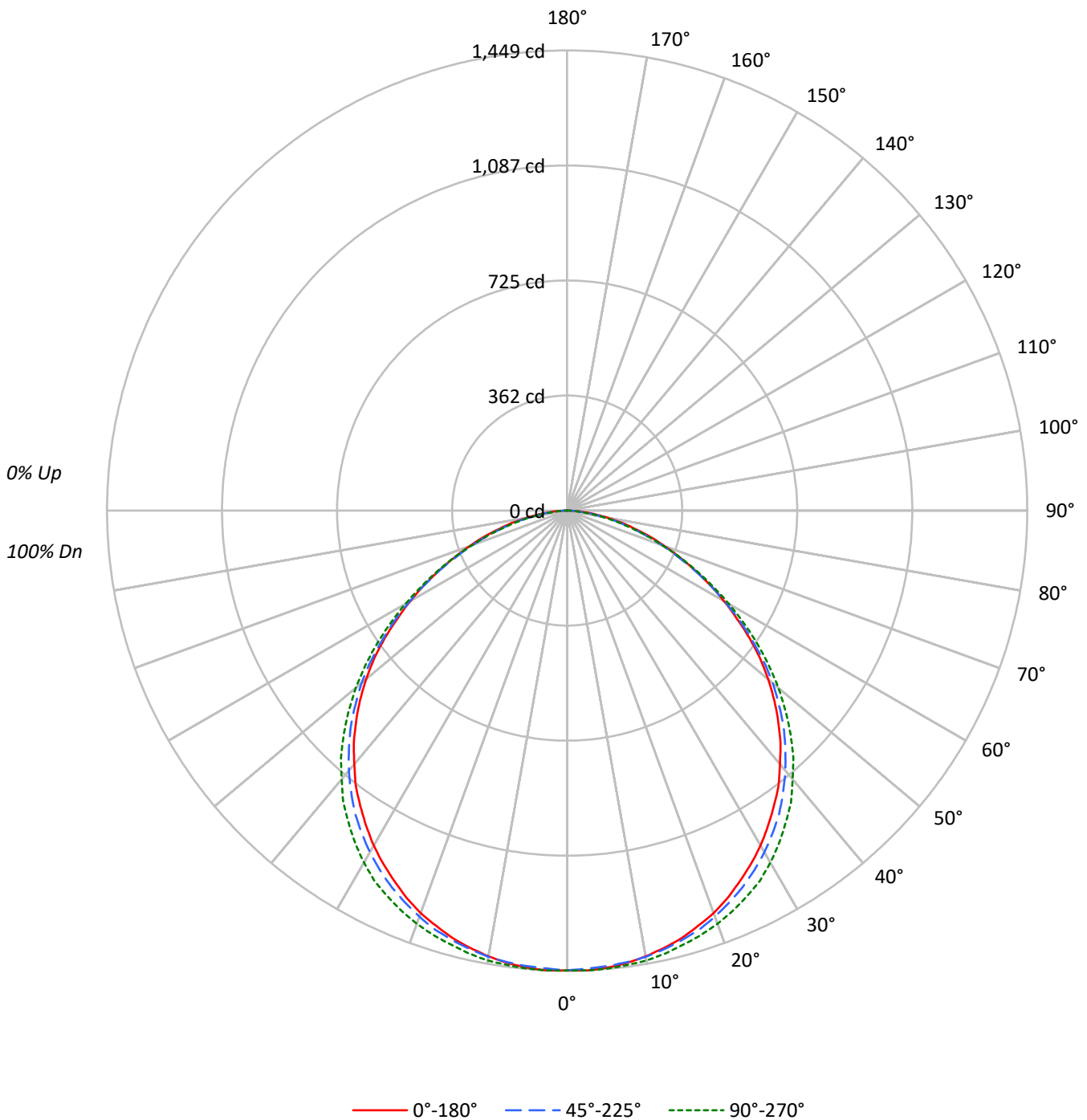
Input Watts (W): 32.271  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1948	1948	1948
5°	1951	1945	1955
10°	1947	1949	1966
15°	1941	1950	1971
20°	1931	1948	1983
25°	1911	1942	1989
30°	1892	1930	1988
35°	1865	1912	1971
40°	1831	1878	1939
45°	1789	1835	1892
50°	1729	1770	1817
55°	1645	1666	1716
60°	1536	1544	1584
65°	1411	1401	1435
70°	1282	1247	1253
75°	1140	1078	1070
80°	989	884	861
85°	812	627	486



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.3	3.5
10°-20°	395.8	10.0
20°-30°	604.2	15.3
30°-40°	728.4	18.4
40°-50°	742.8	18.8
50°-60°	635.7	16.1
60°-70°	437.9	11.1
70°-80°	224.5	5.7
80°-90°	52.2	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°	1137.4	28.7
0°-40°	1865.8	47.1
0°-60°	3244.3	81.9
0°-90°	3959.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3959.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1448	1448	1448	1448	1448	
5°	1445	1442	1440	1445	1448	137
15°	1394	1392	1400	1410	1415	393
25°	1287	1292	1308	1331	1340	594
35°	1135	1140	1164	1190	1200	710
45°	940	942	964	988	994	724
55°	701	697	710	725	731	626
65°	443	432	440	443	451	440
75°	219	210	207	207	206	236
85°	53	47	41	36	32	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1447.8	1447.8	1447.8	1447.8	1447.8
2.5°	1449.3	1446.3	1443.3	1446.3	1449.3
5°	1444.8	1441.8	1440.3	1444.8	1447.8
7.5°	1437.3	1434.3	1434.3	1440.3	1443.3
10°	1425.3	1423.8	1426.8	1432.8	1438.8
12.5°	1410.3	1410.3	1414.8	1422.3	1428.3
15°	1393.8	1392.3	1399.8	1410.3	1414.8
17.5°	1371.2	1372.7	1383.2	1395.3	1401.3
20°	1348.7	1350.2	1360.7	1377.2	1384.7
22.5°	1320.2	1323.2	1335.2	1356.2	1363.7
25°	1287.1	1291.6	1308.1	1330.7	1339.7
27.5°	1254.1	1258.6	1276.6	1302.1	1314.2
30°	1218.0	1224.0	1242.1	1269.1	1279.6
32.5°	1177.5	1182.0	1204.5	1231.5	1242.1
35°	1135.4	1139.9	1164.0	1189.5	1200.0
37.5°	1093.4	1093.4	1117.4	1147.4	1158.0
40°	1042.3	1043.8	1069.3	1097.9	1103.9
42.5°	994.3	994.3	1016.8	1043.8	1054.3
45°	940.2	941.7	964.2	988.2	994.3
47.5°	884.6	884.6	904.1	926.7	932.7
50°	826.0	823.0	845.6	863.6	868.1
52.5°	766.0	761.5	779.5	794.5	800.5
55°	701.4	696.9	710.4	725.4	731.4
57.5°	633.8	627.8	642.8	656.3	659.3
60°	570.7	561.7	573.7	581.2	588.7
62.5°	507.6	497.1	506.1	510.6	516.6
65°	443.1	432.5	440.1	443.1	450.6
67.5°	381.5	374.0	375.5	380.0	383.0
70°	325.9	316.9	316.9	316.9	318.4
72.5°	274.8	261.3	259.8	261.3	261.3
75°	219.3	210.3	207.3	207.3	205.8
77.5°	175.7	163.7	162.2	159.2	156.2
80°	127.7	117.1	114.1	112.6	111.1
82.5°	88.6	79.6	76.6	73.6	69.1
85°	52.6	46.6	40.6	36.0	31.5
87.5°	19.5	18.0	15.0	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)