

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: P296257

Luminaire Tested: **24RLN-LD5-50-RDP-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296257  
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-LD5-50-RDP-UNV-L93050-W2A1-U-5000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3865.0 lumens  
Efficiency: N/A  
Efficacy: 106.0 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

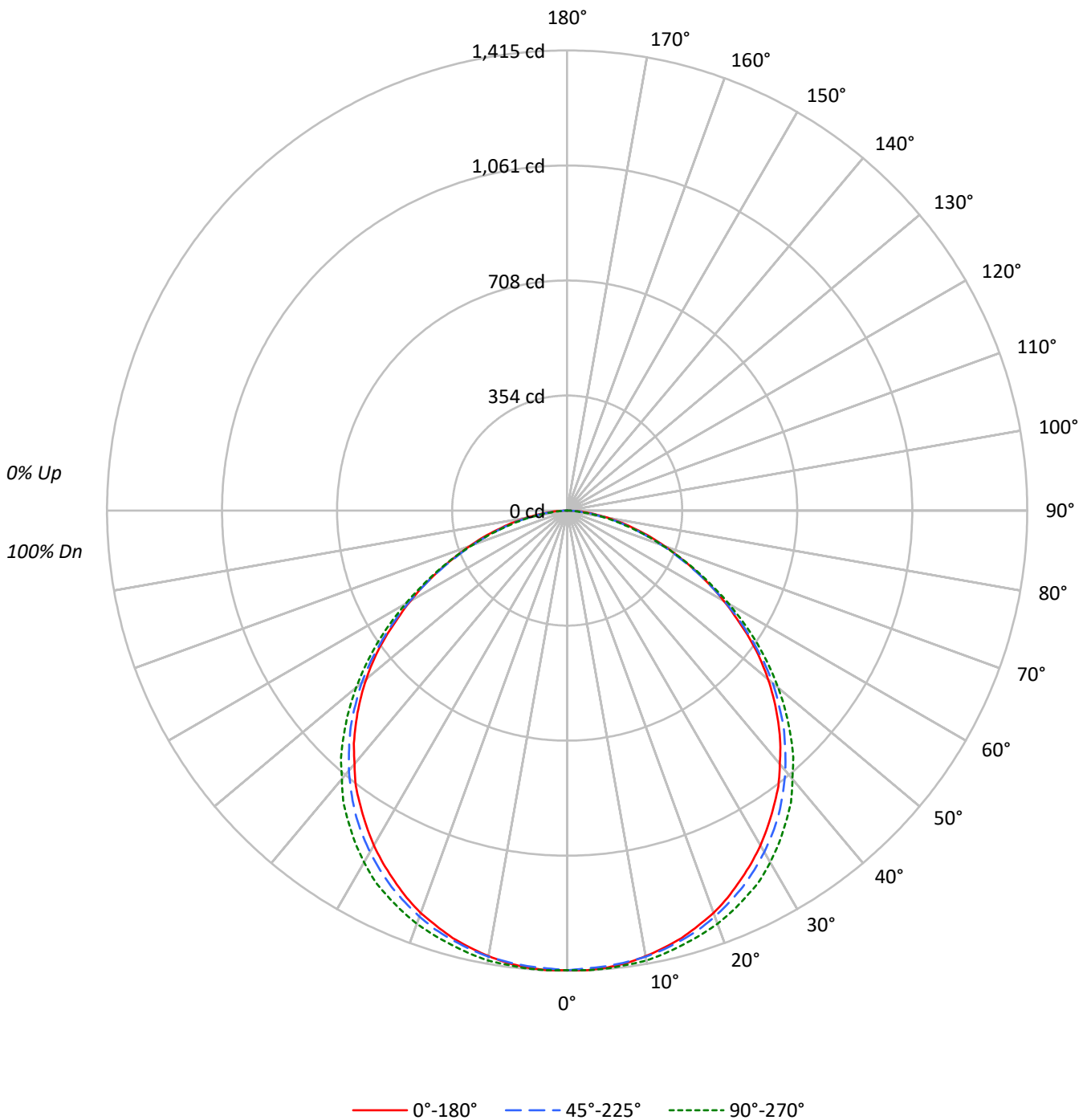
Input Watts (W): 36.456  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1902	1902	1902
5°	1905	1899	1909
10°	1901	1903	1919
15°	1895	1903	1924
20°	1885	1902	1936
25°	1866	1896	1942
30°	1847	1884	1941
35°	1821	1866	1924
40°	1787	1834	1893
45°	1747	1791	1847
50°	1688	1728	1774
55°	1606	1627	1675
60°	1499	1507	1547
65°	1377	1368	1401
70°	1252	1217	1223
75°	1113	1052	1044
80°	965	863	841
85°	792	611	475



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.0	3.5
10°-20°	386.4	10.0
20°-30°	589.9	15.3
30°-40°	711.1	18.4
40°-50°	725.2	18.8
50°-60°	620.6	16.1
60°-70°	427.5	11.1
70°-80°	219.2	5.7
80°-90°	51.0	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°	1110.4	28.7
0°-40°	1821.5	47.1
0°-60°	3167.3	81.9
0°-90°	3865.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3865.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1413	1413	1413	1413	1413	
5°	1410	1408	1406	1410	1413	134
15°	1361	1359	1366	1377	1381	384
25°	1257	1261	1277	1299	1308	579
35°	1108	1113	1136	1161	1172	693
45°	918	919	941	965	971	707
55°	685	680	694	708	714	611
65°	432	422	430	432	440	430
75°	214	205	202	202	201	231
85°	51	46	40	35	31	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1413.4	1413.4	1413.4	1413.4	1413.4
2.5°	1414.9	1412.0	1409.0	1412.0	1414.9
5°	1410.5	1407.6	1406.1	1410.5	1413.4
7.5°	1403.2	1400.2	1400.2	1406.1	1409.0
10°	1391.5	1390.0	1392.9	1398.8	1404.6
12.5°	1376.8	1376.8	1381.2	1388.5	1394.4
15°	1360.7	1359.2	1366.5	1376.8	1381.2
17.5°	1338.7	1340.1	1350.4	1362.1	1368.0
20°	1316.7	1318.1	1328.4	1344.5	1351.9
22.5°	1288.8	1291.7	1303.5	1324.0	1331.3
25°	1256.6	1261.0	1277.1	1299.1	1307.9
27.5°	1224.3	1228.7	1246.3	1271.2	1283.0
30°	1189.1	1195.0	1212.6	1239.0	1249.2
32.5°	1149.5	1153.9	1175.9	1202.3	1212.6
35°	1108.5	1112.9	1136.3	1161.3	1171.5
37.5°	1067.4	1067.4	1090.9	1120.2	1130.5
40°	1017.6	1019.0	1044.0	1071.8	1077.7
42.5°	970.6	970.6	992.6	1019.0	1029.3
45°	917.9	919.3	941.3	964.8	970.6
47.5°	863.6	863.6	882.7	904.7	910.5
50°	806.4	803.5	825.5	843.1	847.5
52.5°	747.8	743.4	761.0	775.6	781.5
55°	684.7	680.3	693.5	708.2	714.1
57.5°	618.7	612.9	627.5	640.7	643.7
60°	557.2	548.4	560.1	567.4	574.8
62.5°	495.6	485.3	494.1	498.5	504.4
65°	432.5	422.3	429.6	432.5	439.9
67.5°	372.4	365.1	366.6	371.0	373.9
70°	318.2	309.4	309.4	309.4	310.8
72.5°	268.3	255.1	253.7	255.1	255.1
75°	214.1	205.3	202.3	202.3	200.9
77.5°	171.5	159.8	158.4	155.4	152.5
80°	124.6	114.4	111.4	110.0	108.5
82.5°	86.5	77.7	74.8	71.8	67.4
85°	51.3	45.5	39.6	35.2	30.8
87.5°	19.1	17.6	14.7	13.2	13.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)