

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: P296247

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296247  
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-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: 3264.0 lumens  
Efficiency: N/A  
Efficacy: 107.7 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

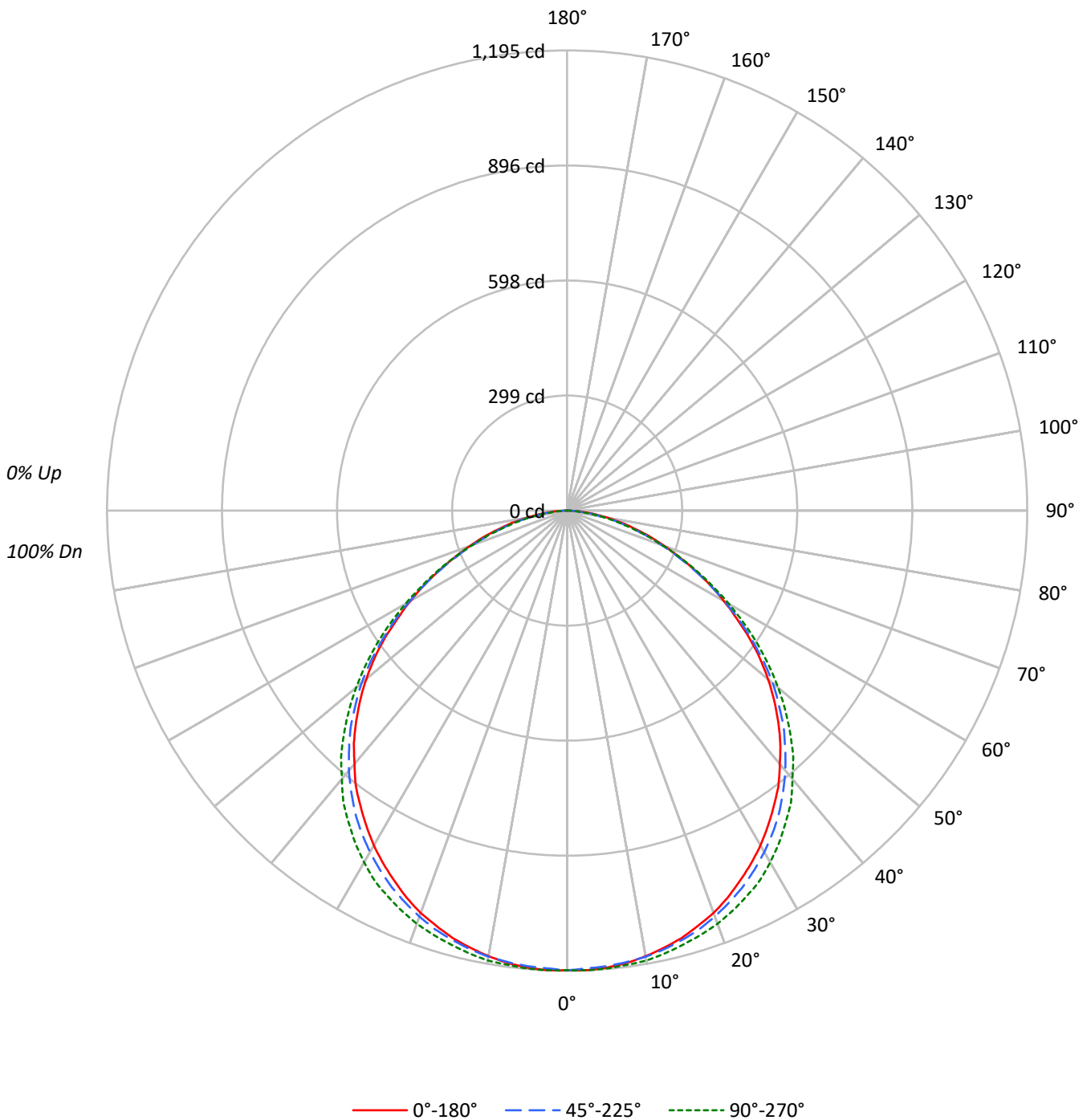
Input Watts (W): 30.318  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1606	1606	1606
5°	1609	1604	1612
10°	1605	1607	1621
15°	1601	1607	1625
20°	1592	1606	1635
25°	1575	1601	1640
30°	1560	1591	1639
35°	1538	1576	1625
40°	1509	1548	1599
45°	1475	1513	1560
50°	1425	1459	1498
55°	1357	1374	1415
60°	1266	1273	1306
65°	1163	1155	1183
70°	1057	1028	1033
75°	940	888	882
80°	815	729	710
85°	668	516	401



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.2	3.5
10°-20°	326.3	10.0
20°-30°	498.1	15.3
30°-40°	600.5	18.4
40°-50°	612.4	18.8
50°-60°	524.1	16.1
60°-70°	361.0	11.1
70°-80°	185.1	5.7
80°-90°	43.1	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°	937.7	28.7
0°-40°	1538.2	47.1
0°-60°	2674.8	81.9
0°-90°	3264.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3264.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1191	1189	1188	1191	1194	113
15°	1149	1148	1154	1163	1166	324
25°	1061	1065	1078	1097	1104	489
35°	936	940	960	981	989	586
45°	775	776	795	815	820	597
55°	578	574	586	598	603	516
65°	365	357	363	365	372	363
75°	181	173	171	171	170	195
85°	43	38	33	30	26	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1193.7	1193.7	1193.7	1193.7	1193.7
2.5°	1194.9	1192.4	1189.9	1192.4	1194.9
5°	1191.2	1188.7	1187.5	1191.2	1193.7
7.5°	1185.0	1182.5	1182.5	1187.5	1189.9
10°	1175.1	1173.8	1176.3	1181.3	1186.2
12.5°	1162.7	1162.7	1166.4	1172.6	1177.6
15°	1149.1	1147.8	1154.0	1162.7	1166.4
17.5°	1130.5	1131.7	1140.4	1150.3	1155.3
20°	1111.9	1113.2	1121.8	1135.5	1141.7
22.5°	1088.4	1090.9	1100.8	1118.1	1124.3
25°	1061.2	1064.9	1078.5	1097.1	1104.5
27.5°	1033.9	1037.6	1052.5	1073.5	1083.5
30°	1004.2	1009.2	1024.0	1046.3	1055.0
32.5°	970.8	974.5	993.1	1015.4	1024.0
35°	936.1	939.8	959.6	980.7	989.3
37.5°	901.4	901.4	921.2	946.0	954.7
40°	859.3	860.6	881.6	905.1	910.1
42.5°	819.7	819.7	838.3	860.6	869.2
45°	775.1	776.4	794.9	814.8	819.7
47.5°	729.3	729.3	745.4	764.0	768.9
50°	681.0	678.6	697.1	712.0	715.7
52.5°	631.5	627.8	642.6	655.0	660.0
55°	578.3	574.5	585.7	598.1	603.0
57.5°	522.5	517.6	530.0	541.1	543.6
60°	470.5	463.1	473.0	479.2	485.4
62.5°	418.5	409.9	417.3	421.0	426.0
65°	365.3	356.6	362.8	365.3	371.5
67.5°	314.5	308.3	309.6	313.3	315.7
70°	268.7	261.3	261.3	261.3	262.5
72.5°	226.6	215.5	214.2	215.5	215.5
75°	180.8	173.4	170.9	170.9	169.6
77.5°	144.9	135.0	133.7	131.3	128.8
80°	105.2	96.6	94.1	92.9	91.6
82.5°	73.1	65.6	63.1	60.7	57.0
85°	43.3	38.4	33.4	29.7	26.0
87.5°	16.1	14.9	12.4	11.1	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)