

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: P296235

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296235  
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-LD5-31-RDP-UNV-L93050-W2A1-U-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2360.0 lumens  
Efficiency: N/A  
Efficacy: 108.4 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

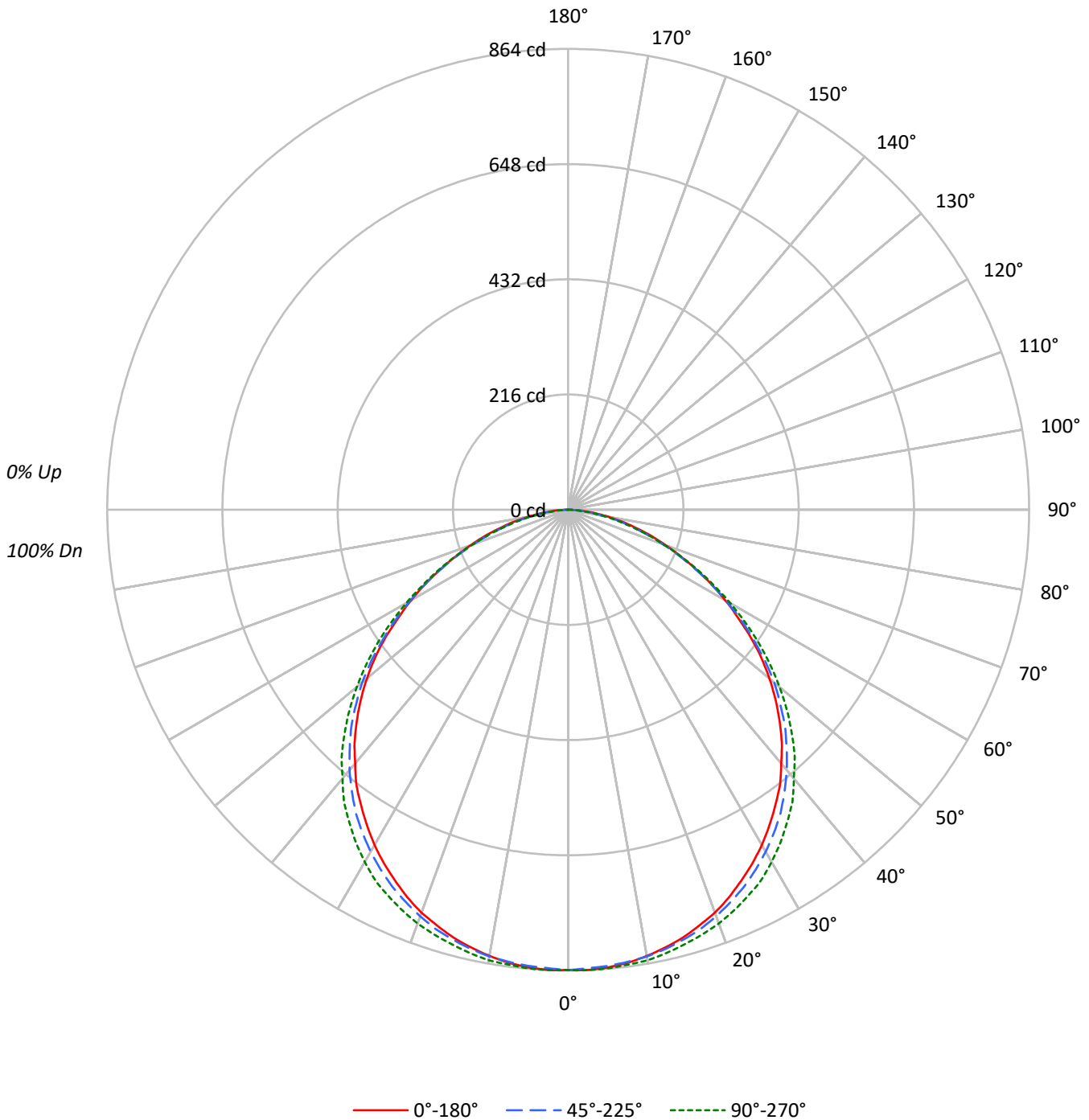
Input Watts (W): 21.762  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60					60			
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1161	1161	1161
5°	1163	1160	1166
10°	1161	1162	1172
15°	1157	1162	1175
20°	1151	1161	1182
25°	1139	1158	1186
30°	1128	1150	1185
35°	1112	1140	1175
40°	1091	1120	1156
45°	1067	1094	1128
50°	1031	1055	1083
55°	981	993	1023
60°	915	920	945
65°	841	835	855
70°	764	743	747
75°	679	643	638
80°	590	527	514
85°	483	374	290



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.9	3.5
10°-20°	236.0	10.0
20°-30°	360.2	15.3
30°-40°	434.2	18.4
40°-50°	442.8	18.8
50°-60°	379.0	16.1
60°-70°	261.0	11.1
70°-80°	133.8	5.7
80°-90°	31.2	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°	678.0	28.7
0°-40°	1112.2	47.1
0°-60°	1934.0	81.9
0°-90°	2360.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2360.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	863	863	863	863	863	
5°	861	860	859	861	863	82
15°	831	830	834	841	843	234
25°	767	770	780	793	799	354
35°	677	680	694	709	715	423
45°	560	561	575	589	593	432
55°	418	415	424	432	436	373
65°	264	258	262	264	269	262
75°	131	125	124	124	123	141
85°	31	28	24	22	19	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	863.1	863.1	863.1	863.1	863.1
2.5°	864.0	862.2	860.4	862.2	864.0
5°	861.3	859.5	858.6	861.3	863.1
7.5°	856.8	855.0	855.0	858.6	860.4
10°	849.6	848.7	850.5	854.1	857.7
12.5°	840.7	840.7	843.4	847.8	851.4
15°	830.8	829.9	834.4	840.7	843.4
17.5°	817.4	818.3	824.6	831.7	835.3
20°	804.0	804.9	811.1	821.0	825.5
22.5°	787.0	788.8	795.9	808.4	812.9
25°	767.3	770.0	779.8	793.2	798.6
27.5°	747.6	750.3	761.0	776.2	783.4
30°	726.1	729.7	740.4	756.5	762.8
32.5°	701.9	704.6	718.0	734.1	740.4
35°	676.8	679.5	693.9	709.1	715.3
37.5°	651.8	651.8	666.1	684.0	690.3
40°	621.3	622.2	637.4	654.5	658.0
42.5°	592.7	592.7	606.1	622.2	628.5
45°	560.5	561.3	574.8	589.1	592.7
47.5°	527.3	527.3	539.0	552.4	556.0
50°	492.4	490.6	504.0	514.8	517.5
52.5°	456.6	453.9	464.7	473.6	477.2
55°	418.1	415.4	423.5	432.4	436.0
57.5°	377.8	374.2	383.2	391.2	393.0
60°	340.2	334.8	342.0	346.5	351.0
62.5°	302.6	296.3	301.7	304.4	308.0
65°	264.1	257.8	262.3	264.1	268.6
67.5°	227.4	222.9	223.8	226.5	228.3
70°	194.3	188.9	188.9	188.9	189.8
72.5°	163.8	155.8	154.9	155.8	155.8
75°	130.7	125.3	123.6	123.6	122.7
77.5°	104.7	97.6	96.7	94.9	93.1
80°	76.1	69.8	68.0	67.1	66.3
82.5°	52.8	47.5	45.7	43.9	41.2
85°	31.3	27.8	24.2	21.5	18.8
87.5°	11.6	10.7	9.0	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)