

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: P296143

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296143  
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-L82765-W2A1-U-2700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2359.0 lumens  
Efficiency: N/A  
Efficacy: 111.3 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

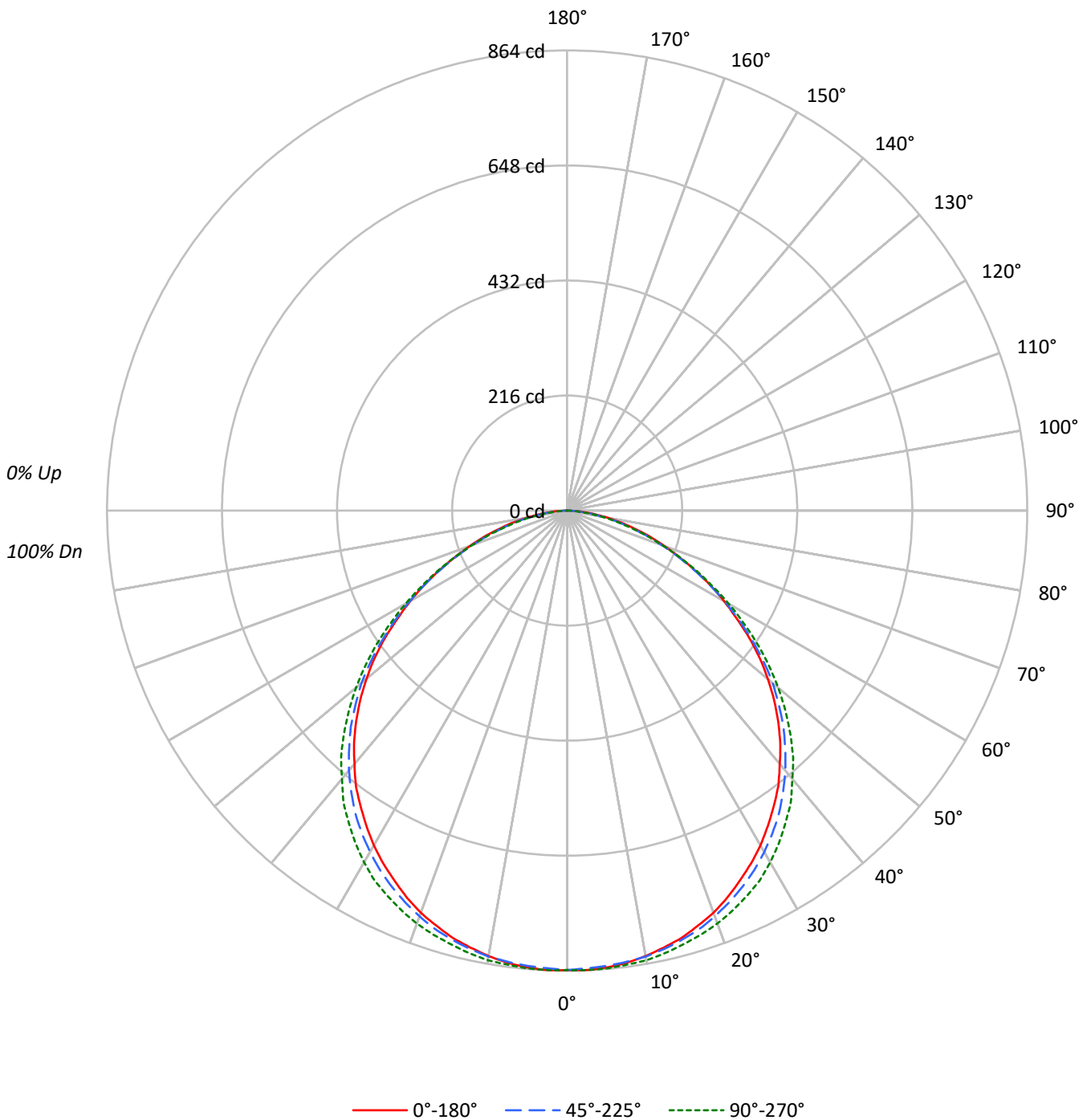
Input Watts (W): 21.204  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	1159	1165
10°	1160	1162	1171
15°	1157	1162	1174
20°	1151	1161	1181
25°	1139	1157	1185
30°	1128	1150	1185
35°	1111	1139	1174
40°	1091	1119	1155
45°	1066	1093	1127
50°	1030	1055	1083
55°	980	993	1022
60°	915	920	944
65°	840	835	855
70°	764	743	746
75°	679	642	637
80°	590	527	513
85°	483	374	290



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.8	3.5
10°-20°	235.9	10.0
20°-30°	360.0	15.3
30°-40°	434.0	18.4
40°-50°	442.6	18.8
50°-60°	378.8	16.1
60°-70°	260.9	11.1
70°-80°	133.8	5.7
80°-90°	31.1	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°	677.7	28.7
0°-40°	1111.7	47.1
0°-60°	1933.2	81.9
0°-90°	2359.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2359.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	863	863	863	863	863	
5°	861	859	858	861	863	82
15°	830	830	834	840	843	234
25°	767	770	780	793	798	354
35°	677	679	694	709	715	423
45°	560	561	574	589	592	432
55°	418	415	423	432	436	373
65°	264	258	262	264	268	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°	862.7	862.7	862.7	862.7	862.7
2.5°	863.6	861.8	860.0	861.8	863.6
5°	860.9	859.1	858.2	860.9	862.7
7.5°	856.4	854.6	854.6	858.2	860.0
10°	849.3	848.4	850.2	853.7	857.3
12.5°	840.3	840.3	843.0	847.5	851.1
15°	830.5	829.6	834.1	840.3	843.0
17.5°	817.1	817.9	824.2	831.4	835.0
20°	803.6	804.5	810.8	820.6	825.1
22.5°	786.6	788.4	795.6	808.1	812.6
25°	766.9	769.6	779.5	792.9	798.3
27.5°	747.3	749.9	760.7	775.9	783.0
30°	725.8	729.4	740.1	756.2	762.5
32.5°	701.6	704.3	717.7	733.8	740.1
35°	676.6	679.2	693.6	708.8	715.0
37.5°	651.5	651.5	665.8	683.7	690.0
40°	621.1	622.0	637.2	654.2	657.8
42.5°	592.4	592.4	605.9	622.0	628.2
45°	560.2	561.1	574.5	588.9	592.4
47.5°	527.1	527.1	538.7	552.2	555.7
50°	492.2	490.4	503.8	514.6	517.3
52.5°	456.4	453.7	464.5	473.4	477.0
55°	417.9	415.2	423.3	432.2	435.8
57.5°	377.7	374.1	383.0	391.1	392.9
60°	340.1	334.7	341.9	346.3	350.8
62.5°	302.5	296.2	301.6	304.3	307.8
65°	264.0	257.7	262.2	264.0	268.5
67.5°	227.3	222.8	223.7	226.4	228.2
70°	194.2	188.8	188.8	188.8	189.7
72.5°	163.8	155.7	154.8	155.7	155.7
75°	130.7	125.3	123.5	123.5	122.6
77.5°	104.7	97.5	96.7	94.9	93.1
80°	76.1	69.8	68.0	67.1	66.2
82.5°	52.8	47.4	45.6	43.9	41.2
85°	31.3	27.7	24.2	21.5	18.8
87.5°	11.6	10.7	8.9	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)