

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: P296093

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296093
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-L83050-W2A1-U-3000K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (504) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2429.0 lumens
Efficiency: N/A
Efficacy: 114.6 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

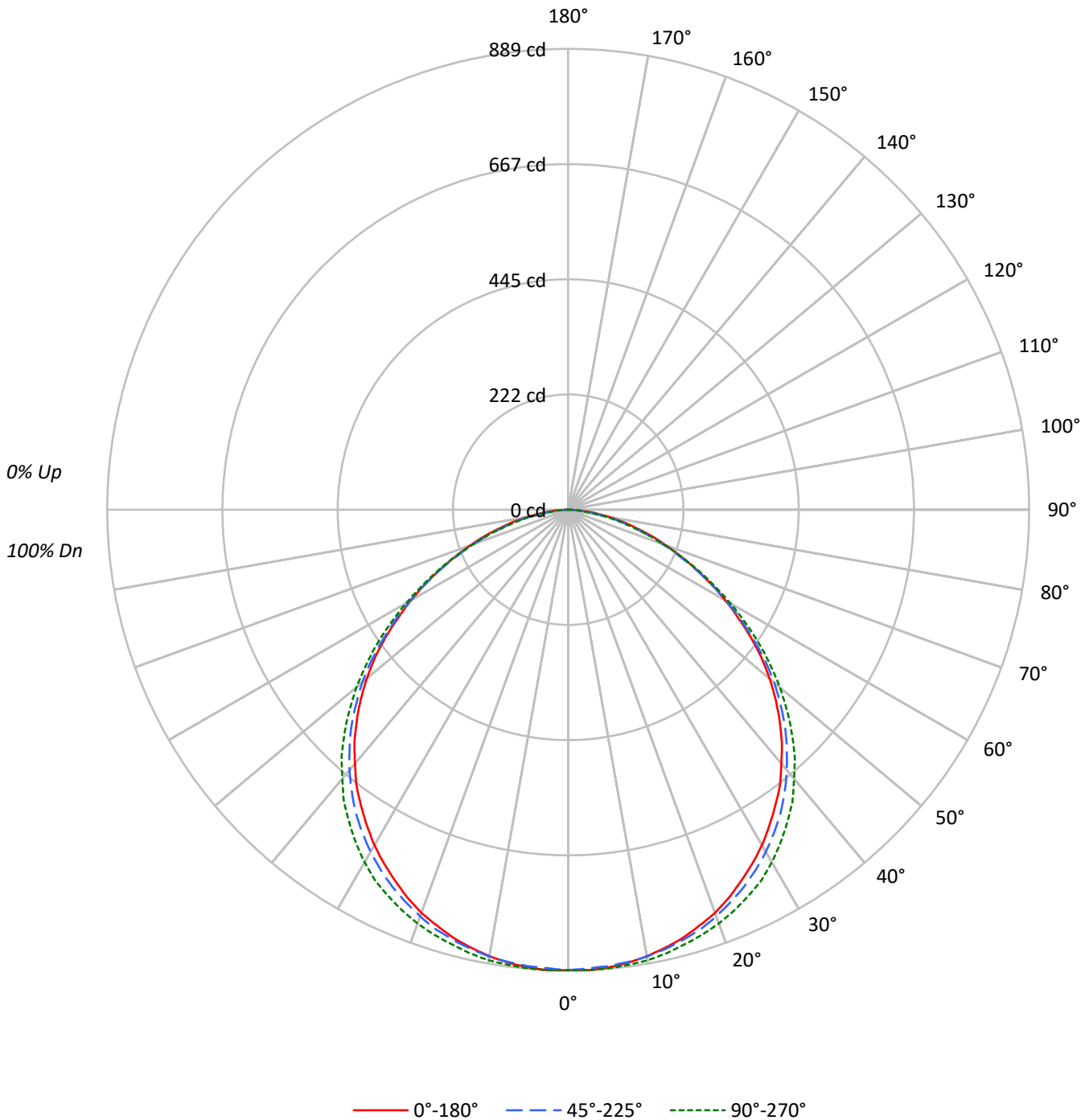
Input Watts (W): 21.204
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1195	1195	1195
5°	1197	1194	1200
10°	1195	1196	1206
15°	1191	1196	1209
20°	1185	1195	1216
25°	1172	1192	1220
30°	1161	1184	1220
35°	1144	1173	1209
40°	1123	1152	1190
45°	1098	1126	1161
50°	1061	1086	1115
55°	1009	1023	1053
60°	942	947	972
65°	865	860	880
70°	787	765	769
75°	699	661	656
80°	607	542	528
85°	499	384	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.2	3.5
10°-20°	242.9	10.0
20°-30°	370.7	15.3
30°-40°	446.9	18.4
40°-50°	455.7	18.8
50°-60°	390.1	16.1
60°-70°	268.7	11.1
70°-80°	137.7	5.7
80°-90°	32.1	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°	697.8	28.7
0°-40°	1144.7	47.1
0°-60°	1990.5	81.9
0°-90°	2429.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2429.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	886	885	884	886	888	84
15°	855	854	859	865	868	241
25°	790	792	803	816	822	364
35°	697	699	714	730	736	436
45°	577	578	592	606	610	444
55°	430	428	436	445	449	384
65°	272	265	270	272	276	270
75°	134	129	127	127	126	145
85°	32	29	25	22	19	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	888.3	888.3	888.3	888.3	888.3
2.5°	889.2	887.4	885.5	887.4	889.2
5°	886.5	884.6	883.7	886.5	888.3
7.5°	881.8	880.0	880.0	883.7	885.5
10°	874.5	873.6	875.4	879.1	882.8
12.5°	865.3	865.3	868.0	872.6	876.3
15°	855.1	854.2	858.8	865.3	868.0
17.5°	841.3	842.2	848.7	856.0	859.7
20°	827.5	828.4	834.8	845.0	849.6
22.5°	810.0	811.8	819.2	832.1	836.7
25°	789.7	792.5	802.6	816.4	821.9
27.5°	769.4	772.2	783.2	798.9	806.3
30°	747.3	751.0	762.1	778.6	785.1
32.5°	722.4	725.2	739.0	755.6	762.1
35°	696.6	699.4	714.1	729.8	736.3
37.5°	670.8	670.8	685.6	704.0	710.5
40°	639.5	640.4	656.1	673.6	677.3
42.5°	610.0	610.0	623.8	640.4	646.9
45°	576.8	577.8	591.6	606.3	610.0
47.5°	542.7	542.7	554.7	568.5	572.2
50°	506.8	505.0	518.8	529.8	532.6
52.5°	469.9	467.2	478.2	487.5	491.1
55°	430.3	427.6	435.9	445.1	448.8
57.5°	388.9	385.2	394.4	402.7	404.5
60°	350.2	344.6	352.0	356.6	361.2
62.5°	311.5	305.0	310.5	313.3	317.0
65°	271.8	265.4	270.0	271.8	276.4
67.5°	234.1	229.4	230.4	233.1	235.0
70°	200.0	194.4	194.4	194.4	195.4
72.5°	168.6	160.3	159.4	160.3	160.3
75°	134.5	129.0	127.2	127.2	126.2
77.5°	107.8	100.4	99.5	97.7	95.8
80°	78.3	71.9	70.0	69.1	68.2
82.5°	54.4	48.8	47.0	45.2	42.4
85°	32.3	28.6	24.9	22.1	19.4
87.5°	12.0	11.1	9.2	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)