

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: P296009

Luminaire Tested: **24RLN-LD5-31-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P296009
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-UNV-L92765-W2A1-U-5500K
Description: RLN LED 2x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (504) 90 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2910.0 lumens
Efficiency: N/A
Efficacy: 133.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

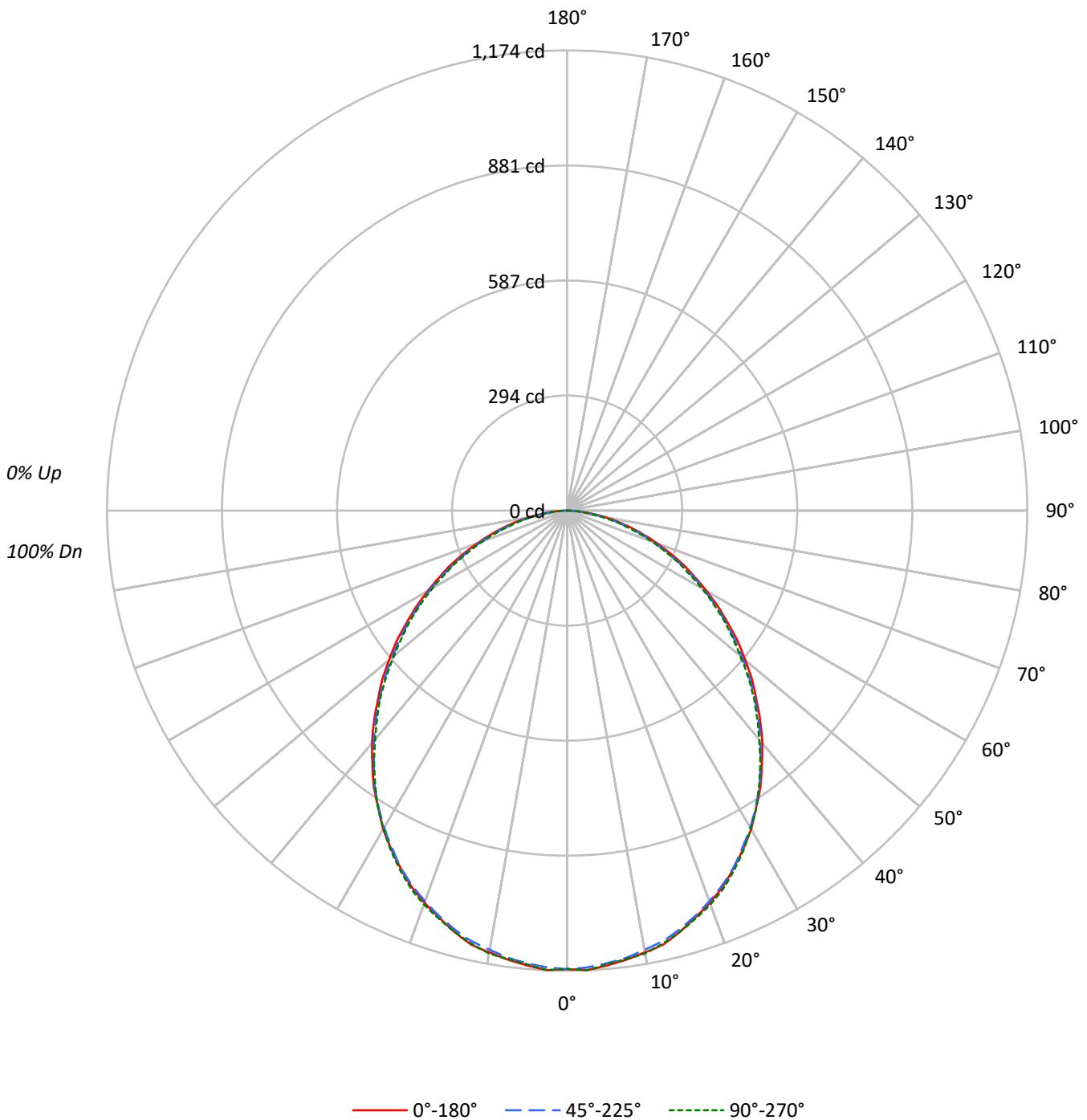
Input Watts (W): 21.762
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	74	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1574	1574	1574
5°	1573	1566	1570
10°	1564	1555	1567
15°	1550	1542	1550
20°	1524	1519	1531
25°	1494	1491	1500
30°	1459	1451	1456
35°	1412	1406	1403
40°	1360	1347	1339
45°	1299	1286	1281
50°	1240	1220	1207
55°	1174	1156	1145
60°	1104	1084	1071
65°	1043	1004	995
70°	956	920	901
75°	879	825	791
80°	771	720	676
85°	624	580	492



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	3.8
10°-20°	312.9	10.8
20°-30°	462.8	15.9
30°-40°	534.1	18.4
40°-50°	521.7	17.9
50°-60°	440.5	15.1
60°-70°	313.8	10.8
70°-80°	169.9	5.8
80°-90°	43.8	1.5
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°	886.1	30.4
0°-40°	1420.2	48.8
0°-60°	2382.5	81.9
0°-90°	2910.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2910.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1165	1165	1159	1162	1162	111
15°	1112	1108	1107	1112	1112	313
25°	1006	1001	1004	1008	1010	463
35°	860	853	856	853	854	537
45°	682	677	676	673	673	528
55°	500	494	493	488	488	449
65°	328	321	315	312	313	323
75°	169	163	159	155	152	179
85°	40	39	38	33	32	48
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1169.7	1169.7	1169.7	1169.7	1169.7
2.5°	1173.5	1168.8	1166.9	1167.9	1173.5
5°	1165.0	1165.0	1159.4	1162.2	1162.2
7.5°	1155.7	1156.6	1151.0	1155.7	1153.8
10°	1144.4	1141.6	1137.8	1145.3	1147.2
12.5°	1134.1	1127.5	1125.6	1130.3	1131.2
15°	1112.5	1107.8	1106.8	1111.5	1112.5
17.5°	1088.1	1089.0	1085.2	1091.8	1090.9
20°	1064.6	1062.7	1060.8	1068.3	1069.3
22.5°	1038.3	1032.7	1034.6	1041.1	1043.0
25°	1006.4	1000.8	1004.5	1008.3	1010.1
27.5°	972.6	969.8	968.8	973.5	975.4
30°	938.8	934.1	934.1	939.7	936.9
32.5°	897.5	893.7	895.6	897.5	898.4
35°	859.9	853.4	856.2	853.4	854.3
37.5°	815.8	811.1	810.2	809.2	809.2
40°	774.5	770.7	767.0	767.0	762.3
42.5°	729.4	724.7	722.9	720.1	717.2
45°	682.5	676.9	675.9	673.1	673.1
47.5°	640.3	631.8	630.9	625.2	625.2
50°	592.4	586.7	583.0	579.2	576.4
52.5°	549.2	543.6	537.9	534.2	531.4
55°	500.4	493.8	492.9	488.2	488.2
57.5°	456.3	450.6	446.9	441.2	442.2
60°	410.3	404.6	402.7	398.0	398.0
62.5°	367.1	362.4	359.6	354.9	351.1
65°	327.6	321.1	315.4	311.7	312.6
67.5°	284.5	276.9	274.1	270.4	267.6
70°	243.1	238.5	233.8	229.1	229.1
72.5°	204.7	200.0	197.1	191.5	189.6
75°	169.0	163.4	158.7	154.9	152.1
77.5°	133.3	127.7	124.9	120.2	120.2
80°	99.5	95.8	92.9	91.1	87.3
82.5°	68.5	66.7	63.8	61.0	58.2
85°	40.4	39.4	37.6	32.9	31.9
87.5°	16.0	16.0	14.1	13.1	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)