

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: P295685

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295685
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36061-R2)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-31-RDP-UNV-L83050-W2A1-U-4000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2779.0 lumens
Efficiency: N/A
Efficacy: 96.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

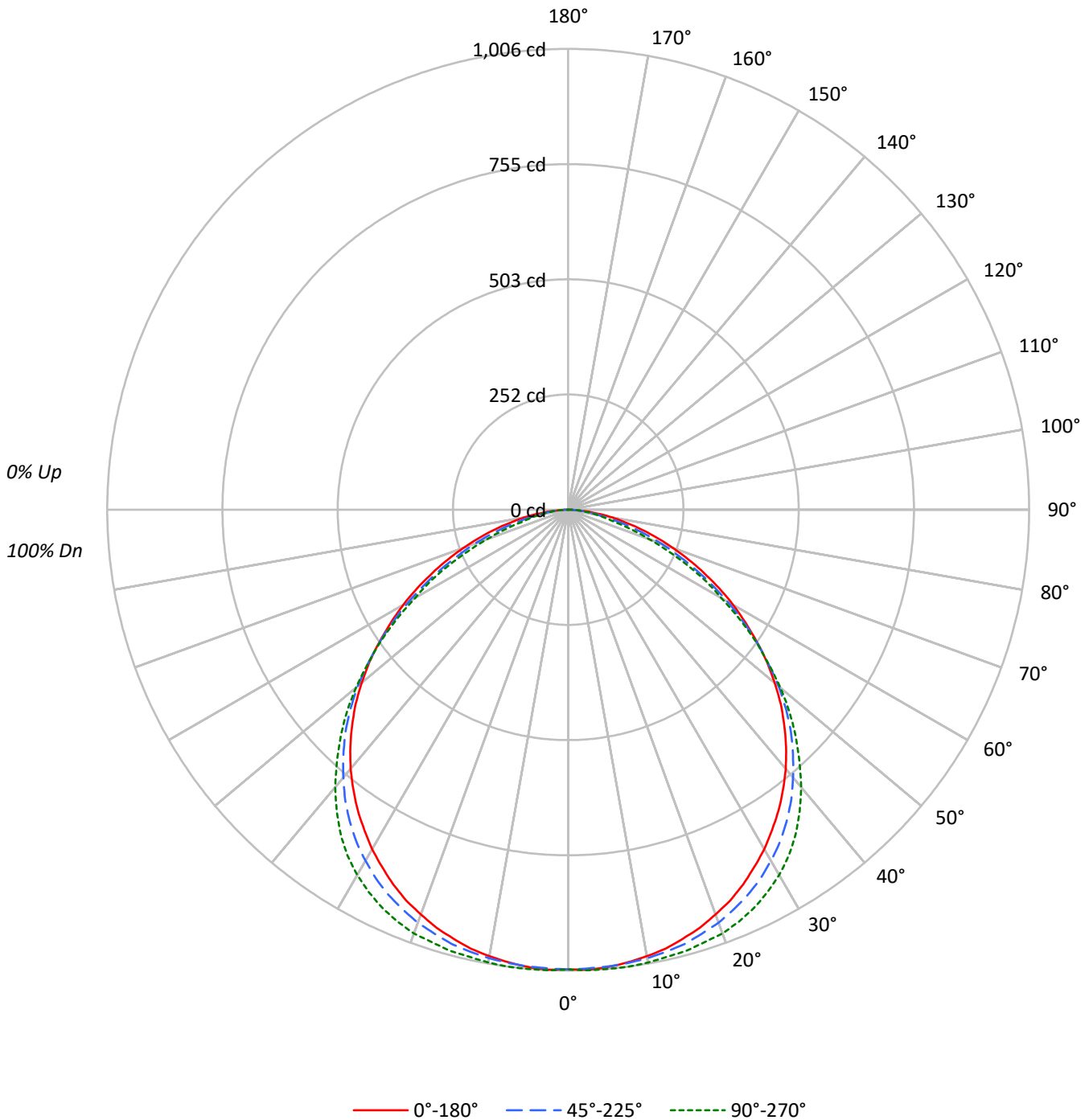
Input Watts (W): 28.923
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	99	96	98	95	93	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72					72			
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61					61			
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52					52			
5	77	64	56	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	54	47	42	52	46	42	40					40			
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35					35			
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31					31			
9	57	44	36	30	56	44	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2701	2701	2701
5°	2707	2703	2719
10°	2705	2716	2742
15°	2700	2734	2777
20°	2692	2747	2819
25°	2681	2754	2849
30°	2660	2750	2861
35°	2630	2730	2844
40°	2594	2682	2779
45°	2538	2616	2674
50°	2462	2508	2531
55°	2358	2351	2338
60°	2236	2162	2080
65°	2083	1934	1828
70°	1901	1695	1477
75°	1708	1407	1105
80°	1519	1027	962
85°	1195	852	852



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.5	3.4
10°-20°	277.7	10.0
20°-30°	428.5	15.4
30°-40°	519.7	18.7
40°-50°	527.6	19.0
50°-60°	446.4	16.1
60°-70°	302.0	10.9
70°-80°	146.0	5.3
80°-90°	35.6	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°	801.7	28.8
0°-40°	1321.4	47.5
0°-60°	2295.4	82.6
0°-90°	2779.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2779.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1004	1004	1004	1004	1004	
5°	1002	1002	1001	1005	1006	95
15°	969	975	982	993	997	274
25°	903	910	928	951	959	416
35°	801	809	831	857	866	501
45°	667	668	688	701	703	514
55°	502	498	501	501	498	449
65°	327	313	304	291	287	324
75°	164	152	135	117	106	175
85°	39	30	28	28	28	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1003.6	1003.6	1003.6	1003.6	1003.6
2.5°	1005.0	1005.0	1002.2	1005.0	1006.4
5°	1002.2	1002.2	1000.8	1005.0	1006.4
7.5°	996.7	998.1	998.1	1003.6	1006.4
10°	989.8	992.6	993.9	1002.2	1003.6
12.5°	981.5	984.3	988.4	998.1	999.5
15°	969.1	974.6	981.5	992.6	996.7
17.5°	956.7	962.2	970.5	985.7	989.8
20°	940.1	947.0	959.4	977.4	984.3
22.5°	923.5	929.1	944.2	966.3	973.2
25°	902.8	909.7	927.7	951.1	959.4
27.5°	879.4	889.0	908.3	933.2	941.5
30°	855.9	864.2	884.9	912.5	920.8
32.5°	828.3	836.6	860.0	886.3	895.9
35°	800.7	809.0	831.0	857.3	865.6
37.5°	770.3	775.8	799.3	821.4	829.7
40°	738.5	742.7	763.4	785.5	791.0
42.5°	704.0	706.8	726.1	745.5	746.8
45°	666.8	668.1	687.5	701.3	702.7
47.5°	629.5	628.1	644.7	654.3	655.7
50°	588.1	588.1	599.1	604.6	604.6
52.5°	546.7	543.9	549.4	553.6	549.4
55°	502.5	498.3	501.1	501.1	498.3
57.5°	458.3	450.0	451.4	448.7	441.7
60°	415.5	405.9	401.7	392.1	386.5
62.5°	371.3	360.3	352.0	341.0	339.6
65°	327.2	313.4	303.7	291.3	287.1
67.5°	284.4	272.0	258.1	244.3	236.1
70°	241.6	227.8	215.4	197.4	187.7
72.5°	202.9	190.5	175.3	154.6	147.7
75°	164.3	151.9	135.3	117.3	106.3
77.5°	127.0	117.3	99.4	84.2	82.8
80°	98.0	87.0	66.3	62.1	62.1
82.5°	63.5	56.6	46.9	44.2	44.2
85°	38.7	30.4	27.6	27.6	27.6
87.5°	15.2	13.8	13.8	13.8	13.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)