

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: P229469

Luminaire Tested: **14RLN-LD5-31-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229469
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36058)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-31-UNV-L930-CD1-U
Description: METALUX 1X4 RLN LED TROFFER
Light Source: (112)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2623.0 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.31
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

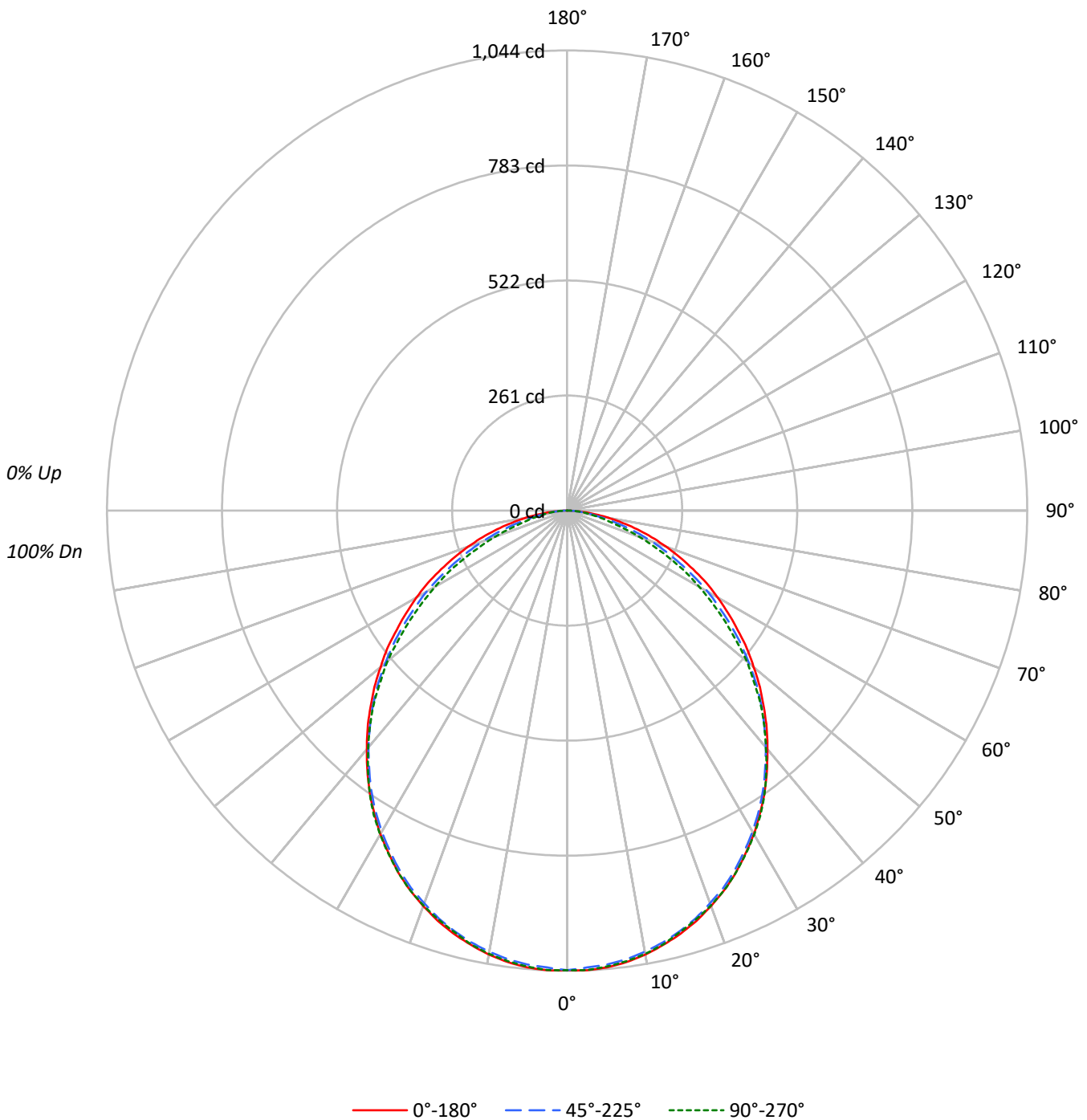
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77		84	79	76		81	77	74	72
3	91	81	74	67	89	80	73	67	77	71	66		74	69	64		72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56		66	60	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38		50	43	38		48	42	38	36
8	62	49	40	35	60	48	40	35	47	40	34		45	39	34		44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31		42	36	31		41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3514	3514	3514
5°	3519	3497	3512
10°	3500	3478	3493
15°	3467	3447	3454
20°	3423	3400	3418
25°	3369	3345	3369
30°	3298	3273	3303
35°	3213	3187	3213
40°	3110	3084	3087
45°	3007	2967	2958
50°	2896	2821	2791
55°	2775	2662	2563
60°	2658	2485	2332
65°	2513	2246	2055
70°	2343	1994	1727
75°	2148	1670	1334
80°	1851	1252	1151
85°	1496	1048	1071



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.5	3.8
10°-20°	279.5	10.7
20°-30°	416.1	15.9
30°-40°	486.3	18.5
40°-50°	480.6	18.3
50°-60°	405.8	15.5
60°-70°	281.1	10.7
70°-80°	140.3	5.3
80°-90°	34.9	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°	794.0	30.3
0°-40°	1280.4	48.8
0°-60°	2166.8	82.6
0°-90°	2623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2623.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1043	1043	1043	1043	1043	
5°	1040	1038	1034	1039	1038	99
15°	994	993	988	993	990	280
25°	906	904	900	906	906	417
35°	781	777	775	780	781	488
45°	631	624	623	621	621	487
55°	472	464	453	443	436	423
65°	315	300	282	267	258	313
75°	165	150	128	111	102	174
85°	39	30	27	27	28	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1042.8	1042.8	1042.8	1042.8	1042.8
2.5°	1044.1	1042.2	1037.7	1042.8	1043.5
5°	1040.3	1038.3	1033.8	1039.0	1038.3
7.5°	1033.2	1030.6	1026.7	1031.2	1031.2
10°	1022.9	1020.9	1016.4	1021.6	1020.9
12.5°	1009.3	1008.0	1003.5	1008.7	1008.0
15°	993.9	992.6	988.1	992.6	990.0
17.5°	975.8	975.2	970.0	973.2	972.6
20°	954.5	953.3	948.1	954.5	953.3
22.5°	932.0	929.4	926.2	931.3	932.0
25°	906.2	903.6	899.8	905.6	906.2
27.5°	876.6	874.6	870.8	879.1	877.8
30°	847.5	845.6	841.1	848.2	848.8
32.5°	814.0	812.1	808.9	816.0	817.3
35°	781.2	777.3	774.7	780.5	781.2
37.5°	744.4	740.6	738.0	743.8	742.5
40°	707.0	702.5	701.2	705.8	701.9
42.5°	670.3	664.5	661.9	664.5	661.9
45°	631.0	623.9	622.6	621.3	620.7
47.5°	593.0	585.2	582.0	577.5	574.3
50°	552.4	544.0	538.2	533.7	532.4
52.5°	514.3	504.7	496.3	492.4	482.1
55°	472.4	464.1	453.1	443.4	436.3
57.5°	433.1	422.2	409.3	399.0	389.9
60°	394.4	380.3	368.7	352.6	346.1
62.5°	356.4	340.3	324.2	306.8	303.6
65°	315.2	300.3	281.7	266.8	257.8
67.5°	275.9	260.4	242.3	221.7	213.3
70°	237.8	221.1	202.4	182.4	175.3
72.5°	201.1	184.3	165.0	143.7	135.4
75°	165.0	150.2	128.3	110.9	102.5
77.5°	128.3	116.0	94.7	80.6	79.3
80°	95.4	84.4	64.5	61.2	59.3
82.5°	65.7	55.4	45.8	43.8	42.5
85°	38.7	29.6	27.1	27.1	27.7
87.5°	14.8	12.9	12.9	12.9	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)