

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: P229539

Luminaire Tested: **14RLN-LD5-31-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229539
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36064)
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-L940-CD1-SVPD1-U
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR
Light Source: (112)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2720.0 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

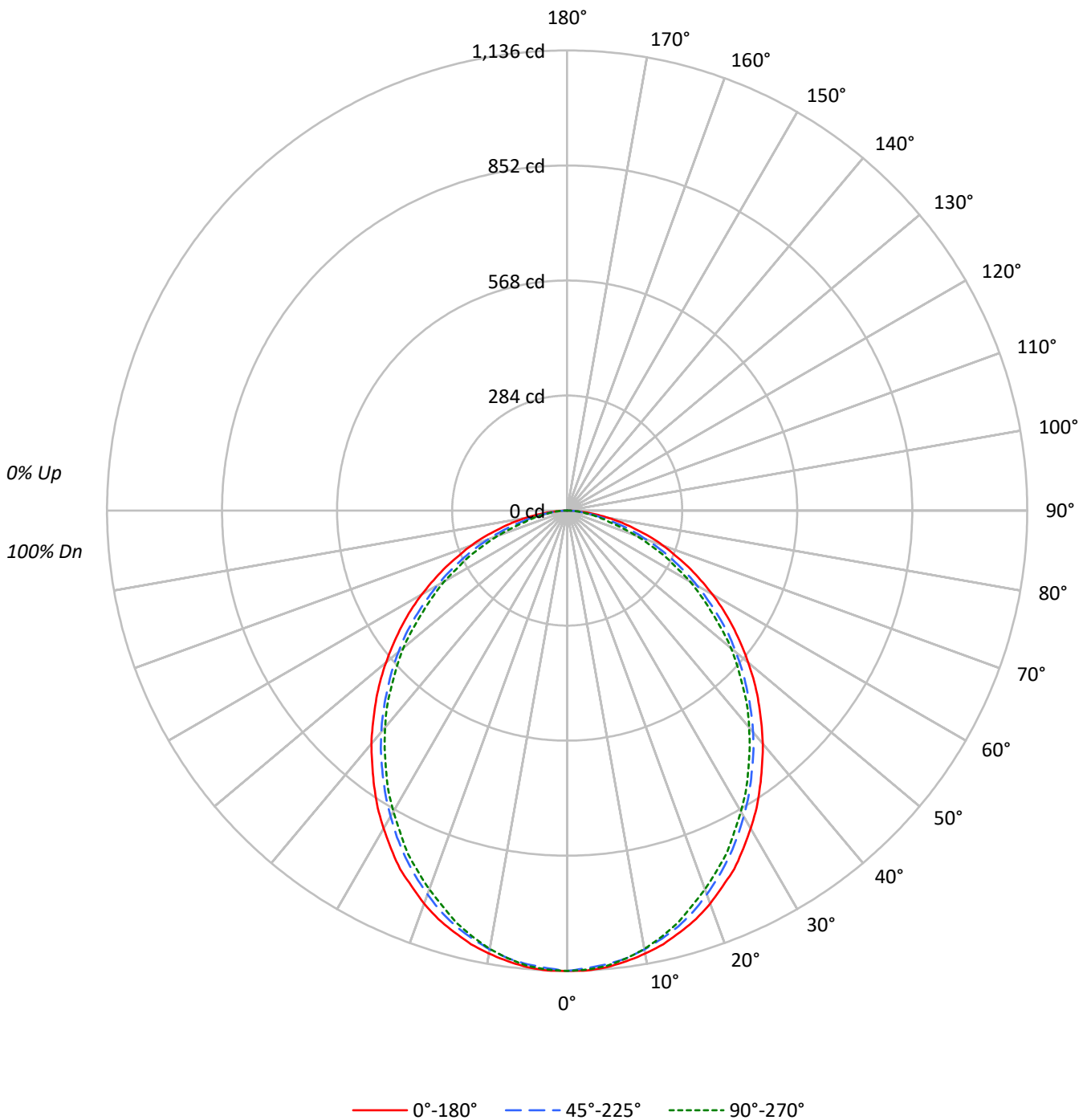
Input Watts (W): 30.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3829	3829	3829
5°	3828	3804	3816
10°	3800	3763	3759
15°	3759	3706	3677
20°	3703	3615	3569
25°	3630	3512	3468
30°	3524	3392	3337
35°	3416	3266	3208
40°	3306	3141	3074
45°	3184	2994	2921
50°	3059	2849	2769
55°	2930	2688	2550
60°	2791	2498	2363
65°	2636	2288	2120
70°	2480	2029	1796
75°	2235	1730	1393
80°	1985	1370	1232
85°	1635	1090	1137



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.9	3.9
10°-20°	299.7	11.0
20°-30°	436.8	16.1
30°-40°	500.8	18.4
40°-50°	489.6	18.0
50°-60°	413.1	15.2
60°-70°	288.7	10.6
70°-80°	147.2	5.4
80°-90°	37.1	1.4
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°	843.4	31.0
0°-40°	1344.2	49.4
0°-60°	2246.9	82.6
0°-90°	2720.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2720.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1136	1136	1136	1136	1136	
5°	1132	1129	1125	1128	1128	107
15°	1078	1074	1062	1059	1054	304
25°	976	965	945	935	933	448
35°	830	819	794	786	780	520
45°	668	650	628	620	613	516
55°	499	480	458	445	434	446
65°	331	311	287	271	266	327
75°	172	158	133	116	107	185
85°	42	32	28	29	29	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1136.4	1136.4	1136.4	1136.4	1136.4
2.5°	1136.4	1134.0	1130.5	1135.2	1134.0
5°	1131.7	1129.3	1124.6	1128.1	1128.1
7.5°	1122.2	1119.9	1115.2	1117.5	1115.2
10°	1110.5	1108.1	1099.9	1101.1	1098.7
12.5°	1096.4	1091.7	1082.3	1081.1	1077.5
15°	1077.5	1074.0	1062.3	1058.7	1054.0
17.5°	1057.5	1050.5	1037.5	1030.5	1023.4
20°	1032.8	1023.4	1008.1	999.9	995.2
22.5°	1003.4	996.4	977.6	968.1	963.4
25°	976.4	964.6	944.6	935.2	932.9
27.5°	941.1	931.7	909.3	901.1	894.0
30°	905.8	895.2	871.7	863.4	857.6
32.5°	870.5	858.7	834.0	824.6	821.1
35°	830.5	818.7	794.0	785.8	779.9
37.5°	790.5	776.4	755.2	745.8	739.9
40°	751.7	735.2	714.1	703.5	698.8
42.5°	709.3	691.7	671.7	661.1	658.8
45°	668.2	650.5	628.2	619.9	612.9
47.5°	627.0	607.0	587.0	575.2	570.5
50°	583.5	564.7	543.5	531.7	528.2
52.5°	541.1	522.3	502.3	489.4	481.1
55°	498.8	480.0	457.6	444.7	434.1
57.5°	457.6	435.3	412.9	397.6	391.7
60°	414.1	394.1	370.6	355.3	350.6
62.5°	371.7	354.1	329.4	311.7	303.5
65°	330.6	310.6	287.0	270.6	265.9
67.5°	288.2	270.6	247.0	228.2	220.0
70°	251.7	229.4	205.9	189.4	182.3
72.5°	212.9	192.9	170.6	151.8	141.2
75°	171.7	157.6	132.9	116.5	107.0
77.5°	138.8	122.3	100.0	87.1	84.7
80°	102.3	89.4	70.6	64.7	63.5
82.5°	71.8	58.8	48.2	45.9	44.7
85°	42.3	31.8	28.2	29.4	29.4
87.5°	17.6	12.9	12.9	14.1	14.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)