

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: P229496

Luminaire Tested: **14RLN-LD5-40-RDP-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229496
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36061)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-40-RDP-UNV-L840-CD1-U
Description: METALUX 1X4 RLN LED TROFFER WITH RDP LENS
Light Source: (112)4000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3453.0 lumens
Efficiency: N/A
Efficacy: 82.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.39
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

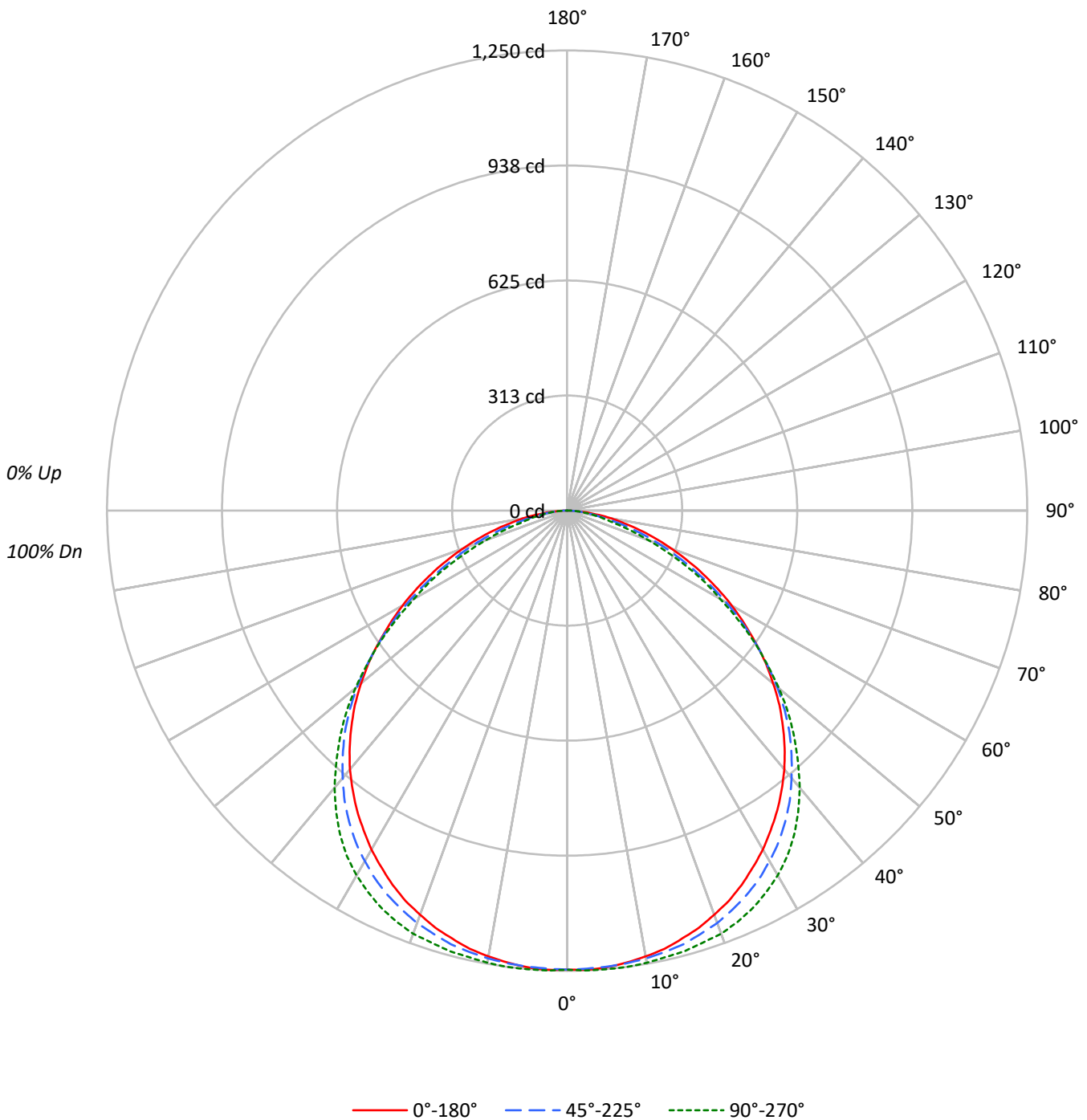
Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229496

CATALOG NUMBER: 14RLN-LD5-40-RDP-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229496

CATALOG NUMBER: 14RLN-LD5-40-RDP-UNV-L840-CD1-U

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		94	92	90		91	89	87	85
2	100	92	85	80	97	90	84	79	87	81	77		83	79	75		80	77	74	72
3	91	81	73	67	89	79	72	66	77	70	65		74	68	64		71	67	63	61
4	84	72	63	57	81	71	63	57	68	61	56		66	60	55		64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34		45	38	33		44	38	33	31
9	57	44	36	30	56	44	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27		38	32	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4202	4202	4202
5°	4212	4206	4229
10°	4208	4226	4267
15°	4200	4255	4320
20°	4189	4275	4385
25°	4171	4286	4432
30°	4138	4278	4452
35°	4093	4248	4424
40°	4037	4172	4323
45°	3948	4071	4161
50°	3830	3902	3938
55°	3668	3658	3638
60°	3479	3364	3237
65°	3241	3009	2845
70°	2958	2636	2298
75°	2657	2189	1720
80°	2363	1597	1498
85°	1856	1326	1326



TEST NUMBER: P229496

CATALOG NUMBER: 14RLN-LD5-40-RDP-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.7	3.4
10°-20°	345.0	10.0
20°-30°	532.4	15.4
30°-40°	645.7	18.7
40°-50°	655.6	19.0
50°-60°	554.6	16.1
60°-70°	375.2	10.9
70°-80°	181.4	5.3
80°-90°	44.3	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°	996.1	28.8
0°-40°	1641.8	47.5
0°-60°	2852.1	82.6
0°-90°	3453.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3453.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1247	1247	1247	1247	1247	
5°	1245	1245	1244	1249	1250	118
15°	1204	1211	1220	1233	1238	340
25°	1122	1130	1153	1182	1192	517
35°	995	1005	1033	1065	1076	622
45°	828	830	854	871	873	639
55°	624	619	623	623	619	558
65°	406	389	377	362	357	403
75°	204	189	168	146	132	217
85°	48	38	34	34	34	56
90°	0	0	0	0	0	



TEST NUMBER: P229496

CATALOG NUMBER: 14RLN-LD5-40-RDP-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1247.0	1247.0	1247.0	1247.0	1247.0
2.5°	1248.7	1248.7	1245.3	1248.7	1250.4
5°	1245.3	1245.3	1243.6	1248.7	1250.4
7.5°	1238.4	1240.1	1240.1	1247.0	1250.4
10°	1229.9	1233.3	1235.0	1245.3	1247.0
12.5°	1219.6	1223.0	1228.1	1240.1	1241.9
15°	1204.1	1211.0	1219.6	1233.3	1238.4
17.5°	1188.7	1195.5	1205.8	1224.7	1229.9
20°	1168.1	1176.7	1192.1	1214.4	1223.0
22.5°	1147.5	1154.4	1173.2	1200.7	1209.3
25°	1121.8	1130.4	1152.7	1181.8	1192.1
27.5°	1092.6	1104.6	1128.7	1159.5	1169.8
30°	1063.5	1073.8	1099.5	1133.8	1144.1
32.5°	1029.2	1039.5	1068.6	1101.2	1113.2
35°	994.9	1005.2	1032.6	1065.2	1075.5
37.5°	957.1	964.0	993.1	1020.6	1030.9
40°	917.7	922.8	948.5	976.0	982.9
42.5°	874.8	878.2	902.2	926.2	928.0
45°	828.5	830.2	854.2	871.4	873.1
47.5°	782.2	780.4	801.0	813.0	814.8
50°	730.7	730.7	744.4	751.3	751.3
52.5°	679.2	675.8	682.7	687.8	682.7
55°	624.4	619.2	622.6	622.6	619.2
57.5°	569.5	559.2	560.9	557.5	548.9
60°	516.3	504.3	499.1	487.1	480.3
62.5°	461.4	447.7	437.4	423.7	422.0
65°	406.5	389.4	377.4	361.9	356.8
67.5°	353.3	337.9	320.8	303.6	293.3
70°	300.2	283.0	267.6	245.3	233.3
72.5°	252.1	236.7	217.8	192.1	183.5
75°	204.1	188.7	168.1	145.8	132.1
77.5°	157.8	145.8	123.5	104.6	102.9
80°	121.8	108.1	82.3	77.2	77.2
82.5°	78.9	70.3	58.3	54.9	54.9
85°	48.0	37.7	34.3	34.3	34.3
87.5°	18.9	17.2	17.2	17.2	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)