

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: P229507

Luminaire Tested: **14RLN-LD5-23-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229507  
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-LD5-23-RDP-UNV-L940-CD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (112)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1778.0 lumens  
Efficiency: N/A  
Efficacy: 81.2 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

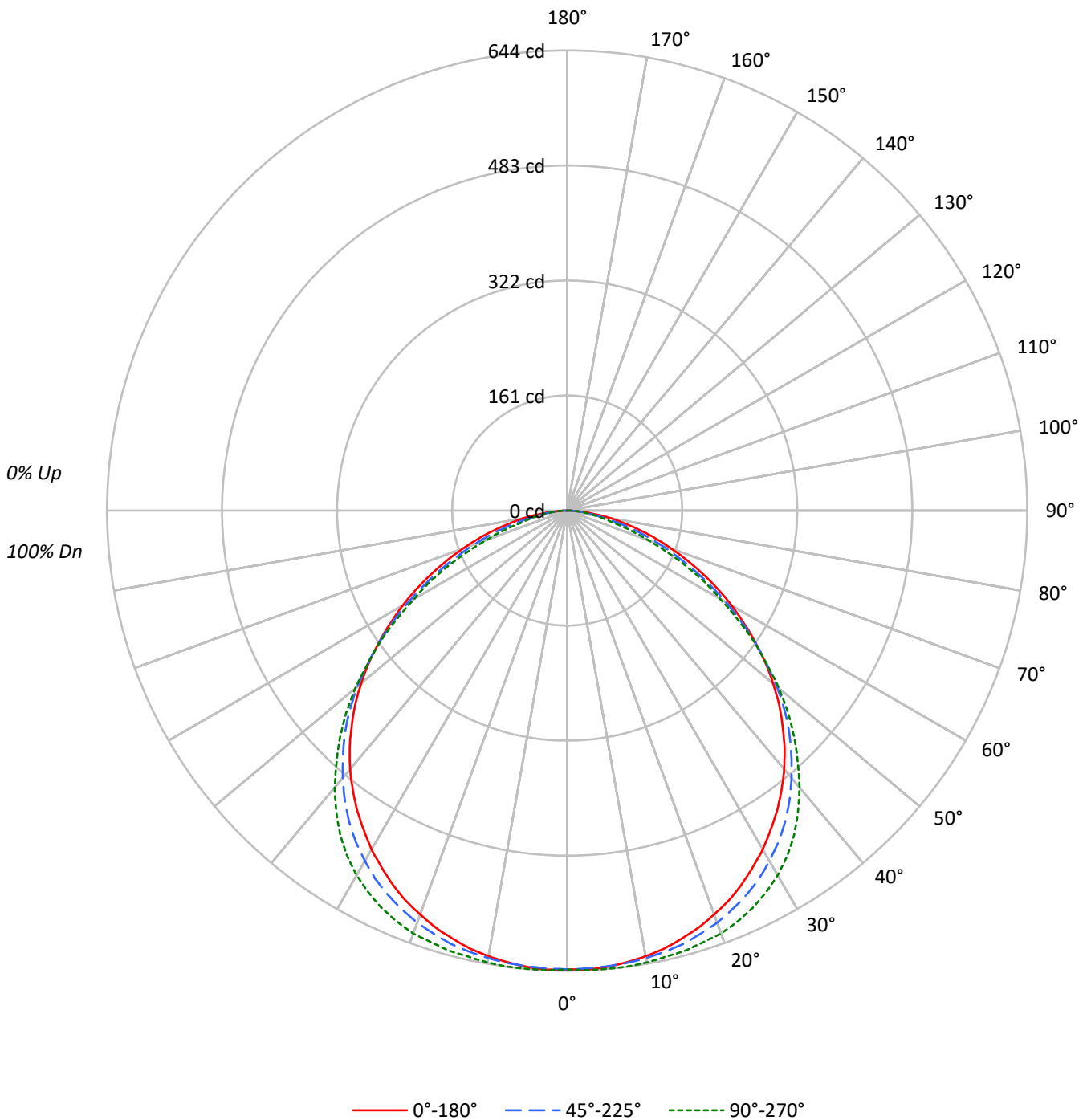
Input Watts (W): 21.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2164	2164	2164
5°	2169	2166	2178
10°	2167	2176	2197
15°	2163	2191	2225
20°	2157	2201	2258
25°	2147	2207	2282
30°	2131	2203	2292
35°	2107	2187	2278
40°	2078	2148	2226
45°	2033	2096	2142
50°	1973	2009	2028
55°	1889	1883	1873
60°	1791	1732	1667
65°	1669	1549	1465
70°	1523	1358	1183
75°	1368	1127	885
80°	1217	823	770
85°	955	684	684



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.1	3.4
10°-20°	177.6	10.0
20°-30°	274.2	15.4
30°-40°	332.5	18.7
40°-50°	337.6	19.0
50°-60°	285.6	16.1
60°-70°	193.2	10.9
70°-80°	93.4	5.3
80°-90°	22.8	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°	512.9	28.8
0°-40°	845.4	47.5
0°-60°	1468.6	82.6
0°-90°	1778.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1778.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	642	642	642	642	642	
5°	641	641	640	643	644	61
15°	620	624	628	635	638	175
25°	578	582	594	608	614	266
35°	512	518	532	548	554	320
45°	427	428	440	449	450	329
55°	322	319	321	321	319	287
65°	209	200	194	186	184	207
75°	105	97	87	75	68	112
85°	25	19	18	18	18	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	642.1	642.1	642.1	642.1	642.1
2.5°	643.0	643.0	641.2	643.0	643.9
5°	641.2	641.2	640.3	643.0	643.9
7.5°	637.7	638.6	638.6	642.1	643.9
10°	633.3	635.0	635.9	641.2	642.1
12.5°	628.0	629.7	632.4	638.6	639.5
15°	620.0	623.6	628.0	635.0	637.7
17.5°	612.1	615.6	620.9	630.6	633.3
20°	601.5	605.9	613.8	625.3	629.7
22.5°	590.9	594.4	604.1	618.3	622.7
25°	577.6	582.0	593.5	608.5	613.8
27.5°	562.6	568.8	581.2	597.1	602.4
30°	547.6	552.9	566.1	583.8	589.1
32.5°	529.9	535.2	550.2	567.0	573.2
35°	512.3	517.6	531.7	548.5	553.8
37.5°	492.8	496.4	511.4	525.5	530.8
40°	472.5	475.2	488.4	502.6	506.1
42.5°	450.4	452.2	464.6	476.9	477.8
45°	426.6	427.5	439.8	448.7	449.6
47.5°	402.7	401.9	412.5	418.6	419.5
50°	376.3	376.3	383.3	386.9	386.9
52.5°	349.8	348.0	351.5	354.2	351.5
55°	321.5	318.8	320.6	320.6	318.8
57.5°	293.2	287.9	288.8	287.0	282.6
60°	265.8	259.7	257.0	250.8	247.3
62.5°	237.6	230.5	225.2	218.2	217.3
65°	209.3	200.5	194.3	186.4	183.7
67.5°	181.9	174.0	165.2	156.3	151.0
70°	154.6	145.7	137.8	126.3	120.1
72.5°	129.8	121.9	112.2	98.9	94.5
75°	105.1	97.2	86.6	75.1	68.0
77.5°	81.3	75.1	63.6	53.9	53.0
80°	62.7	55.6	42.4	39.7	39.7
82.5°	40.6	36.2	30.0	28.3	28.3
85°	24.7	19.4	17.7	17.7	17.7
87.5°	9.7	8.8	8.8	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)