

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: P295600

Luminaire Tested: **14RLN-LD5-40-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295600  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-085-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-40-UNV-L82765-W2A1-U-5500K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4219.0 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.01 / 1.18  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

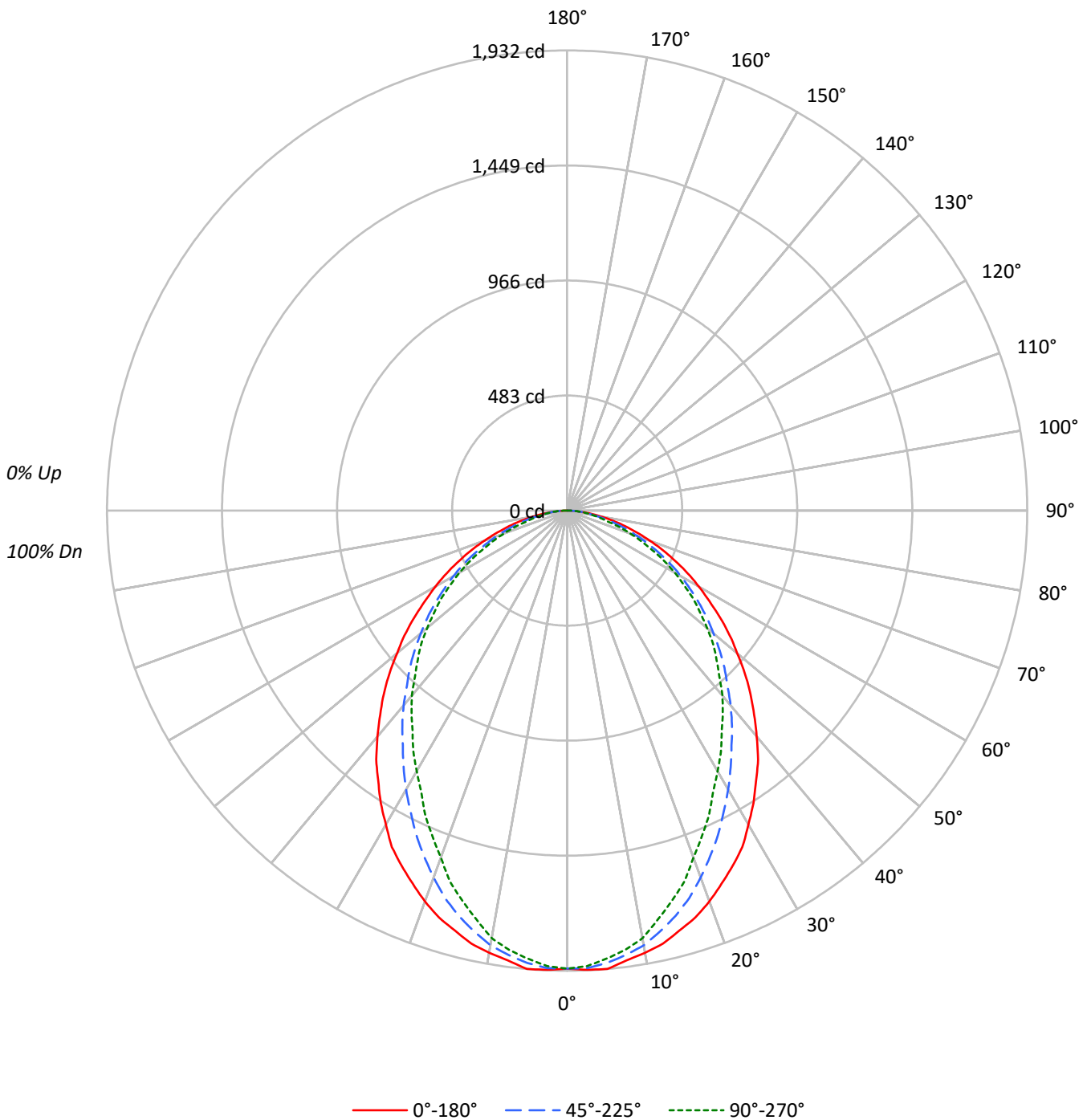
Input Watts (W): 40.548  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47					47			
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33					33			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28					28			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5174	5174	5174
5°	5218	5151	5103
10°	5152	5064	4982
15°	5084	4905	4726
20°	5001	4695	4440
25°	4884	4455	4185
30°	4729	4203	3926
35°	4543	3952	3717
40°	4351	3750	3562
45°	4144	3554	3377
50°	3902	3357	3208
55°	3679	3169	3035
60°	3443	2973	2810
65°	3189	2746	2519
70°	2902	2467	2229
75°	2613	2205	1815
80°	2236	1795	1712
85°	1815	1704	1704



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	180.0	4.3
10°-20°	494.1	11.7
20°-30°	693.5	16.4
30°-40°	769.2	18.2
40°-50°	738.4	17.5
50°-60°	618.9	14.7
60°-70°	434.4	10.3
70°-80°	226.9	5.4
80°-90°	63.5	1.5
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°	1367.7	32.4
0°-40°	2136.9	50.6
0°-60°	3494.2	82.8
0°-90°	4219.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4219.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1923	1923	1923	1923	1923	
5°	1932	1907	1907	1894	1889	182
15°	1825	1793	1761	1714	1696	515
25°	1645	1586	1500	1427	1410	757
35°	1383	1306	1203	1144	1132	866
45°	1089	1005	934	898	888	839
55°	784	725	675	654	647	701
65°	501	467	431	404	396	498
75°	251	232	212	187	175	266
85°	59	55	55	55	55	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1922.9	1922.9	1922.9	1922.9	1922.9
2.5°	1930.0	1919.3	1922.9	1922.9	1913.9
5°	1931.8	1906.8	1906.8	1894.3	1889.0
7.5°	1905.0	1885.4	1881.9	1865.8	1860.5
10°	1885.4	1865.8	1853.4	1832.0	1823.1
12.5°	1862.3	1832.0	1808.8	1773.2	1758.9
15°	1824.8	1792.8	1760.7	1714.3	1696.5
17.5°	1791.0	1753.6	1705.4	1653.8	1634.2
20°	1746.4	1701.9	1639.5	1568.2	1550.4
22.5°	1694.7	1643.1	1570.0	1493.4	1479.1
25°	1644.8	1586.0	1500.5	1427.4	1409.6
27.5°	1593.2	1521.9	1423.9	1345.5	1327.6
30°	1521.9	1448.8	1352.6	1276.0	1263.5
32.5°	1455.9	1382.9	1277.7	1215.4	1201.1
35°	1382.9	1306.3	1202.9	1144.1	1131.6
37.5°	1316.9	1227.8	1137.0	1079.9	1072.8
40°	1238.5	1158.3	1067.5	1024.7	1014.0
42.5°	1161.9	1081.7	996.2	958.8	946.3
45°	1088.8	1005.1	933.8	898.2	887.5
47.5°	1012.2	935.6	867.9	839.4	832.2
50°	932.0	864.3	801.9	775.2	766.3
52.5°	860.7	791.2	739.6	714.6	703.9
55°	784.1	725.3	675.4	654.0	646.9
57.5°	707.5	659.4	611.2	591.6	581.0
60°	639.8	591.6	552.4	529.3	522.1
62.5°	570.3	529.3	491.9	470.5	461.6
65°	500.8	466.9	431.3	404.5	395.6
67.5°	436.6	399.2	370.7	347.5	338.6
70°	368.9	342.2	313.6	292.3	283.3
72.5°	306.5	286.9	262.0	238.8	229.9
75°	251.3	231.7	212.1	187.1	174.6
77.5°	196.0	183.6	164.0	142.6	142.6
80°	144.3	137.2	115.8	112.3	110.5
82.5°	99.8	96.2	83.8	82.0	82.0
85°	58.8	55.2	55.2	55.2	55.2
87.5°	24.9	26.7	28.5	28.5	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)