

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: P295589

Luminaire Tested: **14RLN-LD5-35-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295589  
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-LD5-35-UNV-L82765-W2A1-U-4500K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3621.0 lumens  
Efficiency: N/A  
Efficacy: 105.8 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

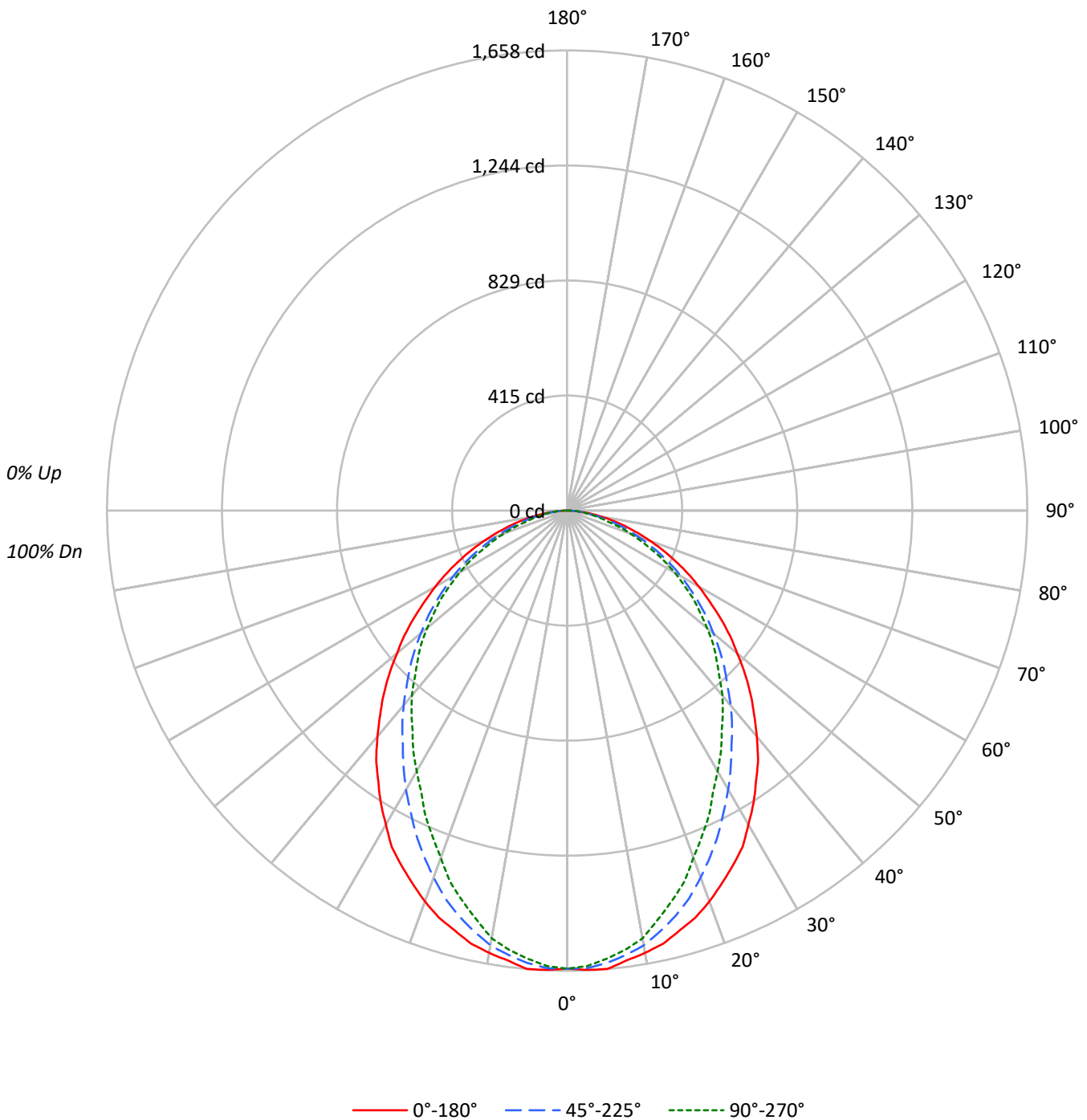
Input Watts (W): 34.224  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4441	4441	4441
5°	4479	4421	4379
10°	4422	4347	4276
15°	4363	4210	4057
20°	4292	4029	3810
25°	4192	3824	3592
30°	4059	3607	3370
35°	3899	3392	3190
40°	3734	3218	3057
45°	3556	3050	2899
50°	3349	2882	2753
55°	3157	2720	2605
60°	2955	2552	2412
65°	2737	2357	2162
70°	2491	2118	1913
75°	2243	1892	1559
80°	1920	1540	1469
85°	1559	1463	1463



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	154.5	4.3
10°-20°	424.1	11.7
20°-30°	595.2	16.4
30°-40°	660.2	18.2
40°-50°	633.8	17.5
50°-60°	531.2	14.7
60°-70°	372.8	10.3
70°-80°	194.7	5.4
80°-90°	54.5	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°	1173.8	32.4
0°-40°	1834.0	50.6
0°-60°	2999.0	82.8
0°-90°	3621.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3621.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1650	1650	1650	1650	1650	
5°	1658	1636	1636	1626	1621	157
15°	1566	1539	1511	1471	1456	442
25°	1412	1361	1288	1225	1210	650
35°	1187	1121	1032	982	971	743
45°	934	863	801	771	762	720
55°	673	622	580	561	555	602
65°	430	401	370	347	340	427
75°	216	199	182	161	150	229
85°	50	47	47	47	47	60
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1650.3	1650.3	1650.3	1650.3	1650.3
2.5°	1656.4	1647.2	1650.3	1650.3	1642.7
5°	1658.0	1636.5	1636.5	1625.8	1621.2
7.5°	1635.0	1618.2	1615.1	1601.4	1596.8
10°	1618.2	1601.4	1590.7	1572.3	1564.7
12.5°	1598.3	1572.3	1552.4	1521.8	1509.6
15°	1566.2	1538.7	1511.1	1471.4	1456.1
17.5°	1537.1	1505.0	1463.7	1419.4	1402.5
20°	1498.9	1460.7	1407.1	1345.9	1330.6
22.5°	1454.5	1410.2	1347.5	1281.7	1269.5
25°	1411.7	1361.2	1287.8	1225.1	1209.8
27.5°	1367.4	1306.2	1222.1	1154.8	1139.5
30°	1306.2	1243.5	1160.9	1095.1	1084.4
32.5°	1249.6	1186.9	1096.6	1043.1	1030.9
35°	1186.9	1121.1	1032.4	981.9	971.2
37.5°	1130.3	1053.8	975.8	926.9	920.7
40°	1063.0	994.2	916.2	879.4	870.3
42.5°	997.2	928.4	855.0	822.9	812.2
45°	934.5	862.6	801.4	770.9	761.7
47.5°	868.7	803.0	744.9	720.4	714.3
50°	799.9	741.8	688.3	665.3	657.7
52.5°	738.7	679.1	634.7	613.3	604.1
55°	673.0	622.5	579.7	561.3	555.2
57.5°	607.2	565.9	524.6	507.8	498.6
60°	549.1	507.8	474.1	454.3	448.1
62.5°	489.4	454.3	422.1	403.8	396.1
65°	429.8	400.7	370.1	347.2	339.5
67.5°	374.7	342.6	318.1	298.2	290.6
70°	316.6	293.7	269.2	250.8	243.2
72.5°	263.1	246.2	224.8	205.0	197.3
75°	215.7	198.8	182.0	160.6	149.9
77.5°	168.2	157.5	140.7	122.4	122.4
80°	123.9	117.8	99.4	96.4	94.8
82.5°	85.7	82.6	71.9	70.4	70.4
85°	50.5	47.4	47.4	47.4	47.4
87.5°	21.4	22.9	24.5	24.5	26.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)