

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: P290592

Luminaire Tested: **14GR-LD5-20-F1-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290592  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-20-F1-UNV-L82765-W2A1-U-2700K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1891.0 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

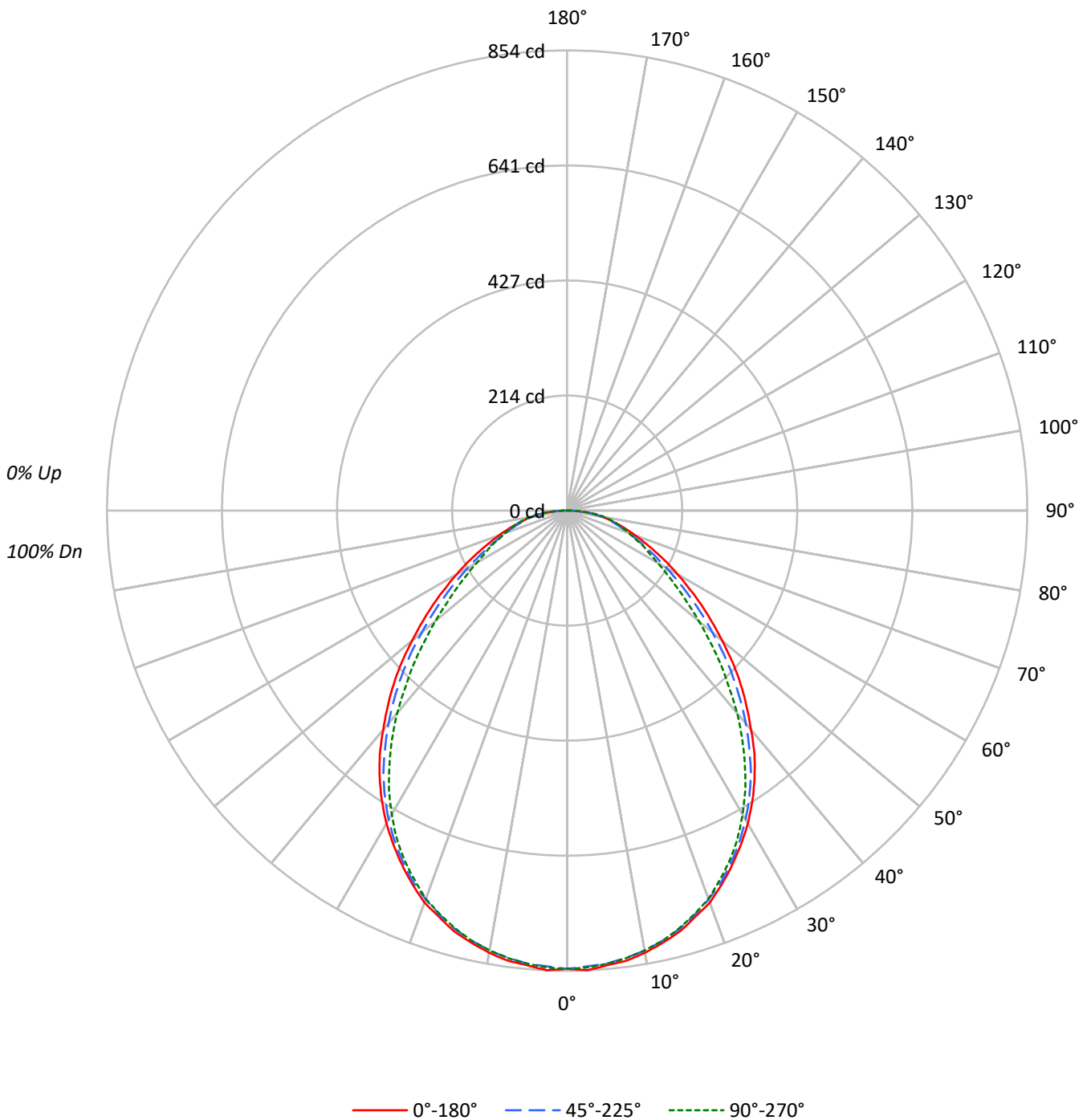
Input Watts (W): 15.531  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

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

	0°	45°	90°
0°	2288	2288	2288
5°	2288	2280	2281
10°	2276	2266	2265
15°	2253	2240	2237
20°	2217	2198	2196
25°	2153	2139	2124
30°	2083	2058	2023
35°	1992	1954	1890
40°	1865	1813	1724
45°	1732	1655	1534
50°	1572	1474	1335
55°	1422	1301	1167
60°	1276	1141	1040
65°	1145	1018	996
70°	1057	948	958
75°	1010	951	1005
80°	1021	1015	1096
85°	1056	1044	1164



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.3	4.2
10°-20°	227.0	12.0
20°-30°	331.5	17.5
30°-40°	369.3	19.5
40°-50°	332.8	17.6
50°-60°	248.8	13.2
60°-70°	164.1	8.7
70°-80°	100.2	5.3
80°-90°	37.2	2.0
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°	638.7	33.8
0°-40°	1008.0	53.3
0°-60°	1589.6	84.1
0°-90°	1891.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1891.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	850	850	850	850	850	
5°	847	846	844	848	844	80
15°	809	806	804	809	803	228
25°	725	723	720	722	715	334
35°	606	601	595	584	575	378
45°	455	450	435	415	403	350
55°	303	298	277	254	249	271
65°	180	174	160	153	156	180
75°	97	95	92	94	97	104
85°	34	33	34	37	38	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	850.4	850.4	850.4	850.4	850.4
2.5°	853.9	850.0	846.5	851.7	848.7
5°	847.0	846.1	843.9	848.3	844.4
7.5°	842.6	839.6	837.0	842.2	837.9
10°	833.1	831.4	829.2	833.5	828.8
12.5°	821.4	819.7	817.5	822.7	817.5
15°	808.8	805.8	804.1	808.8	802.8
17.5°	790.6	789.3	786.7	791.5	785.4
20°	774.1	769.4	767.6	771.1	766.8
22.5°	750.3	746.8	746.4	748.6	741.2
25°	725.2	722.6	720.4	721.7	715.2
27.5°	698.7	695.3	692.7	692.2	685.3
30°	670.5	666.2	662.3	658.8	651.0
32.5°	639.8	634.6	629.4	623.7	615.5
35°	606.4	601.2	594.7	584.3	575.2
37.5°	571.3	565.2	554.8	542.7	533.6
40°	531.0	527.9	516.2	500.6	490.7
42.5°	493.3	489.8	475.1	457.7	444.3
45°	455.1	450.4	434.8	414.8	403.1
47.5°	416.1	411.3	394.0	369.3	358.9
50°	375.4	372.8	352.0	329.4	319.0
52.5°	338.1	335.1	313.8	291.3	281.7
55°	303.0	298.2	277.4	254.4	248.8
57.5°	267.9	262.7	243.2	223.7	219.8
60°	237.1	230.6	212.0	196.8	193.3
62.5°	208.1	200.7	185.1	173.4	171.6
65°	179.9	174.2	159.9	153.4	156.5
67.5°	155.6	150.0	139.6	137.0	136.1
70°	134.4	129.2	120.5	121.4	121.8
72.5°	114.9	111.8	105.3	107.5	109.2
75°	97.1	95.4	91.5	94.5	96.7
77.5°	81.1	79.8	78.0	80.6	84.1
80°	65.9	65.0	65.5	67.2	70.7
82.5°	50.7	49.0	50.3	53.7	55.9
85°	34.2	32.9	33.8	37.3	37.7
87.5°	16.0	16.0	15.6	18.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)