

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: P290682

Luminaire Tested: **14GR-LD5-40-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290682  
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-LD5-40-F1-UNV-L93050-W2A1-U-4000K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3755.0 lumens  
Efficiency: N/A  
Efficacy: 108.8 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

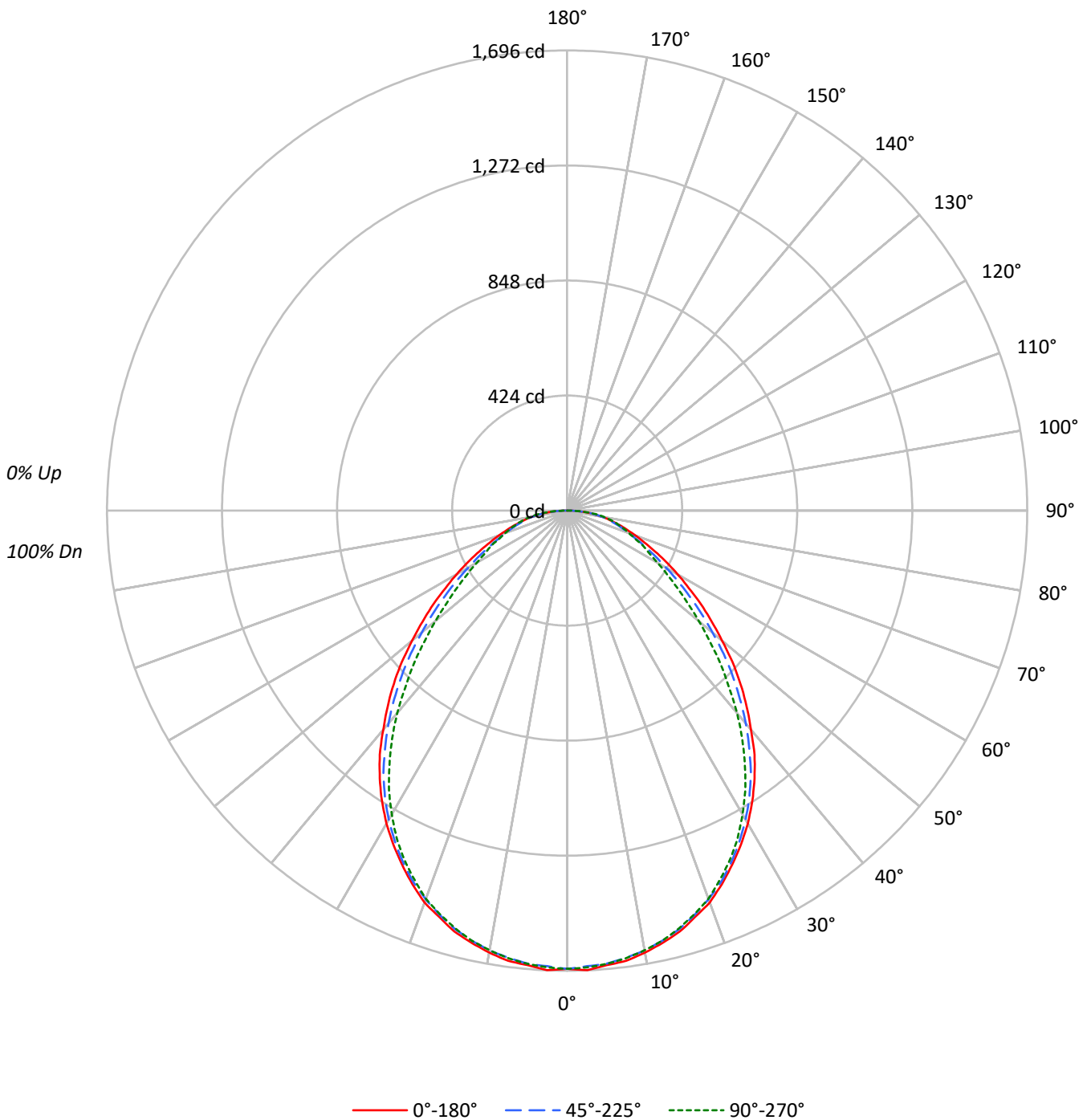
Input Watts (W): 34.503  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4544	4544	4544
5°	4543	4527	4529
10°	4520	4499	4497
15°	4474	4448	4441
20°	4402	4365	4360
25°	4276	4247	4217
30°	4137	4087	4017
35°	3956	3879	3752
40°	3704	3601	3423
45°	3439	3285	3046
50°	3121	2926	2652
55°	2822	2585	2318
60°	2534	2265	2066
65°	2274	2022	1978
70°	2099	1883	1903
75°	2005	1888	1995
80°	2027	2015	2174
85°	2100	2072	2313



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.4	4.2
10°-20°	450.7	12.0
20°-30°	658.2	17.5
30°-40°	733.4	19.5
40°-50°	660.8	17.6
50°-60°	494.0	13.2
60°-70°	325.8	8.7
70°-80°	198.9	5.3
80°-90°	73.8	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°	1268.3	33.8
0°-40°	2001.7	53.3
0°-60°	3156.5	84.1
0°-90°	3755.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3755.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1689	1689	1689	1689	1689	
5°	1682	1680	1676	1684	1677	160
15°	1606	1600	1597	1606	1594	452
25°	1440	1435	1430	1433	1420	663
35°	1204	1194	1181	1160	1142	751
45°	904	894	863	824	800	696
55°	602	592	551	505	494	539
65°	357	346	318	305	311	358
75°	193	189	182	188	192	206
85°	68	65	67	74	75	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1688.7	1688.7	1688.7	1688.7	1688.7
2.5°	1695.6	1687.9	1681.0	1691.3	1685.3
5°	1681.8	1680.1	1675.8	1684.4	1676.7
7.5°	1673.2	1667.2	1662.0	1672.4	1663.8
10°	1654.3	1650.8	1646.5	1655.2	1645.7
12.5°	1631.1	1627.6	1623.3	1633.6	1623.3
15°	1606.1	1600.1	1596.6	1606.1	1594.0
17.5°	1569.9	1567.4	1562.2	1571.7	1559.6
20°	1537.2	1527.8	1524.3	1531.2	1522.6
22.5°	1489.9	1483.0	1482.1	1486.5	1471.8
25°	1440.0	1434.8	1430.5	1433.1	1420.2
27.5°	1387.5	1380.6	1375.4	1374.6	1360.8
30°	1331.5	1322.9	1315.2	1308.3	1292.8
32.5°	1270.4	1260.1	1249.8	1238.6	1222.2
35°	1204.1	1193.8	1180.9	1160.2	1142.2
37.5°	1134.4	1122.4	1101.7	1077.6	1059.5
40°	1054.4	1048.3	1025.1	994.1	974.3
42.5°	979.5	972.6	943.3	908.9	882.2
45°	903.7	894.3	863.3	823.7	800.5
47.5°	826.3	816.8	782.4	733.3	712.7
50°	745.4	740.2	698.9	654.1	633.5
52.5°	671.4	665.3	623.2	578.4	559.5
55°	601.6	592.2	550.9	505.2	494.0
57.5°	531.9	521.6	482.9	444.1	436.4
60°	470.8	457.9	420.9	390.8	383.9
62.5°	413.1	398.5	367.5	344.3	340.8
65°	357.2	346.0	317.6	304.7	310.7
67.5°	309.0	297.8	277.1	272.0	270.3
70°	266.8	256.5	239.3	241.0	241.9
72.5°	228.1	222.1	209.2	213.5	216.9
75°	192.8	189.4	181.6	187.6	191.9
77.5°	161.0	158.4	154.9	160.1	167.0
80°	130.8	129.1	130.0	133.4	140.3
82.5°	100.7	97.3	99.8	106.7	111.0
85°	68.0	65.4	67.1	74.0	74.9
87.5°	31.8	31.8	31.0	36.1	36.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)