

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: P290640

Luminaire Tested: **14GR-LD5-40-F1-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290640  
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-L82765-W2A1-U-4000K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4083.0 lumens  
Efficiency: N/A  
Efficacy: 120.0 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

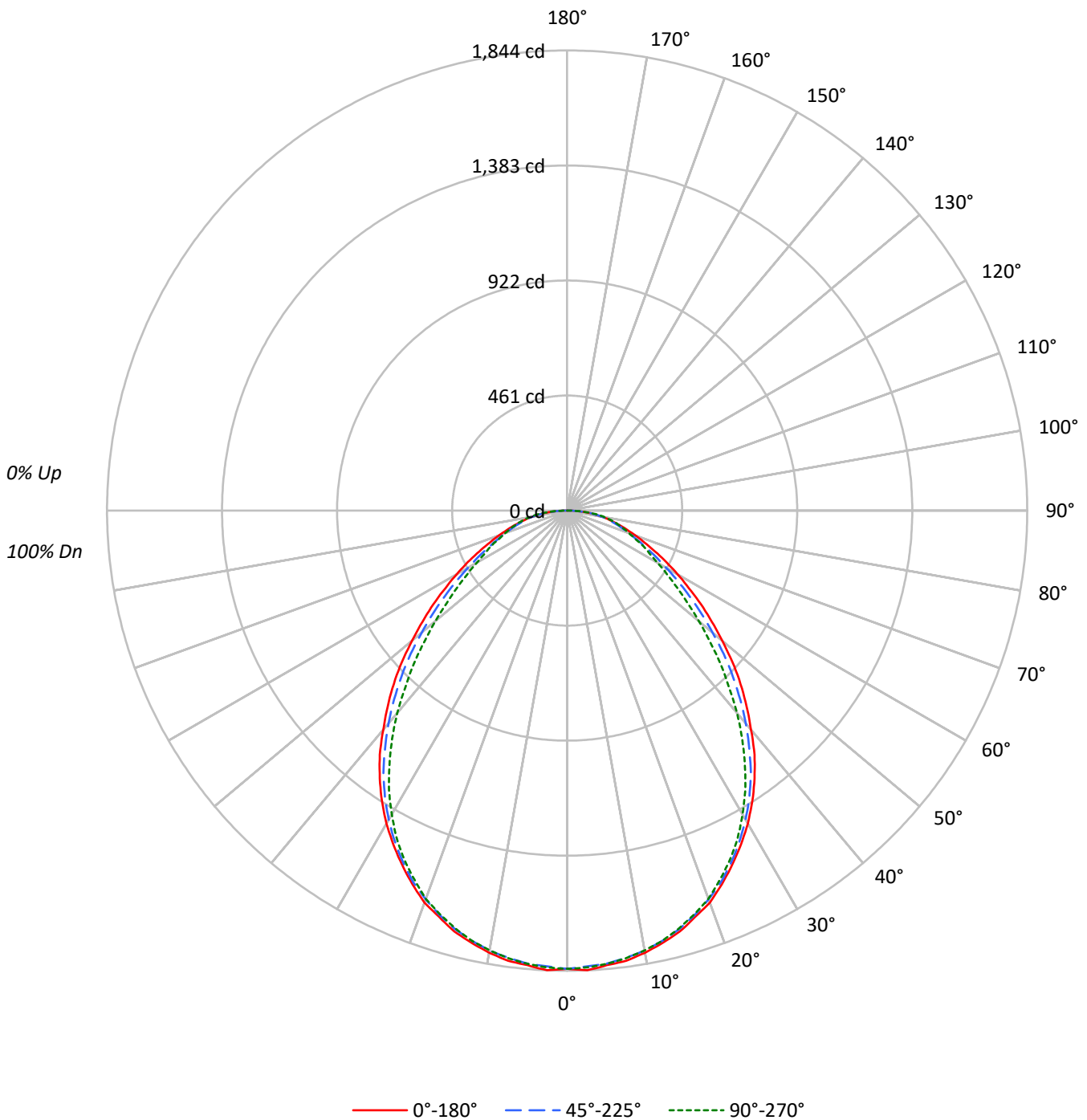
Input Watts (W): 34.038  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4941	4941	4941
5°	4940	4922	4925
10°	4915	4892	4890
15°	4865	4837	4829
20°	4787	4747	4741
25°	4649	4619	4585
30°	4499	4443	4368
35°	4301	4218	4080
40°	4027	3916	3721
45°	3740	3572	3312
50°	3393	3181	2884
55°	3069	2810	2520
60°	2755	2463	2246
65°	2473	2199	2152
70°	2282	2047	2069
75°	2179	2053	2170
80°	2205	2190	2365
85°	2282	2254	2513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	173.3	4.2
10°-20°	490.1	12.0
20°-30°	715.7	17.5
30°-40°	797.5	19.5
40°-50°	718.5	17.6
50°-60°	537.1	13.2
60°-70°	354.3	8.7
70°-80°	216.3	5.3
80°-90°	80.2	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°	1379.1	33.8
0°-40°	2176.5	53.3
0°-60°	3432.2	84.1
0°-90°	4083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4083.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1836	1836	1836	1836	1836	
5°	1829	1827	1822	1832	1823	174
15°	1746	1740	1736	1746	1733	492
25°	1566	1560	1556	1558	1544	721
35°	1309	1298	1284	1262	1242	816
45°	983	972	939	896	870	756
55°	654	644	599	549	537	586
65°	388	376	345	331	338	389
75°	210	206	198	204	209	224
85°	74	71	73	80	81	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1836.2	1836.2	1836.2	1836.2	1836.2
2.5°	1843.7	1835.3	1827.8	1839.0	1832.5
5°	1828.7	1826.9	1822.2	1831.5	1823.1
7.5°	1819.4	1812.8	1807.2	1818.4	1809.1
10°	1798.8	1795.0	1790.4	1799.7	1789.4
12.5°	1773.5	1769.8	1765.1	1776.3	1765.1
15°	1746.4	1739.8	1736.1	1746.4	1733.3
17.5°	1707.1	1704.3	1698.7	1708.9	1695.8
20°	1671.5	1661.2	1657.5	1665.0	1655.6
22.5°	1620.0	1612.5	1611.6	1616.3	1600.4
25°	1565.8	1560.1	1555.5	1558.3	1544.2
27.5°	1508.7	1501.2	1495.6	1494.6	1479.7
30°	1447.8	1438.5	1430.0	1422.6	1405.7
32.5°	1381.4	1370.2	1358.9	1346.8	1329.0
35°	1309.3	1298.1	1284.0	1261.6	1241.9
37.5°	1233.5	1220.4	1197.9	1171.7	1152.1
40°	1146.5	1139.9	1114.7	1081.0	1059.4
42.5°	1065.0	1057.6	1025.7	988.3	959.3
45°	982.7	972.4	938.7	895.7	870.4
47.5°	898.5	888.2	850.7	797.4	774.9
50°	810.5	804.9	759.9	711.3	688.8
52.5°	730.0	723.4	677.6	628.9	608.3
55°	654.2	643.9	599.0	549.4	537.2
57.5°	578.4	567.2	525.0	482.9	474.5
60°	511.9	497.9	457.7	424.9	417.4
62.5°	449.2	433.3	399.6	374.4	370.6
65°	388.4	376.2	345.3	331.3	337.9
67.5°	336.0	323.8	301.4	295.7	293.9
70°	290.1	278.9	260.2	262.1	263.0
72.5°	248.0	241.5	227.4	232.1	235.8
75°	209.6	205.9	197.5	204.0	208.7
77.5°	175.0	172.2	168.5	174.1	181.6
80°	142.3	140.4	141.3	145.1	152.6
82.5°	109.5	105.8	108.6	116.1	120.7
85°	73.9	71.1	73.0	80.5	81.4
87.5°	34.6	34.6	33.7	39.3	39.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)