

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: P290585

Luminaire Tested: **14GR-LD5-40-F1-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P290585  
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-L83050-W2A1-U-4500K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER WITH F1 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4335.0 lumens  
Efficiency: N/A  
Efficacy: 122.7 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

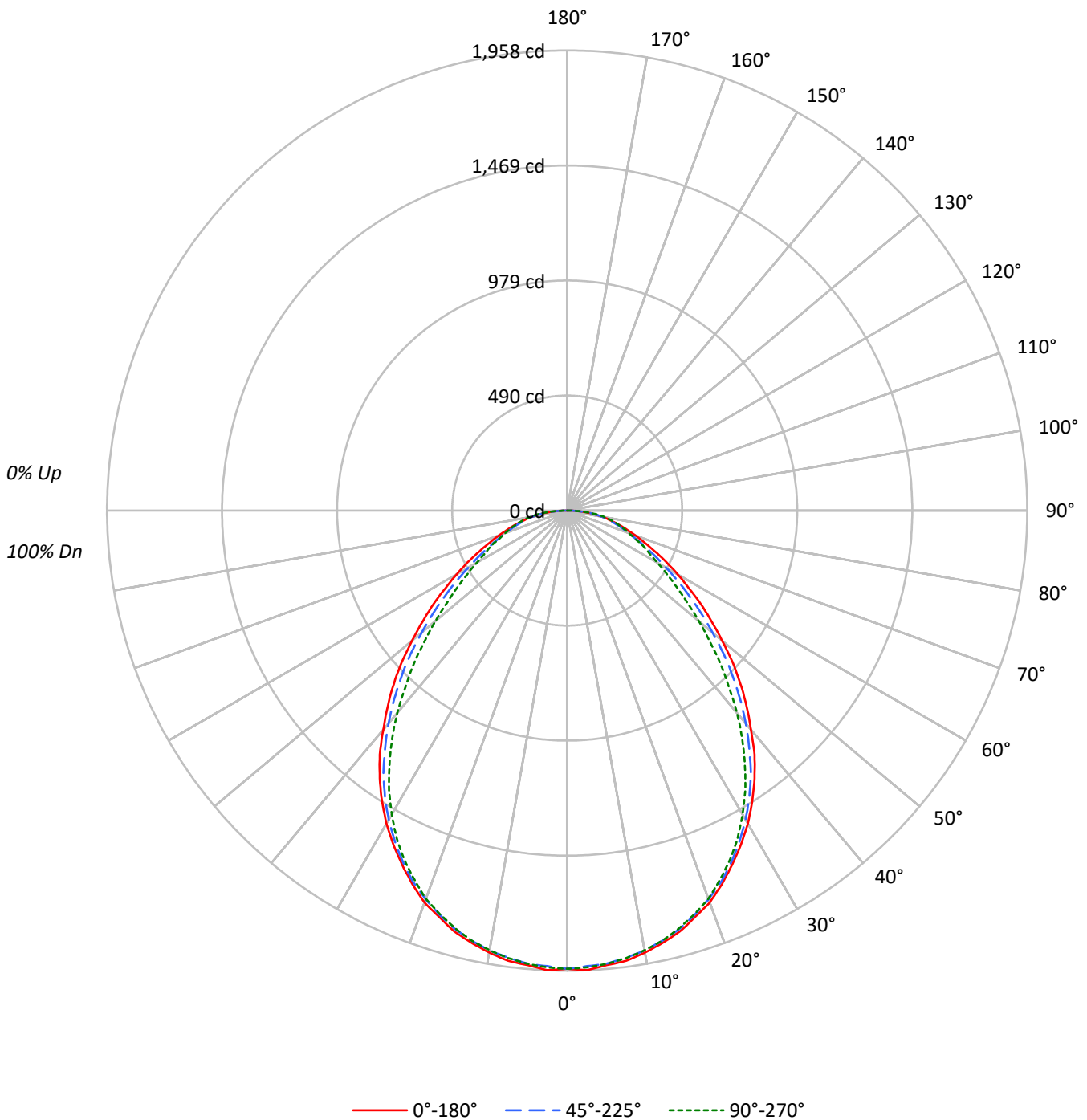
Input Watts (W): 35.34  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5246	5246	5246
5°	5245	5226	5229
10°	5219	5194	5191
15°	5166	5135	5127
20°	5082	5040	5034
25°	4936	4904	4868
30°	4777	4718	4638
35°	4567	4479	4332
40°	4276	4157	3951
45°	3970	3793	3517
50°	3602	3378	3062
55°	3259	2983	2676
60°	2925	2615	2385
65°	2626	2335	2284
70°	2423	2173	2197
75°	2314	2180	2304
80°	2340	2325	2510
85°	2424	2393	2668



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	184.0	4.2
10°-20°	520.3	12.0
20°-30°	759.8	17.5
30°-40°	846.7	19.5
40°-50°	762.9	17.6
50°-60°	570.2	13.2
60°-70°	376.2	8.7
70°-80°	229.6	5.3
80°-90°	85.2	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°	1464.2	33.8
0°-40°	2310.9	53.3
0°-60°	3644.0	84.1
0°-90°	4335.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4335.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1950	1950	1950	1950	1950	
5°	1942	1940	1935	1945	1936	185
15°	1854	1847	1843	1854	1840	522
25°	1662	1656	1652	1654	1640	765
35°	1390	1378	1363	1340	1319	867
45°	1043	1032	997	951	924	803
55°	695	684	636	583	570	622
65°	412	400	367	352	359	413
75°	223	219	210	217	222	238
85°	78	76	78	86	86	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1949.6	1949.6	1949.6	1949.6	1949.6
2.5°	1957.5	1948.6	1940.6	1952.5	1945.6
5°	1941.6	1939.6	1934.7	1944.6	1935.6
7.5°	1931.7	1924.7	1918.8	1930.7	1920.7
10°	1909.8	1905.8	1900.9	1910.8	1899.9
12.5°	1883.0	1879.0	1874.0	1886.0	1874.0
15°	1854.2	1847.2	1843.2	1854.2	1840.3
17.5°	1812.4	1809.5	1803.5	1814.4	1800.5
20°	1774.7	1763.7	1759.8	1767.7	1757.8
22.5°	1720.0	1712.1	1711.1	1716.0	1699.2
25°	1662.4	1656.4	1651.5	1654.4	1639.5
27.5°	1601.8	1593.8	1587.9	1586.9	1571.0
30°	1537.2	1527.3	1518.3	1510.4	1492.5
32.5°	1466.6	1454.7	1442.8	1429.9	1411.0
35°	1390.1	1378.2	1363.3	1339.5	1318.6
37.5°	1309.6	1295.7	1271.9	1244.1	1223.2
40°	1217.2	1210.3	1183.4	1147.7	1124.8
42.5°	1130.8	1122.8	1089.1	1049.3	1018.5
45°	1043.3	1032.4	996.6	950.9	924.1
47.5°	953.9	943.0	903.2	846.6	822.7
50°	860.5	854.5	806.9	755.2	731.3
52.5°	775.1	768.1	719.4	667.7	645.9
55°	694.6	683.6	635.9	583.3	570.4
57.5°	614.1	602.2	557.4	512.7	503.8
60°	543.5	528.6	485.9	451.1	443.2
62.5°	477.0	460.1	424.3	397.5	393.5
65°	412.4	399.5	366.7	351.8	358.7
67.5°	356.7	343.8	320.0	314.0	312.0
70°	308.0	296.1	276.2	278.2	279.2
72.5°	263.3	256.4	241.5	246.4	250.4
75°	222.6	218.6	209.7	216.6	221.6
77.5°	185.8	182.8	178.9	184.8	192.8
80°	151.0	149.0	150.0	154.0	162.0
82.5°	116.3	112.3	115.3	123.2	128.2
85°	78.5	75.5	77.5	85.5	86.4
87.5°	36.8	36.8	35.8	41.7	41.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)