

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: P476202

Luminaire Tested: **14GR-LD5-43-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476202  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-43-F1-UNV-L850-CD1-U  
Description: GR 1'X4' LED TROFFER w/ F1 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4418.3 lumens  
Efficiency: N/A  
Efficacy: 133.9 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

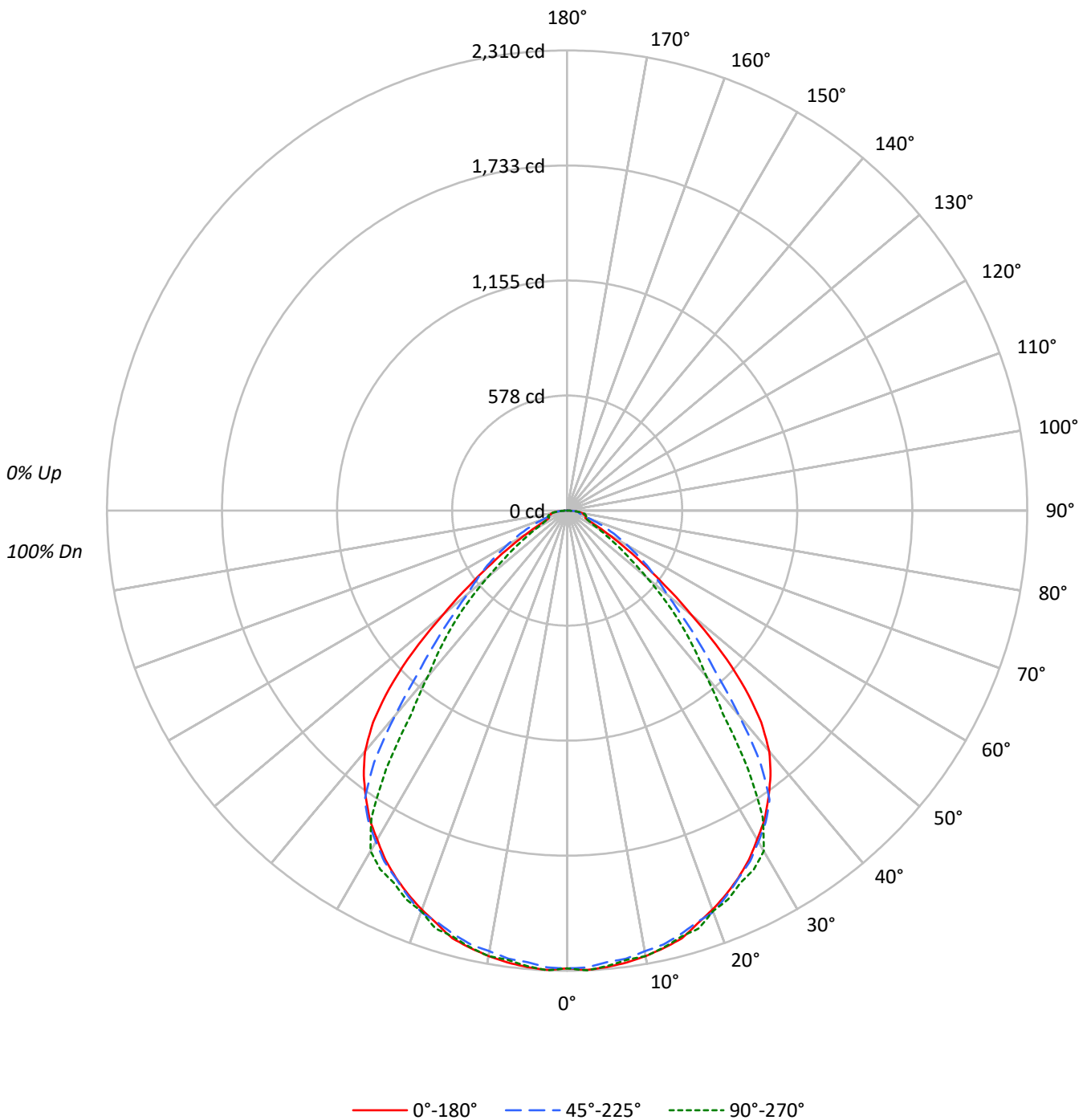
Input Watts (W): 33  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P476202

CATALOG NUMBER: 14GR-LD5-43-F1-UNV-L850-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P476202

CATALOG NUMBER: 14GR-LD5-43-F1-UNV-L850-CD1-U

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	50	43	39	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33

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

	0°	45°	90°
0°	6184	6184	6184
5°	6214	6147	6200
10°	6204	6137	6204
15°	6195	6133	6167
20°	6106	6141	6127
25°	6037	6044	6118
30°	5926	5964	6133
35°	5785	5818	5200
40°	5544	4718	3823
45°	4810	3558	3087
50°	3417	2734	2164
55°	2170	2344	1451
60°	1278	1877	959
65°	756	1465	741
70°	778	992	759
75°	951	771	1003
80°	1227	958	1342
85°	1297	1297	1297



TEST NUMBER: P476202

CATALOG NUMBER: 14GR-LD5-43-F1-UNV-L850-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.9	4.9
10°-20°	623.9	14.1
20°-30°	943.6	21.4
30°-40°	1050.8	23.8
40°-50°	769.1	17.4
50°-60°	423.9	9.6
60°-70°	216.7	4.9
70°-80°	123.3	2.8
80°-90°	49.1	1.1
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°	1785.4	40.4
0°-40°	2836.2	64.2
0°-60°	4029.2	91.2
0°-90°	4418.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4418.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2298	2298	2298	2298	2298	
5°	2300	2300	2276	2290	2295	219
15°	2224	2199	2201	2229	2214	625
25°	2033	2028	2036	2070	2060	936
35°	1761	1764	1771	1650	1583	1099
45°	1264	1165	935	851	811	951
55°	462	544	500	428	309	432
65°	119	282	230	220	116	137
75°	92	158	74	141	96	96
85°	42	52	42	57	42	45
90°	0	0	0	0	0	



TEST NUMBER: P476202

CATALOG NUMBER: 14GR-LD5-43-F1-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2297.9	2297.9	2297.9	2297.9	2297.9
2.5°	2307.7	2307.7	2295.4	2310.2	2310.2
5°	2300.3	2300.3	2275.6	2290.4	2295.4
7.5°	2288.0	2288.0	2268.2	2280.5	2275.6
10°	2270.6	2258.3	2245.9	2280.5	2270.6
12.5°	2248.4	2223.7	2231.1	2228.6	2245.9
15°	2223.7	2198.9	2201.4	2228.6	2213.8
17.5°	2174.2	2176.7	2166.8	2186.5	2198.9
20°	2132.1	2139.6	2144.5	2156.9	2139.6
22.5°	2085.1	2087.6	2092.6	2109.9	2112.3
25°	2033.2	2028.2	2035.7	2070.3	2060.4
27.5°	1976.3	1973.8	1986.2	2015.9	2030.7
30°	1907.0	1916.9	1919.4	1973.8	1973.8
32.5°	1842.7	1842.7	1855.1	1882.3	1827.9
35°	1761.1	1763.6	1771.0	1649.8	1583.0
37.5°	1677.0	1669.6	1592.9	1372.8	1283.7
40°	1578.1	1560.8	1343.1	1145.2	1088.3
42.5°	1442.0	1390.1	1108.1	989.4	947.3
45°	1263.9	1165.0	935.0	850.9	811.3
47.5°	1051.2	959.7	776.7	719.8	665.4
50°	816.2	796.5	653.0	603.5	517.0
52.5°	620.8	660.4	573.8	509.5	398.2
55°	462.5	544.2	499.6	427.9	309.2
57.5°	338.9	452.6	420.5	363.6	232.5
60°	237.5	383.4	348.8	306.7	178.1
62.5°	168.2	331.4	286.9	262.2	136.0
65°	118.7	282.0	230.0	220.1	116.3
67.5°	98.9	237.5	175.6	195.4	98.9
70°	98.9	197.9	126.1	173.1	96.5
72.5°	98.9	173.1	94.0	158.3	101.4
75°	91.5	158.3	74.2	141.0	96.5
77.5°	84.1	133.6	64.3	121.2	94.0
80°	79.2	96.5	61.8	98.9	86.6
82.5°	64.3	69.3	56.9	76.7	66.8
85°	42.0	51.9	42.0	56.9	42.0
87.5°	19.8	27.2	19.8	24.7	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)