

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: P476184

Luminaire Tested: **14GR-LD5-43-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476184
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-L835-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

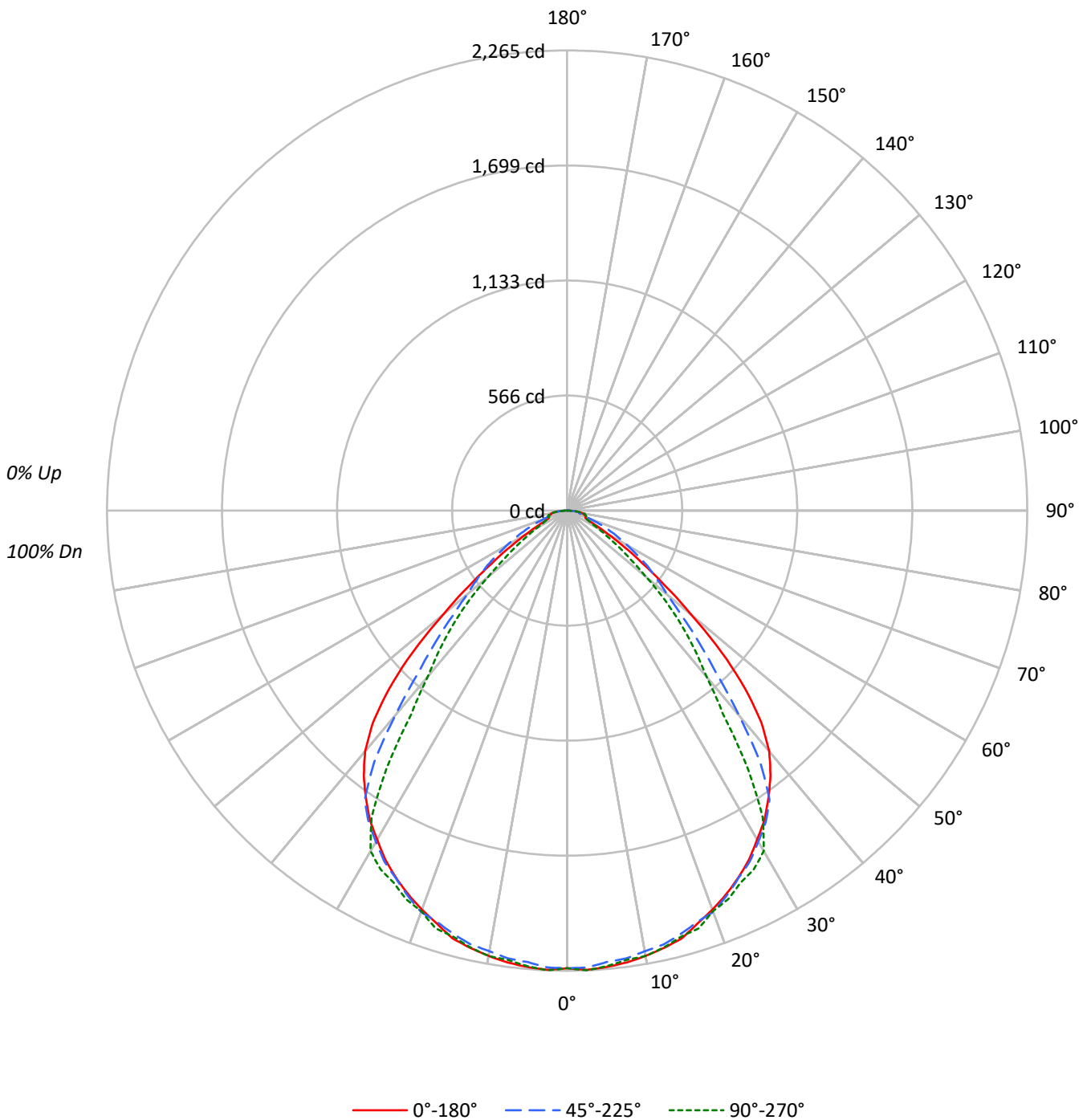
Lumens per Lamp: N/A
Luminaire Lumens: 4331.7 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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



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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	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°	6062	6062	6062
5°	6092	6027	6079
10°	6083	6017	6083
15°	6073	6013	6046
20°	5986	6021	6007
25°	5918	5926	5998
30°	5810	5847	6013
35°	5672	5704	5098
40°	5435	4626	3748
45°	4716	3488	3027
50°	3350	2680	2122
55°	2128	2298	1422
60°	1253	1840	940
65°	741	1436	726
70°	763	973	744
75°	933	756	984
80°	1203	939	1316
85°	1272	1272	1272



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.6	4.9
10°-20°	611.7	14.1
20°-30°	925.1	21.4
30°-40°	1030.2	23.8
40°-50°	754.0	17.4
50°-60°	415.6	9.6
60°-70°	212.5	4.9
70°-80°	120.9	2.8
80°-90°	48.1	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°	1750.4	40.4
0°-40°	2780.6	64.2
0°-60°	3950.2	91.2
0°-90°	4331.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4331.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2253	2253	2253	2253	2253	
5°	2255	2255	2231	2246	2250	214
15°	2180	2156	2158	2185	2170	613
25°	1993	1988	1996	2030	2020	918
35°	1727	1729	1736	1618	1552	1077
45°	1239	1142	917	834	795	932
55°	454	534	490	420	303	424
65°	116	276	226	216	114	134
75°	90	155	73	138	95	94
85°	41	51	41	56	41	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2252.8	2252.8	2252.8	2252.8	2252.8
2.5°	2262.5	2262.5	2250.4	2264.9	2264.9
5°	2255.2	2255.2	2231.0	2245.5	2250.4
7.5°	2243.1	2243.1	2223.7	2235.8	2231.0
10°	2226.1	2214.0	2201.9	2235.8	2226.1
12.5°	2204.3	2180.0	2187.3	2184.9	2201.9
15°	2180.0	2155.8	2158.2	2184.9	2170.3
17.5°	2131.6	2134.0	2124.3	2143.7	2155.8
20°	2090.3	2097.6	2102.5	2114.6	2097.6
22.5°	2044.3	2046.7	2051.5	2068.5	2070.9
25°	1993.3	1988.5	1995.8	2029.7	2020.0
27.5°	1937.6	1935.1	1947.3	1976.4	1990.9
30°	1869.7	1879.4	1881.8	1935.1	1935.1
32.5°	1806.6	1806.6	1818.7	1845.4	1792.1
35°	1726.6	1729.0	1736.3	1617.5	1552.0
37.5°	1644.1	1636.9	1561.7	1345.9	1258.6
40°	1547.1	1530.2	1316.8	1122.8	1067.0
42.5°	1413.8	1362.8	1086.4	970.0	928.8
45°	1239.2	1142.2	916.6	834.2	795.4
47.5°	1030.6	940.9	761.4	705.7	652.3
50°	800.2	780.8	640.2	591.7	506.8
52.5°	608.7	647.5	562.6	499.5	390.4
55°	453.5	533.5	489.8	419.5	303.1
57.5°	332.2	443.8	412.2	356.5	227.9
60°	232.8	375.9	341.9	300.7	174.6
62.5°	164.9	324.9	281.3	257.0	133.4
65°	116.4	276.4	225.5	215.8	114.0
67.5°	97.0	232.8	172.2	191.6	97.0
70°	97.0	194.0	123.7	169.7	94.6
72.5°	97.0	169.7	92.1	155.2	99.4
75°	89.7	155.2	72.7	138.2	94.6
77.5°	82.4	130.9	63.0	118.8	92.1
80°	77.6	94.6	60.6	97.0	84.9
82.5°	63.0	67.9	55.8	75.2	65.5
85°	41.2	50.9	41.2	55.8	41.2
87.5°	19.4	26.7	19.4	24.2	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)