

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: P290686

Luminaire Tested: **14GR-LD5-43-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290686
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-LD5-43-F1-UNV-L93050-W2A1-U-3500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3709.0 lumens
Efficiency: N/A
Efficacy: 99.7 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

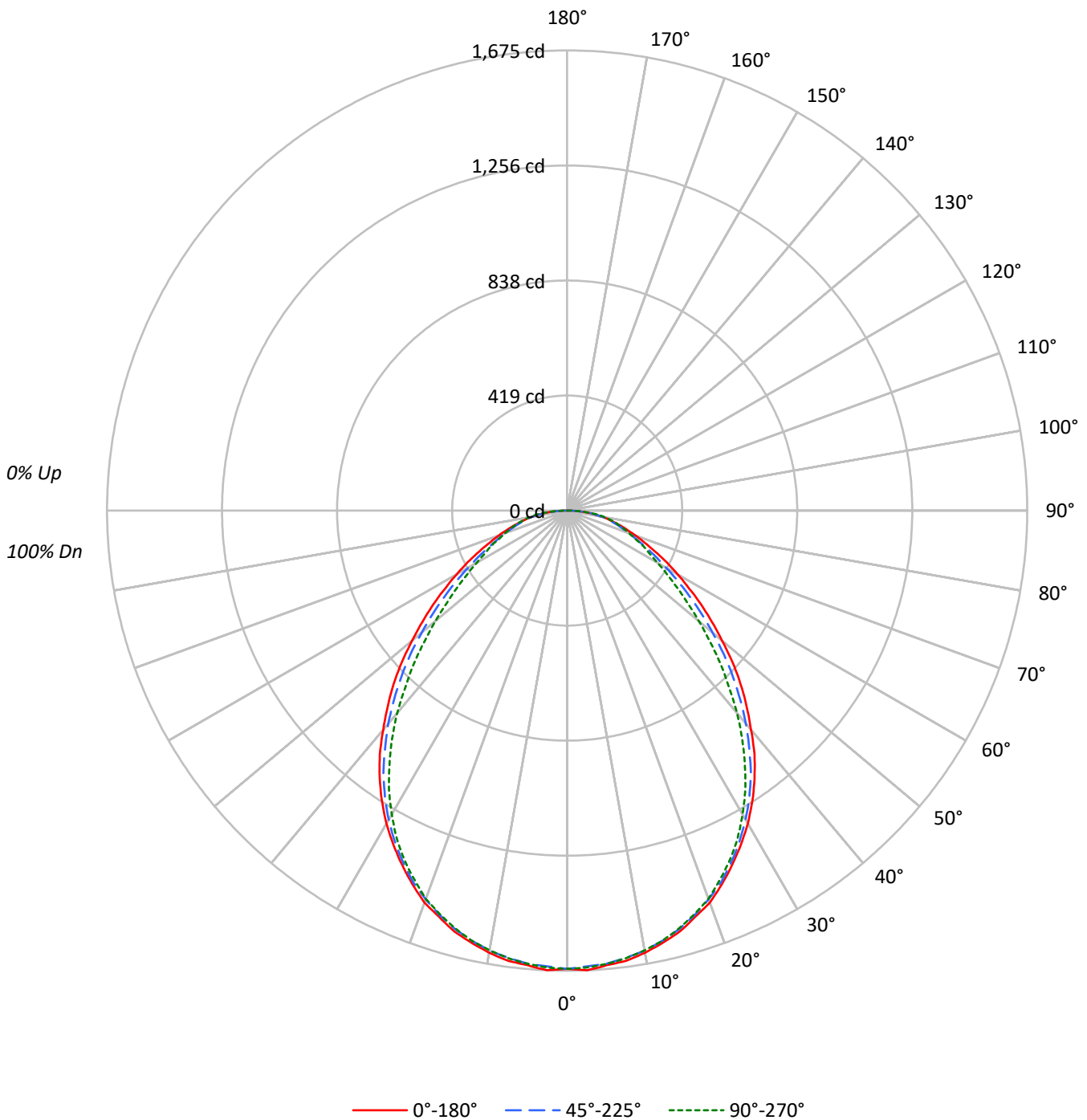
Input Watts (W): 37.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4489	4489	4489
5°	4487	4471	4474
10°	4465	4444	4442
15°	4420	4394	4386
20°	4348	4312	4307
25°	4223	4195	4165
30°	4087	4037	3968
35°	3907	3832	3706
40°	3659	3557	3381
45°	3397	3245	3009
50°	3082	2890	2619
55°	2788	2553	2289
60°	2503	2237	2041
65°	2246	1997	1954
70°	2074	1859	1880
75°	1980	1865	1971
80°	2002	1990	2148
85°	2075	2047	2285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	4.2
10°-20°	445.2	12.0
20°-30°	650.1	17.5
30°-40°	724.4	19.5
40°-50°	652.7	17.6
50°-60°	487.9	13.2
60°-70°	321.9	8.7
70°-80°	196.5	5.3
80°-90°	72.9	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°	1252.8	33.8
0°-40°	1977.2	53.3
0°-60°	3117.8	84.1
0°-90°	3709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3709.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1668	1668	1668	1668	1668	
5°	1661	1660	1655	1664	1656	158
15°	1586	1580	1577	1586	1574	446
25°	1422	1417	1413	1416	1403	655
35°	1189	1179	1166	1146	1128	742
45°	893	883	853	814	791	687
55°	594	585	544	499	488	532
65°	353	342	314	301	307	354
75°	190	187	179	185	190	203
85°	67	65	66	73	74	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1668.0	1668.0	1668.0	1668.0	1668.0
2.5°	1674.8	1667.2	1660.4	1670.6	1664.6
5°	1661.2	1659.5	1655.3	1663.8	1656.1
7.5°	1652.7	1646.8	1641.7	1651.9	1643.4
10°	1634.0	1630.6	1626.4	1634.9	1625.5
12.5°	1611.1	1607.7	1603.4	1613.6	1603.4
15°	1586.4	1580.5	1577.1	1586.4	1574.5
17.5°	1550.7	1548.2	1543.1	1552.4	1540.5
20°	1518.4	1509.0	1505.6	1512.5	1503.9
22.5°	1471.6	1464.8	1464.0	1468.2	1453.8
25°	1422.3	1417.2	1413.0	1415.5	1402.8
27.5°	1370.5	1363.7	1358.6	1357.7	1344.1
30°	1315.2	1306.7	1299.1	1292.3	1277.0
32.5°	1254.8	1244.6	1234.4	1223.4	1207.2
35°	1189.4	1179.2	1166.4	1146.0	1128.2
37.5°	1120.5	1108.6	1088.2	1064.4	1046.6
40°	1041.5	1035.5	1012.6	981.9	962.4
42.5°	967.5	960.7	931.8	897.8	871.4
45°	892.7	883.3	852.7	813.6	790.7
47.5°	816.2	806.8	772.8	724.3	703.9
50°	736.2	731.1	690.3	646.1	625.7
52.5°	663.1	657.2	615.5	571.3	552.6
55°	594.3	584.9	544.1	499.0	488.0
57.5°	525.4	515.2	476.9	438.7	431.0
60°	465.0	452.3	415.7	386.0	379.2
62.5°	408.1	393.6	363.0	340.1	336.7
65°	352.8	341.8	313.7	301.0	306.9
67.5°	305.2	294.2	273.8	268.7	267.0
70°	263.6	253.4	236.3	238.0	238.9
72.5°	225.3	219.3	206.6	210.8	214.2
75°	190.4	187.0	179.4	185.3	189.6
77.5°	159.0	156.4	153.0	158.1	164.9
80°	129.2	127.5	128.4	131.8	138.6
82.5°	99.5	96.1	98.6	105.4	109.7
85°	67.2	64.6	66.3	73.1	74.0
87.5°	31.5	31.5	30.6	35.7	35.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)