

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: P290564

Luminaire Tested: **14GR-LD5-24-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290564
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-LD5-24-F1-UNV-L83050-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: 2534.0 lumens
Efficiency: N/A
Efficacy: 135.6 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

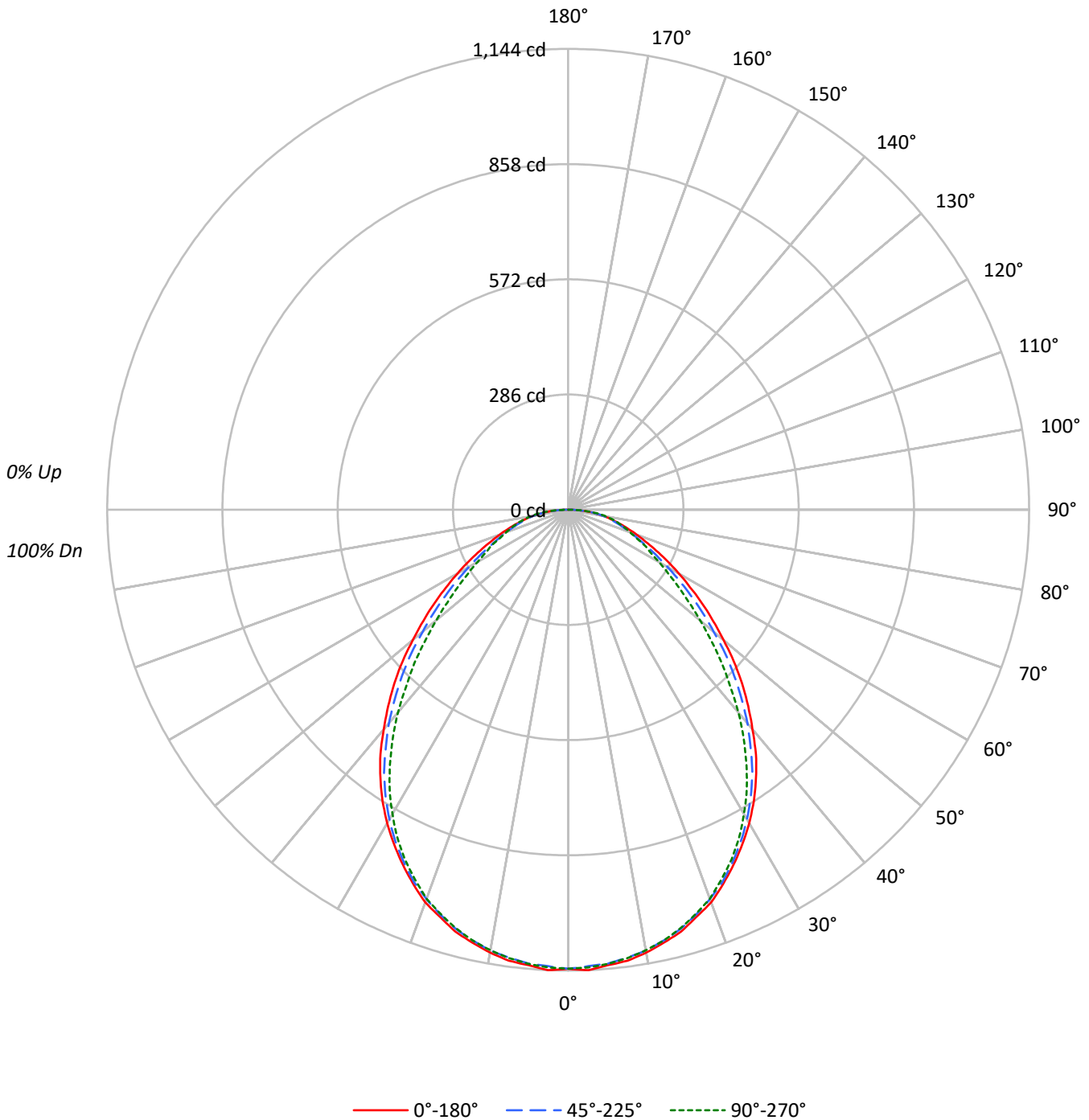
Input Watts (W): 18.693
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3067	3067	3067
5°	3066	3055	3056
10°	3051	3036	3035
15°	3019	3002	2997
20°	2971	2946	2942
25°	2885	2866	2846
30°	2792	2758	2711
35°	2669	2618	2532
40°	2499	2430	2310
45°	2321	2217	2056
50°	2106	1974	1790
55°	1905	1744	1564
60°	1710	1528	1394
65°	1535	1365	1335
70°	1417	1271	1284
75°	1353	1275	1346
80°	1368	1359	1468
85°	1417	1399	1559



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.6	4.2
10°-20°	304.1	12.0
20°-30°	444.2	17.5
30°-40°	494.9	19.5
40°-50°	445.9	17.6
50°-60°	333.3	13.2
60°-70°	219.9	8.7
70°-80°	134.2	5.3
80°-90°	49.8	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°	855.9	33.8
0°-40°	1350.8	53.3
0°-60°	2130.1	84.1
0°-90°	2534.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2534.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1140	1140	1140	1140	1140	
5°	1135	1134	1131	1137	1132	108
15°	1084	1080	1078	1084	1076	305
25°	972	968	965	967	958	447
35°	813	806	797	783	771	507
45°	610	604	583	556	540	469
55°	406	400	372	341	333	364
65°	241	234	214	206	210	242
75°	130	128	123	127	130	139
85°	46	44	45	50	50	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1139.6	1139.6	1139.6	1139.6	1139.6
2.5°	1144.3	1139.0	1134.4	1141.3	1137.3
5°	1135.0	1133.8	1130.9	1136.7	1131.5
7.5°	1129.1	1125.1	1121.6	1128.6	1122.8
10°	1116.4	1114.0	1111.1	1117.0	1110.6
12.5°	1100.7	1098.4	1095.5	1102.4	1095.5
15°	1083.8	1079.8	1077.5	1083.8	1075.7
17.5°	1059.4	1057.7	1054.2	1060.6	1052.5
20°	1037.4	1031.0	1028.7	1033.3	1027.5
22.5°	1005.4	1000.8	1000.2	1003.1	993.2
25°	971.7	968.3	965.4	967.1	958.4
27.5°	936.3	931.7	928.2	927.6	918.3
30°	898.6	892.7	887.5	882.9	872.4
32.5°	857.3	850.3	843.4	835.8	824.8
35°	812.6	805.6	796.9	783.0	770.8
37.5°	765.5	757.4	743.5	727.2	715.0
40°	711.5	707.5	691.8	670.9	657.5
42.5°	661.0	656.3	636.6	613.4	595.4
45°	609.9	603.5	582.6	555.9	540.2
47.5°	557.6	551.2	528.0	494.9	480.9
50°	503.0	499.5	471.6	441.4	427.5
52.5°	453.1	449.0	420.5	390.3	377.5
55°	406.0	399.6	371.7	341.0	333.4
57.5°	359.0	352.0	325.9	299.7	294.5
60°	317.7	309.0	284.0	263.7	259.1
62.5°	278.8	268.9	248.0	232.3	230.0
65°	241.0	233.5	214.3	205.6	209.7
67.5°	208.5	201.0	187.0	183.5	182.4
70°	180.1	173.1	161.5	162.6	163.2
72.5°	153.9	149.9	141.1	144.0	146.4
75°	130.1	127.8	122.6	126.6	129.5
77.5°	108.6	106.9	104.6	108.0	112.7
80°	88.3	87.1	87.7	90.0	94.7
82.5°	68.0	65.6	67.4	72.0	74.9
85°	45.9	44.1	45.3	50.0	50.5
87.5°	21.5	21.5	20.9	24.4	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)