

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: P290657

Luminaire Tested: **14GR-LD5-20-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290657
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-LD5-20-F1-UNV-L93050-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1892.0 lumens
Efficiency: N/A
Efficacy: 119.0 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

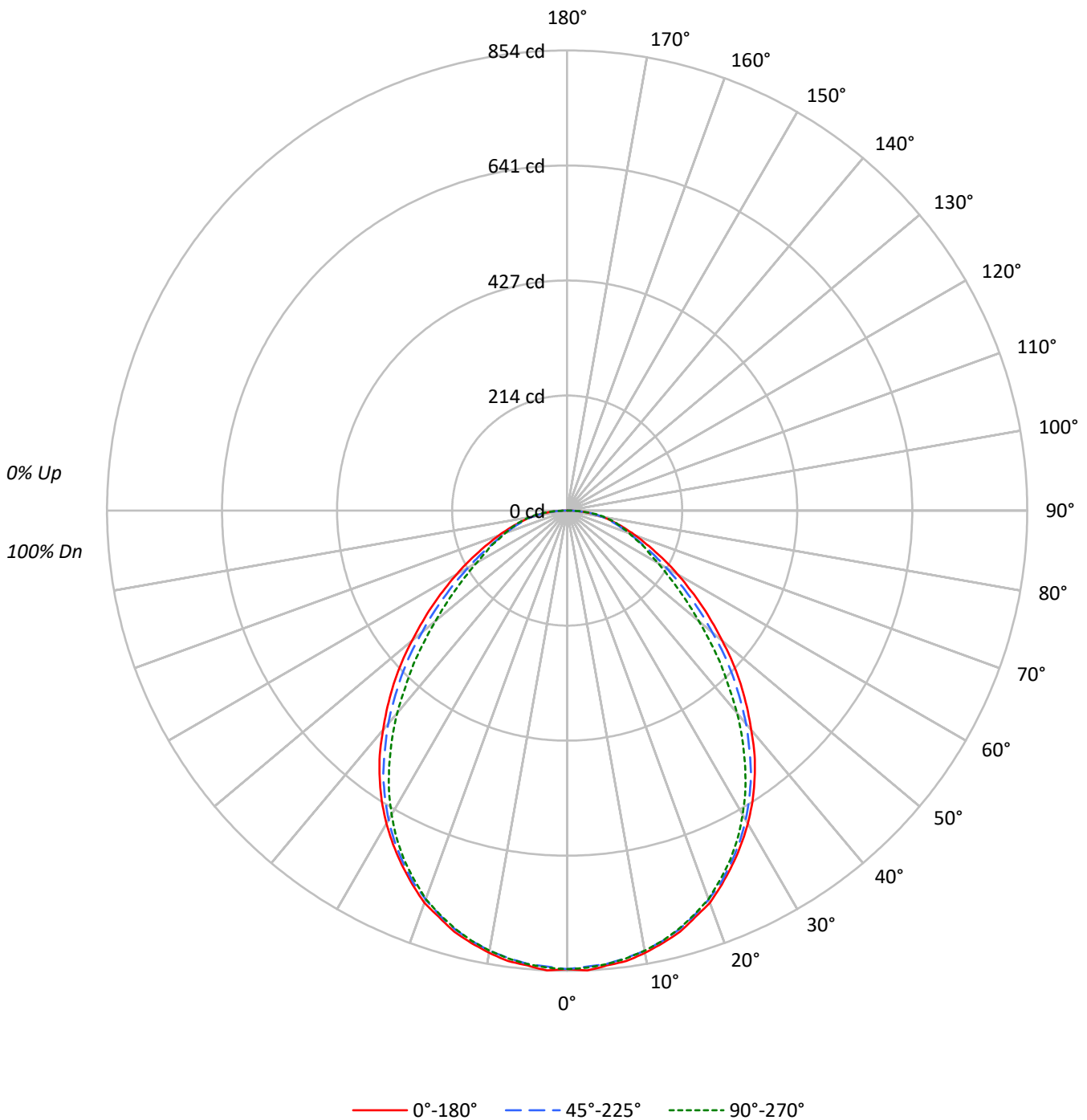
Input Watts (W): 15.903
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P290657

CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L93050-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P290657

CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L93050-W2A1-U-4000K

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°	2290	2290	2290
5°	2289	2281	2282
10°	2278	2267	2266
15°	2254	2241	2238
20°	2218	2199	2197
25°	2154	2140	2125
30°	2085	2059	2024
35°	1993	1955	1891
40°	1866	1814	1724
45°	1733	1655	1535
50°	1572	1474	1336
55°	1422	1302	1168
60°	1277	1142	1041
65°	1146	1019	997
70°	1057	949	959
75°	1010	951	1005
80°	1021	1015	1096
85°	1059	1044	1164



TEST NUMBER: P290657

CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L93050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.3	4.2
10°-20°	227.1	12.0
20°-30°	331.6	17.5
30°-40°	369.5	19.5
40°-50°	333.0	17.6
50°-60°	248.9	13.2
60°-70°	164.2	8.7
70°-80°	100.2	5.3
80°-90°	37.2	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°	639.0	33.8
0°-40°	1008.6	53.3
0°-60°	1590.4	84.1
0°-90°	1892.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1892.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	851	851	851	851	851	
5°	847	846	844	849	845	81
15°	809	806	804	809	803	228
25°	726	723	721	722	716	334
35°	607	602	595	585	576	378
45°	455	451	435	415	403	350
55°	303	298	278	255	249	271
65°	180	174	160	154	157	180
75°	97	95	92	94	97	104
85°	34	33	34	37	38	36
90°	0	0	0	0	0	



TEST NUMBER: P290657

CATALOG NUMBER: 14GR-LD5-20-F1-UNV-L93050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	850.9	850.9	850.9	850.9	850.9
2.5°	854.3	850.4	847.0	852.2	849.1
5°	847.4	846.5	844.4	848.7	844.8
7.5°	843.1	840.0	837.4	842.6	838.3
10°	833.5	831.8	829.6	834.0	829.2
12.5°	821.8	820.1	817.9	823.1	817.9
15°	809.2	806.2	804.5	809.2	803.2
17.5°	791.0	789.7	787.1	791.9	785.8
20°	774.6	769.8	768.0	771.5	767.2
22.5°	750.7	747.2	746.8	749.0	741.6
25°	725.5	722.9	720.8	722.1	715.6
27.5°	699.1	695.6	693.0	692.6	685.6
30°	670.9	666.6	662.7	659.2	651.4
32.5°	640.1	634.9	629.7	624.1	615.8
35°	606.7	601.5	595.0	584.6	575.5
37.5°	571.6	565.5	555.1	543.0	533.9
40°	531.3	528.2	516.5	500.9	490.9
42.5°	493.5	490.1	475.3	458.0	444.5
45°	455.4	450.6	435.0	415.0	403.3
47.5°	416.3	411.6	394.2	369.5	359.1
50°	375.6	373.0	352.1	329.6	319.2
52.5°	338.3	335.2	314.0	291.4	281.9
55°	303.1	298.4	277.6	254.6	248.9
57.5°	268.0	262.8	243.3	223.8	219.9
60°	237.2	230.7	212.1	196.9	193.4
62.5°	208.2	200.8	185.2	173.5	171.7
65°	180.0	174.3	160.0	153.5	156.6
67.5°	155.7	150.1	139.6	137.0	136.2
70°	134.4	129.2	120.6	121.4	121.9
72.5°	114.9	111.9	105.4	107.6	109.3
75°	97.1	95.4	91.5	94.5	96.7
77.5°	81.1	79.8	78.1	80.7	84.1
80°	65.9	65.1	65.5	67.2	70.7
82.5°	50.7	49.0	50.3	53.8	55.9
85°	34.3	33.0	33.8	37.3	37.7
87.5°	16.0	16.0	15.6	18.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)