

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: P290662

Luminaire Tested: **14GR-LD5-24-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290662
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-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: 2215.0 lumens
Efficiency: N/A
Efficacy: 118.5 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

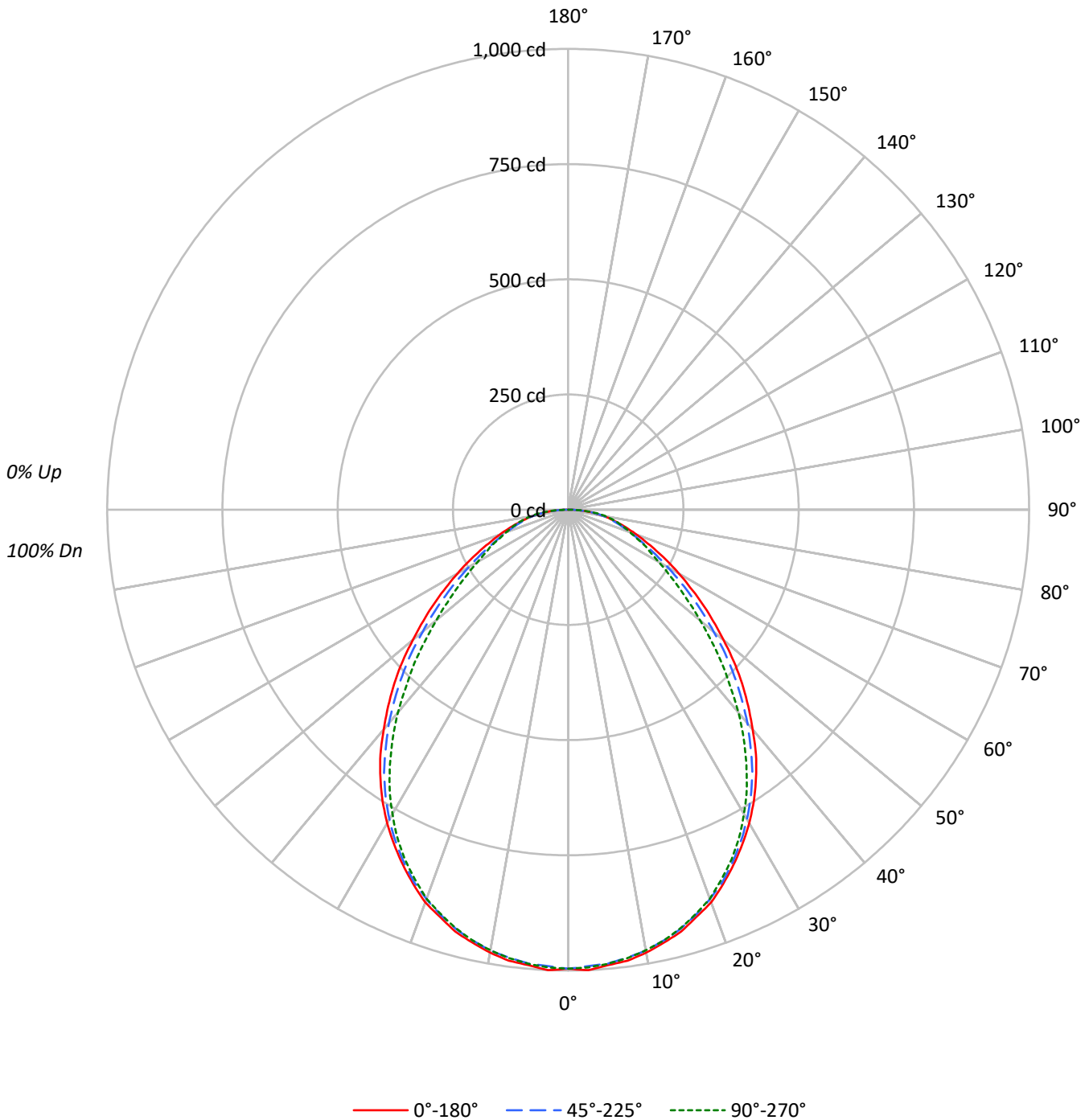
Input Watts (W): 18.693
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P290662

CATALOG NUMBER: 14GR-LD5-24-F1-UNV-L93050-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P290662

CATALOG NUMBER: 14GR-LD5-24-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°	2680	2680	2680
5°	2680	2670	2672
10°	2666	2654	2653
15°	2639	2624	2620
20°	2597	2575	2572
25°	2522	2505	2487
30°	2440	2411	2370
35°	2333	2288	2213
40°	2185	2124	2019
45°	2029	1938	1797
50°	1841	1726	1564
55°	1665	1524	1367
60°	1495	1336	1218
65°	1342	1193	1167
70°	1238	1110	1123
75°	1182	1114	1177
80°	1196	1189	1283
85°	1238	1223	1365



TEST NUMBER: P290662

CATALOG NUMBER: 14GR-LD5-24-F1-UNV-L93050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	4.2
10°-20°	265.9	12.0
20°-30°	388.2	17.5
30°-40°	432.6	19.5
40°-50°	389.8	17.6
50°-60°	291.4	13.2
60°-70°	192.2	8.7
70°-80°	117.3	5.3
80°-90°	43.5	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°	748.1	33.8
0°-40°	1180.8	53.3
0°-60°	1861.9	84.1
0°-90°	2215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	996	996	996	996	996	
5°	992	991	988	994	989	94
15°	947	944	942	947	940	267
25°	849	846	844	845	838	391
35°	710	704	697	684	674	443
45°	533	528	509	486	472	410
55°	355	349	325	298	291	318
65°	211	204	187	180	183	211
75°	114	112	107	111	113	121
85°	40	39	40	44	44	43
90°	0	0	0	0	0	



TEST NUMBER: P290662

CATALOG NUMBER: 14GR-LD5-24-F1-UNV-L93050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	996.1	996.1	996.1	996.1	996.1
2.5°	1000.2	995.6	991.6	997.7	994.1
5°	992.1	991.1	988.5	993.6	989.0
7.5°	987.0	983.4	980.4	986.5	981.4
10°	975.8	973.8	971.3	976.3	970.8
12.5°	962.1	960.1	957.6	963.6	957.6
15°	947.4	943.8	941.8	947.4	940.3
17.5°	926.1	924.6	921.5	927.1	920.0
20°	906.8	901.2	899.2	903.2	898.2
22.5°	878.9	874.8	874.3	876.8	868.2
25°	849.4	846.4	843.8	845.3	837.7
27.5°	818.4	814.4	811.3	810.8	802.7
30°	785.4	780.4	775.8	771.7	762.6
32.5°	749.4	743.3	737.2	730.6	721.0
35°	710.3	704.2	696.6	684.4	673.7
37.5°	669.2	662.1	649.9	635.7	625.0
40°	622.0	618.4	604.7	586.4	574.7
42.5°	577.8	573.7	556.5	536.1	520.4
45°	533.1	527.5	509.2	485.9	472.2
47.5°	487.4	481.8	461.5	432.6	420.4
50°	439.7	436.6	412.3	385.9	373.7
52.5°	396.0	392.5	367.6	341.2	330.0
55°	354.9	349.3	324.9	298.0	291.4
57.5°	313.8	307.7	284.8	262.0	257.4
60°	277.7	270.1	248.3	230.5	226.4
62.5°	243.7	235.1	216.8	203.1	201.1
65°	210.7	204.1	187.3	179.7	183.3
67.5°	182.3	175.7	163.5	160.4	159.4
70°	157.4	151.3	141.1	142.2	142.7
72.5°	134.5	131.0	123.4	125.9	127.9
75°	113.7	111.7	107.1	110.7	113.2
77.5°	94.9	93.4	91.4	94.4	98.5
80°	77.2	76.2	76.7	78.7	82.8
82.5°	59.4	57.4	58.9	63.0	65.5
85°	40.1	38.6	39.6	43.7	44.2
87.5°	18.8	18.8	18.3	21.3	21.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)