

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: P290711

Luminaire Tested: **14GR-LD5-28-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290711
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-LD5-28-F1-UNV-L92765-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: 2545.0 lumens
Efficiency: N/A
Efficacy: 113.1 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

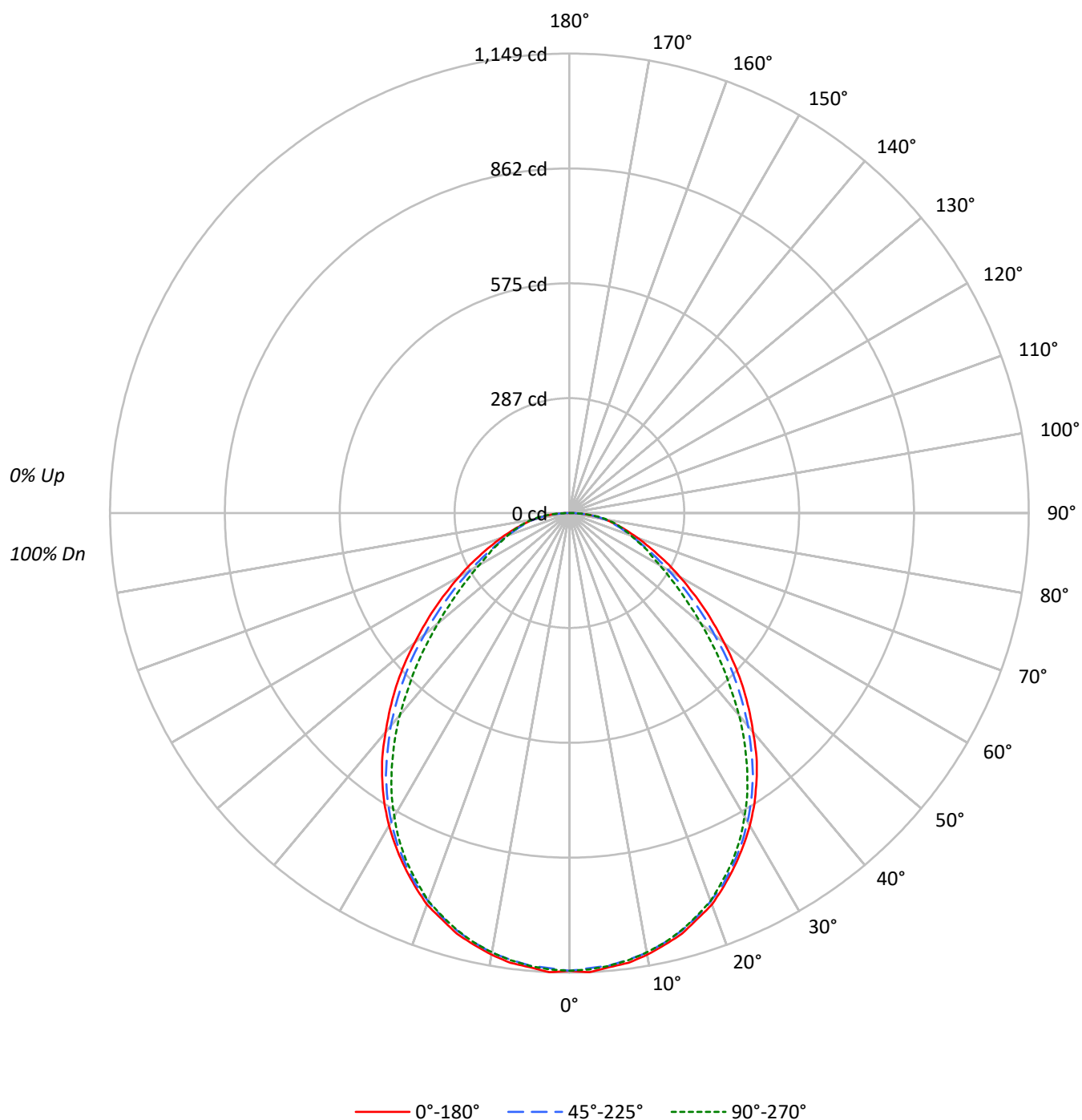
Input Watts (W): 22.506
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P290711

CATALOG NUMBER: 14GR-LD5-28-F1-UNV-L92765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P290711

CATALOG NUMBER: 14GR-LD5-28-F1-UNV-L92765-W2A1-U-4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	110	105	101	98	107	103	99	96	99	96	93		95	92	90		91
2	101	93	87	81	98	91	85	80	88	83	78		84	80	77		81
3	92	83	75	69	90	81	74	68	78	72	67		75	70	66		73
4	85	74	66	59	83	73	65	59	70	64	58		68	62	57		66
5	79	67	58	52	77	66	58	52	64	57	51		62	55	51		60
6	73	61	52	46	71	60	52	46	58	51	45		56	50	45		55
7	68	55	47	41	66	54	47	41	53	46	41		52	45	40		50
8	64	51	43	37	62	50	42	37	49	42	37		47	41	36		46
9	60	47	39	34	58	46	39	33	45	38	33		44	38	33		43
10	56	43	36	31	55	43	35	31	42	35	30		41	35	30		40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3080	3080	3080
5°	3079	3068	3070
10°	3064	3049	3048
15°	3032	3015	3010
20°	2984	2958	2955
25°	2898	2879	2858
30°	2804	2770	2723
35°	2681	2629	2543
40°	2510	2441	2320
45°	2331	2227	2065
50°	2115	1983	1798
55°	1913	1751	1571
60°	1717	1535	1400
65°	1542	1371	1341
70°	1423	1276	1290
75°	1359	1280	1353
80°	1375	1365	1474
85°	1423	1405	1568



TEST NUMBER: P290711

CATALOG NUMBER: 14GR-LD5-28-F1-UNV-L92765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.1	4.2
10°-20°	305.5	12.0
20°-30°	446.1	17.5
30°-40°	497.1	19.5
40°-50°	447.9	17.6
50°-60°	334.8	13.2
60°-70°	220.8	8.7
70°-80°	134.8	5.3
80°-90°	50.0	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°	859.6	33.8
0°-40°	1356.7	53.3
0°-60°	2139.3	84.1
0°-90°	2545.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2545.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1145	1145	1145	1145	1145	
5°	1140	1139	1136	1142	1136	108
15°	1088	1084	1082	1088	1080	306
25°	976	972	970	971	962	449
35°	816	809	800	786	774	509
45°	612	606	585	558	542	471
55°	408	401	373	342	335	365
65°	242	234	215	206	211	243
75°	131	128	123	127	130	140
85°	46	44	46	50	51	49
90°	0	0	0	0	0	



TEST NUMBER: P290711

CATALOG NUMBER: 14GR-LD5-28-F1-UNV-L92765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1144.6	1144.6	1144.6	1144.6	1144.6
2.5°	1149.2	1144.0	1139.3	1146.3	1142.2
5°	1139.9	1138.7	1135.8	1141.6	1136.4
7.5°	1134.1	1130.0	1126.5	1133.5	1127.6
10°	1121.2	1118.9	1116.0	1121.8	1115.4
12.5°	1105.5	1103.1	1100.2	1107.2	1100.2
15°	1088.5	1084.5	1082.1	1088.5	1080.4
17.5°	1064.0	1062.3	1058.8	1065.2	1057.0
20°	1041.9	1035.5	1033.1	1037.8	1032.0
22.5°	1009.8	1005.1	1004.5	1007.5	997.5
25°	976.0	972.5	969.5	971.3	962.5
27.5°	940.4	935.7	932.2	931.6	922.3
30°	902.5	896.6	891.4	886.7	876.2
32.5°	861.0	854.0	847.0	839.5	828.4
35°	816.1	809.1	800.4	786.4	774.1
37.5°	768.9	760.7	746.7	730.4	718.1
40°	714.6	710.5	694.8	673.8	660.4
42.5°	663.9	659.2	639.4	616.0	597.9
45°	612.5	606.1	585.1	558.3	542.5
47.5°	560.0	553.6	530.3	497.0	483.0
50°	505.2	501.7	473.7	443.4	429.4
52.5°	455.0	450.9	422.4	392.0	379.2
55°	407.8	401.4	373.3	342.4	334.8
57.5°	360.5	353.5	327.3	301.0	295.8
60°	319.1	310.3	285.3	264.8	260.2
62.5°	280.0	270.1	249.1	233.3	231.0
65°	242.1	234.5	215.3	206.5	210.6
67.5°	209.4	201.8	187.8	184.3	183.2
70°	180.8	173.8	162.2	163.3	163.9
72.5°	154.6	150.5	141.8	144.7	147.0
75°	130.7	128.3	123.1	127.2	130.1
77.5°	109.1	107.3	105.0	108.5	113.2
80°	88.7	87.5	88.1	90.4	95.1
82.5°	68.3	65.9	67.7	72.3	75.3
85°	46.1	44.3	45.5	50.2	50.8
87.5°	21.6	21.6	21.0	24.5	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)