

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: P290708

Luminaire Tested: **14GR-LD5-28-F1-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290708
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-2700K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2258.0 lumens
Efficiency: N/A
Efficacy: 102.0 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

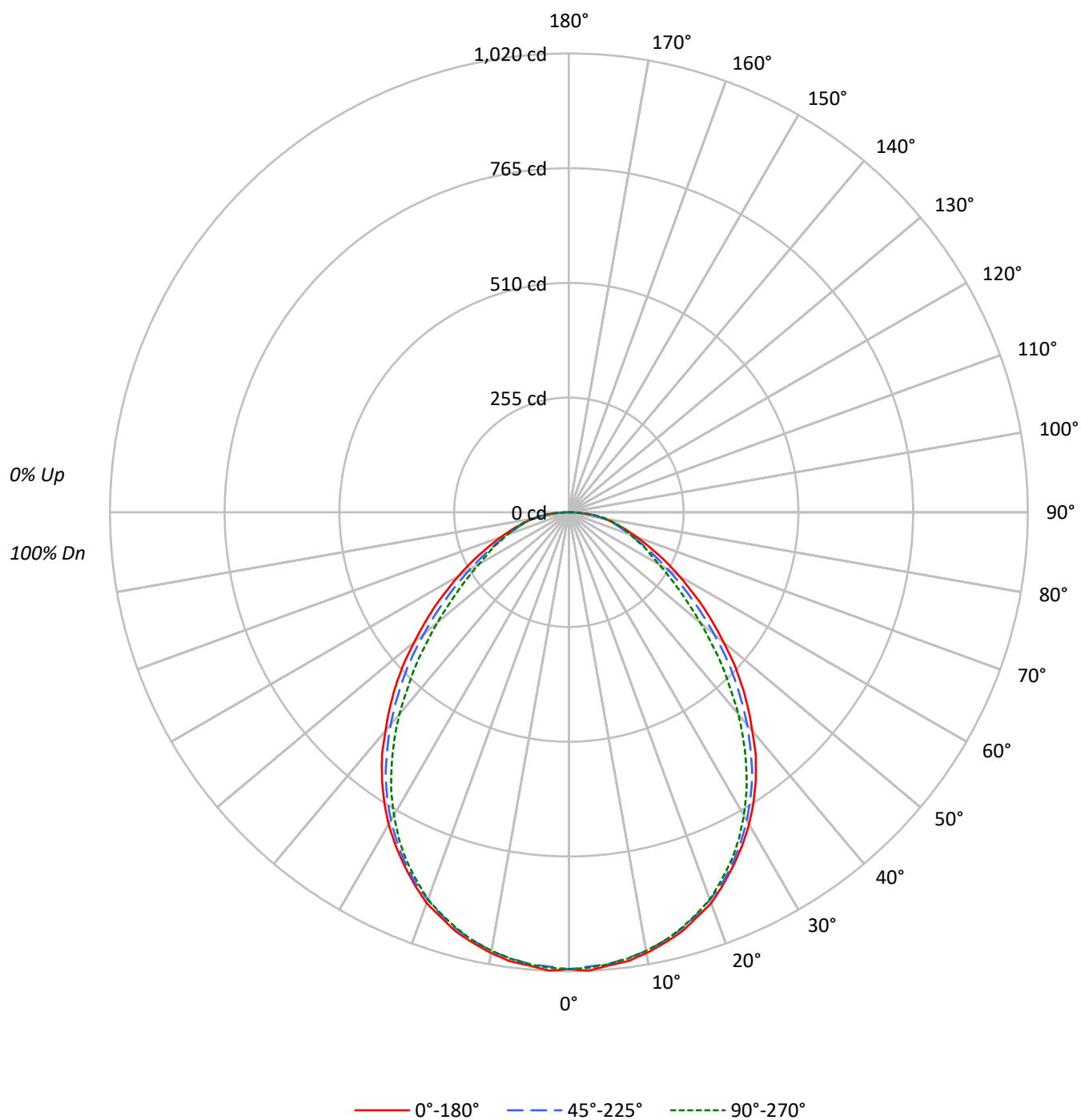
Input Watts (W): 22.134
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		88	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	64	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		64	57	51		62	55	51		60	54	50
6	73	61	52	46	71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	47	41		53	46	41		52	45	40		50	44	40
8	64	51	43	37	62	50	42	37		49	42	37		47	41	36		46	41	36
9	60	47	39	34	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	31		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2733	2733	2733
5°	2732	2722	2723
10°	2718	2705	2704
15°	2691	2675	2670
20°	2647	2625	2622
25°	2571	2554	2536
30°	2488	2458	2416
35°	2379	2333	2256
40°	2227	2165	2058
45°	2068	1975	1832
50°	1876	1760	1595
55°	1697	1554	1394
60°	1524	1362	1242
65°	1368	1216	1189
70°	1262	1132	1144
75°	1205	1135	1200
80°	1220	1212	1308
85°	1263	1247	1389



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.9	4.2
10°-20°	271.0	12.0
20°-30°	395.8	17.5
30°-40°	441.0	19.5
40°-50°	397.4	17.6
50°-60°	297.0	13.2
60°-70°	195.9	8.7
70°-80°	119.6	5.3
80°-90°	44.4	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°	762.7	33.8
0°-40°	1203.7	53.3
0°-60°	1898.1	84.1
0°-90°	2258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1016	1016	1016	1016	1016	
5°	1011	1010	1008	1013	1008	96
15°	966	962	960	966	958	272
25°	866	863	860	862	854	399
35°	724	718	710	698	687	451
45°	544	538	519	495	481	418
55°	362	356	331	304	297	324
65°	215	208	191	183	187	215
75°	116	114	109	113	115	124
85°	41	39	40	44	45	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1015.5	1015.5	1015.5	1015.5	1015.5
2.5°	1019.6	1015.0	1010.8	1017.0	1013.4
5°	1011.3	1010.3	1007.7	1012.9	1008.2
7.5°	1006.2	1002.5	999.4	1005.6	1000.5
10°	994.8	992.7	990.1	995.3	989.6
12.5°	980.8	978.7	976.1	982.4	976.1
15°	965.8	962.2	960.1	965.8	958.5
17.5°	944.1	942.5	939.4	945.1	937.8
20°	924.4	918.7	916.6	920.8	915.6
22.5°	895.9	891.8	891.3	893.8	885.1
25°	865.9	862.8	860.2	861.8	854.0
27.5°	834.3	830.2	827.1	826.6	818.3
30°	800.7	795.5	790.9	786.7	777.4
32.5°	763.9	757.7	751.5	744.8	735.0
35°	724.1	717.9	710.1	697.7	686.8
37.5°	682.2	674.9	662.5	648.0	637.1
40°	634.0	630.4	616.4	597.8	585.9
42.5°	589.0	584.9	567.3	546.6	530.5
45°	543.5	537.8	519.1	495.3	481.3
47.5°	496.9	491.2	470.5	441.0	428.6
50°	448.2	445.1	420.3	393.4	380.9
52.5°	403.7	400.1	374.7	347.8	336.4
55°	361.8	356.1	331.2	303.8	297.1
57.5°	319.9	313.6	290.4	267.1	262.4
60°	283.1	275.3	253.1	235.0	230.8
62.5°	248.4	239.6	221.0	207.0	205.0
65°	214.8	208.1	191.0	183.2	186.8
67.5°	185.8	179.1	166.7	163.6	162.5
70°	160.4	154.2	143.9	144.9	145.4
72.5°	137.2	133.5	125.8	128.4	130.4
75°	115.9	113.9	109.2	112.8	115.4
77.5°	96.8	95.2	93.2	96.3	100.4
80°	78.7	77.6	78.2	80.2	84.4
82.5°	60.6	58.5	60.0	64.2	66.8
85°	40.9	39.3	40.4	44.5	45.0
87.5°	19.2	19.2	18.6	21.7	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)