

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: P290569

Luminaire Tested: **14GR-LD5-28-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290569
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-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: 3025.0 lumens
Efficiency: N/A
Efficacy: 133.3 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

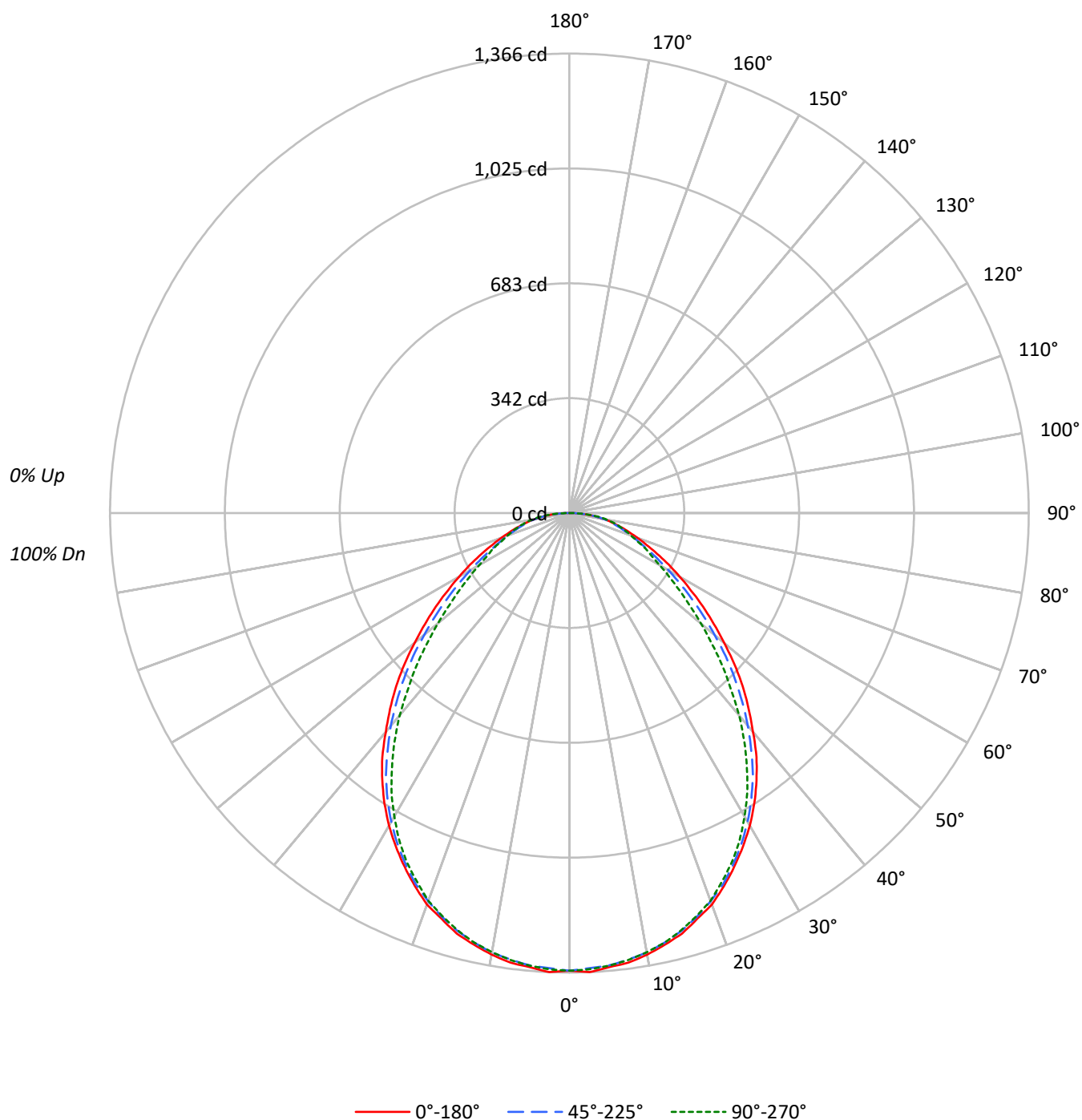
Input Watts (W): 22.692
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3661	3661	3661
5°	3660	3647	3649
10°	3642	3624	3622
15°	3605	3583	3577
20°	3546	3517	3513
25°	3444	3422	3397
30°	3333	3292	3236
35°	3187	3125	3023
40°	2984	2901	2757
45°	2771	2647	2454
50°	2514	2357	2136
55°	2274	2082	1867
60°	2041	1825	1664
65°	1833	1629	1594
70°	1691	1517	1533
75°	1615	1521	1607
80°	1633	1623	1751
85°	1692	1670	1862



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.4	4.2
10°-20°	363.1	12.0
20°-30°	530.2	17.5
30°-40°	590.8	19.5
40°-50°	532.3	17.6
50°-60°	397.9	13.2
60°-70°	262.5	8.7
70°-80°	160.2	5.3
80°-90°	59.5	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°	1021.7	33.8
0°-40°	1612.5	53.3
0°-60°	2542.8	84.1
0°-90°	3025.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3025.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1355	1354	1350	1357	1351	129
15°	1294	1289	1286	1294	1284	364
25°	1160	1156	1152	1154	1144	534
35°	970	962	951	935	920	605
45°	728	720	696	664	645	560
55°	485	477	444	407	398	434
65°	288	279	256	246	250	288
75°	155	152	146	151	155	166
85°	55	53	54	60	60	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1360.4	1360.4	1360.4	1360.4	1360.4
2.5°	1366.0	1359.7	1354.2	1362.5	1357.6
5°	1354.9	1353.5	1350.0	1357.0	1350.7
7.5°	1347.9	1343.1	1338.9	1347.2	1340.3
10°	1332.7	1329.9	1326.4	1333.4	1325.7
12.5°	1314.0	1311.2	1307.7	1316.0	1307.7
15°	1293.9	1289.0	1286.2	1293.9	1284.1
17.5°	1264.7	1262.7	1258.5	1266.1	1256.4
20°	1238.4	1230.8	1228.0	1233.5	1226.6
22.5°	1200.2	1194.7	1194.0	1197.5	1185.7
25°	1160.0	1155.9	1152.4	1154.5	1144.1
27.5°	1117.7	1112.2	1108.0	1107.3	1096.2
30°	1072.7	1065.7	1059.5	1053.9	1041.5
32.5°	1023.4	1015.1	1006.8	997.8	984.6
35°	970.0	961.7	951.3	934.7	920.1
37.5°	913.9	904.2	887.5	868.1	853.6
40°	849.4	844.5	825.8	800.9	784.9
42.5°	789.1	783.5	759.9	732.2	710.7
45°	728.1	720.4	695.5	663.6	644.8
47.5°	665.6	658.0	630.3	590.8	574.1
50°	600.5	596.3	563.0	527.0	510.3
52.5°	540.8	536.0	502.0	466.0	450.7
55°	484.7	477.0	443.8	407.0	398.0
57.5°	428.5	420.2	389.0	357.8	351.5
60°	379.3	368.9	339.1	314.8	309.2
62.5°	332.8	321.0	296.1	277.4	274.6
65°	287.8	278.7	255.9	245.5	250.3
67.5°	248.9	239.9	223.3	219.1	217.7
70°	214.9	206.6	192.8	194.1	194.8
72.5°	183.7	178.9	168.5	172.0	174.7
75°	155.3	152.5	146.3	151.2	154.6
77.5°	129.7	127.6	124.8	129.0	134.5
80°	105.4	104.0	104.7	107.5	113.0
82.5°	81.1	78.4	80.4	86.0	89.4
85°	54.8	52.7	54.1	59.6	60.3
87.5°	25.7	25.7	25.0	29.1	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)