

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: P290614

Luminaire Tested: **14GR-LD5-28-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290614
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-L82765-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2927.0 lumens
Efficiency: N/A
Efficacy: 129.5 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

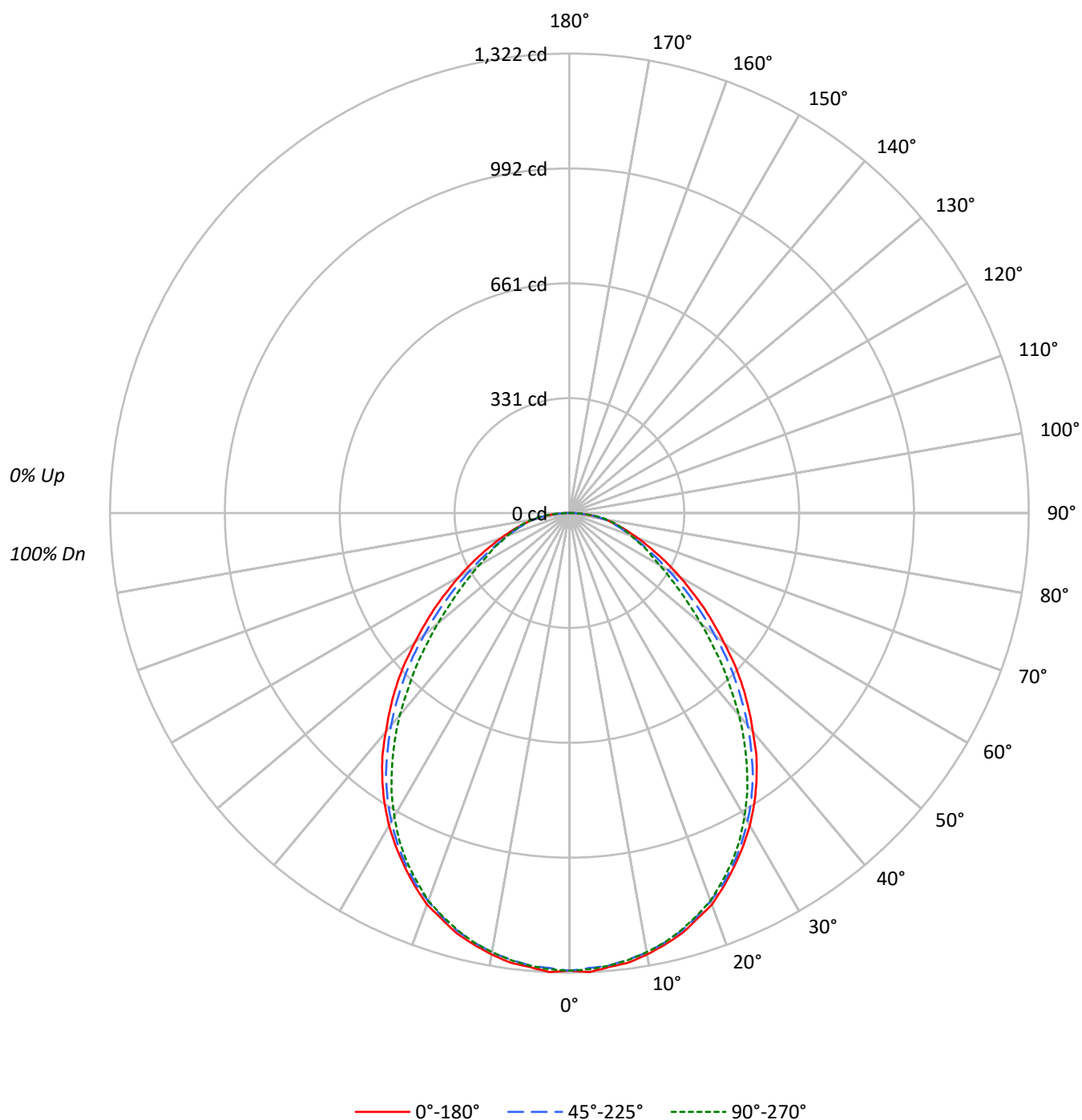
Input Watts (W): 22.599
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				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°	3542	3542	3542
5°	3541	3529	3531
10°	3524	3507	3505
15°	3488	3467	3461
20°	3432	3403	3399
25°	3333	3311	3287
30°	3225	3186	3131
35°	3083	3024	2925
40°	2887	2807	2668
45°	2681	2561	2375
50°	2432	2281	2067
55°	2200	2015	1807
60°	1975	1766	1610
65°	1773	1577	1542
70°	1637	1467	1483
75°	1563	1472	1555
80°	1581	1570	1695
85°	1636	1615	1803



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.3	4.2
10°-20°	351.3	12.0
20°-30°	513.0	17.5
30°-40°	571.7	19.5
40°-50°	515.1	17.6
50°-60°	385.0	13.2
60°-70°	254.0	8.7
70°-80°	155.1	5.3
80°-90°	57.5	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°	988.6	33.8
0°-40°	1560.3	53.3
0°-60°	2460.5	84.1
0°-90°	2927.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2927.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1316	1316	1316	1316	1316	
5°	1311	1310	1306	1313	1307	125
15°	1252	1247	1245	1252	1242	352
25°	1122	1118	1115	1117	1107	517
35°	939	931	920	904	890	585
45°	704	697	673	642	624	542
55°	469	462	429	394	385	420
65°	278	270	248	238	242	279
75°	150	148	142	146	150	161
85°	53	51	52	58	58	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1316.3	1316.3	1316.3	1316.3	1316.3
2.5°	1321.7	1315.7	1310.3	1318.4	1313.7
5°	1311.0	1309.6	1306.3	1313.0	1307.0
7.5°	1304.3	1299.6	1295.5	1303.6	1296.9
10°	1289.5	1286.8	1283.5	1290.2	1282.8
12.5°	1271.4	1268.7	1265.4	1273.4	1265.4
15°	1251.9	1247.2	1244.6	1251.9	1242.5
17.5°	1223.8	1221.7	1217.7	1225.1	1215.7
20°	1198.3	1190.9	1188.2	1193.6	1186.9
22.5°	1161.4	1156.0	1155.3	1158.7	1147.3
25°	1122.4	1118.4	1115.1	1117.1	1107.0
27.5°	1081.5	1076.2	1072.1	1071.5	1060.7
30°	1037.9	1031.2	1025.2	1019.8	1007.7
32.5°	990.3	982.2	974.2	965.5	952.7
35°	938.6	930.6	920.5	904.4	890.3
37.5°	884.3	874.9	858.8	840.0	825.9
40°	821.9	817.2	799.1	774.9	759.5
42.5°	763.5	758.1	735.3	708.5	687.7
45°	704.5	697.1	672.9	642.1	624.0
47.5°	644.1	636.7	609.9	571.6	555.5
50°	581.0	577.0	544.8	509.9	493.8
52.5°	523.3	518.6	485.7	450.9	436.1
55°	469.0	461.6	429.4	393.8	385.1
57.5°	414.6	406.6	376.4	346.2	340.2
60°	367.0	356.9	328.1	304.6	299.2
62.5°	322.0	310.6	286.5	268.4	265.7
65°	278.4	269.7	247.6	237.5	242.2
67.5°	240.9	232.1	216.0	212.0	210.7
70°	208.0	199.9	186.5	187.9	188.5
72.5°	177.8	173.1	163.0	166.4	169.1
75°	150.3	147.6	141.6	146.3	149.6
77.5°	125.5	123.4	120.8	124.8	130.2
80°	102.0	100.6	101.3	104.0	109.4
82.5°	78.5	75.8	77.8	83.2	86.5
85°	53.0	51.0	52.3	57.7	58.4
87.5°	24.8	24.8	24.2	28.2	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)