

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: P291577

Luminaire Tested: **14GR-LD5-20-FGW080-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P291577  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-20-FGW080-UNV-L82765-W2A1-U-5000K  
Description: GRLED 1x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1623.0 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

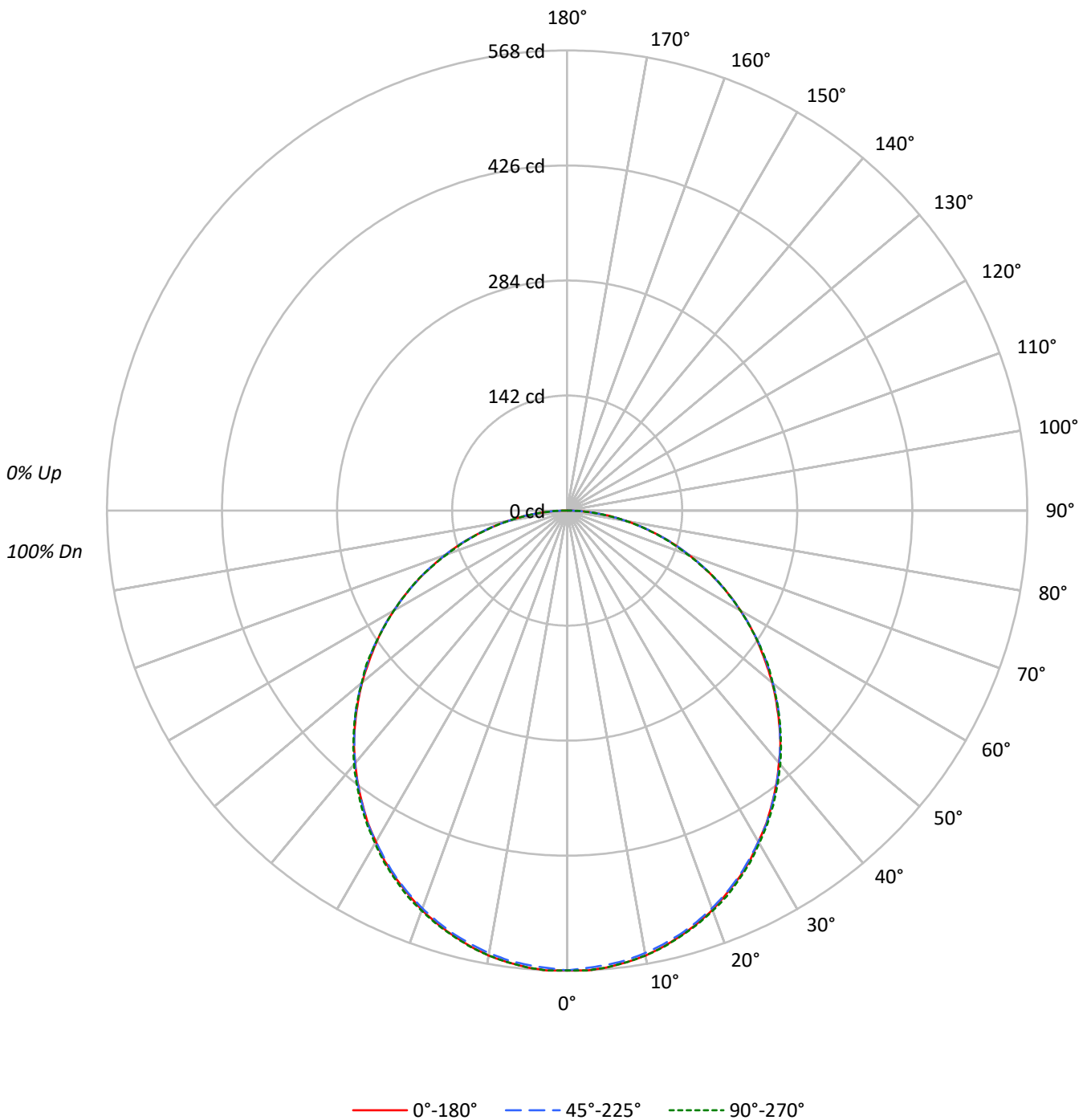
Input Watts (W): 15.903  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P291577

CATALOG NUMBER: 14GR-LD5-20-FGW080-UNV-L82765-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P291577

CATALOG NUMBER: 14GR-LD5-20-FGW080-UNV-L82765-W2A1-U-5000K

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1527	1527	1527
5°	1529	1521	1529
10°	1524	1515	1524
15°	1513	1507	1515
20°	1502	1496	1505
25°	1487	1483	1491
30°	1467	1467	1473
35°	1449	1450	1457
40°	1429	1431	1438
45°	1408	1412	1414
50°	1384	1388	1386
55°	1356	1363	1361
60°	1329	1329	1329
65°	1298	1298	1305
70°	1257	1257	1245
75°	1213	1208	1203
80°	1158	1150	1142
85°	1090	1074	1041



TEST NUMBER: P291577

CATALOG NUMBER: 14GR-LD5-20-FGW080-UNV-L82765-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.7	3.3
10°-20°	153.2	9.4
20°-30°	230.8	14.2
30°-40°	276.6	17.0
40°-50°	286.1	17.6
50°-60°	259.4	16.0
60°-70°	201.6	12.4
70°-80°	123.1	7.6
80°-90°	38.5	2.4
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°	437.7	27.0
0°-40°	714.3	44.0
0°-60°	1259.8	77.6
0°-90°	1623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1623.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	568	568	568	568	568	
5°	566	566	563	566	566	54
15°	543	543	541	544	544	153
25°	501	501	500	503	502	231
35°	441	442	442	444	444	276
45°	370	370	371	372	372	285
55°	289	290	290	290	290	259
65°	204	204	204	203	205	201
75°	117	117	116	116	116	123
85°	35	34	35	34	34	39
90°	0	0	0	0	0	



TEST NUMBER: P291577

CATALOG NUMBER: 14GR-LD5-20-FGW080-UNV-L82765-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	567.6	567.6	567.6	567.6	567.6
2.5°	568.1	567.6	565.0	567.6	568.1
5°	566.0	565.5	562.9	565.5	566.0
7.5°	562.4	562.4	559.8	562.4	562.4
10°	557.7	557.2	554.6	557.2	557.7
12.5°	551.0	551.0	548.4	551.0	551.5
15°	543.2	543.2	541.1	543.7	543.7
17.5°	534.4	534.9	532.3	535.4	535.4
20°	524.5	524.0	522.5	525.1	525.6
22.5°	512.6	513.1	511.6	514.7	515.2
25°	500.7	500.7	499.6	502.7	502.2
27.5°	487.7	487.7	486.1	488.7	489.3
30°	472.1	472.7	472.1	474.7	474.2
32.5°	457.6	458.1	458.1	459.2	459.7
35°	441.0	441.5	441.5	443.6	443.6
37.5°	424.4	424.4	424.9	426.5	426.5
40°	406.8	407.3	407.3	408.8	409.4
42.5°	389.6	388.6	389.1	390.7	390.7
45°	369.9	370.4	371.0	371.5	371.5
47.5°	350.2	351.2	351.8	352.3	351.8
50°	330.5	331.5	331.5	331.0	331.0
52.5°	309.2	311.8	311.3	311.3	312.3
55°	289.0	290.0	290.5	290.5	290.0
57.5°	268.8	269.8	268.8	269.3	268.2
60°	247.0	247.5	247.0	247.0	247.0
62.5°	225.7	226.2	225.2	225.2	225.2
65°	203.9	203.9	203.9	202.9	204.9
67.5°	181.1	182.1	182.1	182.6	180.6
70°	159.8	160.3	159.8	159.3	158.2
72.5°	138.5	139.0	139.6	137.5	137.0
75°	116.7	116.7	116.2	115.7	115.7
77.5°	95.5	95.5	95.5	94.4	94.4
80°	74.7	75.2	74.2	74.2	73.7
82.5°	54.5	54.5	54.5	54.0	52.9
85°	35.3	34.2	34.8	33.7	33.7
87.5°	16.1	16.1	16.1	15.0	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)