

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: P292816

Luminaire Tested: **22GR-LD5-24-FGW080-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292816  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-26)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-24-FGW080-UNV-L93050-W2A1-U-3000K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1585.0 lumens  
Efficiency: N/A  
Efficacy: 85.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

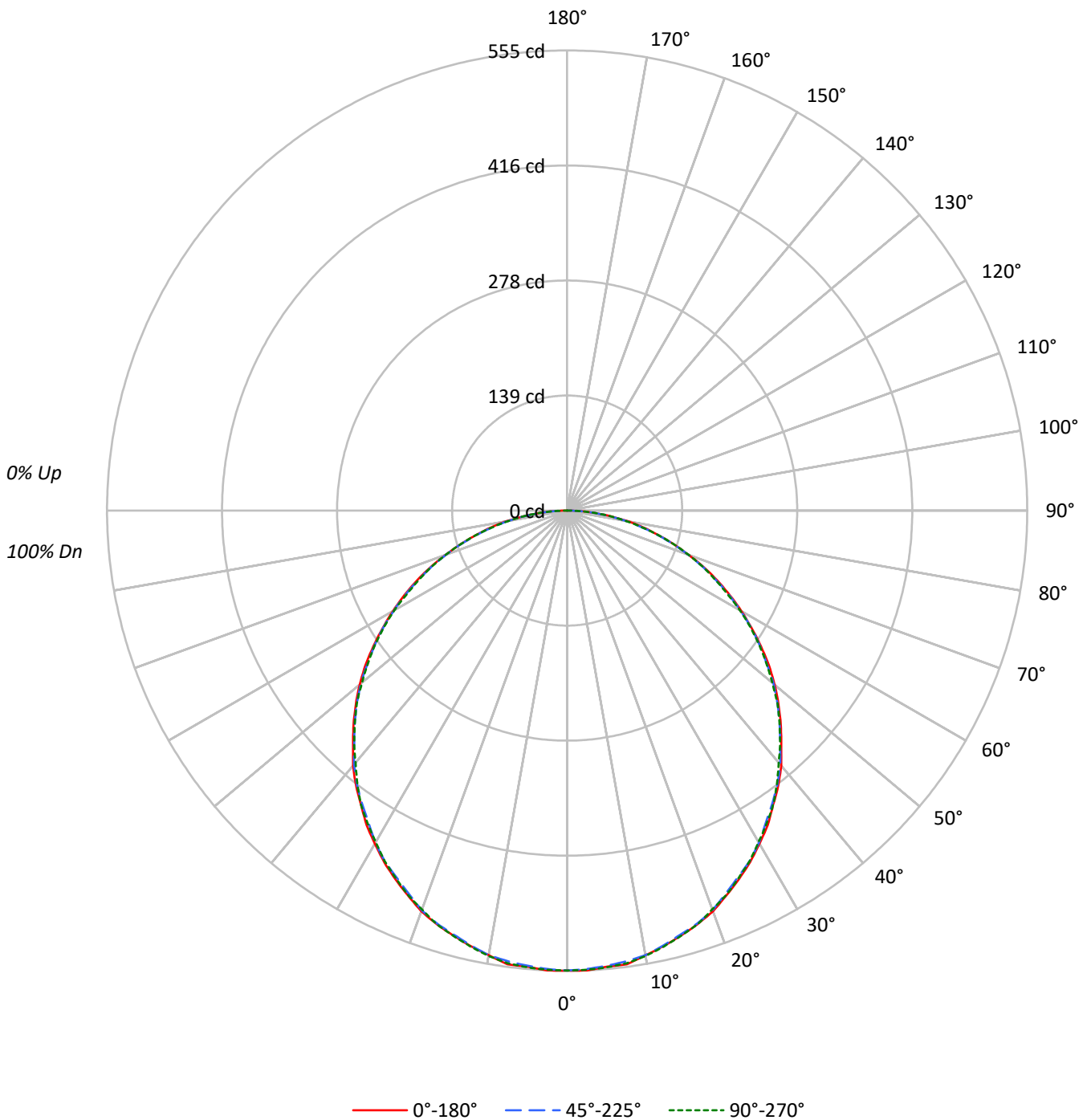
Input Watts (W): 18.507  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	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	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	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°	1493	1493	1493
5°	1491	1488	1494
10°	1488	1488	1491
15°	1478	1474	1479
20°	1473	1469	1466
25°	1456	1448	1452
30°	1442	1437	1435
35°	1423	1417	1423
40°	1411	1404	1395
45°	1387	1378	1378
50°	1368	1360	1352
55°	1339	1330	1328
60°	1307	1300	1295
65°	1274	1259	1254
70°	1223	1220	1223
75°	1181	1167	1176
80°	1168	1111	1103
85°	1034	1007	1019



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.5	3.3
10°-20°	149.7	9.4
20°-30°	225.5	14.2
30°-40°	270.6	17.1
40°-50°	280.0	17.7
50°-60°	253.7	16.0
60°-70°	196.7	12.4
70°-80°	119.4	7.5
80°-90°	36.9	2.3
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°	427.7	27.0
0°-40°	698.3	44.1
0°-60°	1232.0	77.7
0°-90°	1585.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1585.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	555	555	555	555	555	
5°	552	552	551	552	553	53
15°	531	531	529	532	531	150
25°	490	490	488	490	489	226
35°	433	433	431	432	433	272
45°	364	364	362	362	362	281
55°	285	285	283	283	283	255
65°	200	200	198	199	197	198
75°	114	113	112	112	113	121
85°	34	33	33	33	33	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	554.8	554.8	554.8	554.8	554.8
2.5°	555.2	552.9	553.4	554.3	554.3
5°	552.0	552.0	551.0	552.4	552.9
7.5°	552.0	549.6	548.2	549.6	550.6
10°	544.5	543.6	544.5	544.1	545.5
12.5°	538.0	537.1	537.1	538.5	538.5
15°	530.6	530.6	529.2	531.5	531.0
17.5°	523.1	523.1	522.2	522.2	523.1
20°	514.3	511.9	512.9	512.4	511.9
22.5°	502.2	500.8	499.8	501.2	501.7
25°	490.5	489.6	487.7	489.6	489.1
27.5°	478.0	477.0	476.6	475.6	476.6
30°	464.0	463.1	462.6	461.7	461.7
32.5°	450.0	448.2	445.9	448.2	447.7
35°	433.3	433.3	431.4	431.9	433.3
37.5°	418.4	417.5	416.5	415.1	415.6
40°	401.6	400.2	399.8	398.9	397.0
42.5°	382.1	382.1	380.2	380.7	380.2
45°	364.4	363.9	362.1	362.1	362.1
47.5°	345.8	345.3	343.9	343.0	343.9
50°	326.7	324.9	324.9	323.5	323.0
52.5°	306.7	305.3	303.4	303.9	303.0
55°	285.3	284.8	283.4	283.0	283.0
57.5°	263.9	264.4	263.4	261.6	262.0
60°	242.9	242.5	241.5	240.6	240.6
62.5°	221.5	221.5	219.7	219.7	217.8
65°	200.1	200.1	197.8	198.7	196.9
67.5°	178.7	178.3	176.9	176.4	176.9
70°	155.4	155.9	155.0	155.0	155.4
72.5°	134.5	134.0	133.6	133.6	134.5
75°	113.6	113.1	112.2	112.2	113.1
77.5°	94.5	92.2	91.7	92.6	91.2
80°	75.4	72.1	71.7	71.2	71.2
82.5°	53.1	51.7	52.1	51.7	52.6
85°	33.5	33.0	32.6	32.6	33.0
87.5°	15.8	14.9	14.9	14.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)