

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: P292819

Luminaire Tested: **22GR-LD5-24-FGW080-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292819  
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-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1903.0 lumens  
Efficiency: N/A  
Efficacy: 100.8 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

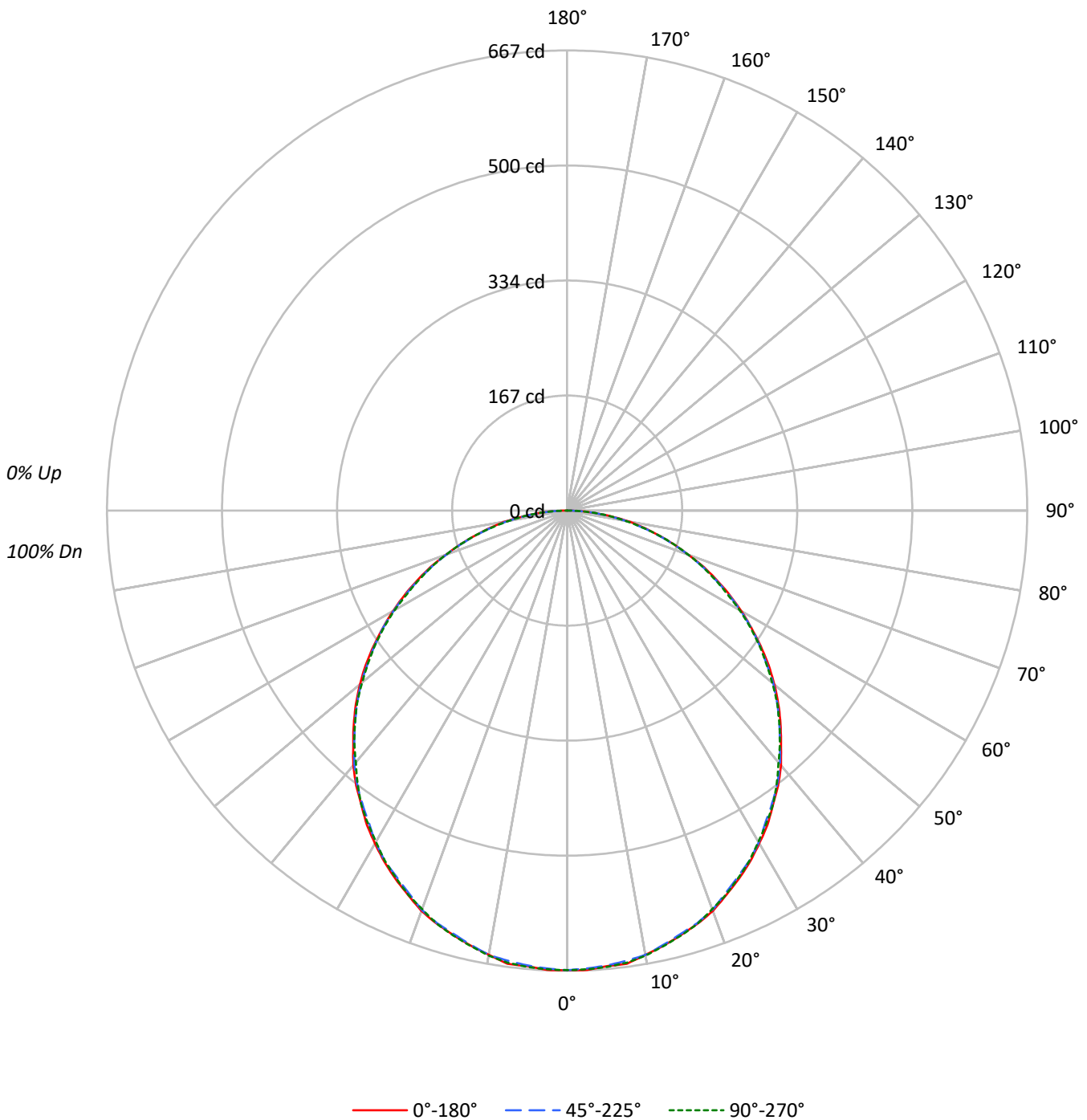
Input Watts (W): 18.879  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1792	1792	1792
5°	1790	1787	1793
10°	1787	1787	1790
15°	1775	1770	1776
20°	1768	1763	1760
25°	1749	1739	1744
30°	1731	1726	1722
35°	1709	1702	1709
40°	1694	1686	1674
45°	1665	1654	1654
50°	1642	1633	1623
55°	1607	1597	1594
60°	1570	1561	1555
65°	1530	1512	1505
70°	1468	1464	1468
75°	1417	1400	1412
80°	1402	1334	1325
85°	1241	1207	1226



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.0	3.3
10°-20°	179.8	9.4
20°-30°	270.7	14.2
30°-40°	324.9	17.1
40°-50°	336.2	17.7
50°-60°	304.6	16.0
60°-70°	236.1	12.4
70°-80°	143.4	7.5
80°-90°	44.4	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°	513.5	27.0
0°-40°	838.4	44.1
0°-60°	1479.2	77.7
0°-90°	1903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1903.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	663	663	662	663	664	63
15°	637	637	635	638	638	180
25°	589	588	586	588	587	271
35°	520	520	518	518	520	326
45°	438	437	435	435	435	338
55°	342	342	340	340	340	306
65°	240	240	238	239	236	238
75°	136	136	135	135	136	145
85°	40	40	39	39	40	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	666.1	666.1	666.1	666.1	666.1
2.5°	666.6	663.8	664.4	665.5	665.5
5°	662.7	662.7	661.6	663.3	663.8
7.5°	662.7	659.9	658.2	659.9	661.0
10°	653.8	652.7	653.8	653.2	654.9
12.5°	646.0	644.8	644.8	646.5	646.5
15°	637.0	637.0	635.3	638.1	637.6
17.5°	628.1	628.1	627.0	627.0	628.1
20°	617.5	614.7	615.8	615.2	614.7
22.5°	602.9	601.2	600.1	601.8	602.4
25°	589.0	587.8	585.6	587.8	587.3
27.5°	573.9	572.8	572.2	571.1	572.2
30°	557.1	556.0	555.4	554.3	554.3
32.5°	540.3	538.1	535.3	538.1	537.5
35°	520.2	520.2	518.0	518.5	520.2
37.5°	502.3	501.2	500.1	498.4	499.0
40°	482.2	480.6	480.0	478.9	476.6
42.5°	458.8	458.8	456.5	457.1	456.5
45°	437.5	437.0	434.7	434.7	434.7
47.5°	415.2	414.6	412.9	411.8	412.9
50°	392.3	390.0	390.0	388.4	387.8
52.5°	368.2	366.6	364.3	364.9	363.8
55°	342.5	342.0	340.3	339.7	339.7
57.5°	316.8	317.4	316.3	314.0	314.6
60°	291.7	291.1	290.0	288.9	288.9
62.5°	266.0	266.0	263.7	263.7	261.5
65°	240.3	240.3	237.5	238.6	236.4
67.5°	214.6	214.0	212.3	211.8	212.3
70°	186.6	187.2	186.1	186.1	186.6
72.5°	161.5	160.9	160.4	160.4	161.5
75°	136.3	135.8	134.7	134.7	135.8
77.5°	113.4	110.6	110.1	111.2	109.5
80°	90.5	86.6	86.1	85.5	85.5
82.5°	63.7	62.0	62.6	62.0	63.1
85°	40.2	39.7	39.1	39.1	39.7
87.5°	19.0	17.9	17.9	17.3	17.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)