

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: P292721

Luminaire Tested: **22GR-LD5-24-FGW080-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292721  
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-L83050-W2A1-U-4500K  
Description: GRLED 2x2 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2160.0 lumens  
Efficiency: N/A  
Efficacy: 113.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.24 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

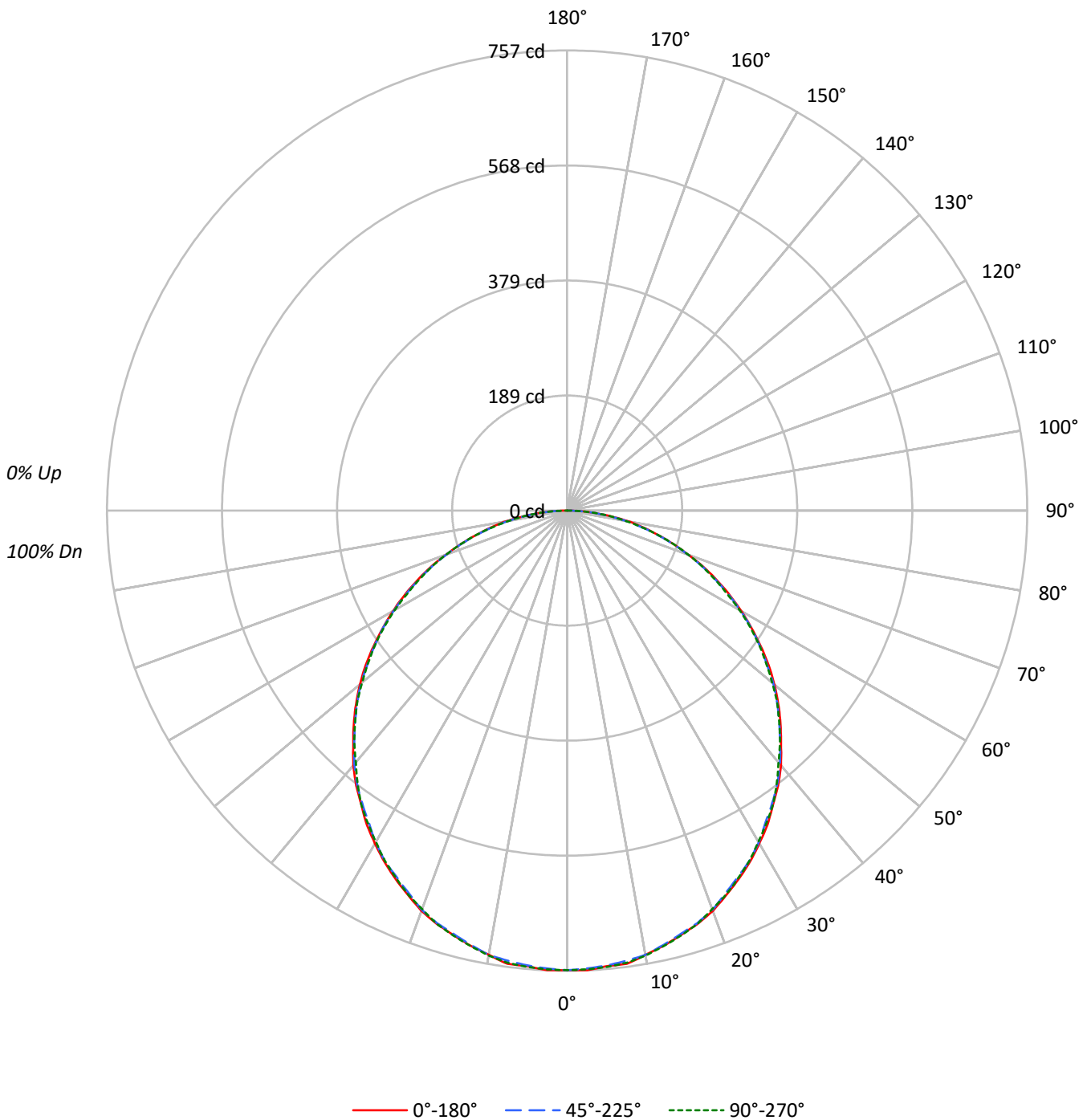
Input Watts (W): 19.065  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2034	2034	2034
5°	2032	2028	2035
10°	2028	2028	2031
15°	2014	2009	2016
20°	2007	2001	1998
25°	1985	1974	1979
30°	1965	1959	1955
35°	1940	1931	1940
40°	1923	1914	1900
45°	1890	1878	1878
50°	1864	1853	1843
55°	1824	1812	1809
60°	1782	1772	1765
65°	1736	1717	1708
70°	1666	1662	1666
75°	1609	1590	1602
80°	1592	1514	1503
85°	1411	1371	1389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.5	3.3
10°-20°	204.1	9.4
20°-30°	307.3	14.2
30°-40°	368.8	17.1
40°-50°	381.6	17.7
50°-60°	345.8	16.0
60°-70°	268.0	12.4
70°-80°	162.7	7.5
80°-90°	50.4	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°	582.9	27.0
0°-40°	951.6	44.1
0°-60°	1678.9	77.7
0°-90°	2160.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2160.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	756	756	756	756	756	
5°	752	752	751	753	754	72
15°	723	723	721	724	724	204
25°	668	667	665	667	667	308
35°	590	590	588	589	590	370
45°	497	496	493	493	493	383
55°	389	388	386	386	386	348
65°	273	273	270	271	268	270
75°	155	154	153	153	154	165
85°	46	45	44	44	45	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	756.0	756.0	756.0	756.0	756.0
2.5°	756.7	753.5	754.1	755.4	755.4
5°	752.2	752.2	750.9	752.8	753.5
7.5°	752.2	749.0	747.1	749.0	750.3
10°	742.1	740.8	742.1	741.4	743.3
12.5°	733.2	731.9	731.9	733.8	733.8
15°	723.0	723.0	721.1	724.3	723.7
17.5°	712.9	712.9	711.6	711.6	712.9
20°	700.8	697.7	698.9	698.3	697.7
22.5°	684.4	682.4	681.2	683.1	683.7
25°	668.5	667.2	664.7	667.2	666.6
27.5°	651.4	650.1	649.5	648.2	649.5
30°	632.3	631.1	630.4	629.2	629.2
32.5°	613.3	610.8	607.6	610.8	610.1
35°	590.5	590.5	587.9	588.6	590.5
37.5°	570.2	568.9	567.6	565.7	566.4
40°	547.4	545.5	544.8	543.5	541.0
42.5°	520.7	520.7	518.2	518.8	518.2
45°	496.6	496.0	493.4	493.4	493.4
47.5°	471.2	470.6	468.7	467.4	468.7
50°	445.2	442.7	442.7	440.8	440.2
52.5°	418.0	416.1	413.5	414.2	412.9
55°	388.8	388.2	386.3	385.6	385.6
57.5°	359.6	360.3	359.0	356.4	357.1
60°	331.1	330.4	329.2	327.9	327.9
62.5°	301.9	301.9	299.4	299.4	296.8
65°	272.7	272.7	269.6	270.8	268.3
67.5°	243.6	242.9	241.0	240.4	241.0
70°	211.8	212.5	211.2	211.2	211.8
72.5°	183.3	182.7	182.0	182.0	183.3
75°	154.8	154.1	152.9	152.9	154.1
77.5°	128.8	125.6	124.9	126.2	124.3
80°	102.7	98.3	97.7	97.0	97.0
82.5°	72.3	70.4	71.0	70.4	71.7
85°	45.7	45.0	44.4	44.4	45.0
87.5°	21.6	20.3	20.3	19.7	19.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)