

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: P294277

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294277  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-25)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-72-FGW080-UNV-L82765-W2A1-U-2700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5785.0 lumens  
Efficiency: N/A  
Efficacy: 110.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

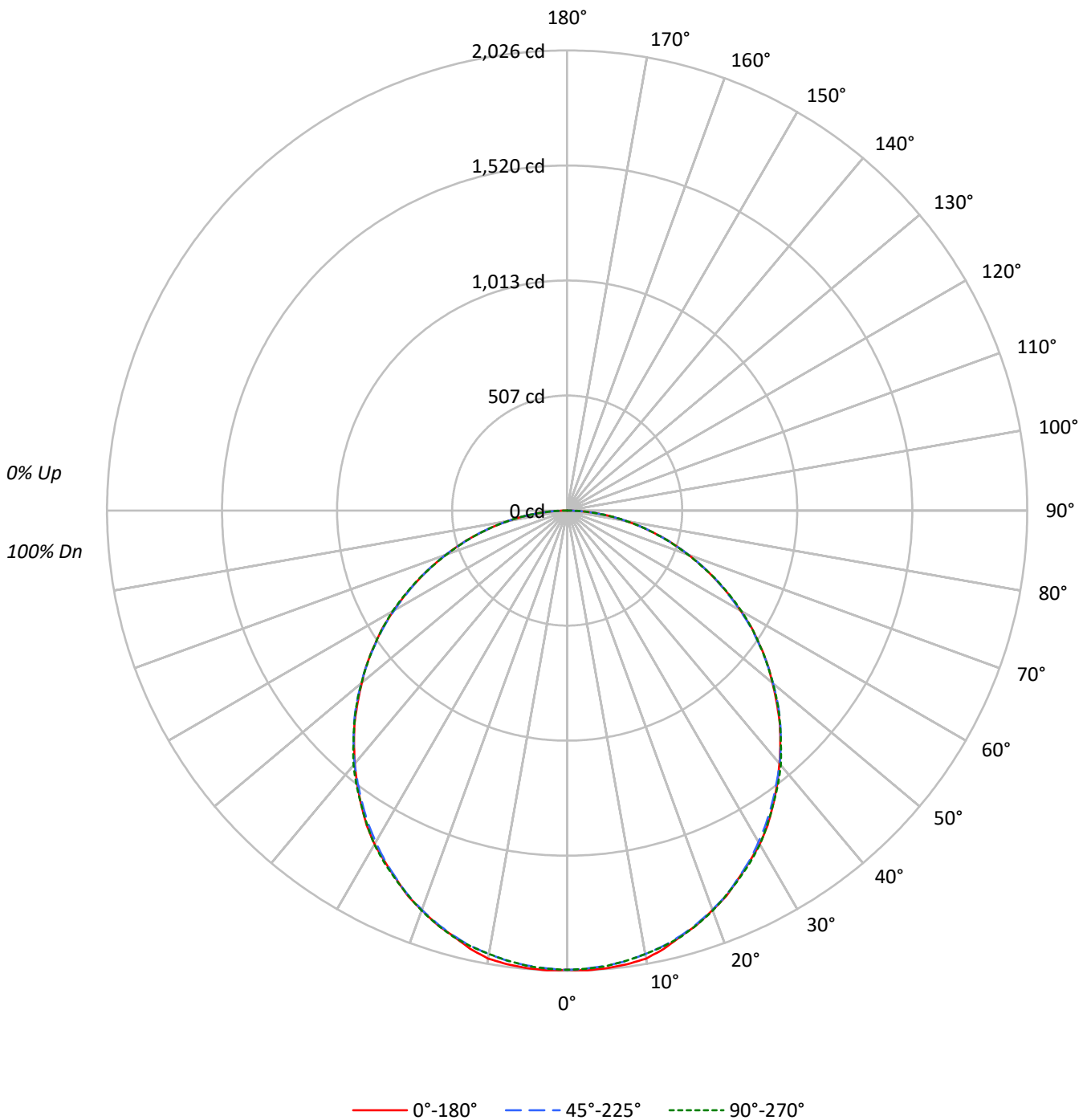
Input Watts (W): 52.545  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2720	2720	2720
5°	2731	2716	2718
10°	2736	2708	2708
15°	2701	2699	2704
20°	2680	2678	2684
25°	2651	2649	2657
30°	2635	2618	2637
35°	2597	2584	2597
40°	2555	2557	2571
45°	2518	2526	2521
50°	2470	2479	2473
55°	2432	2426	2432
60°	2375	2368	2390
65°	2302	2311	2319
70°	2227	2238	2222
75°	2149	2149	2149
80°	2029	2029	2051
85°	1874	1896	1832



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.2	3.3
10°-20°	546.5	9.4
20°-30°	823.6	14.2
30°-40°	986.5	17.1
40°-50°	1021.1	17.7
50°-60°	925.9	16.0
60°-70°	717.8	12.4
70°-80°	436.5	7.5
80°-90°	135.8	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°	1561.3	27.0
0°-40°	2547.8	44.0
0°-60°	4494.8	77.7
0°-90°	5785.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5785.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2022	2022	2022	2022	2022	
5°	2022	2010	2011	2008	2012	192
15°	1939	1940	1937	1930	1941	548
25°	1786	1786	1784	1790	1790	824
35°	1581	1570	1573	1580	1581	989
45°	1323	1326	1328	1322	1325	1019
55°	1037	1031	1034	1038	1037	927
65°	723	727	726	723	728	717
75°	413	412	413	412	413	437
85°	121	120	123	121	119	136
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2021.9	2021.9	2021.9	2021.9	2021.9
2.5°	2026.0	2017.8	2017.8	2015.1	2019.2
5°	2021.9	2009.6	2011.0	2008.3	2012.4
7.5°	2015.1	1998.7	2000.1	1997.4	1998.7
10°	2002.8	1983.7	1982.4	1981.0	1982.4
12.5°	1975.5	1964.6	1963.3	1960.5	1964.6
15°	1938.7	1940.1	1937.3	1930.5	1941.4
17.5°	1910.0	1908.7	1906.0	1899.1	1910.0
20°	1871.8	1873.2	1870.5	1867.8	1874.6
22.5°	1835.0	1830.9	1832.3	1830.9	1832.3
25°	1785.9	1785.9	1784.5	1790.0	1790.0
27.5°	1740.9	1735.4	1738.1	1743.6	1746.3
30°	1695.9	1682.2	1684.9	1690.4	1697.2
32.5°	1642.6	1629.0	1631.7	1637.2	1639.9
35°	1581.2	1570.3	1573.1	1579.9	1581.2
37.5°	1518.5	1511.7	1514.4	1519.9	1523.9
40°	1454.4	1451.6	1455.7	1454.4	1463.9
42.5°	1388.9	1387.5	1391.6	1391.6	1393.0
45°	1323.4	1326.1	1327.5	1322.0	1324.8
47.5°	1251.1	1252.4	1257.9	1255.2	1256.5
50°	1180.1	1178.8	1184.2	1185.6	1181.5
52.5°	1111.9	1105.1	1110.6	1113.3	1110.6
55°	1036.9	1031.4	1034.2	1038.2	1036.9
57.5°	963.2	957.8	959.1	965.9	963.2
60°	882.7	881.4	880.0	885.4	888.2
62.5°	803.6	802.2	799.5	804.9	807.7
65°	723.1	727.2	725.8	723.1	728.5
67.5°	646.7	650.8	646.7	644.0	644.0
70°	566.2	570.3	568.9	566.2	564.8
72.5°	491.2	491.2	488.4	487.1	488.4
75°	413.4	412.0	413.4	412.0	413.4
77.5°	337.0	338.4	338.4	338.4	337.0
80°	261.9	261.9	261.9	263.3	264.7
82.5°	192.4	188.3	192.4	189.6	191.0
85°	121.4	120.1	122.8	121.4	118.7
87.5°	54.6	55.9	55.9	57.3	57.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)