

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: P294335

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294335  
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-LD5-85-FGW080-UNV-L93050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH FGW080 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5623.0 lumens  
Efficiency: N/A  
Efficacy: 88.1 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

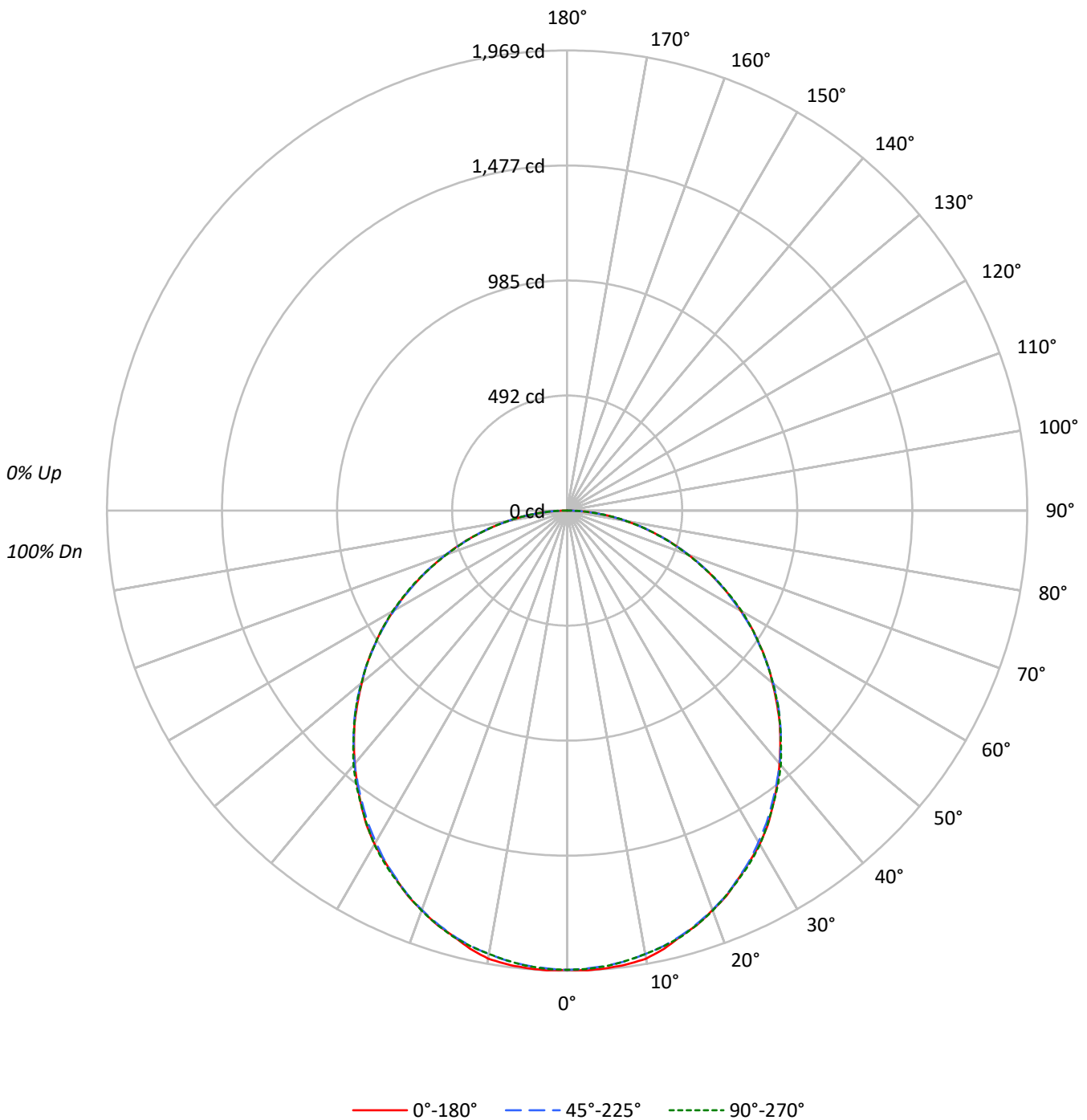
Input Watts (W): 63.838269  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2644	2644	2644
5°	2654	2640	2642
10°	2660	2632	2632
15°	2625	2623	2629
20°	2605	2603	2609
25°	2577	2575	2583
30°	2561	2545	2563
35°	2525	2511	2525
40°	2483	2485	2499
45°	2448	2455	2450
50°	2401	2409	2404
55°	2364	2358	2364
60°	2309	2302	2323
65°	2238	2246	2254
70°	2165	2175	2160
75°	2089	2089	2089
80°	1973	1973	1994
85°	1822	1843	1782



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.8	3.3
10°-20°	531.2	9.4
20°-30°	800.6	14.2
30°-40°	958.9	17.1
40°-50°	992.5	17.7
50°-60°	900.0	16.0
60°-70°	697.7	12.4
70°-80°	424.3	7.5
80°-90°	132.0	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°	1517.6	27.0
0°-40°	2476.5	44.0
0°-60°	4369.0	77.7
0°-90°	5623.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5623.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1965	1965	1965	1965	1965	
5°	1965	1953	1955	1952	1956	187
15°	1884	1886	1883	1876	1887	533
25°	1736	1736	1735	1740	1740	801
35°	1537	1526	1529	1536	1537	961
45°	1286	1289	1290	1285	1288	991
55°	1008	1002	1005	1009	1008	901
65°	703	707	706	703	708	697
75°	402	400	402	400	402	424
85°	118	117	119	118	115	132
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1965.3	1965.3	1965.3	1965.3	1965.3
2.5°	1969.3	1961.3	1961.3	1958.7	1962.7
5°	1965.3	1953.4	1954.7	1952.0	1956.0
7.5°	1958.7	1942.8	1944.1	1941.4	1942.8
10°	1946.7	1928.2	1926.8	1925.5	1926.8
12.5°	1920.2	1909.6	1908.3	1905.6	1909.6
15°	1884.4	1885.7	1883.1	1876.5	1887.1
17.5°	1856.6	1855.2	1852.6	1846.0	1856.6
20°	1819.4	1820.8	1818.1	1815.5	1822.1
22.5°	1783.6	1779.6	1781.0	1779.6	1781.0
25°	1735.9	1735.9	1734.6	1739.9	1739.9
27.5°	1692.1	1686.8	1689.5	1694.8	1697.4
30°	1648.4	1635.1	1637.8	1643.1	1649.7
32.5°	1596.6	1583.4	1586.0	1591.3	1594.0
35°	1537.0	1526.4	1529.0	1535.6	1537.0
37.5°	1476.0	1469.3	1472.0	1477.3	1481.3
40°	1413.6	1411.0	1415.0	1413.6	1422.9
42.5°	1350.0	1348.7	1352.6	1352.6	1354.0
45°	1286.3	1289.0	1290.3	1285.0	1287.7
47.5°	1216.0	1217.4	1222.7	1220.0	1221.4
50°	1147.1	1145.8	1151.1	1152.4	1148.4
52.5°	1080.8	1074.2	1079.5	1082.1	1079.5
55°	1007.8	1002.5	1005.2	1009.2	1007.8
57.5°	936.2	930.9	932.3	938.9	936.2
60°	858.0	856.7	855.3	860.6	863.3
62.5°	781.1	779.8	777.1	782.4	785.1
65°	702.8	706.8	705.5	702.8	708.1
67.5°	628.6	632.6	628.6	625.9	625.9
70°	550.3	554.3	553.0	550.3	549.0
72.5°	477.4	477.4	474.7	473.4	474.7
75°	401.8	400.5	401.8	400.5	401.8
77.5°	327.6	328.9	328.9	328.9	327.6
80°	254.6	254.6	254.6	255.9	257.3
82.5°	187.0	183.0	187.0	184.3	185.7
85°	118.0	116.7	119.4	118.0	115.4
87.5°	53.0	54.4	54.4	55.7	55.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)