

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: P292998

Luminaire Tested: **24GR-LD5-48-F1-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292998  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-12)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-48-F1-UNV-L82765-W2A1-U-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5069.0 lumens  
Efficiency: N/A  
Efficacy: 147.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

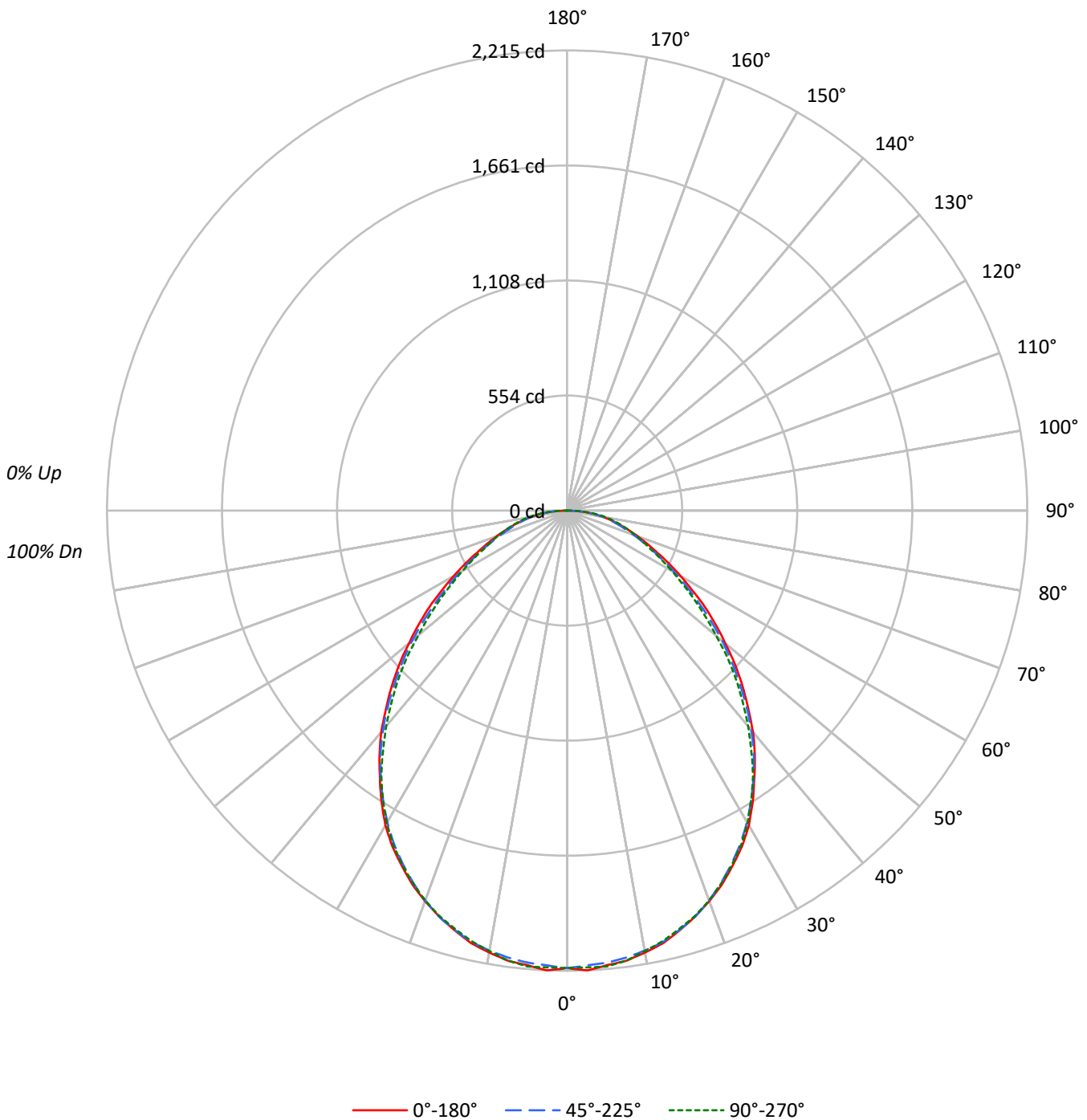
Input Watts (W): 34.317  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	38	33	43	37	32	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

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

	0°	45°	90°
0°	2963	2963	2963
5°	2967	2950	2975
10°	2951	2938	2941
15°	2914	2911	2904
20°	2865	2859	2859
25°	2799	2783	2789
30°	2717	2690	2698
35°	2581	2569	2562
40°	2444	2422	2380
45°	2272	2232	2188
50°	2081	2035	1959
55°	1901	1815	1753
60°	1694	1612	1570
65°	1524	1445	1425
70°	1415	1328	1382
75°	1353	1293	1402
80°	1353	1353	1499
85°	1405	1420	1582



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	207.9	4.1
10°-20°	588.5	11.6
20°-30°	863.6	17.0
30°-40°	976.4	19.3
40°-50°	902.4	17.8
50°-60°	695.3	13.7
60°-70°	460.4	9.1
70°-80°	274.1	5.4
80°-90°	100.4	2.0
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°	1660.1	32.7
0°-40°	2636.5	52.0
0°-60°	4234.2	83.5
0°-90°	5069.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5069.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2202	2202	2202	2202	2202	
5°	2197	2197	2184	2185	2203	209
15°	2092	2088	2090	2089	2085	590
25°	1885	1880	1875	1872	1879	868
35°	1571	1569	1564	1557	1560	983
45°	1194	1186	1173	1152	1150	920
55°	810	794	774	753	748	723
65°	479	472	454	450	448	480
75°	260	254	249	260	270	278
85°	91	86	92	101	102	97
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2201.9	2201.9	2201.9	2201.9	2201.9
2.5°	2215.4	2203.9	2191.4	2191.4	2200.8
5°	2196.6	2196.6	2184.1	2185.1	2202.9
7.5°	2185.1	2178.9	2170.5	2170.5	2184.1
10°	2160.0	2154.8	2150.6	2148.5	2152.7
12.5°	2132.8	2124.5	2127.6	2124.5	2123.4
15°	2092.1	2087.9	2090.0	2088.9	2084.8
17.5°	2048.2	2046.1	2050.3	2042.9	2046.1
20°	2001.1	1994.8	1996.9	1992.8	1996.9
22.5°	1947.8	1943.6	1938.4	1933.2	1941.5
25°	1885.1	1879.8	1874.6	1872.5	1878.8
27.5°	1822.3	1814.0	1806.6	1804.6	1814.0
30°	1749.1	1739.7	1731.4	1729.3	1736.6
32.5°	1662.4	1660.3	1649.8	1645.6	1648.8
35°	1571.4	1569.3	1564.1	1556.8	1559.9
37.5°	1484.6	1483.6	1476.3	1463.7	1455.4
40°	1391.6	1384.3	1379.0	1361.3	1355.0
42.5°	1289.1	1287.0	1277.6	1257.8	1250.4
45°	1194.0	1185.6	1173.1	1152.2	1150.1
47.5°	1095.7	1084.2	1072.7	1046.6	1045.5
50°	994.3	985.9	972.3	946.2	935.7
52.5°	900.2	888.7	869.9	844.8	839.5
55°	810.3	793.5	773.7	752.8	747.5
57.5°	714.1	706.8	682.7	666.0	659.7
60°	629.4	623.1	599.1	583.4	583.4
62.5°	553.1	543.7	522.8	512.3	512.3
65°	478.8	471.5	453.8	449.6	447.5
67.5°	415.1	405.7	393.1	392.1	397.3
70°	359.7	348.2	337.7	348.2	351.3
72.5°	307.4	300.1	290.7	304.2	310.5
75°	260.3	254.1	248.8	260.3	269.7
77.5°	217.5	211.2	211.2	223.7	232.1
80°	174.6	170.4	174.6	185.1	193.4
82.5°	133.8	130.7	135.9	146.4	151.6
85°	91.0	85.7	92.0	101.4	102.5
87.5°	42.9	41.8	46.0	52.3	51.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)