

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: P293137

Luminaire Tested: **24GR-LD5-64-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293137  
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-LD5-64-F1-UNV-L92765-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5652.0 lumens  
Efficiency: N/A  
Efficacy: 121.5 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

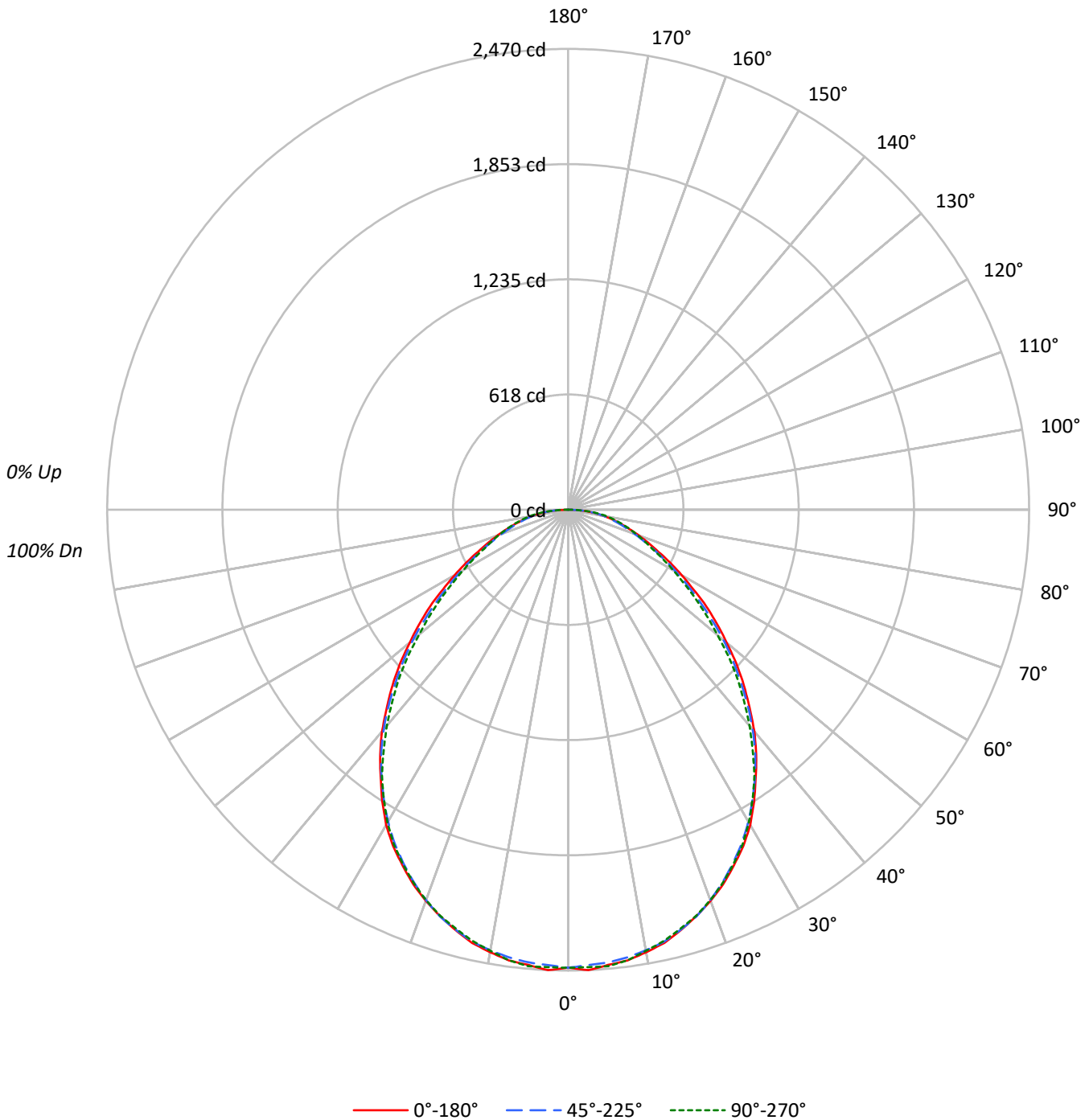
Input Watts (W): 46.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3303	3303	3303
5°	3308	3289	3318
10°	3291	3276	3279
15°	3249	3246	3238
20°	3195	3188	3188
25°	3120	3103	3110
30°	3030	2999	3008
35°	2878	2865	2857
40°	2725	2701	2654
45°	2533	2489	2440
50°	2321	2269	2184
55°	2119	2024	1955
60°	1889	1798	1750
65°	1700	1611	1588
70°	1578	1481	1541
75°	1509	1443	1564
80°	1509	1509	1671
85°	1565	1584	1763



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.9	4.1
10°-20°	656.1	11.6
20°-30°	963.0	17.0
30°-40°	1088.7	19.3
40°-50°	1006.2	17.8
50°-60°	775.2	13.7
60°-70°	513.3	9.1
70°-80°	305.6	5.4
80°-90°	111.9	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°	1851.0	32.7
0°-40°	2939.7	52.0
0°-60°	4721.1	83.5
0°-90°	5652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5652.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2455	2455	2455	2455	2455	
5°	2449	2449	2435	2436	2456	233
15°	2333	2328	2330	2329	2324	657
25°	2102	2096	2090	2088	2095	968
35°	1752	1750	1744	1736	1739	1096
45°	1331	1322	1308	1285	1282	1025
55°	904	885	863	839	834	806
65°	534	526	506	501	499	535
75°	290	283	278	290	301	310
85°	101	96	103	113	114	108
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2455.1	2455.1	2455.1	2455.1	2455.1
2.5°	2470.2	2457.4	2443.4	2443.4	2453.9
5°	2449.3	2449.3	2435.3	2436.4	2456.3
7.5°	2436.4	2429.4	2420.1	2420.1	2435.3
10°	2408.5	2402.6	2398.0	2395.6	2400.3
12.5°	2378.2	2368.8	2372.3	2368.8	2367.7
15°	2332.7	2328.0	2330.4	2329.2	2324.5
17.5°	2283.7	2281.4	2286.1	2277.9	2281.4
20°	2231.3	2224.3	2226.6	2221.9	2226.6
22.5°	2171.8	2167.2	2161.3	2155.5	2164.8
25°	2101.9	2096.0	2090.2	2087.9	2094.9
27.5°	2031.9	2022.6	2014.4	2012.1	2022.6
30°	1950.3	1939.8	1930.5	1928.2	1936.3
32.5°	1853.6	1851.2	1839.6	1834.9	1838.4
35°	1752.1	1749.8	1744.0	1735.8	1739.3
37.5°	1655.4	1654.2	1646.1	1632.1	1622.7
40°	1551.6	1543.5	1537.6	1517.8	1510.8
42.5°	1437.4	1435.1	1424.6	1402.4	1394.3
45°	1331.3	1322.0	1308.0	1284.7	1282.3
47.5°	1221.7	1208.9	1196.1	1166.9	1165.8
50°	1108.6	1099.3	1084.2	1055.0	1043.4
52.5°	1003.7	990.9	969.9	941.9	936.1
55°	903.5	884.8	862.7	839.3	833.5
57.5°	796.2	788.1	761.2	742.6	735.6
60°	701.8	694.8	668.0	650.5	650.5
62.5°	616.7	606.2	582.9	571.2	571.2
65°	533.9	525.8	505.9	501.3	498.9
67.5°	462.8	452.3	438.3	437.2	443.0
70°	401.0	388.2	376.5	388.2	391.7
72.5°	342.7	334.6	324.1	339.2	346.2
75°	290.3	283.3	277.5	290.3	300.8
77.5°	242.5	235.5	235.5	249.5	258.8
80°	194.7	190.0	194.7	206.3	215.7
82.5°	149.2	145.7	151.5	163.2	169.0
85°	101.4	95.6	102.6	113.1	114.2
87.5°	47.8	46.6	51.3	58.3	57.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)