

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: P293521

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293521  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-72-A-UNV-L82765-W2A1-U-2700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6712.0 lumens  
Efficiency: N/A  
Efficacy: 127.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

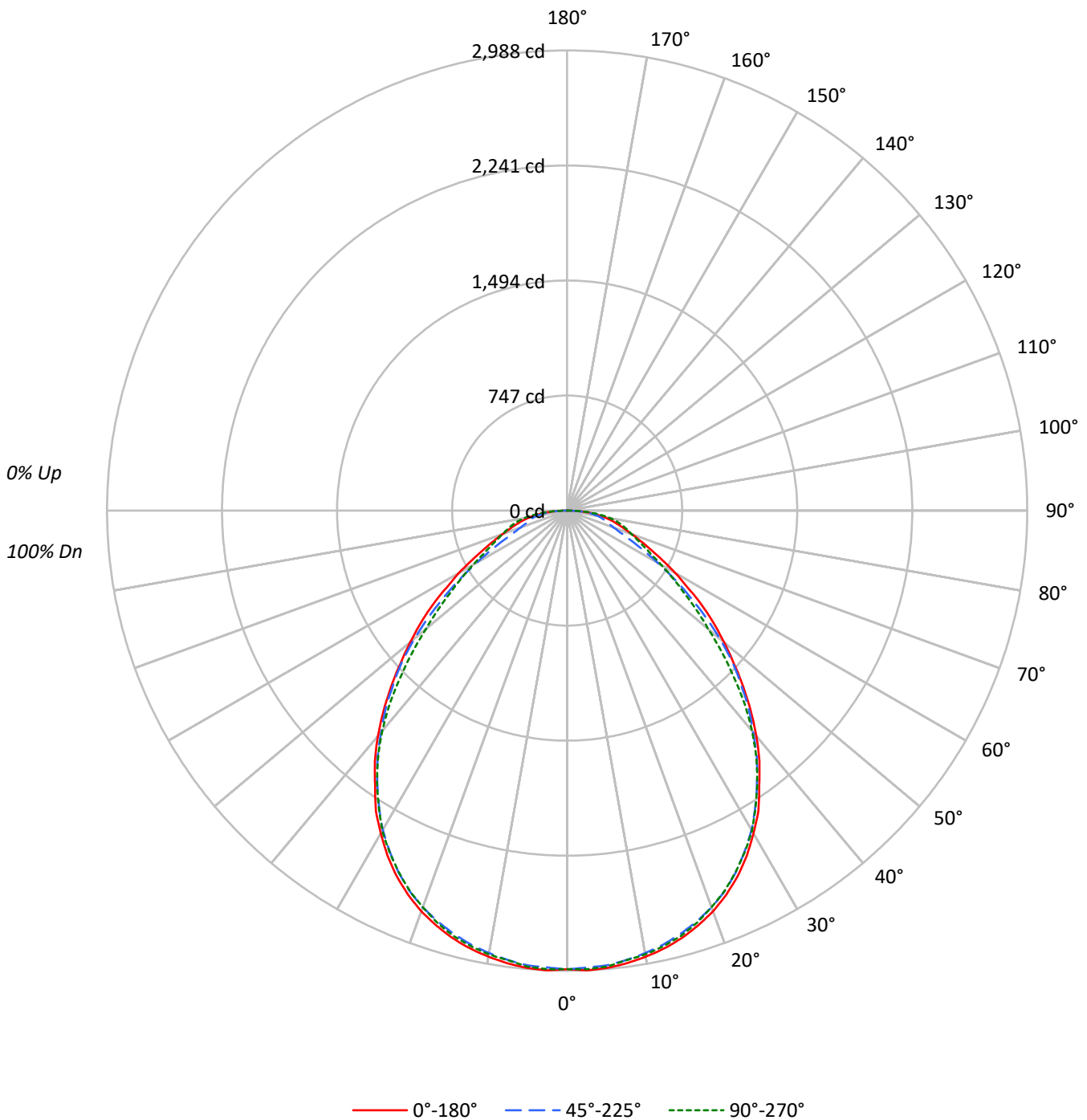
Input Watts (W): 52.545  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

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

	0°	45°	90°
0°	4007	4007	4007
5°	4026	4004	4014
10°	4019	3987	3998
15°	4004	3963	3981
20°	3966	3926	3924
25°	3889	3847	3844
30°	3760	3721	3730
35°	3572	3531	3536
40°	3358	3300	3280
45°	3078	3037	2916
50°	2783	2707	2503
55°	2498	2274	2157
60°	2187	1830	1897
65°	1908	1439	1746
70°	1746	1257	1746
75°	1747	1337	1925
80°	1896	1574	2194
85°	2081	1777	2353



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.0	4.2
10°-20°	804.8	12.0
20°-30°	1193.4	17.8
30°-40°	1346.2	20.1
40°-50°	1219.3	18.2
50°-60°	879.6	13.1
60°-70°	525.2	7.8
70°-80°	324.6	4.8
80°-90°	136.7	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°	2280.2	34.0
0°-40°	3626.4	54.0
0°-60°	5725.4	85.3
0°-90°	6712.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6712.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2978	2978	2978	2978	2978	
5°	2981	2977	2965	2961	2972	283
15°	2874	2857	2845	2846	2858	810
25°	2619	2605	2591	2582	2589	1203
35°	2174	2171	2150	2151	2153	1360
45°	1618	1607	1596	1556	1533	1247
55°	1065	1032	970	922	920	951
65°	599	528	452	513	548	603
75°	336	291	257	320	370	359
85°	135	118	115	150	152	141
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2978.0	2978.0	2978.0	2978.0	2978.0
2.5°	2988.4	2980.1	2969.7	2976.0	2981.1
5°	2981.1	2977.0	2964.6	2961.4	2971.8
7.5°	2965.6	2955.2	2943.8	2949.0	2944.9
10°	2941.7	2932.4	2917.9	2918.9	2926.2
12.5°	2912.7	2901.3	2885.8	2889.9	2896.1
15°	2874.3	2856.7	2845.3	2846.3	2857.8
17.5°	2825.6	2812.1	2797.6	2800.7	2805.9
20°	2769.6	2762.4	2741.6	2735.4	2740.6
22.5°	2699.1	2685.6	2674.2	2671.1	2672.1
25°	2619.3	2604.7	2591.3	2581.9	2589.2
27.5°	2525.9	2513.5	2495.9	2492.8	2499.0
30°	2420.2	2410.8	2395.3	2391.1	2400.5
32.5°	2312.3	2296.8	2275.0	2275.0	2277.1
35°	2174.4	2171.3	2149.5	2150.6	2152.6
37.5°	2050.0	2035.5	2023.0	2010.6	2016.8
40°	1912.1	1895.5	1878.9	1870.6	1867.5
42.5°	1763.8	1751.4	1744.1	1714.0	1706.8
45°	1617.6	1607.2	1595.8	1556.4	1532.6
47.5°	1468.3	1466.2	1456.9	1387.4	1363.6
50°	1329.3	1326.2	1293.0	1219.4	1195.6
52.5°	1197.6	1176.9	1133.4	1060.8	1056.6
55°	1064.9	1031.7	969.5	921.8	919.7
57.5°	924.9	885.5	822.3	796.4	809.8
60°	812.9	752.8	680.2	683.3	705.1
62.5°	696.8	629.4	557.9	589.0	614.9
65°	599.3	527.8	452.1	513.3	548.5
67.5°	514.3	447.9	375.4	457.3	491.5
70°	443.8	389.9	319.4	405.4	443.8
72.5°	387.8	338.0	283.1	364.0	408.5
75°	336.0	291.4	257.2	320.4	370.2
77.5°	291.4	247.8	232.3	283.1	331.8
80°	244.7	205.3	203.2	246.8	283.1
82.5°	190.8	163.8	163.8	206.3	228.1
85°	134.8	118.2	115.1	150.4	152.4
87.5°	69.5	66.4	60.1	78.8	78.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)