

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: P293523

Luminaire Tested: **24GR-LD5-72-A-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293523  
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-3500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7144.0 lumens  
Efficiency: N/A  
Efficacy: 135.2 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

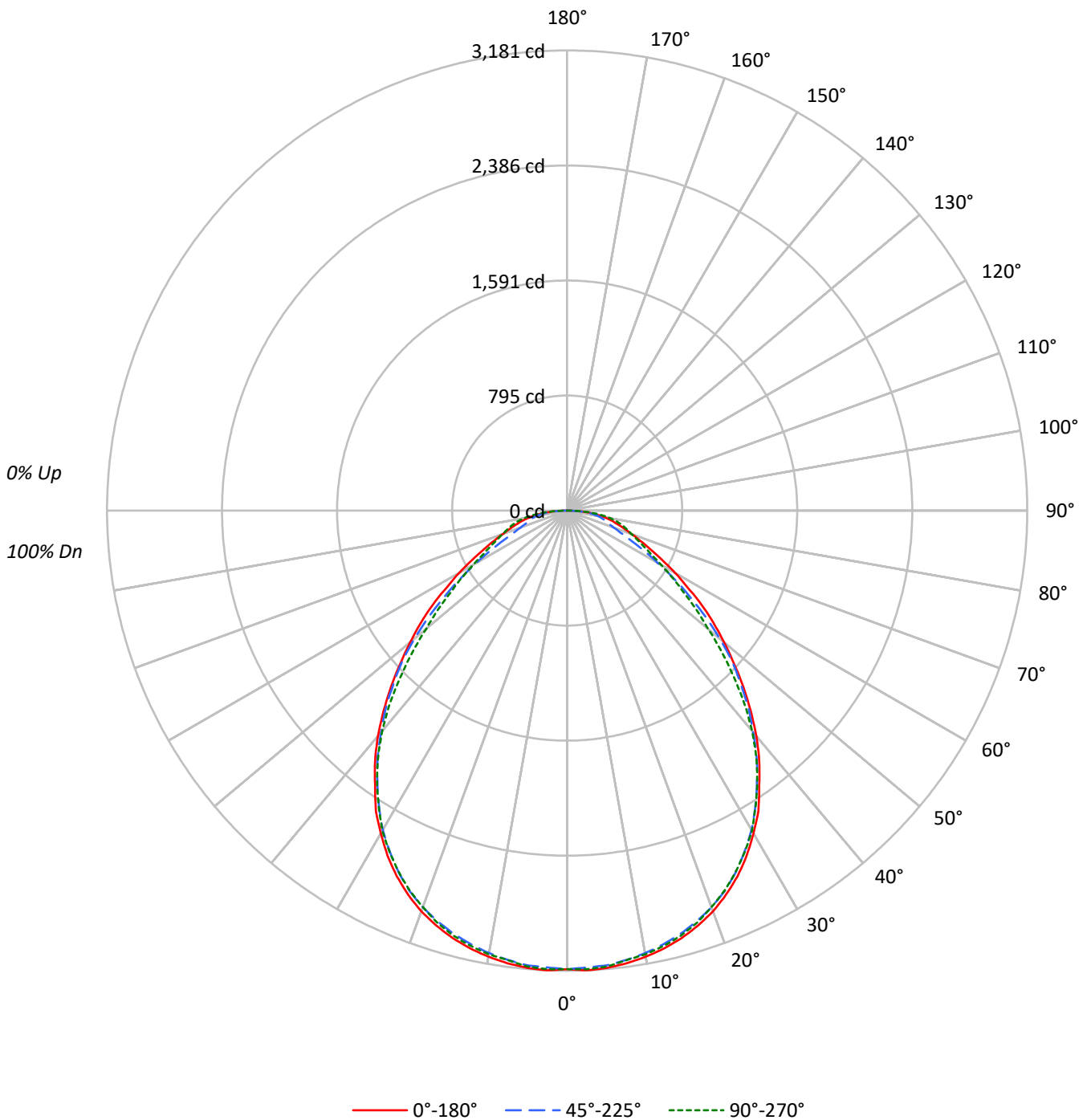
Input Watts (W): 52.824  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4265	4265	4265
5°	4286	4262	4272
10°	4278	4243	4255
15°	4261	4218	4237
20°	4221	4178	4177
25°	4139	4094	4091
30°	4002	3961	3970
35°	3801	3758	3763
40°	3574	3512	3491
45°	3276	3232	3104
50°	2962	2881	2664
55°	2659	2421	2296
60°	2329	1948	2020
65°	2031	1532	1859
70°	1858	1337	1858
75°	1859	1423	2048
80°	2018	1676	2335
85°	2215	1891	2504



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	300.2	4.2
10°-20°	856.6	12.0
20°-30°	1270.2	17.8
30°-40°	1432.9	20.1
40°-50°	1297.8	18.2
50°-60°	936.3	13.1
60°-70°	559.0	7.8
70°-80°	345.5	4.8
80°-90°	145.6	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°	2426.9	34.0
0°-40°	3859.8	54.0
0°-60°	6093.9	85.3
0°-90°	7144.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7144.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3170	3170	3170	3170	3170	
5°	3173	3169	3155	3152	3163	301
15°	3059	3041	3028	3030	3042	862
25°	2788	2772	2758	2748	2756	1281
35°	2314	2311	2288	2289	2291	1448
45°	1722	1711	1698	1657	1631	1327
55°	1134	1098	1032	981	979	1012
65°	638	562	481	546	584	642
75°	358	310	274	341	394	382
85°	144	126	122	160	162	150
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3169.7	3169.7	3169.7	3169.7	3169.7
2.5°	3180.7	3171.9	3160.9	3167.5	3173.0
5°	3173.0	3168.6	3155.4	3152.1	3163.1
7.5°	3156.5	3145.4	3133.3	3138.8	3134.4
10°	3131.1	3121.1	3105.7	3106.8	3114.5
12.5°	3100.2	3088.0	3071.5	3075.9	3082.5
15°	3059.3	3040.6	3028.4	3029.5	3041.7
17.5°	3007.5	2993.1	2977.7	2981.0	2986.5
20°	2947.9	2940.1	2918.1	2911.5	2917.0
22.5°	2872.8	2858.5	2846.3	2843.0	2844.1
25°	2787.8	2772.4	2758.0	2748.1	2755.8
27.5°	2688.5	2675.3	2656.5	2653.2	2659.8
30°	2575.9	2566.0	2549.5	2545.0	2555.0
32.5°	2461.2	2444.6	2421.4	2421.4	2423.6
35°	2314.4	2311.1	2287.9	2289.0	2291.2
37.5°	2181.9	2166.5	2153.2	2140.0	2146.6
40°	2035.1	2017.5	1999.8	1991.0	1987.7
42.5°	1877.3	1864.1	1856.4	1824.3	1816.6
45°	1721.7	1710.7	1698.5	1656.6	1631.2
47.5°	1562.8	1560.6	1550.6	1476.7	1451.3
50°	1414.9	1411.6	1376.3	1297.9	1272.5
52.5°	1274.7	1252.7	1206.3	1129.0	1124.6
55°	1133.5	1098.1	1031.9	981.2	978.9
57.5°	984.5	942.5	875.2	847.6	862.0
60°	865.3	801.3	724.0	727.3	750.5
62.5°	741.7	669.9	593.8	626.9	654.5
65°	637.9	561.8	481.2	546.3	583.8
67.5°	547.4	476.8	399.5	486.7	523.1
70°	472.4	415.0	339.9	431.5	472.4
72.5°	412.8	359.8	301.3	387.4	434.8
75°	357.6	310.1	273.7	341.0	394.0
77.5°	310.1	263.8	247.2	301.3	353.2
80°	260.5	218.5	216.3	262.7	301.3
82.5°	203.1	174.4	174.4	219.6	242.8
85°	143.5	125.8	122.5	160.0	162.2
87.5°	73.9	70.6	64.0	83.9	83.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)