

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: P293021

Luminaire Tested: **24GR-LD5-72-F1-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293021
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-LD5-72-F1-UNV-L82765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7345.0 lumens
Efficiency: N/A
Efficacy: 137.1 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

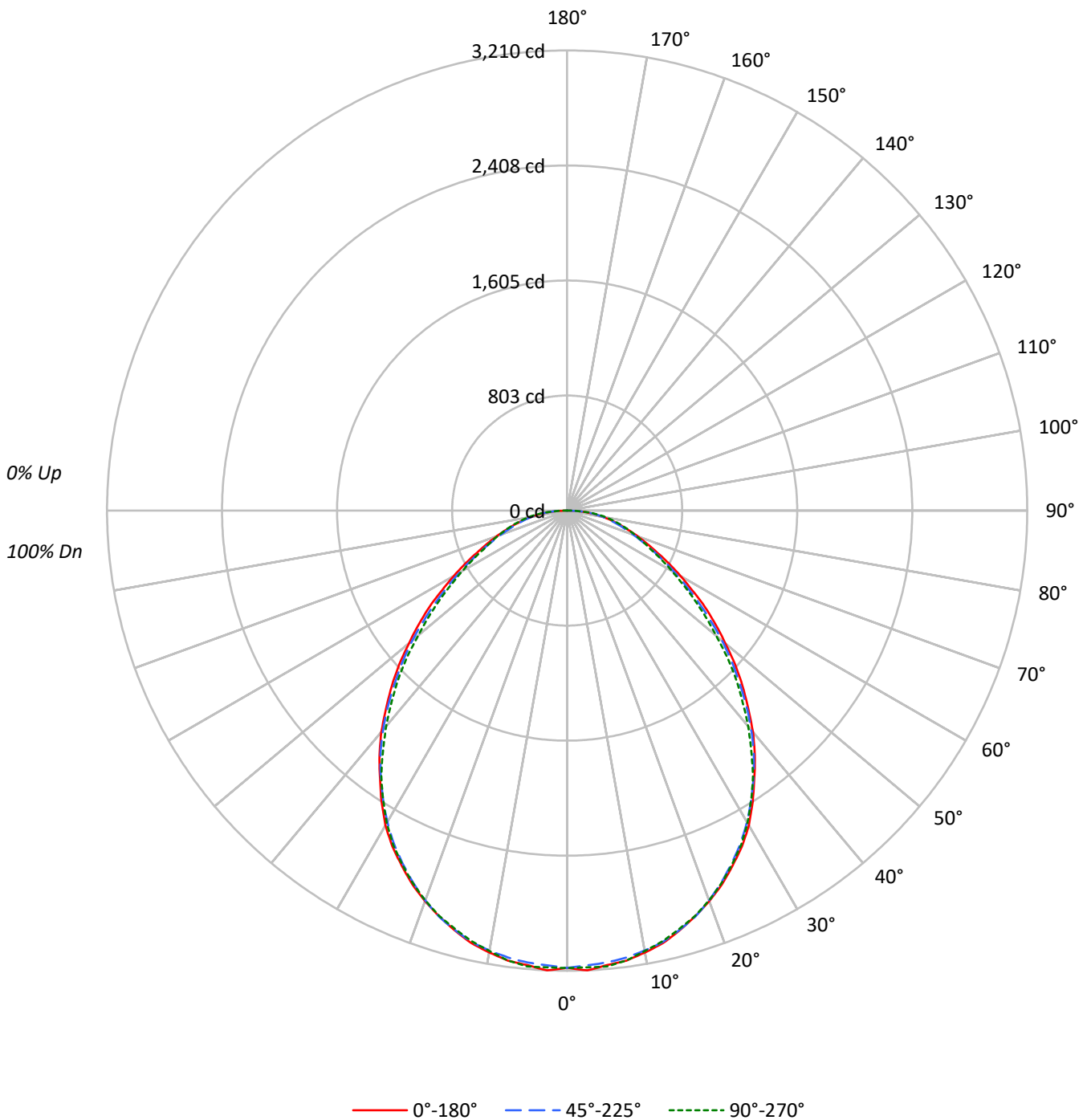
Input Watts (W): 53.568
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293021

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P293021

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-4500K

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°	4293	4293	4293
5°	4299	4274	4311
10°	4276	4258	4262
15°	4223	4218	4208
20°	4152	4143	4143
25°	4055	4033	4042
30°	3938	3898	3909
35°	3740	3723	3713
40°	3542	3510	3449
45°	3292	3234	3171
50°	3016	2949	2838
55°	2754	2630	2541
60°	2454	2336	2275
65°	2209	2093	2064
70°	2050	1925	2002
75°	1961	1875	2032
80°	1960	1960	2172
85°	2035	2058	2293



TEST NUMBER: P293021

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	301.3	4.1
10°-20°	852.7	11.6
20°-30°	1251.4	17.0
30°-40°	1414.8	19.3
40°-50°	1307.6	17.8
50°-60°	1007.4	13.7
60°-70°	667.1	9.1
70°-80°	397.1	5.4
80°-90°	145.5	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°	2405.4	32.7
0°-40°	3820.2	52.0
0°-60°	6135.3	83.5
0°-90°	7345.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7345.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3190	3190	3190	3190	3190	
5°	3183	3183	3165	3166	3192	302
15°	3031	3025	3028	3027	3021	854
25°	2732	2724	2716	2713	2722	1258
35°	2277	2274	2266	2256	2260	1425
45°	1730	1718	1700	1670	1666	1333
55°	1174	1150	1121	1091	1083	1047
65°	694	683	658	651	648	696
75°	377	368	361	377	391	402
85°	132	124	133	147	148	140
90°	0	0	0	0	0	



TEST NUMBER: P293021

CATALOG NUMBER: 24GR-LD5-72-F1-UNV-L82765-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3190.5	3190.5	3190.5	3190.5	3190.5
2.5°	3210.2	3193.5	3175.3	3175.3	3189.0
5°	3182.9	3182.9	3164.7	3166.3	3192.0
7.5°	3166.3	3157.2	3145.0	3145.0	3164.7
10°	3129.9	3122.3	3116.3	3113.2	3119.3
12.5°	3090.5	3078.4	3082.9	3078.4	3076.9
15°	3031.4	3025.4	3028.4	3026.9	3020.8
17.5°	2967.8	2964.8	2970.8	2960.2	2964.8
20°	2899.6	2890.5	2893.6	2887.5	2893.6
22.5°	2822.4	2816.3	2808.7	2801.2	2813.3
25°	2731.5	2723.9	2716.3	2713.3	2722.4
27.5°	2640.6	2628.4	2617.8	2614.8	2628.4
30°	2534.5	2520.9	2508.8	2505.7	2516.3
32.5°	2408.8	2405.7	2390.6	2384.5	2389.1
35°	2277.0	2273.9	2266.4	2255.8	2260.3
37.5°	2151.2	2149.7	2139.1	2120.9	2108.8
40°	2016.4	2005.8	1998.2	1972.5	1963.4
42.5°	1867.9	1864.9	1851.3	1822.5	1811.9
45°	1730.1	1718.0	1699.8	1669.5	1666.4
47.5°	1587.7	1571.0	1554.3	1516.5	1515.0
50°	1440.7	1428.6	1408.9	1371.0	1355.9
52.5°	1304.4	1287.7	1260.4	1224.1	1216.5
55°	1174.1	1149.9	1121.1	1090.8	1083.2
57.5°	1034.7	1024.1	989.3	965.0	955.9
60°	912.0	902.9	868.1	845.3	845.3
62.5°	801.4	787.8	757.5	742.3	742.3
65°	693.8	683.2	657.5	651.4	648.4
67.5°	601.4	587.8	569.6	568.1	575.7
70°	521.1	504.5	489.3	504.5	509.0
72.5°	445.4	434.8	421.2	440.9	449.9
75°	377.2	368.1	360.6	377.2	390.9
77.5°	315.1	306.0	306.0	324.2	336.3
80°	253.0	246.9	253.0	268.1	280.3
82.5°	193.9	189.4	196.9	212.1	219.7
85°	131.8	124.2	133.3	147.0	148.5
87.5°	62.1	60.6	66.7	75.7	74.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)