

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: P293027

Luminaire Tested: **24GR-LD5-85-F1-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293027  
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-LD5-85-F1-UNV-L82765-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7826.0 lumens  
Efficiency: N/A  
Efficacy: 126.4 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

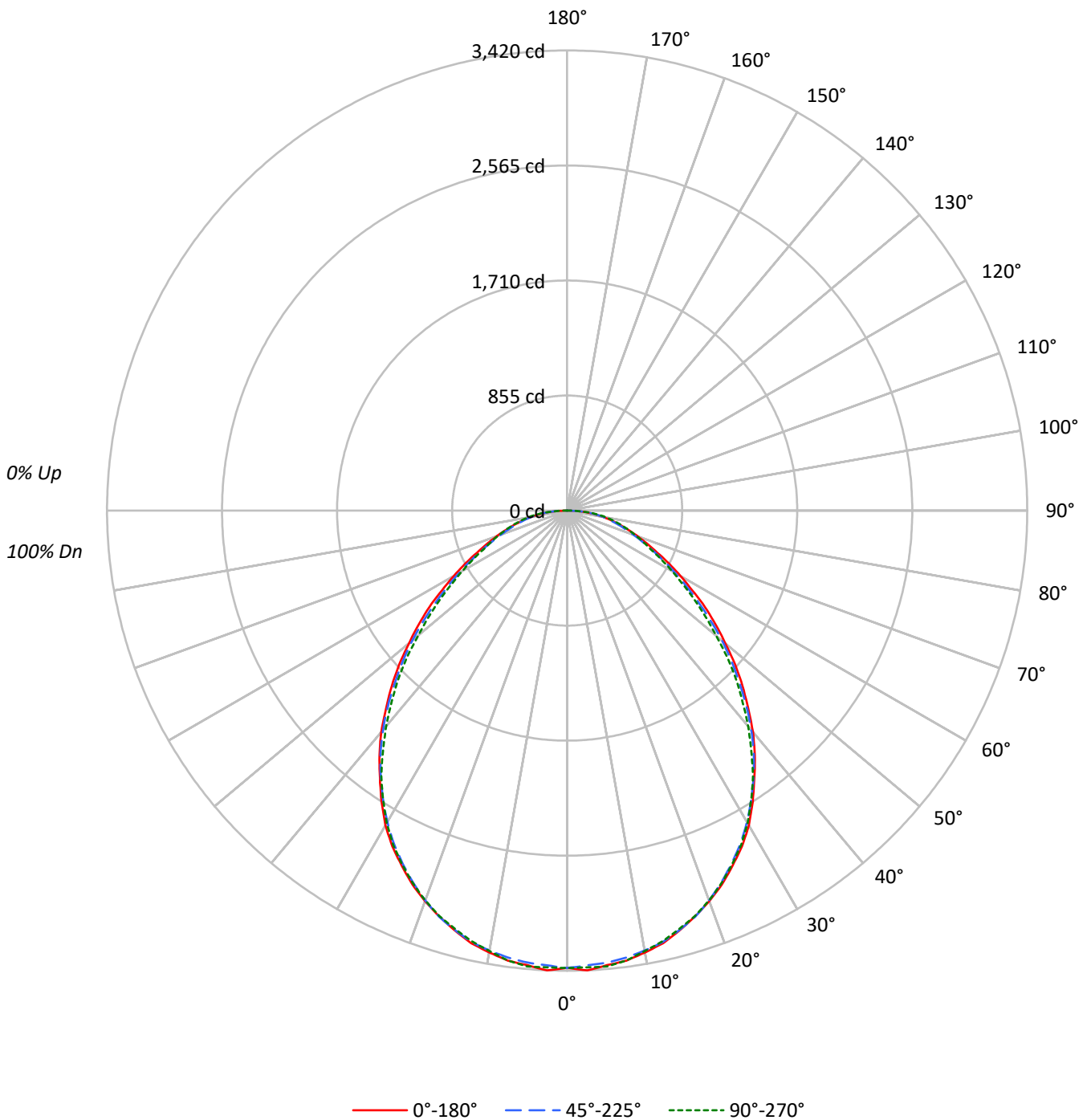
Input Watts (W): 61.938  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	4574	4574	4574
5°	4581	4554	4593
10°	4556	4536	4541
15°	4499	4495	4483
20°	4424	4415	4415
25°	4321	4297	4306
30°	4196	4153	4165
35°	3985	3966	3956
40°	3774	3740	3674
45°	3508	3446	3379
50°	3213	3142	3024
55°	2935	2802	2707
60°	2615	2489	2424
65°	2354	2230	2200
70°	2185	2051	2134
75°	2089	1997	2165
80°	2089	2089	2314
85°	2167	2192	2442



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	321.0	4.1
10°-20°	908.5	11.6
20°-30°	1333.4	17.0
30°-40°	1507.5	19.3
40°-50°	1393.2	17.8
50°-60°	1073.4	13.7
60°-70°	710.8	9.1
70°-80°	423.1	5.4
80°-90°	155.0	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°	2562.9	32.7
0°-40°	4070.4	52.0
0°-60°	6537.1	83.5
0°-90°	7826.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7826.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3399	3399	3399	3399	3399	
5°	3391	3391	3372	3374	3401	322
15°	3230	3224	3227	3225	3219	910
25°	2910	2902	2894	2891	2901	1340
35°	2426	2423	2415	2404	2408	1518
45°	1843	1830	1811	1779	1776	1420
55°	1251	1225	1194	1162	1154	1116
65°	739	728	700	694	691	741
75°	402	392	384	402	416	429
85°	140	132	142	157	158	149
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3399.4	3399.4	3399.4	3399.4	3399.4
2.5°	3420.4	3402.7	3383.3	3383.3	3397.8
5°	3391.4	3391.4	3372.0	3373.6	3401.0
7.5°	3373.6	3363.9	3351.0	3351.0	3372.0
10°	3334.9	3326.8	3320.3	3317.1	3323.6
12.5°	3292.9	3280.0	3284.8	3280.0	3278.4
15°	3229.9	3223.5	3226.7	3225.1	3218.6
17.5°	3162.1	3158.9	3165.4	3154.1	3158.9
20°	3089.5	3079.8	3083.1	3076.6	3083.1
22.5°	3007.2	3000.7	2992.7	2984.6	2997.5
25°	2910.3	2902.3	2894.2	2891.0	2900.7
27.5°	2813.5	2800.6	2789.3	2786.0	2800.6
30°	2700.5	2686.0	2673.1	2669.8	2681.1
32.5°	2566.5	2563.3	2547.2	2540.7	2545.5
35°	2426.1	2422.9	2414.8	2403.5	2408.3
37.5°	2292.1	2290.5	2279.2	2259.8	2246.9
40°	2148.5	2137.2	2129.1	2101.6	2092.0
42.5°	1990.3	1987.0	1972.5	1941.8	1930.5
45°	1843.4	1830.5	1811.1	1778.8	1775.6
47.5°	1691.6	1673.9	1656.1	1615.8	1614.2
50°	1535.1	1522.2	1501.2	1460.8	1444.7
52.5°	1389.8	1372.0	1343.0	1304.2	1296.2
55°	1251.0	1225.2	1194.5	1162.2	1154.1
57.5°	1102.5	1091.2	1054.0	1028.2	1018.5
60°	971.7	962.0	924.9	900.7	900.7
62.5°	853.9	839.4	807.1	790.9	790.9
65°	739.3	728.0	700.5	694.1	690.9
67.5°	640.8	626.3	606.9	605.3	613.4
70°	555.3	537.5	521.4	537.5	542.4
72.5°	474.6	463.3	448.7	469.7	479.4
75°	401.9	392.2	384.2	401.9	416.5
77.5°	335.7	326.1	326.1	345.4	358.3
80°	269.6	263.1	269.6	285.7	298.6
82.5°	206.6	201.8	209.8	226.0	234.1
85°	140.4	132.4	142.0	156.6	158.2
87.5°	66.2	64.6	71.0	80.7	79.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)