

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: P293329

Luminaire Tested: **24GR-LD5-85-F125-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293329  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33304)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-85-F125-UNV-L93050-W2A1-U-4000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F125 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7609.0 lumens  
Efficiency: N/A  
Efficacy: 118.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

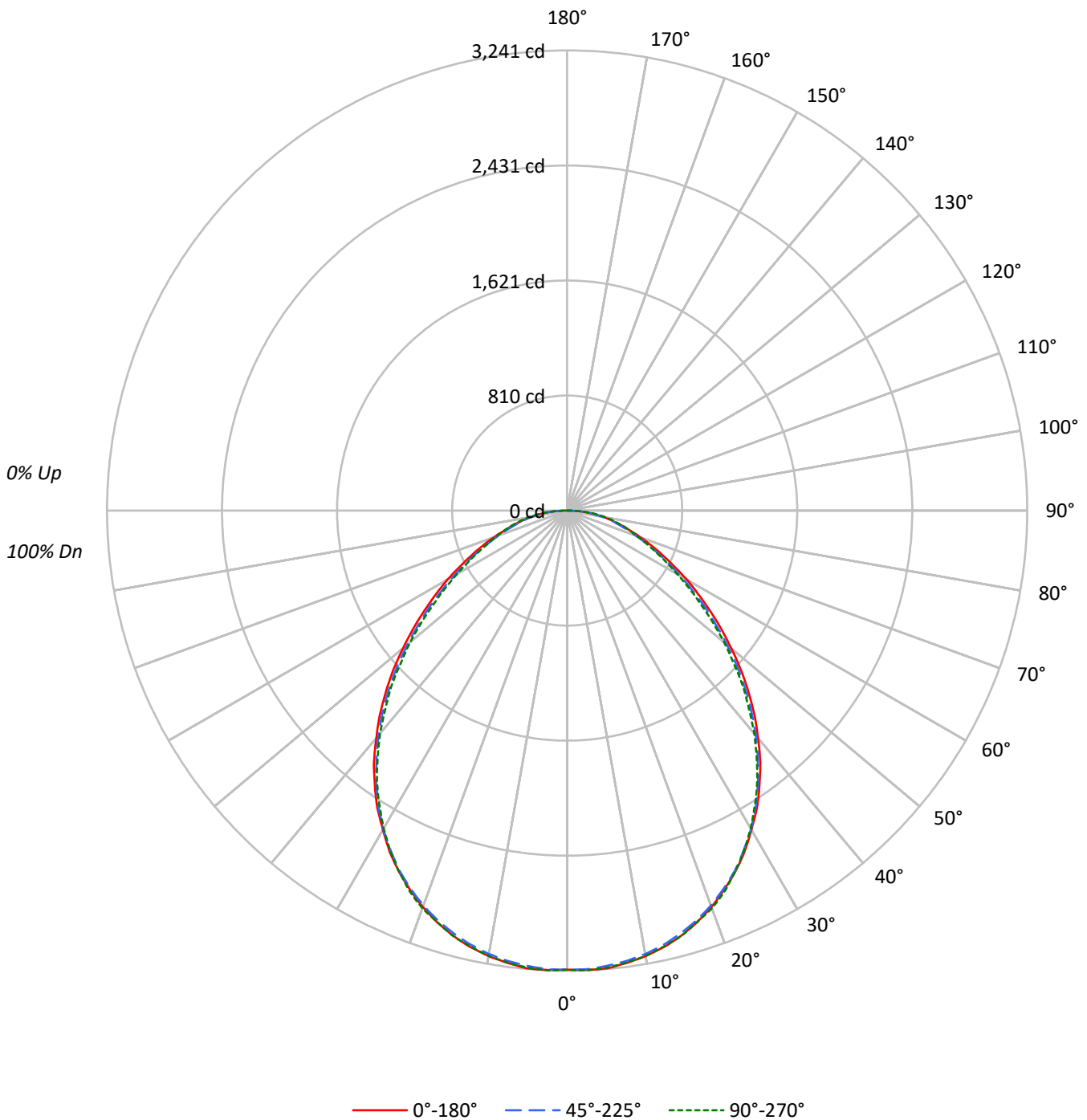
Input Watts (W): 64.025478  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P293329

CATALOG NUMBER: 24GR-LD5-85-F125-UNV-L93050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P293329

CATALOG NUMBER: 24GR-LD5-85-F125-UNV-L93050-W2A1-U-4000K

**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	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42					42			
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33					33			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30					30			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28					28			

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

	0°	45°	90°
0°	4351	4351	4351
5°	4371	4347	4364
10°	4353	4332	4352
15°	4319	4296	4322
20°	4256	4239	4269
25°	4164	4153	4162
30°	4032	4025	4015
35°	3880	3850	3835
40°	3672	3631	3601
45°	3435	3372	3331
50°	3157	3072	3020
55°	2879	2773	2692
60°	2615	2474	2410
65°	2355	2223	2185
70°	2157	2017	2073
75°	2015	1923	2065
80°	2000	1963	2156
85°	2038	2056	2350



TEST NUMBER: P293329

CATALOG NUMBER: 24GR-LD5-85-F125-UNV-L93050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.1	4.0
10°-20°	870.1	11.4
20°-30°	1285.4	16.9
30°-40°	1461.4	19.2
40°-50°	1364.7	17.9
50°-60°	1061.3	13.9
60°-70°	704.2	9.3
70°-80°	407.5	5.4
80°-90°	148.2	1.9
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°	2461.6	32.4
0°-40°	3923.0	51.6
0°-60°	6349.1	83.4
0°-90°	7609.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7609.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3234	3234	3234	3234	3234	
5°	3236	3220	3218	3224	3231	307
15°	3101	3085	3084	3083	3103	874
25°	2804	2793	2797	2791	2803	1289
35°	2362	2350	2344	2328	2335	1475
45°	1805	1791	1772	1750	1751	1391
55°	1227	1210	1182	1151	1148	1101
65°	740	717	698	685	686	739
75°	388	378	370	386	397	415
85°	132	130	133	151	152	144
90°	0	0	0	0	0	



TEST NUMBER: P293329

CATALOG NUMBER: 24GR-LD5-85-F125-UNV-L93050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3233.8	3233.8	3233.8	3233.8	3233.8
2.5°	3238.6	3229.1	3233.8	3230.3	3241.0
5°	3236.2	3219.6	3218.4	3224.3	3231.4
7.5°	3213.6	3195.8	3199.3	3199.3	3211.2
10°	3186.3	3168.4	3170.8	3172.0	3185.1
12.5°	3149.4	3131.5	3132.7	3131.5	3144.6
15°	3100.6	3085.2	3084.0	3082.8	3103.0
17.5°	3041.2	3019.7	3026.9	3028.1	3038.8
20°	2972.2	2955.5	2960.3	2959.1	2981.7
22.5°	2890.1	2878.2	2881.8	2879.4	2900.8
25°	2804.5	2792.6	2797.3	2791.4	2803.3
27.5°	2708.1	2699.8	2695.1	2691.5	2699.8
30°	2595.1	2590.4	2590.4	2574.9	2584.4
32.5°	2488.1	2472.6	2472.6	2466.7	2460.8
35°	2362.0	2350.1	2344.2	2327.5	2334.7
37.5°	2236.0	2208.6	2206.2	2193.1	2193.1
40°	2090.9	2075.4	2067.1	2052.8	2050.4
42.5°	1952.9	1937.4	1923.2	1899.4	1894.6
45°	1805.4	1791.2	1772.1	1749.5	1750.7
47.5°	1659.1	1638.9	1621.1	1593.7	1590.2
50°	1508.1	1493.8	1467.6	1443.9	1442.7
52.5°	1366.6	1344.0	1320.2	1291.6	1291.6
55°	1227.4	1209.6	1182.2	1151.3	1147.7
57.5°	1094.2	1077.5	1046.6	1024.0	1018.1
60°	971.7	947.9	919.4	900.3	895.6
62.5°	849.2	827.8	806.4	787.3	786.2
65°	739.8	717.2	698.1	685.1	686.3
67.5°	641.1	622.0	600.6	597.1	598.2
70°	548.3	528.1	512.6	520.9	526.9
72.5°	460.3	449.6	438.9	450.8	459.1
75°	387.7	378.2	369.9	386.5	397.2
77.5°	321.1	314.0	312.8	327.1	336.6
80°	258.1	249.8	253.3	270.0	278.3
82.5°	196.2	190.3	191.5	211.7	217.6
85°	132.0	129.6	133.2	151.0	152.2
87.5°	70.2	70.2	72.5	83.3	79.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)