

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: P293032

Luminaire Tested: **24GR-LD5-85-F1-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293032  
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-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8619.0 lumens  
Efficiency: N/A  
Efficacy: 134.3 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

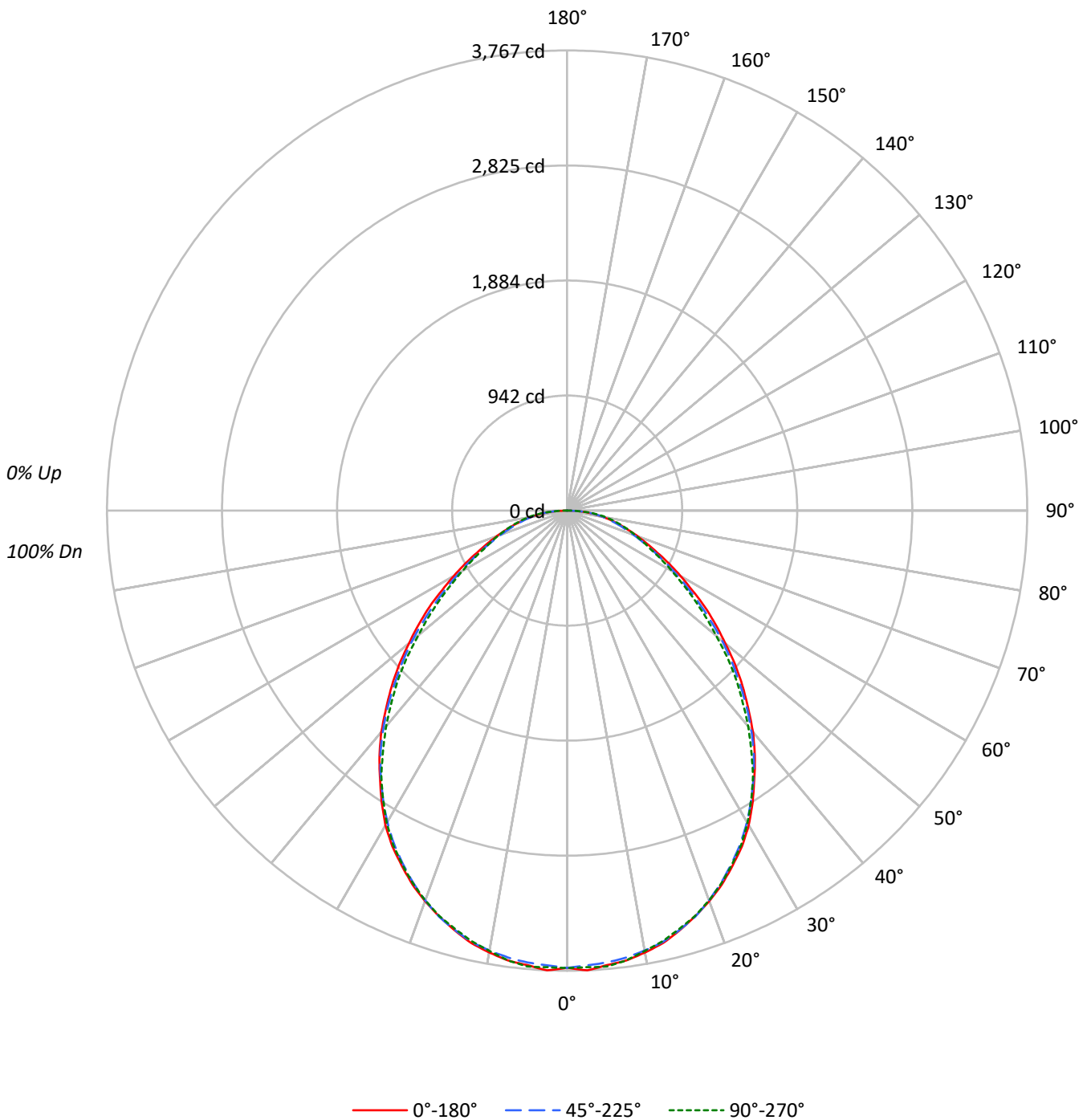
Input Watts (W): 64.17  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	5037	5037	5037
5°	5045	5016	5059
10°	5018	4996	5001
15°	4955	4950	4938
20°	4872	4862	4862
25°	4758	4732	4743
30°	4621	4574	4588
35°	4389	4368	4357
40°	4156	4118	4047
45°	3863	3795	3721
50°	3539	3461	3331
55°	3232	3086	2982
60°	2880	2741	2669
65°	2592	2456	2422
70°	2406	2259	2350
75°	2301	2200	2385
80°	2300	2300	2548
85°	2388	2414	2689



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	353.6	4.1
10°-20°	1000.6	11.6
20°-30°	1468.5	17.0
30°-40°	1660.2	19.3
40°-50°	1534.4	17.8
50°-60°	1182.2	13.7
60°-70°	782.8	9.1
70°-80°	466.0	5.4
80°-90°	170.7	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°	2822.6	32.7
0°-40°	4482.9	52.0
0°-60°	7199.5	83.5
0°-90°	8619.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8619.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3744	3744	3744	3744	3744	
5°	3735	3735	3714	3715	3746	355
15°	3557	3550	3554	3552	3545	1003
25°	3205	3196	3188	3184	3195	1476
35°	2672	2668	2660	2647	2652	1672
45°	2030	2016	1995	1959	1956	1564
55°	1378	1349	1316	1280	1271	1229
65°	814	802	772	764	761	816
75°	443	432	423	443	459	472
85°	155	146	156	172	174	164
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3743.9	3743.9	3743.9	3743.9	3743.9
2.5°	3767.0	3747.4	3726.1	3726.1	3742.1
5°	3735.0	3735.0	3713.7	3715.4	3745.7
7.5°	3715.4	3704.8	3690.6	3690.6	3713.7
10°	3672.8	3663.9	3656.8	3653.2	3660.3
12.5°	3626.6	3612.3	3617.7	3612.3	3610.6
15°	3557.2	3550.1	3553.7	3551.9	3544.8
17.5°	3482.6	3479.0	3486.1	3473.7	3479.0
20°	3402.6	3391.9	3395.5	3388.3	3395.5
22.5°	3311.9	3304.8	3295.9	3287.0	3301.2
25°	3205.2	3196.3	3187.5	3183.9	3194.6
27.5°	3098.6	3084.4	3071.9	3068.4	3084.4
30°	2974.1	2958.1	2943.9	2940.4	2952.8
32.5°	2826.6	2823.0	2805.3	2798.1	2803.5
35°	2671.9	2668.4	2659.5	2647.0	2652.4
37.5°	2524.4	2522.6	2510.1	2488.8	2474.6
40°	2366.2	2353.7	2344.8	2314.6	2303.9
42.5°	2191.9	2188.4	2172.4	2138.6	2126.2
45°	2030.2	2015.9	1994.6	1959.1	1955.5
47.5°	1863.1	1843.5	1823.9	1779.5	1777.7
50°	1690.6	1676.4	1653.3	1608.8	1591.1
52.5°	1530.6	1511.1	1479.1	1436.4	1427.5
55°	1377.7	1349.3	1315.5	1280.0	1271.1
57.5°	1214.2	1201.7	1160.9	1132.4	1121.7
60°	1070.2	1059.5	1018.6	992.0	992.0
62.5°	940.4	924.4	888.9	871.1	871.1
65°	814.2	801.8	771.5	764.4	760.9
67.5°	705.8	689.8	668.4	666.6	675.5
70°	611.5	592.0	574.2	592.0	597.3
72.5°	522.7	510.2	494.2	517.3	528.0
75°	442.7	432.0	423.1	442.7	458.7
77.5°	369.8	359.1	359.1	380.4	394.7
80°	296.9	289.8	296.9	314.7	328.9
82.5°	227.5	222.2	231.1	248.9	257.8
85°	154.7	145.8	156.4	172.4	174.2
87.5°	72.9	71.1	78.2	88.9	87.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)