

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: P293160

Luminaire Tested: **24GR-LD5-85-F1-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293160  
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-L92765-W2A1-U-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7867.0 lumens  
Efficiency: N/A  
Efficacy: 120.5 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

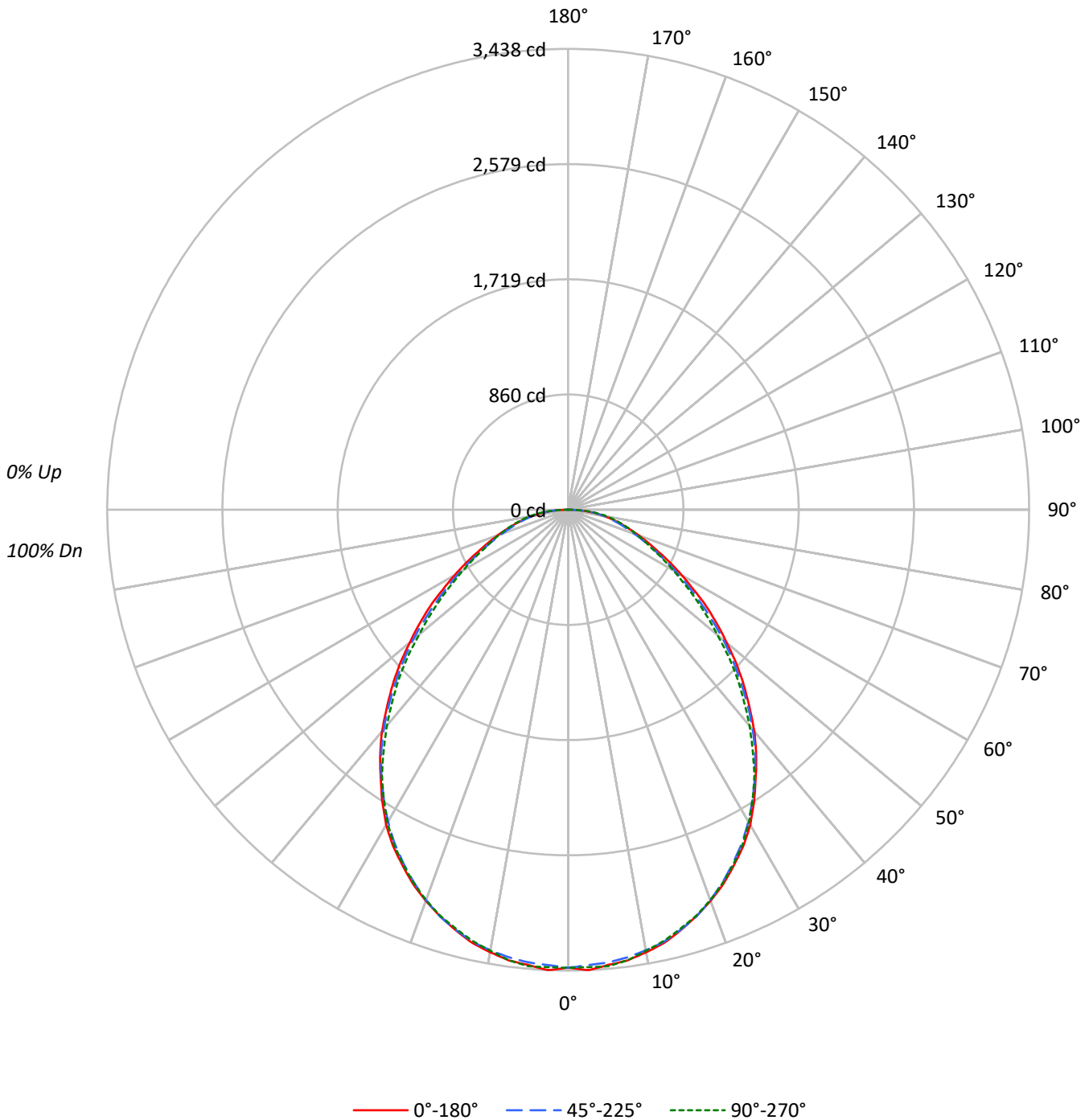
Input Watts (W): 65.286  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4598	4598	4598
5°	4604	4578	4618
10°	4580	4560	4565
15°	4523	4518	4507
20°	4447	4438	4438
25°	4343	4319	4329
30°	4218	4175	4187
35°	4006	3987	3976
40°	3793	3759	3694
45°	3526	3464	3396
50°	3230	3159	3040
55°	2950	2817	2722
60°	2629	2502	2436
65°	2366	2242	2211
70°	2196	2062	2145
75°	2100	2008	2176
80°	2100	2100	2326
85°	2180	2205	2455



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	322.7	4.1
10°-20°	913.3	11.6
20°-30°	1340.4	17.0
30°-40°	1515.4	19.3
40°-50°	1400.5	17.8
50°-60°	1079.0	13.7
60°-70°	714.5	9.1
70°-80°	425.3	5.4
80°-90°	155.8	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°	2576.4	32.7
0°-40°	4091.7	52.0
0°-60°	6571.3	83.5
0°-90°	7867.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7867.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3417	3417	3417	3417	3417	
5°	3409	3409	3390	3391	3419	324
15°	3247	3240	3244	3242	3236	915
25°	2926	2918	2909	2906	2916	1347
35°	2439	2436	2427	2416	2421	1526
45°	1853	1840	1821	1788	1785	1427
55°	1258	1232	1201	1168	1160	1122
65°	743	732	704	698	694	745
75°	404	394	386	404	419	431
85°	141	133	143	157	159	150
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3417.2	3417.2	3417.2	3417.2	3417.2
2.5°	3438.3	3420.5	3401.0	3401.0	3415.6
5°	3409.1	3409.1	3389.7	3391.3	3418.9
7.5°	3391.3	3381.5	3368.6	3368.6	3389.7
10°	3352.3	3344.2	3337.7	3334.5	3341.0
12.5°	3310.1	3297.2	3302.0	3297.2	3295.5
15°	3246.9	3240.4	3243.6	3242.0	3235.5
17.5°	3178.7	3175.5	3182.0	3170.6	3175.5
20°	3105.7	3096.0	3099.2	3092.7	3099.2
22.5°	3022.9	3016.5	3008.3	3000.2	3013.2
25°	2925.6	2917.5	2909.4	2906.1	2915.8
27.5°	2828.2	2815.2	2803.9	2800.6	2815.2
30°	2714.6	2700.0	2687.1	2683.8	2695.2
32.5°	2580.0	2576.7	2560.5	2554.0	2558.9
35°	2438.8	2435.6	2427.4	2416.1	2420.9
37.5°	2304.1	2302.5	2291.1	2271.7	2258.7
40°	2159.7	2148.3	2140.2	2112.7	2102.9
42.5°	2000.7	1997.4	1982.8	1952.0	1940.7
45°	1853.0	1840.1	1820.6	1788.1	1784.9
47.5°	1700.5	1682.7	1664.8	1624.2	1622.6
50°	1543.1	1530.1	1509.0	1468.5	1452.2
52.5°	1397.1	1379.2	1350.0	1311.1	1303.0
55°	1257.5	1231.6	1200.7	1168.3	1160.2
57.5°	1108.2	1096.9	1059.6	1033.6	1023.9
60°	976.8	967.1	929.8	905.4	905.4
62.5°	858.4	843.8	811.3	795.1	795.1
65°	743.2	731.8	704.2	697.7	694.5
67.5°	644.2	629.6	610.1	608.5	616.6
70°	558.2	540.3	524.1	540.3	545.2
72.5°	477.1	465.7	451.1	472.2	481.9
75°	404.0	394.3	386.2	404.0	418.6
77.5°	337.5	327.8	327.8	347.2	360.2
80°	271.0	264.5	271.0	287.2	300.2
82.5°	207.7	202.8	210.9	227.2	235.3
85°	141.2	133.1	142.8	157.4	159.0
87.5°	66.5	64.9	71.4	81.1	79.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)