

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: P293158

Luminaire Tested: **24GR-LD5-85-F1-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293158  
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-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7781.0 lumens  
Efficiency: N/A  
Efficacy: 121.3 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

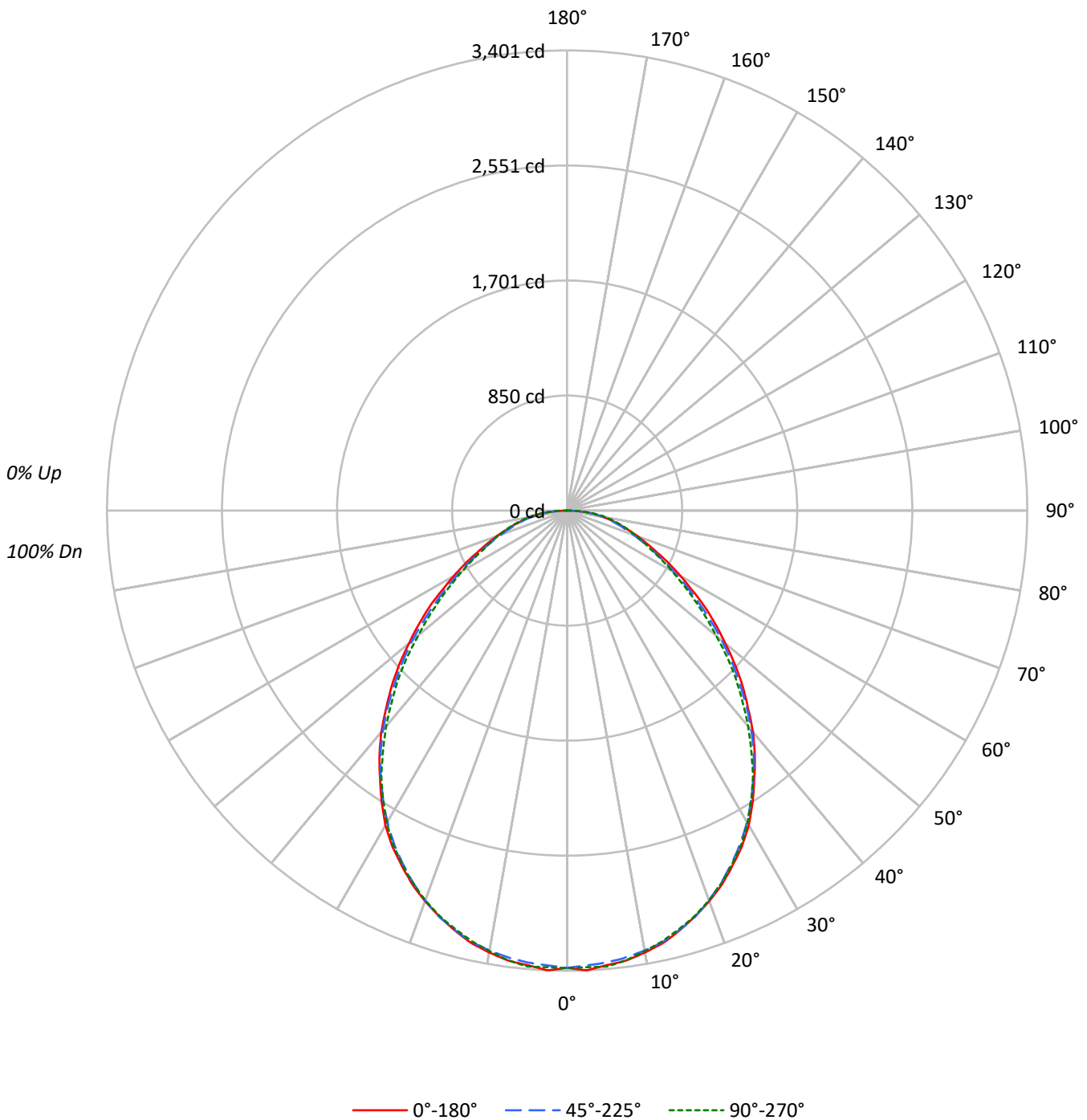
Input Watts (W): 64.17  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4548	4548	4548
5°	4554	4528	4567
10°	4530	4510	4515
15°	4473	4469	4458
20°	4398	4389	4389
25°	4296	4272	4282
30°	4172	4129	4142
35°	3962	3944	3933
40°	3752	3718	3653
45°	3487	3426	3359
50°	3195	3124	3007
55°	2918	2786	2692
60°	2600	2475	2410
65°	2340	2217	2187
70°	2172	2039	2121
75°	2077	1986	2153
80°	2077	2077	2300
85°	2155	2180	2428



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	319.2	4.1
10°-20°	903.3	11.6
20°-30°	1325.7	17.0
30°-40°	1498.8	19.3
40°-50°	1385.2	17.8
50°-60°	1067.2	13.7
60°-70°	706.7	9.1
70°-80°	420.7	5.4
80°-90°	154.1	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°	2548.2	32.7
0°-40°	4047.0	52.0
0°-60°	6499.5	83.5
0°-90°	7781.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7781.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3380	3380	3380	3380	3380	
5°	3372	3372	3353	3354	3382	320
15°	3211	3205	3208	3207	3200	905
25°	2894	2886	2878	2874	2884	1332
35°	2412	2409	2401	2390	2394	1509
45°	1833	1820	1801	1769	1765	1412
55°	1244	1218	1188	1156	1148	1109
65°	735	724	696	690	687	737
75°	400	390	382	400	414	426
85°	140	132	141	156	157	148
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3379.9	3379.9	3379.9	3379.9	3379.9
2.5°	3400.7	3383.1	3363.8	3363.8	3378.3
5°	3371.9	3371.9	3352.6	3354.2	3381.5
7.5°	3354.2	3344.6	3331.7	3331.7	3352.6
10°	3315.7	3307.7	3301.2	3298.0	3304.5
12.5°	3274.0	3261.1	3265.9	3261.1	3259.5
15°	3211.4	3204.9	3208.2	3206.6	3200.1
17.5°	3144.0	3140.8	3147.2	3135.9	3140.8
20°	3071.7	3062.1	3065.3	3058.9	3065.3
22.5°	2989.9	2983.5	2975.5	2967.4	2980.3
25°	2893.6	2885.6	2877.6	2874.3	2884.0
27.5°	2797.3	2784.5	2773.2	2770.0	2784.5
30°	2685.0	2670.5	2657.7	2654.5	2665.7
32.5°	2551.8	2548.6	2532.5	2526.1	2530.9
35°	2412.1	2408.9	2400.9	2389.7	2394.5
37.5°	2278.9	2277.3	2266.1	2246.8	2234.0
40°	2136.1	2124.9	2116.8	2089.6	2079.9
42.5°	1978.8	1975.6	1961.2	1930.7	1919.4
45°	1832.8	1819.9	1800.7	1768.6	1765.4
47.5°	1681.9	1664.3	1646.6	1606.5	1604.9
50°	1526.2	1513.4	1492.5	1452.4	1436.4
52.5°	1381.8	1364.1	1335.3	1296.7	1288.7
55°	1243.8	1218.1	1187.6	1155.5	1147.5
57.5°	1096.1	1084.9	1048.0	1022.3	1012.7
60°	966.1	956.5	919.6	895.5	895.5
62.5°	849.0	834.5	802.4	786.4	786.4
65°	735.0	723.8	696.5	690.1	686.9
67.5°	637.1	622.7	603.4	601.8	609.9
70°	552.1	534.4	518.4	534.4	539.2
72.5°	471.8	460.6	446.2	467.0	476.7
75°	399.6	390.0	382.0	399.6	414.1
77.5°	333.8	324.2	324.2	343.4	356.3
80°	268.0	261.6	268.0	284.1	296.9
82.5°	205.4	200.6	208.6	224.7	232.7
85°	139.6	131.6	141.2	155.7	157.3
87.5°	65.8	64.2	70.6	80.2	78.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)