

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: P292943

Luminaire Tested: **24GR-LD5-64-F1-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P292943  
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-LD5-64-F1-UNV-L83050-W2A1-U-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH F1 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6783.0 lumens  
Efficiency: N/A  
Efficacy: 140.8 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

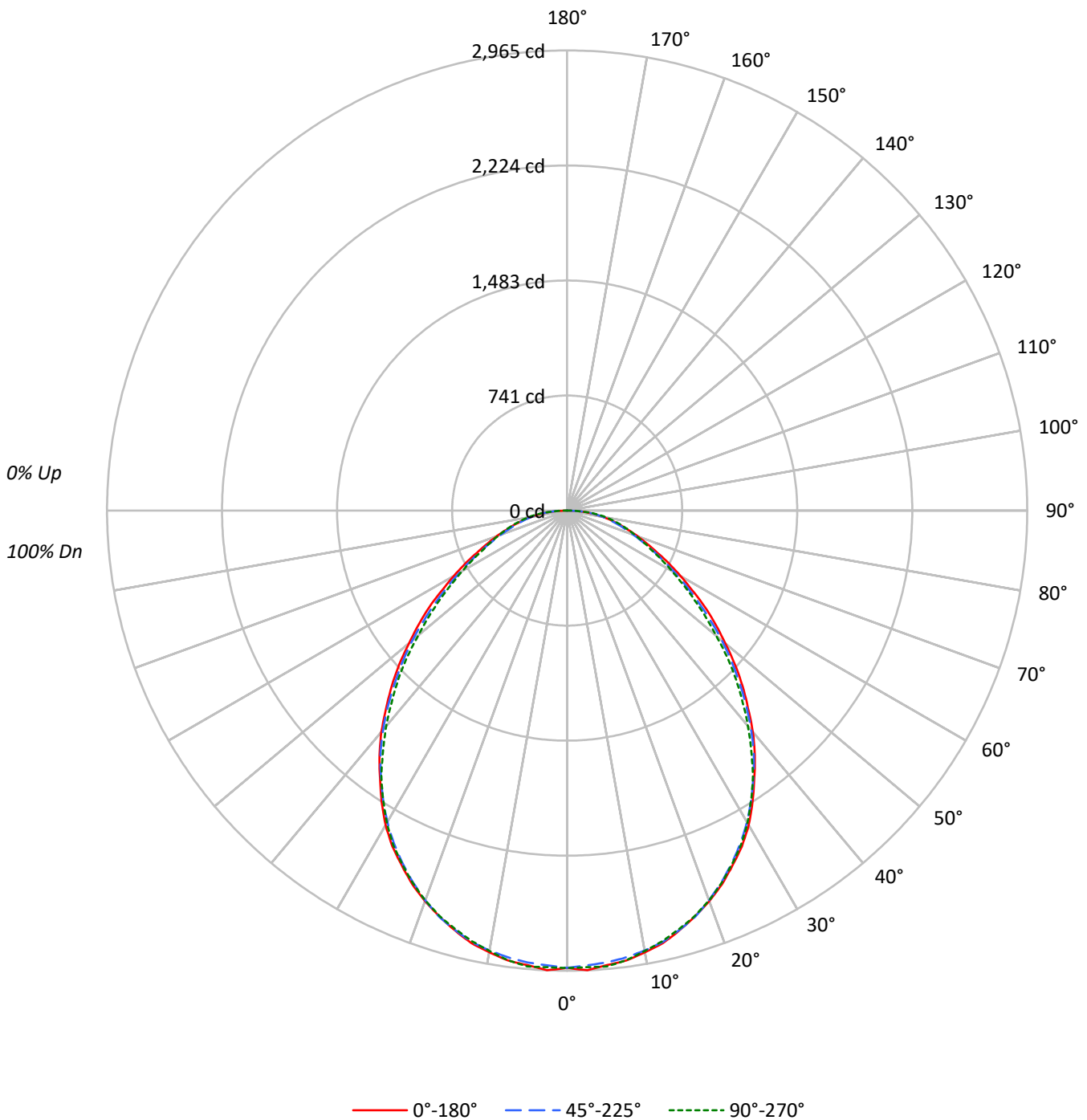
Input Watts (W): 48.174  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3964	3964	3964
5°	3970	3947	3981
10°	3949	3932	3936
15°	3900	3896	3886
20°	3834	3826	3826
25°	3745	3724	3732
30°	3636	3599	3610
35°	3454	3438	3429
40°	3271	3241	3185
45°	3040	2987	2928
50°	2785	2723	2621
55°	2544	2429	2346
60°	2266	2157	2101
65°	2040	1933	1906
70°	1893	1778	1849
75°	1811	1731	1877
80°	1810	1810	2005
85°	1879	1900	2117



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.3	4.1
10°-20°	787.4	11.6
20°-30°	1155.7	17.0
30°-40°	1306.6	19.3
40°-50°	1207.5	17.8
50°-60°	930.4	13.7
60°-70°	616.1	9.1
70°-80°	366.7	5.4
80°-90°	134.4	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°	2221.4	32.7
0°-40°	3527.9	52.0
0°-60°	5665.8	83.5
0°-90°	6783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6783.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2946	2946	2946	2946	2946	
5°	2939	2939	2923	2924	2948	279
15°	2800	2794	2797	2795	2790	789
25°	2522	2516	2508	2506	2514	1161
35°	2103	2100	2093	2083	2087	1316
45°	1598	1586	1570	1542	1539	1231
55°	1084	1062	1035	1007	1000	967
65°	641	631	607	602	599	642
75°	348	340	333	348	361	371
85°	122	115	123	136	137	129
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2946.4	2946.4	2946.4	2946.4	2946.4
2.5°	2964.6	2949.2	2932.4	2932.4	2945.0
5°	2939.4	2939.4	2922.6	2924.0	2947.8
7.5°	2924.0	2915.6	2904.4	2904.4	2922.6
10°	2890.4	2883.4	2877.8	2875.0	2880.6
12.5°	2854.0	2842.8	2847.0	2842.8	2841.4
15°	2799.5	2793.9	2796.7	2795.3	2789.7
17.5°	2740.7	2737.9	2743.5	2733.7	2737.9
20°	2677.8	2669.4	2672.2	2666.6	2672.2
22.5°	2606.4	2600.8	2593.8	2586.8	2598.0
25°	2522.5	2515.5	2508.5	2505.7	2514.1
27.5°	2438.5	2427.3	2417.5	2414.7	2427.3
30°	2340.6	2328.0	2316.8	2314.0	2323.8
32.5°	2224.5	2221.7	2207.7	2202.1	2206.3
35°	2102.8	2100.0	2093.0	2083.2	2087.4
37.5°	1986.6	1985.2	1975.4	1958.7	1947.5
40°	1862.1	1852.3	1845.3	1821.5	1813.2
42.5°	1725.0	1722.2	1709.6	1683.0	1673.2
45°	1597.7	1586.5	1569.7	1541.7	1538.9
47.5°	1466.2	1450.8	1435.4	1400.4	1399.0
50°	1330.5	1319.3	1301.1	1266.1	1252.1
52.5°	1204.6	1189.2	1164.0	1130.4	1123.4
55°	1084.3	1061.9	1035.3	1007.3	1000.3
57.5°	955.5	945.7	913.6	891.2	882.8
60°	842.2	833.8	801.6	780.7	780.7
62.5°	740.1	727.5	699.5	685.5	685.5
65°	640.8	631.0	607.2	601.6	598.8
67.5°	555.4	542.8	526.0	524.6	531.6
70°	481.3	465.9	451.9	465.9	470.1
72.5°	411.3	401.5	388.9	407.1	415.5
75°	348.4	340.0	333.0	348.4	361.0
77.5°	291.0	282.6	282.6	299.4	310.6
80°	233.6	228.0	233.6	247.6	258.8
82.5°	179.1	174.9	181.9	195.9	202.9
85°	121.7	114.7	123.1	135.7	137.1
87.5°	57.4	56.0	61.6	70.0	68.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)