

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: P293155

Luminaire Tested: **24GR-LD5-85-F1-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293155
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-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7321.0 lumens
Efficiency: N/A
Efficacy: 115.9 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

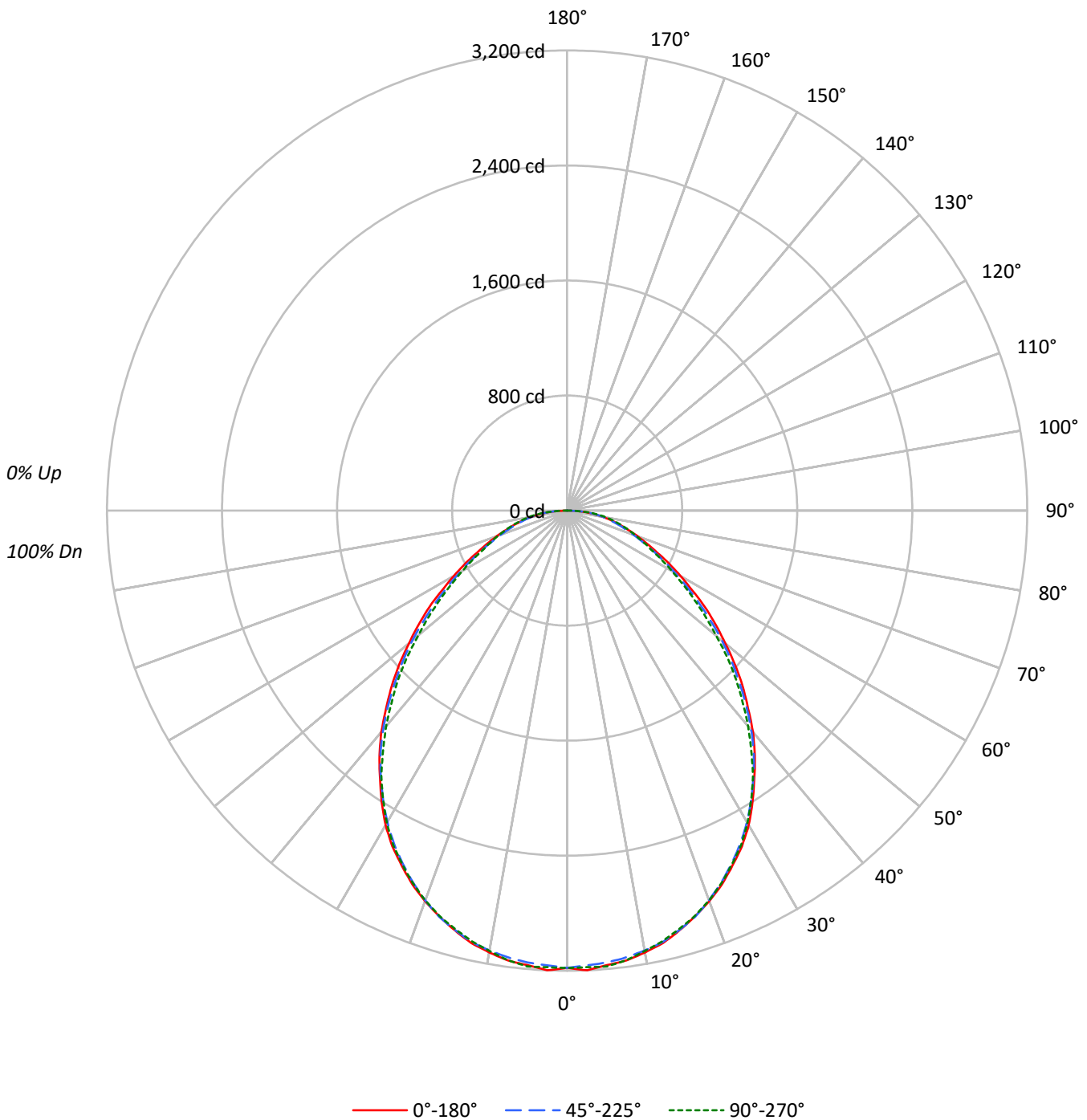
Input Watts (W): 63.147
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4279	4279	4279
5°	4285	4260	4297
10°	4262	4244	4248
15°	4209	4205	4194
20°	4138	4130	4130
25°	4042	4019	4028
30°	3925	3885	3897
35°	3728	3710	3700
40°	3530	3498	3437
45°	3281	3224	3161
50°	3006	2939	2829
55°	2745	2621	2533
60°	2446	2328	2267
65°	2202	2086	2058
70°	2043	1919	1996
75°	1955	1868	2025
80°	1954	1954	2165
85°	2029	2052	2285



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.3	4.1
10°-20°	849.9	11.6
20°-30°	1247.3	17.0
30°-40°	1410.2	19.3
40°-50°	1303.3	17.8
50°-60°	1004.2	13.7
60°-70°	664.9	9.1
70°-80°	395.8	5.4
80°-90°	145.0	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°	2397.6	32.7
0°-40°	3807.8	52.0
0°-60°	6115.2	83.5
0°-90°	7321.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7321.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3180	3180	3180	3180	3180	
5°	3172	3172	3154	3156	3182	301
15°	3022	3016	3018	3017	3011	852
25°	2722	2715	2707	2704	2714	1254
35°	2270	2266	2259	2248	2253	1420
45°	1724	1712	1694	1664	1661	1328
55°	1170	1146	1117	1087	1080	1044
65°	692	681	655	649	646	693
75°	376	367	359	376	390	401
85°	131	124	133	146	148	140
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3180.1	3180.1	3180.1	3180.1	3180.1
2.5°	3199.7	3183.1	3165.0	3165.0	3178.6
5°	3172.5	3172.5	3154.4	3155.9	3181.6
7.5°	3155.9	3146.8	3134.8	3134.8	3154.4
10°	3119.7	3112.1	3106.1	3103.1	3109.1
12.5°	3080.4	3068.3	3072.9	3068.3	3066.8
15°	3021.5	3015.5	3018.5	3017.0	3010.9
17.5°	2958.1	2955.1	2961.1	2950.5	2955.1
20°	2890.1	2881.1	2884.1	2878.1	2884.1
22.5°	2813.1	2807.1	2799.5	2792.0	2804.1
25°	2722.5	2715.0	2707.4	2704.4	2713.5
27.5°	2631.9	2619.9	2609.3	2606.3	2619.9
30°	2526.2	2512.6	2500.6	2497.5	2508.1
32.5°	2400.9	2397.9	2382.8	2376.7	2381.3
35°	2269.5	2266.5	2259.0	2248.4	2252.9
37.5°	2144.2	2142.7	2132.1	2114.0	2101.9
40°	2009.8	1999.2	1991.7	1966.0	1957.0
42.5°	1861.8	1858.8	1845.2	1816.5	1806.0
45°	1724.4	1712.3	1694.2	1664.0	1661.0
47.5°	1582.5	1565.9	1549.3	1511.5	1510.0
50°	1436.0	1423.9	1404.3	1366.6	1351.5
52.5°	1300.1	1283.5	1256.3	1220.1	1212.5
55°	1170.3	1146.1	1117.4	1087.2	1079.7
57.5°	1031.3	1020.8	986.0	961.9	952.8
60°	909.0	900.0	865.2	842.6	842.6
62.5°	798.8	785.2	755.0	739.9	739.9
65°	691.6	681.0	655.3	649.3	646.3
67.5°	599.5	585.9	567.8	566.3	573.8
70°	519.4	502.8	487.7	502.8	507.4
72.5°	443.9	433.4	419.8	439.4	448.5
75°	376.0	366.9	359.4	376.0	389.6
77.5°	314.1	305.0	305.0	323.1	335.2
80°	252.2	246.1	252.2	267.3	279.4
82.5°	193.3	188.8	196.3	211.4	219.0
85°	131.4	123.8	132.9	146.5	148.0
87.5°	61.9	60.4	66.4	75.5	74.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)