

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: P293076

Luminaire Tested: **24GR-LD5-85-F1-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293076
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-L93050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7046.0 lumens
Efficiency: N/A
Efficacy: 110.8 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

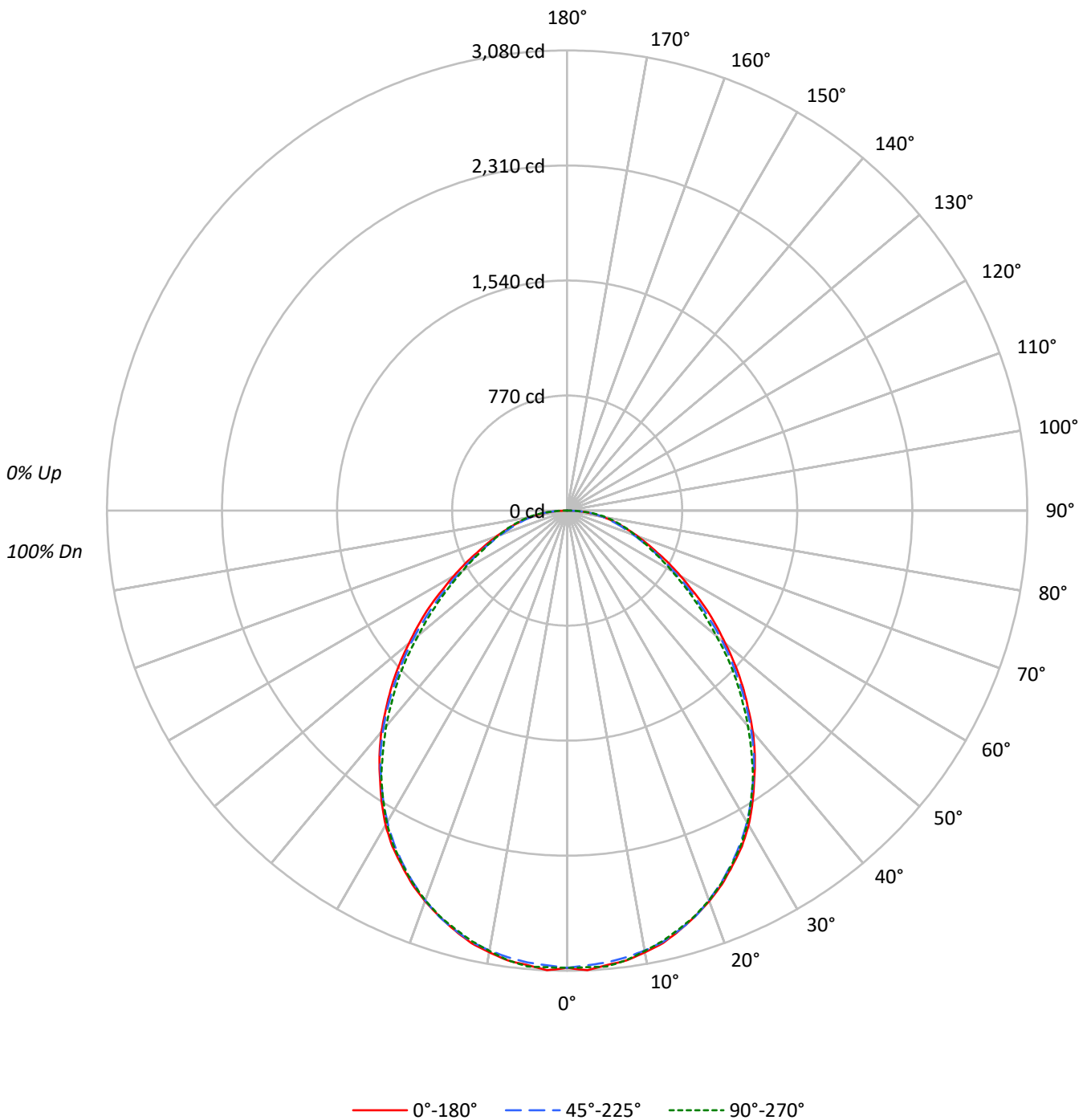
Input Watts (W): 63.588657
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4118	4118	4118
5°	4124	4100	4136
10°	4102	4084	4088
15°	4051	4047	4036
20°	3983	3975	3975
25°	3890	3868	3877
30°	3777	3739	3750
35°	3588	3571	3562
40°	3397	3367	3308
45°	3158	3103	3042
50°	2893	2829	2723
55°	2642	2523	2438
60°	2354	2241	2182
65°	2119	2008	1980
70°	1967	1847	1921
75°	1881	1798	1949
80°	1881	1881	2084
85°	1951	1974	2198



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.0	4.1
10°-20°	818.0	11.6
20°-30°	1200.5	17.0
30°-40°	1357.2	19.3
40°-50°	1254.4	17.8
50°-60°	966.4	13.7
60°-70°	639.9	9.1
70°-80°	381.0	5.4
80°-90°	139.6	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°	2307.5	32.7
0°-40°	3664.7	52.0
0°-60°	5885.5	83.5
0°-90°	7046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7046.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3061	3061	3061	3061	3061	
5°	3053	3053	3036	3037	3062	290
15°	2908	2902	2905	2904	2898	820
25°	2620	2613	2606	2603	2612	1207
35°	2184	2181	2174	2164	2168	1367
45°	1660	1648	1631	1602	1599	1278
55°	1126	1103	1075	1046	1039	1005
65°	666	655	631	625	622	667
75°	362	353	346	362	375	386
85°	126	119	128	141	142	134
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3060.6	3060.6	3060.6	3060.6	3060.6
2.5°	3079.5	3063.5	3046.1	3046.1	3059.2
5°	3053.3	3053.3	3035.9	3037.4	3062.1
7.5°	3037.4	3028.6	3017.0	3017.0	3035.9
10°	3002.5	2995.2	2989.4	2986.5	2992.3
12.5°	2964.7	2953.1	2957.4	2953.1	2951.6
15°	2908.0	2902.2	2905.1	2903.7	2897.8
17.5°	2847.0	2844.1	2849.9	2839.7	2844.1
20°	2781.6	2772.9	2775.8	2770.0	2775.8
22.5°	2707.5	2701.7	2694.4	2687.1	2698.7
25°	2620.3	2613.0	2605.7	2602.8	2611.6
27.5°	2533.1	2521.4	2511.3	2508.4	2521.4
30°	2431.3	2418.3	2406.6	2403.7	2413.9
32.5°	2310.7	2307.8	2293.3	2287.5	2291.8
35°	2184.3	2181.4	2174.1	2163.9	2168.3
37.5°	2063.7	2062.2	2052.0	2034.6	2023.0
40°	1934.3	1924.1	1916.9	1892.2	1883.5
42.5°	1791.9	1789.0	1775.9	1748.3	1738.1
45°	1659.6	1648.0	1630.6	1601.5	1598.6
47.5°	1523.0	1507.1	1491.1	1454.7	1453.3
50°	1382.1	1370.4	1351.6	1315.2	1300.7
52.5°	1251.3	1235.3	1209.1	1174.3	1167.0
55°	1126.3	1103.0	1075.4	1046.4	1039.1
57.5°	992.6	982.4	949.0	925.7	917.0
60°	874.9	866.2	832.7	810.9	810.9
62.5°	768.8	755.7	726.6	712.1	712.1
65°	665.6	655.4	630.7	624.9	622.0
67.5°	577.0	563.9	546.4	545.0	552.2
70°	499.9	483.9	469.4	483.9	488.3
72.5°	427.3	417.1	404.0	422.9	431.6
75°	361.9	353.1	345.9	361.9	374.9
77.5°	302.3	293.6	293.6	311.0	322.6
80°	242.7	236.9	242.7	257.2	268.9
82.5°	186.0	181.7	188.9	203.5	210.7
85°	126.4	119.2	127.9	141.0	142.4
87.5°	59.6	58.1	63.9	72.7	71.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)