

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: P293147

Luminaire Tested: **24GR-LD5-72-F1-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293147
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-LD5-72-F1-UNV-L92765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6551.0 lumens
Efficiency: N/A
Efficacy: 122.3 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

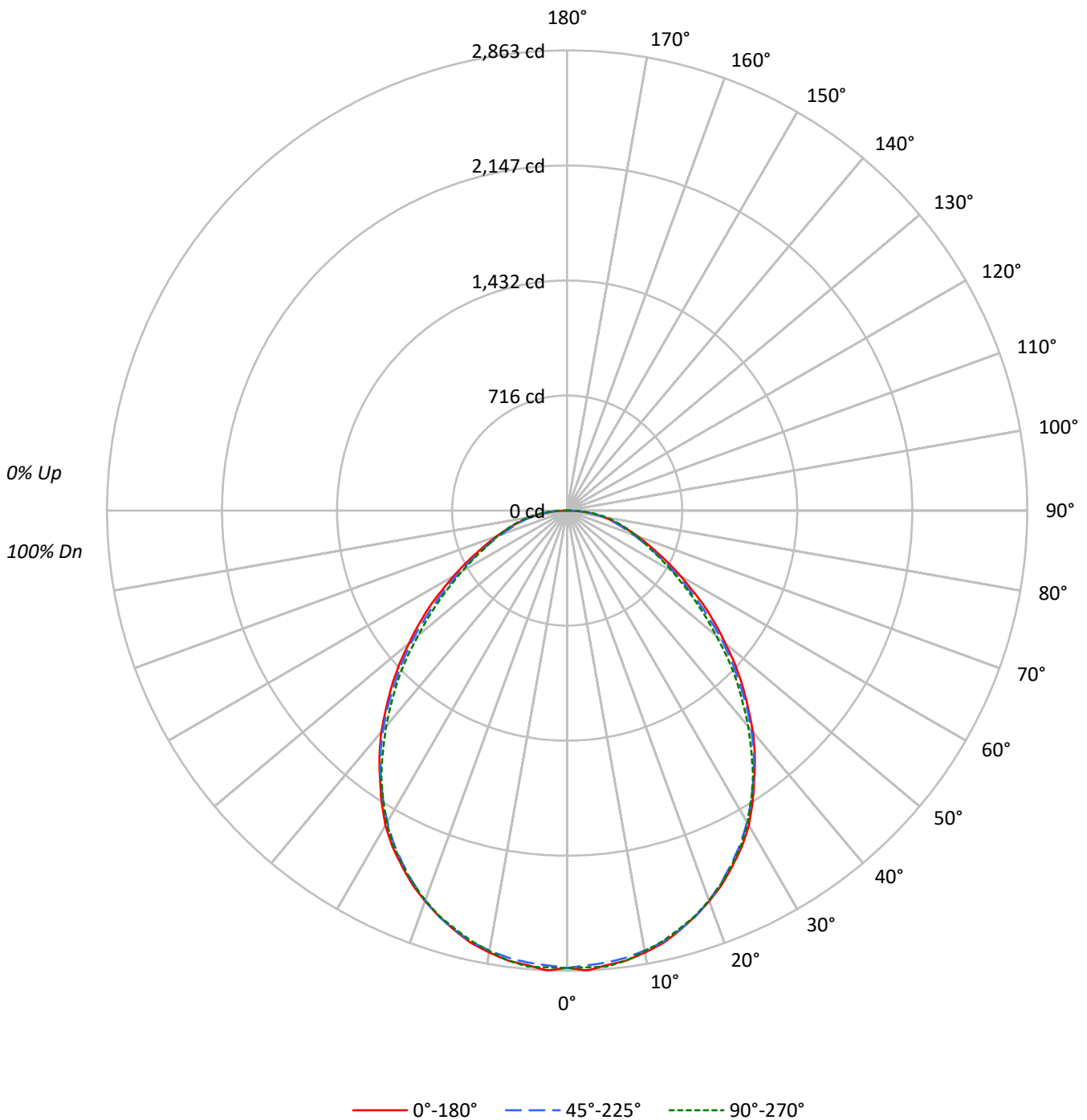
Input Watts (W): 53.568
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3829	3829	3829
5°	3834	3812	3845
10°	3814	3797	3801
15°	3766	3762	3753
20°	3703	3695	3695
25°	3617	3597	3605
30°	3512	3476	3487
35°	3336	3320	3311
40°	3159	3130	3076
45°	2936	2885	2828
50°	2690	2630	2531
55°	2457	2346	2266
60°	2189	2083	2029
65°	1970	1867	1841
70°	1828	1717	1786
75°	1749	1672	1812
80°	1748	1748	1937
85°	1815	1836	2044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	268.7	4.1
10°-20°	760.5	11.6
20°-30°	1116.2	17.0
30°-40°	1261.9	19.3
40°-50°	1166.2	17.8
50°-60°	898.5	13.7
60°-70°	595.0	9.1
70°-80°	354.2	5.4
80°-90°	129.8	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°	2145.4	32.7
0°-40°	3407.3	52.0
0°-60°	5472.1	83.5
0°-90°	6551.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6551.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2846	2846	2846	2846	2846	
5°	2839	2839	2823	2824	2847	270
15°	2704	2698	2701	2700	2694	762
25°	2436	2429	2423	2420	2428	1122
35°	2031	2028	2021	2012	2016	1271
45°	1543	1532	1516	1489	1486	1189
55°	1047	1026	1000	973	966	934
65°	619	609	586	581	578	620
75°	336	328	322	336	349	359
85°	118	111	119	131	132	125
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2845.6	2845.6	2845.6	2845.6	2845.6
2.5°	2863.2	2848.3	2832.1	2832.1	2844.2
5°	2838.8	2838.8	2822.6	2824.0	2847.0
7.5°	2824.0	2815.9	2805.1	2805.1	2822.6
10°	2791.6	2784.8	2779.4	2776.7	2782.1
12.5°	2756.4	2745.6	2749.7	2745.6	2744.3
15°	2703.7	2698.3	2701.0	2699.7	2694.3
17.5°	2647.0	2644.3	2649.7	2640.2	2644.3
20°	2586.2	2578.1	2580.8	2575.4	2580.8
22.5°	2517.3	2511.9	2505.1	2498.3	2509.2
25°	2436.2	2429.4	2422.7	2420.0	2428.1
27.5°	2355.1	2344.3	2334.9	2332.1	2344.3
30°	2260.5	2248.4	2237.6	2234.9	2244.3
32.5°	2148.4	2145.7	2132.2	2126.8	2130.8
35°	2030.8	2028.1	2021.4	2011.9	2016.0
37.5°	1918.7	1917.3	1907.9	1891.7	1880.9
40°	1798.4	1789.0	1782.2	1759.2	1751.1
42.5°	1666.0	1663.3	1651.2	1625.5	1616.0
45°	1543.1	1532.2	1516.0	1489.0	1486.3
47.5°	1416.0	1401.2	1386.3	1352.5	1351.2
50°	1285.0	1274.2	1256.6	1222.8	1209.3
52.5°	1163.4	1148.5	1124.2	1091.8	1085.0
55°	1047.2	1025.6	999.9	972.9	966.1
57.5°	922.9	913.4	882.3	860.7	852.6
60°	813.4	805.3	774.2	754.0	754.0
62.5°	714.8	702.6	675.6	662.1	662.1
65°	618.8	609.4	586.4	581.0	578.3
67.5°	536.4	524.3	508.0	506.7	513.5
70°	464.8	449.9	436.4	449.9	454.0
72.5°	397.2	387.8	375.6	393.2	401.3
75°	336.4	328.3	321.6	336.4	348.6
77.5°	281.0	272.9	272.9	289.2	300.0
80°	225.6	220.2	225.6	239.2	250.0
82.5°	173.0	168.9	175.7	189.2	195.9
85°	117.6	110.8	118.9	131.1	132.4
87.5°	55.4	54.0	59.5	67.6	66.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)