

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: P293575

Luminaire Tested: **24GR-LD5-72-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293575
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-A-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6218.0 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

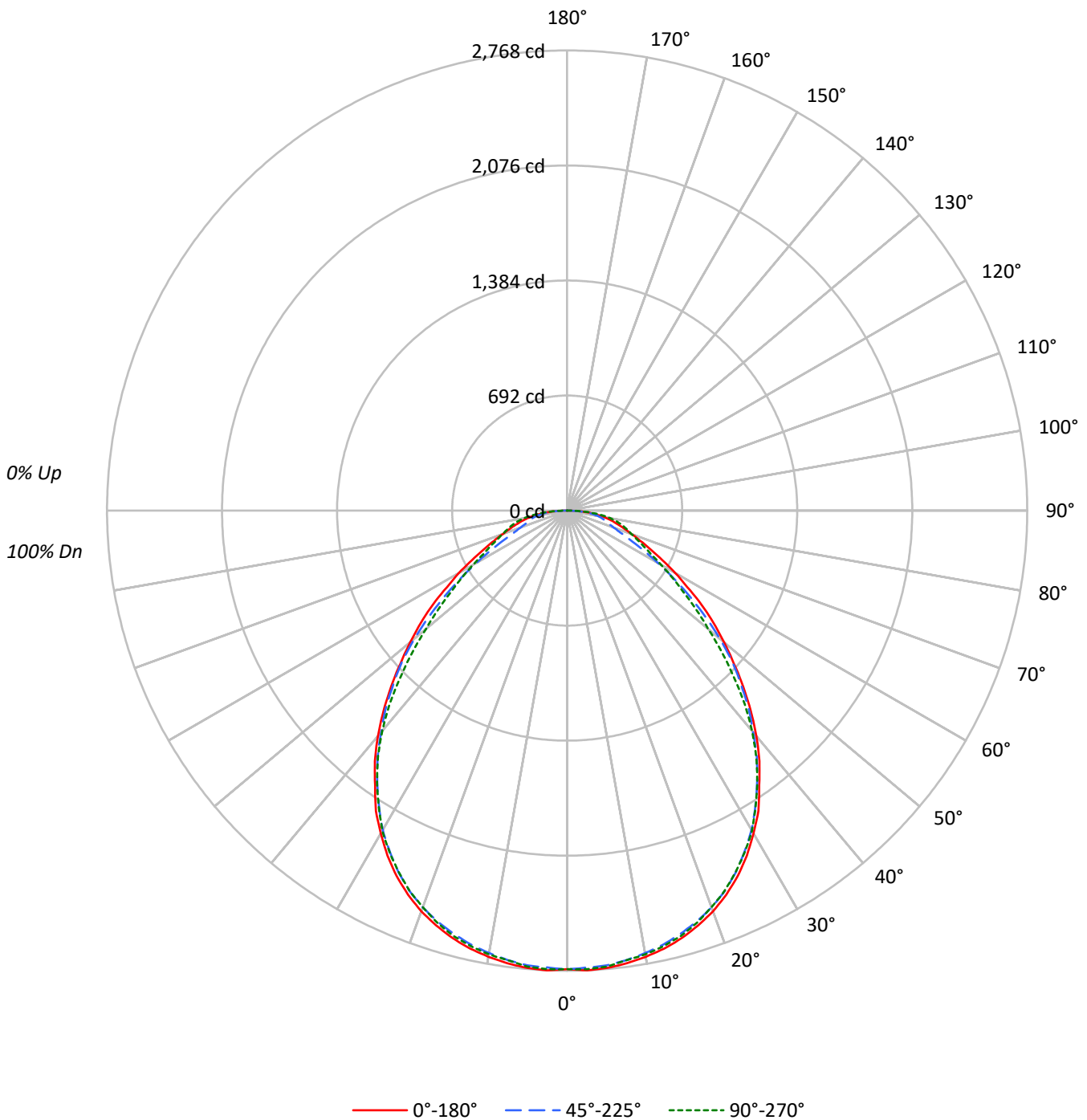
Input Watts (W): 53.543355
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3712	3712	3712
5°	3730	3709	3718
10°	3723	3693	3704
15°	3709	3672	3688
20°	3674	3637	3635
25°	3602	3564	3561
30°	3483	3448	3455
35°	3309	3271	3276
40°	3111	3057	3039
45°	2851	2813	2702
50°	2578	2507	2318
55°	2314	2107	1999
60°	2027	1696	1758
65°	1768	1333	1618
70°	1617	1164	1617
75°	1618	1238	1783
80°	1757	1459	2032
85°	1928	1646	2180



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.3	4.2
10°-20°	745.6	12.0
20°-30°	1105.5	17.8
30°-40°	1247.2	20.1
40°-50°	1129.6	18.2
50°-60°	814.9	13.1
60°-70°	486.6	7.8
70°-80°	300.7	4.8
80°-90°	126.7	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°	2112.4	34.0
0°-40°	3359.5	54.0
0°-60°	5304.0	85.3
0°-90°	6218.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6218.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2759	2759	2759	2759	2759	
5°	2762	2758	2746	2744	2753	262
15°	2663	2646	2636	2637	2647	751
25°	2426	2413	2400	2392	2399	1115
35°	2014	2012	1991	1992	1994	1260
45°	1498	1489	1478	1442	1420	1155
55°	986	956	898	854	852	881
65°	555	489	419	476	508	558
75°	311	270	238	297	343	332
85°	125	110	107	139	141	130
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2758.9	2758.9	2758.9	2758.9	2758.9
2.5°	2768.5	2760.8	2751.2	2756.9	2761.7
5°	2761.7	2757.9	2746.4	2743.5	2753.1
7.5°	2747.3	2737.7	2727.2	2732.0	2728.1
10°	2725.2	2716.6	2703.1	2704.1	2710.8
12.5°	2698.3	2687.8	2673.4	2677.2	2683.0
15°	2662.8	2646.5	2635.9	2636.9	2647.4
17.5°	2617.6	2605.2	2591.7	2594.6	2599.4
20°	2565.8	2559.0	2539.8	2534.1	2538.9
22.5°	2500.5	2488.0	2477.4	2474.5	2475.5
25°	2426.5	2413.0	2400.5	2391.9	2398.6
27.5°	2340.0	2328.5	2312.2	2309.3	2315.1
30°	2242.0	2233.4	2219.0	2215.2	2223.8
32.5°	2142.1	2127.7	2107.6	2107.6	2109.5
35°	2014.4	2011.5	1991.3	1992.3	1994.2
37.5°	1899.1	1885.7	1874.1	1862.6	1868.4
40°	1771.4	1756.0	1740.6	1732.9	1730.0
42.5°	1634.0	1622.5	1615.7	1587.9	1581.2
45°	1498.5	1488.9	1478.4	1441.9	1419.8
47.5°	1360.2	1358.3	1349.6	1285.3	1263.2
50°	1231.5	1228.6	1197.9	1129.7	1107.6
52.5°	1109.5	1090.3	1049.9	982.7	978.9
55°	986.5	955.8	898.2	854.0	852.1
57.5°	856.9	820.4	761.8	737.7	750.2
60°	753.1	697.4	630.2	633.0	653.2
62.5°	645.5	583.1	516.8	545.6	569.6
65°	555.2	488.9	418.8	475.5	508.2
67.5°	476.5	415.0	347.7	423.6	455.3
70°	411.1	361.2	295.9	375.6	411.1
72.5°	359.3	313.2	262.2	337.2	378.5
75°	311.2	269.9	238.2	296.8	342.9
77.5°	269.9	229.6	215.2	262.2	307.4
80°	226.7	190.2	188.3	228.6	262.2
82.5°	176.8	151.8	151.8	191.2	211.3
85°	124.9	109.5	106.6	139.3	141.2
87.5°	64.4	61.5	55.7	73.0	73.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)