

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: P293067

Luminaire Tested: **24GR-LD5-64-F1-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293067
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-L93050-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: 5874.0 lumens
Efficiency: N/A
Efficacy: 124.6 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

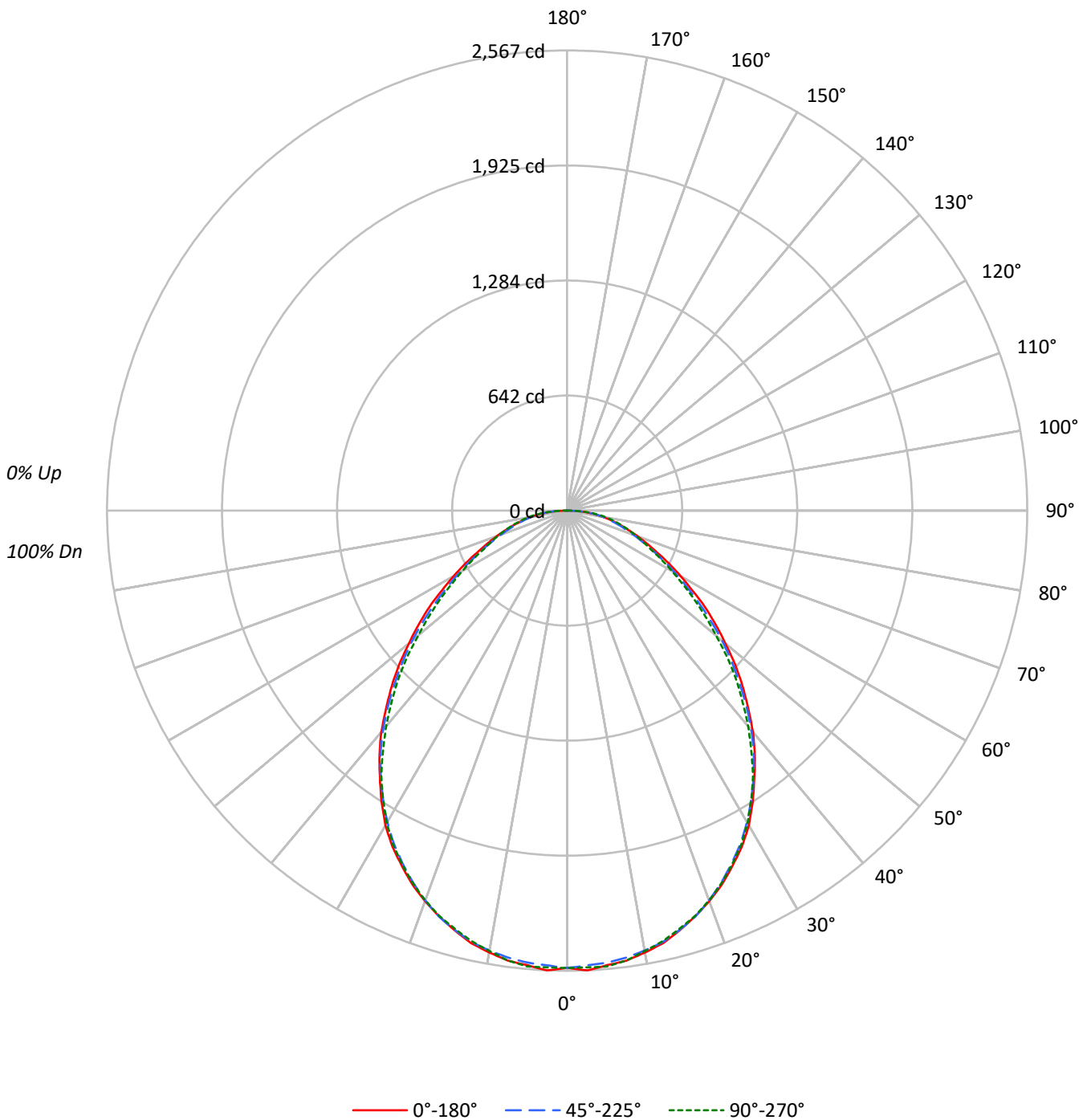
Input Watts (W): 47.136492
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3433	3433	3433
5°	3438	3418	3448
10°	3420	3405	3408
15°	3377	3374	3365
20°	3320	3313	3313
25°	3243	3225	3232
30°	3149	3117	3127
35°	2991	2977	2969
40°	2832	2807	2758
45°	2633	2587	2536
50°	2412	2358	2270
55°	2203	2103	2032
60°	1963	1868	1819
65°	1767	1674	1651
70°	1640	1539	1602
75°	1568	1499	1625
80°	1567	1567	1736
85°	1627	1646	1832



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.0	4.1
10°-20°	681.9	11.6
20°-30°	1000.8	17.0
30°-40°	1131.5	19.3
40°-50°	1045.7	17.8
50°-60°	805.7	13.7
60°-70°	533.5	9.1
70°-80°	317.6	5.4
80°-90°	116.3	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°	1923.7	32.7
0°-40°	3055.2	52.0
0°-60°	4906.6	83.5
0°-90°	5874.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5874.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2552	2552	2552	2552	2552	
5°	2546	2546	2531	2532	2553	242
15°	2424	2420	2422	2421	2416	683
25°	2184	2178	2172	2170	2177	1006
35°	1821	1818	1812	1804	1808	1139
45°	1384	1374	1359	1335	1333	1066
55°	939	920	896	872	866	838
65°	555	546	526	521	518	556
75°	302	294	288	302	313	322
85°	105	99	107	118	119	112
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2551.5	2551.5	2551.5	2551.5	2551.5
2.5°	2567.3	2553.9	2539.4	2539.4	2550.3
5°	2545.5	2545.5	2530.9	2532.1	2552.7
7.5°	2532.1	2524.9	2515.2	2515.2	2530.9
10°	2503.1	2497.0	2492.2	2489.7	2494.6
12.5°	2471.6	2461.9	2465.5	2461.9	2460.7
15°	2424.3	2419.5	2421.9	2420.7	2415.8
17.5°	2373.4	2371.0	2375.9	2367.4	2371.0
20°	2318.9	2311.6	2314.1	2309.2	2314.1
22.5°	2257.1	2252.3	2246.2	2240.2	2249.9
25°	2184.4	2178.4	2172.3	2169.9	2177.2
27.5°	2111.7	2102.0	2093.6	2091.1	2102.0
30°	2026.9	2016.0	2006.3	2003.9	2012.4
32.5°	1926.4	1923.9	1911.8	1907.0	1910.6
35°	1821.0	1818.5	1812.5	1804.0	1807.6
37.5°	1720.4	1719.2	1710.7	1696.2	1686.5
40°	1612.6	1604.1	1598.0	1577.4	1570.2
42.5°	1493.8	1491.4	1480.5	1457.5	1449.0
45°	1383.6	1373.9	1359.4	1335.1	1332.7
47.5°	1269.7	1256.4	1243.1	1212.8	1211.6
50°	1152.2	1142.5	1126.7	1096.5	1084.3
52.5°	1043.1	1029.8	1008.0	978.9	972.9
55°	939.0	919.6	896.5	872.3	866.3
57.5°	827.5	819.0	791.1	771.8	764.5
60°	729.4	722.1	694.2	676.0	676.0
62.5°	640.9	630.0	605.8	593.7	593.7
65°	554.9	546.4	525.8	521.0	518.5
67.5°	481.0	470.1	455.5	454.3	460.4
70°	416.8	403.4	391.3	403.4	407.1
72.5°	356.2	347.7	336.8	352.6	359.8
75°	301.7	294.4	288.3	301.7	312.6
77.5°	252.0	244.7	244.7	259.3	269.0
80°	202.3	197.5	202.3	214.4	224.1
82.5°	155.1	151.4	157.5	169.6	175.7
85°	105.4	99.3	106.6	117.5	118.7
87.5°	49.7	48.5	53.3	60.6	59.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)