

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: P292931

Luminaire Tested: **24GR-LD5-48-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P292931
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-LD5-48-F1-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5091.0 lumens
Efficiency: N/A
Efficacy: 151.6 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

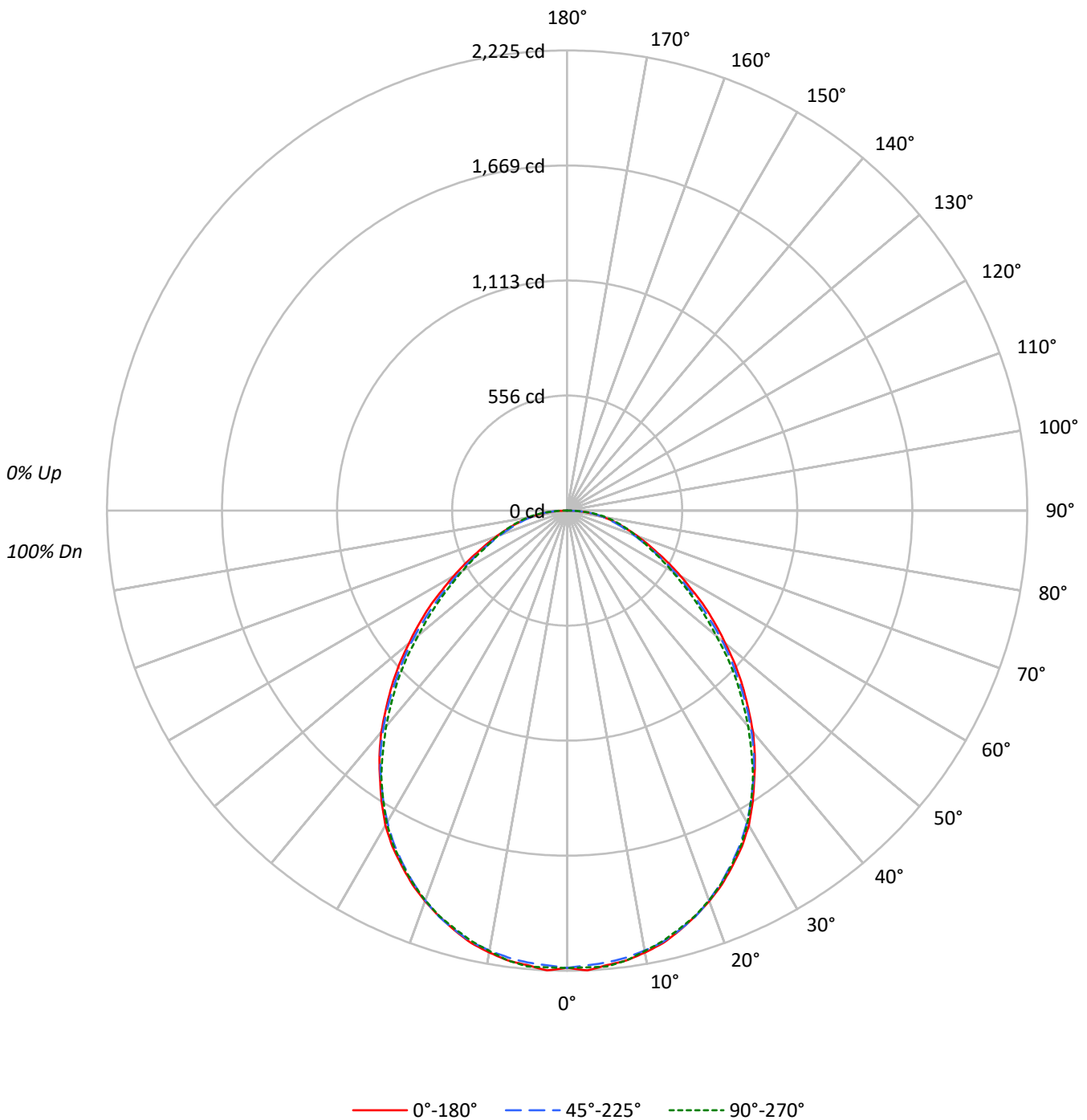
Input Watts (W): 33.573
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2975	2975	2975
5°	2980	2963	2988
10°	2964	2951	2954
15°	2927	2924	2917
20°	2878	2872	2872
25°	2811	2795	2801
30°	2729	2702	2710
35°	2592	2580	2573
40°	2455	2433	2390
45°	2282	2242	2198
50°	2090	2044	1967
55°	1909	1823	1761
60°	1701	1619	1577
65°	1531	1451	1431
70°	1421	1334	1388
75°	1359	1299	1408
80°	1359	1359	1506
85°	1411	1426	1589



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.8	4.1
10°-20°	591.0	11.6
20°-30°	867.4	17.0
30°-40°	980.7	19.3
40°-50°	906.3	17.8
50°-60°	698.3	13.7
60°-70°	462.4	9.1
70°-80°	275.3	5.4
80°-90°	100.9	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°	1667.3	32.7
0°-40°	2647.9	52.0
0°-60°	4252.5	83.5
0°-90°	5091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5091.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2211	2211	2211	2211	2211	
5°	2206	2206	2194	2195	2212	210
15°	2101	2097	2099	2098	2094	592
25°	1893	1888	1883	1881	1887	872
35°	1578	1576	1571	1564	1567	988
45°	1199	1191	1178	1157	1155	924
55°	814	797	777	756	751	726
65°	481	474	456	452	449	482
75°	262	255	250	262	271	279
85°	91	86	92	102	103	97
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2211.4	2211.4	2211.4	2211.4	2211.4
2.5°	2225.1	2213.5	2200.9	2200.9	2210.4
5°	2206.2	2206.2	2193.6	2194.6	2212.5
7.5°	2194.6	2188.3	2179.9	2179.9	2193.6
10°	2169.4	2164.2	2160.0	2157.9	2162.1
12.5°	2142.1	2133.7	2136.9	2133.7	2132.7
15°	2101.2	2097.0	2099.1	2098.0	2093.8
17.5°	2057.1	2055.0	2059.2	2051.8	2055.0
20°	2009.8	2003.5	2005.6	2001.4	2005.6
22.5°	1956.2	1952.0	1946.8	1941.5	1949.9
25°	1893.2	1888.0	1882.7	1880.6	1886.9
27.5°	1830.2	1821.8	1814.5	1812.4	1821.8
30°	1756.7	1747.3	1738.9	1736.8	1744.1
32.5°	1669.6	1667.5	1657.0	1652.8	1655.9
35°	1578.2	1576.1	1570.9	1563.5	1566.7
37.5°	1491.1	1490.0	1482.7	1470.1	1461.7
40°	1397.6	1390.3	1385.0	1367.2	1360.9
42.5°	1294.7	1292.6	1283.2	1263.2	1255.9
45°	1199.2	1190.8	1178.2	1157.2	1155.1
47.5°	1100.5	1088.9	1077.4	1051.1	1050.1
50°	998.6	990.2	976.5	950.3	939.8
52.5°	904.1	892.5	873.6	848.4	843.2
55°	813.8	797.0	777.0	756.0	750.8
57.5°	717.2	709.8	685.7	668.9	662.6
60°	632.1	625.8	601.7	585.9	585.9
62.5°	555.5	546.0	525.0	514.5	514.5
65°	480.9	473.6	455.7	451.5	449.4
67.5°	416.9	407.4	394.8	393.8	399.0
70°	361.2	349.7	339.2	349.7	352.8
72.5°	308.7	301.4	291.9	305.6	311.9
75°	261.5	255.2	249.9	261.5	270.9
77.5°	218.4	212.1	212.1	224.7	233.1
80°	175.4	171.2	175.4	185.9	194.3
82.5°	134.4	131.3	136.5	147.0	152.3
85°	91.4	86.1	92.4	101.9	102.9
87.5°	43.1	42.0	46.2	52.5	51.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)