

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: P293433

Luminaire Tested: **24GR-LD5-48-A-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293433
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-LD5-48-A-UNV-L83050-W2A1-U-3000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4636.0 lumens
Efficiency: N/A
Efficacy: 141.6 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

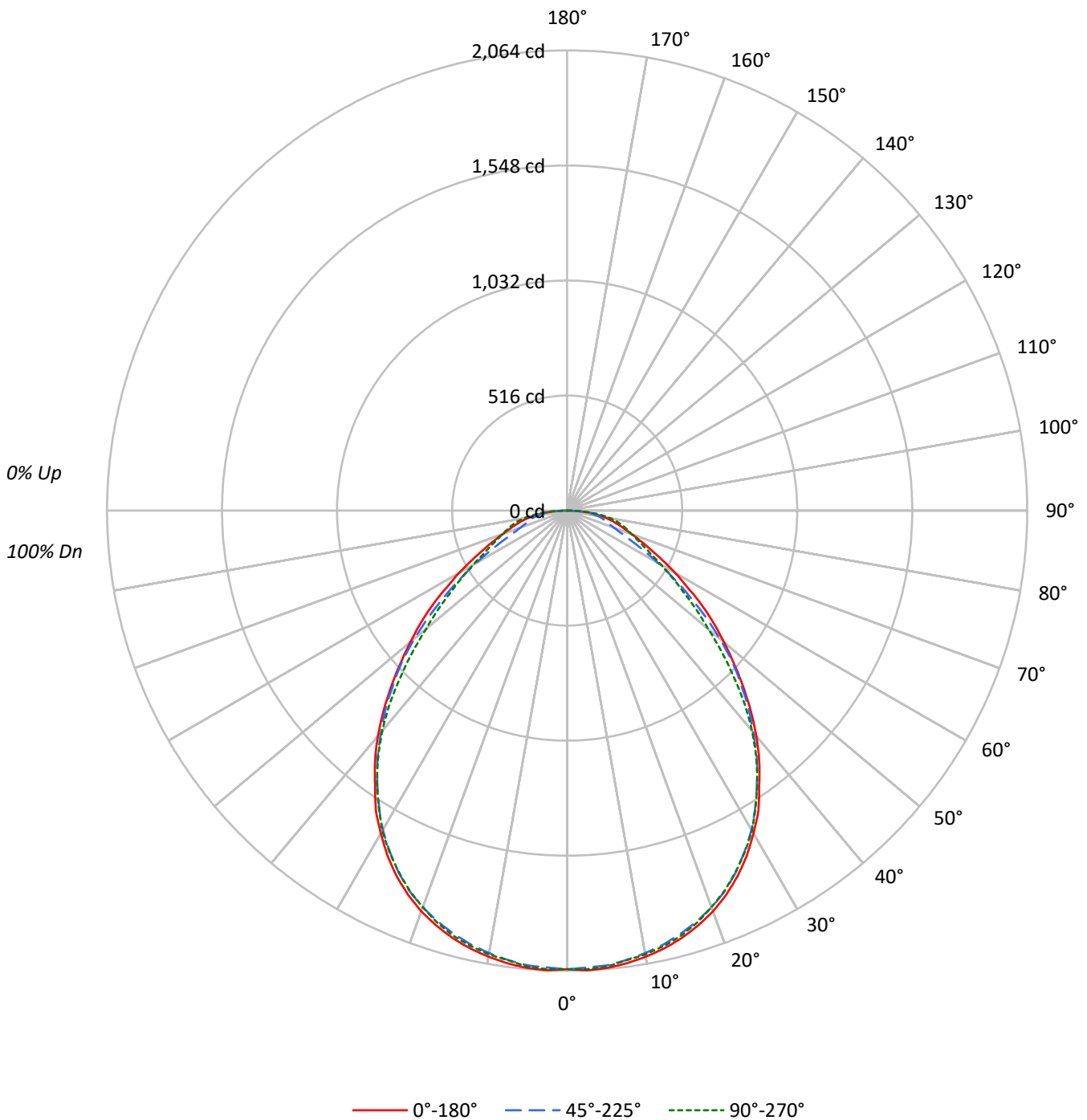
Input Watts (W): 32.736
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293433

CATALOG NUMBER: 24GR-LD5-48-A-UNV-L83050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P293433

CATALOG NUMBER: 24GR-LD5-48-A-UNV-L83050-W2A1-U-3000K

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°	2768	2768	2768
5°	2781	2766	2772
10°	2776	2754	2761
15°	2765	2738	2750
20°	2739	2711	2710
25°	2686	2657	2655
30°	2597	2570	2576
35°	2467	2439	2442
40°	2320	2279	2266
45°	2126	2097	2014
50°	1922	1869	1729
55°	1725	1571	1490
60°	1511	1264	1311
65°	1318	994	1206
70°	1206	868	1206
75°	1207	923	1329
80°	1309	1088	1515
85°	1437	1227	1626



TEST NUMBER: P293433

CATALOG NUMBER: 24GR-LD5-48-A-UNV-L83050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.8	4.2
10°-20°	555.9	12.0
20°-30°	824.3	17.8
30°-40°	929.9	20.1
40°-50°	842.2	18.2
50°-60°	607.6	13.1
60°-70°	362.8	7.8
70°-80°	224.2	4.8
80°-90°	94.5	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°	1574.9	34.0
0°-40°	2504.8	54.0
0°-60°	3954.6	85.3
0°-90°	4636.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4636.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2057	2057	2057	2057	2057	
5°	2059	2056	2048	2046	2053	196
15°	1985	1973	1965	1966	1974	560
25°	1809	1799	1790	1783	1788	831
35°	1502	1500	1485	1485	1487	940
45°	1117	1110	1102	1075	1059	861
55°	736	713	670	637	635	657
65°	414	364	312	354	379	416
75°	232	201	178	221	256	248
85°	93	82	80	104	105	97
90°	0	0	0	0	0	



TEST NUMBER: P293433

CATALOG NUMBER: 24GR-LD5-48-A-UNV-L83050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2056.9	2056.9	2056.9	2056.9	2056.9
2.5°	2064.1	2058.4	2051.2	2055.5	2059.1
5°	2059.1	2056.2	2047.6	2045.5	2052.6
7.5°	2048.3	2041.2	2033.3	2036.9	2034.0
10°	2031.9	2025.4	2015.4	2016.1	2021.1
12.5°	2011.8	2003.9	1993.2	1996.1	2000.4
15°	1985.3	1973.1	1965.3	1966.0	1973.9
17.5°	1951.7	1942.3	1932.3	1934.5	1938.0
20°	1913.0	1908.0	1893.6	1889.3	1892.9
22.5°	1864.3	1855.0	1847.1	1844.9	1845.7
25°	1809.1	1799.1	1789.8	1783.3	1788.4
27.5°	1744.7	1736.1	1723.9	1721.8	1726.1
30°	1671.6	1665.2	1654.4	1651.6	1658.0
32.5°	1597.1	1586.4	1571.4	1571.4	1572.8
35°	1501.9	1499.7	1484.7	1485.4	1486.8
37.5°	1415.9	1405.9	1397.3	1388.7	1393.0
40°	1320.7	1309.2	1297.8	1292.0	1289.9
42.5°	1218.3	1209.7	1204.7	1183.9	1178.9
45°	1117.3	1110.1	1102.2	1075.0	1058.6
47.5°	1014.1	1012.7	1006.3	958.3	941.8
50°	918.2	916.0	893.1	842.3	825.8
52.5°	827.2	812.9	782.8	732.7	729.8
55°	735.5	712.6	669.7	636.7	635.3
57.5°	638.9	611.6	568.0	550.0	559.4
60°	561.5	520.0	469.8	472.0	487.0
62.5°	481.3	434.7	385.3	406.8	424.7
65°	414.0	364.5	312.3	354.5	378.9
67.5°	355.2	309.4	259.3	315.8	339.5
70°	306.5	269.3	220.6	280.0	306.5
72.5°	267.9	233.5	195.5	251.4	282.2
75°	232.1	201.3	177.6	221.3	255.7
77.5°	201.3	171.2	160.4	195.5	229.2
80°	169.0	141.8	140.4	170.5	195.5
82.5°	131.8	113.2	113.2	142.5	157.6
85°	93.1	81.6	79.5	103.8	105.3
87.5°	48.0	45.8	41.5	54.4	54.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)