

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: P293560

Luminaire Tested: **24GR-LD5-48-A-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293560
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-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: 4170.0 lumens
Efficiency: N/A
Efficacy: 124.7 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

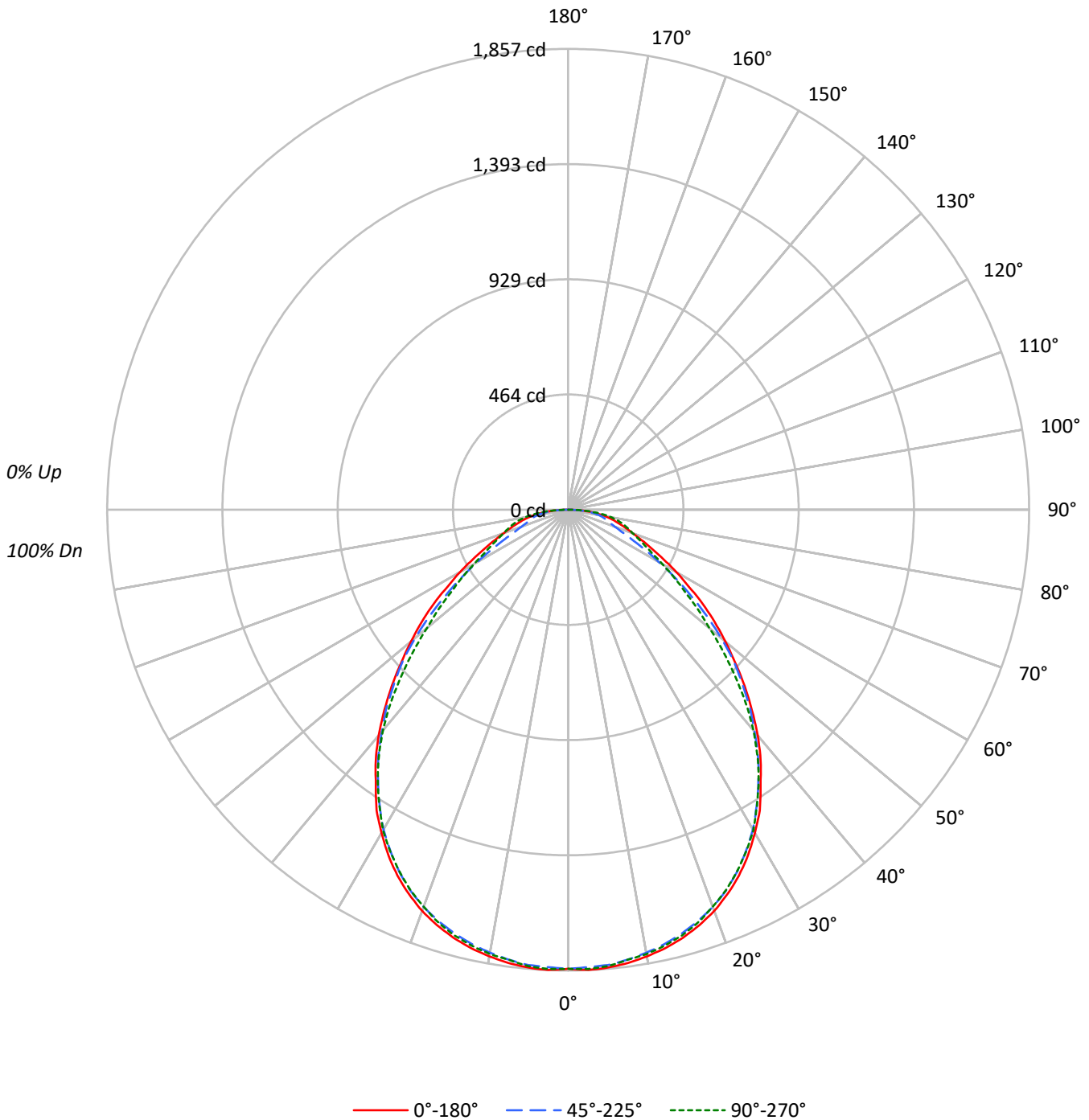
Input Watts (W): 33.452751
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2489	2489	2489
5°	2501	2488	2494
10°	2497	2477	2484
15°	2488	2462	2473
20°	2464	2439	2438
25°	2416	2390	2388
30°	2336	2312	2317
35°	2219	2194	2197
40°	2086	2050	2038
45°	1912	1886	1812
50°	1729	1681	1555
55°	1552	1413	1340
60°	1359	1137	1179
65°	1186	894	1085
70°	1085	780	1085
75°	1085	831	1196
80°	1178	979	1363
85°	1292	1104	1462



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.2	4.2
10°-20°	500.0	12.0
20°-30°	741.4	17.8
30°-40°	836.4	20.1
40°-50°	757.5	18.2
50°-60°	546.5	13.1
60°-70°	326.3	7.8
70°-80°	201.7	4.8
80°-90°	85.0	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°	1416.6	34.0
0°-40°	2253.0	54.0
0°-60°	3557.0	85.3
0°-90°	4170.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4170.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1850	1850	1850	1850	1850	
5°	1852	1850	1842	1840	1846	176
15°	1786	1775	1768	1768	1776	503
25°	1627	1618	1610	1604	1609	748
35°	1351	1349	1336	1336	1337	845
45°	1005	998	991	967	952	774
55°	662	641	602	573	571	591
65°	372	328	281	319	341	375
75°	209	181	160	199	230	223
85°	84	73	72	93	95	87
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1850.2	1850.2	1850.2	1850.2	1850.2
2.5°	1856.6	1851.5	1845.0	1848.9	1852.1
5°	1852.1	1849.5	1841.8	1839.9	1846.3
7.5°	1842.5	1836.0	1828.9	1832.1	1829.6
10°	1827.6	1821.8	1812.8	1813.5	1818.0
12.5°	1809.6	1802.5	1792.8	1795.4	1799.3
15°	1785.8	1774.8	1767.7	1768.4	1775.5
17.5°	1755.5	1747.1	1738.1	1740.0	1743.2
20°	1720.7	1716.2	1703.3	1699.4	1702.7
22.5°	1676.9	1668.5	1661.4	1659.5	1660.1
25°	1627.3	1618.3	1609.9	1604.1	1608.6
27.5°	1569.3	1561.6	1550.6	1548.7	1552.6
30°	1503.6	1497.8	1488.1	1485.6	1491.4
32.5°	1436.6	1426.9	1413.4	1413.4	1414.7
35°	1350.9	1349.0	1335.5	1336.1	1337.4
37.5°	1273.6	1264.6	1256.9	1249.1	1253.0
40°	1187.9	1177.6	1167.3	1162.2	1160.2
42.5°	1095.8	1088.1	1083.6	1064.9	1060.4
45°	1005.0	998.5	991.4	967.0	952.1
47.5°	912.2	910.9	905.1	862.0	847.1
50°	825.9	823.9	803.3	757.6	742.8
52.5°	744.1	731.2	704.1	659.0	656.5
55°	661.6	641.0	602.3	572.7	571.4
57.5°	574.6	550.2	510.9	494.8	503.1
60°	505.1	467.7	422.6	424.5	438.1
62.5°	432.9	391.0	346.6	365.9	382.0
65°	372.4	327.9	280.9	318.9	340.8
67.5°	319.5	278.3	233.2	284.1	305.4
70°	275.7	242.2	198.4	251.9	275.7
72.5°	240.9	210.0	175.9	226.1	253.8
75°	208.7	181.0	159.8	199.1	230.0
77.5°	181.0	154.0	144.3	175.9	206.1
80°	152.0	127.6	126.3	153.3	175.9
82.5°	118.5	101.8	101.8	128.2	141.7
85°	83.7	73.4	71.5	93.4	94.7
87.5°	43.2	41.2	37.4	49.0	49.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)