

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: P293431

Luminaire Tested: **24GR-LD5-42-A-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293431
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-LD5-42-A-UNV-L83050-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4496.0 lumens
Efficiency: N/A
Efficacy: 153.0 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

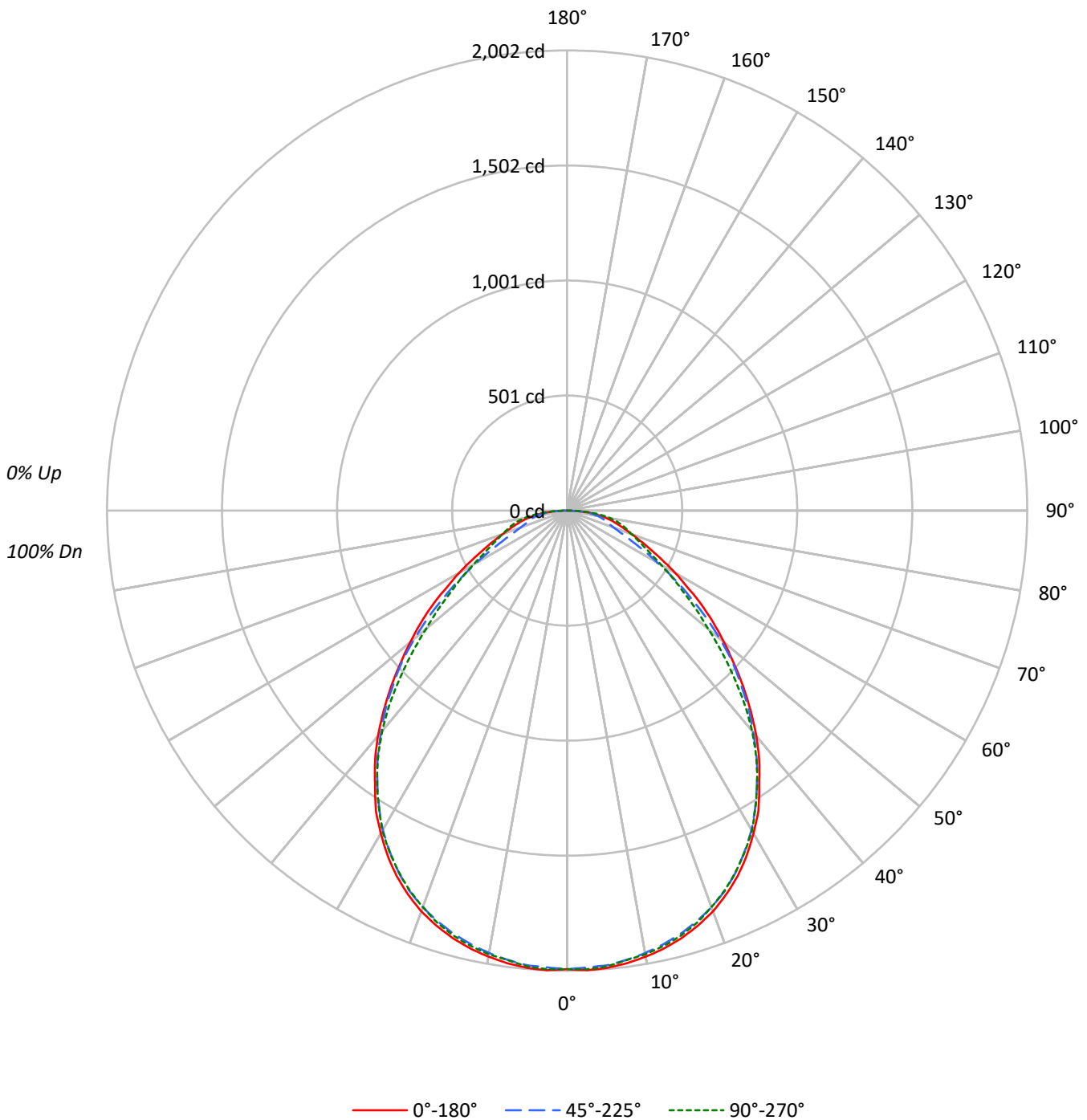
Input Watts (W): 29.388
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2684	2684	2684
5°	2697	2682	2689
10°	2692	2670	2678
15°	2682	2655	2667
20°	2656	2630	2629
25°	2605	2577	2575
30°	2519	2493	2498
35°	2392	2365	2368
40°	2250	2211	2197
45°	2062	2034	1953
50°	1864	1813	1676
55°	1673	1523	1445
60°	1465	1226	1271
65°	1278	964	1170
70°	1170	841	1170
75°	1170	896	1289
80°	1270	1055	1469
85°	1394	1190	1576



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.9	4.2
10°-20°	539.1	12.0
20°-30°	799.4	17.8
30°-40°	901.8	20.1
40°-50°	816.7	18.2
50°-60°	589.2	13.1
60°-70°	351.8	7.8
70°-80°	217.4	4.8
80°-90°	91.6	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°	1527.4	34.0
0°-40°	2429.2	54.0
0°-60°	3835.1	85.3
0°-90°	4496.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4496.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1995	1995	1995	1995	1995	
5°	1997	1994	1986	1984	1991	190
15°	1925	1914	1906	1907	1914	543
25°	1754	1745	1736	1730	1734	806
35°	1456	1454	1440	1441	1442	911
45°	1084	1077	1069	1043	1027	835
55°	713	691	649	618	616	637
65°	402	354	303	344	367	404
75°	225	195	172	215	248	240
85°	90	79	77	101	102	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1994.8	1994.8	1994.8	1994.8	1994.8
2.5°	2001.8	1996.2	1989.3	1993.4	1996.9
5°	1996.9	1994.1	1985.8	1983.7	1990.7
7.5°	1986.5	1979.5	1971.9	1975.4	1972.6
10°	1970.5	1964.3	1954.5	1955.2	1960.1
12.5°	1951.1	1943.4	1933.0	1935.8	1940.0
15°	1925.4	1913.6	1905.9	1906.6	1914.3
17.5°	1892.7	1883.7	1874.0	1876.1	1879.5
20°	1855.2	1850.4	1836.5	1832.3	1835.8
22.5°	1808.0	1799.0	1791.3	1789.2	1789.9
25°	1754.5	1744.8	1735.7	1729.5	1734.4
27.5°	1692.0	1683.7	1671.8	1669.8	1673.9
30°	1621.1	1614.9	1604.5	1601.7	1607.9
32.5°	1548.9	1538.5	1523.9	1523.9	1525.3
35°	1456.5	1454.4	1439.9	1440.6	1441.9
37.5°	1373.2	1363.5	1355.1	1346.8	1351.0
40°	1280.8	1269.7	1258.6	1253.0	1250.9
42.5°	1181.5	1173.1	1168.3	1148.1	1143.3
45°	1083.5	1076.6	1069.0	1042.6	1026.6
47.5°	983.5	982.1	975.9	929.3	913.4
50°	890.4	888.4	866.1	816.8	800.8
52.5°	802.2	788.3	759.2	710.6	707.8
55°	713.3	691.1	649.4	617.5	616.1
57.5°	619.6	593.2	550.8	533.4	542.5
60°	544.5	504.3	455.6	457.7	472.3
62.5°	466.8	421.6	373.7	394.5	411.9
65°	401.5	353.5	302.8	343.8	367.4
67.5°	344.5	300.1	251.4	306.3	329.2
70°	297.3	261.2	213.9	271.6	297.3
72.5°	259.8	226.4	189.6	243.8	273.7
75°	225.0	195.2	172.3	214.6	248.0
77.5°	195.2	166.0	155.6	189.6	222.3
80°	163.9	137.5	136.1	165.3	189.6
82.5°	127.8	109.7	109.7	138.2	152.8
85°	90.3	79.2	77.1	100.7	102.1
87.5°	46.5	44.5	40.3	52.8	52.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)