

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: P291079

Luminaire Tested: **14GR-LD5-43-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291079
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33314)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-A-UNV-L93050-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4048.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

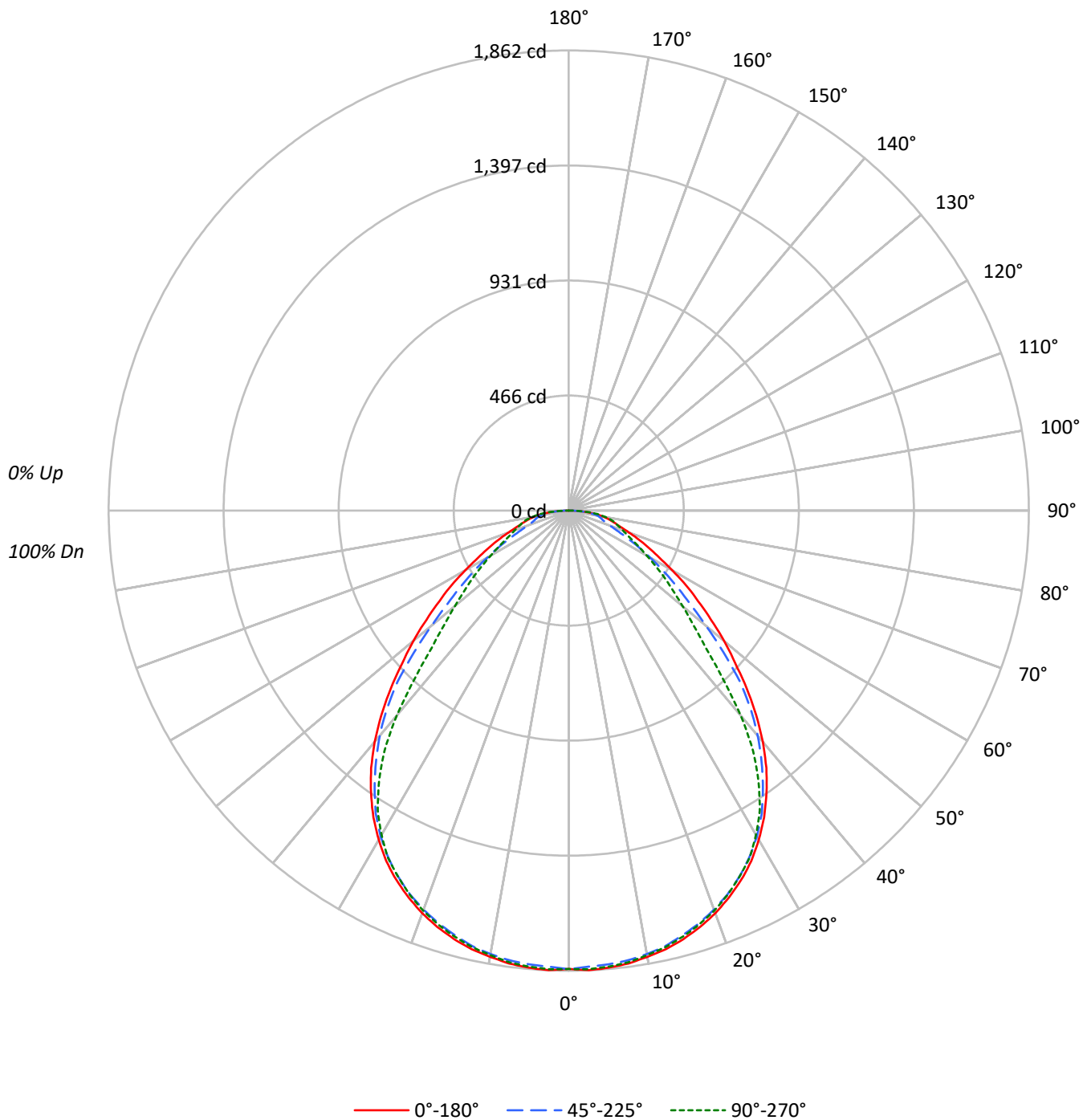
Input Watts (W): 37.479
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	110	106	102	98	107	103	100	97		99	96	94		95	93	91		92	90	88
2	101	94	88	83	99	92	86	82		88	84	80		85	81	78		82	79	76
3	93	84	76	71	91	82	75	70		79	74	69		77	72	68		74	70	66
4	86	75	67	61	84	74	67	61		72	65	60		69	64	59		67	62	58
5	80	68	60	54	78	67	59	53		65	58	53		63	57	52		61	56	52
6	74	62	54	48	72	61	53	47		59	52	47		58	51	47		56	51	46
7	69	57	48	43	67	56	48	43		54	47	42		53	47	42		52	46	42
8	65	52	44	38	63	51	44	38		50	43	38		49	43	38		48	42	38
9	61	48	40	35	59	47	40	35		46	39	35		45	39	35		44	39	34
10	57	44	37	32	56	44	37	32		43	36	32		42	36	32		41	36	31

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4992	4992	4992
5°	5016	4978	5003
10°	5009	4979	4992
15°	5000	4956	4971
20°	4965	4919	4932
25°	4899	4852	4855
30°	4779	4730	4709
35°	4583	4500	4398
40°	4290	4181	3805
45°	3875	3728	2973
50°	3436	3027	2515
55°	2999	2483	2219
60°	2601	2044	1958
65°	2281	1640	1808
70°	2034	1391	1820
75°	1985	1466	2034
80°	2201	1850	2331
85°	2294	1973	2729



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.0	4.3
10°-20°	504.2	12.5
20°-30°	754.2	18.6
30°-40°	851.4	21.0
40°-50°	722.3	17.8
50°-60°	488.7	12.1
60°-70°	291.7	7.2
70°-80°	182.7	4.5
80°-90°	76.8	1.9
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°	1434.4	35.4
0°-40°	2285.8	56.5
0°-60°	3496.8	86.4
0°-90°	4048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4048.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1855	1855	1855	1855	1855	
5°	1857	1851	1843	1856	1852	177
15°	1795	1791	1779	1791	1784	506
25°	1650	1644	1634	1642	1635	759
35°	1395	1386	1370	1358	1339	869
45°	1018	1022	980	840	781	785
55°	639	609	529	474	473	576
65°	358	297	258	274	284	358
75°	191	170	141	186	196	205
85°	74	70	64	83	88	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1855.0	1855.0	1855.0	1855.0	1855.0
2.5°	1861.6	1855.9	1847.5	1858.7	1857.8
5°	1856.9	1851.2	1842.8	1855.9	1852.2
7.5°	1848.4	1843.7	1835.2	1847.5	1843.7
10°	1833.3	1829.6	1822.1	1832.4	1826.8
12.5°	1817.4	1814.5	1805.1	1814.5	1808.9
15°	1794.8	1791.0	1778.8	1791.0	1784.5
17.5°	1766.6	1761.9	1751.6	1761.9	1756.3
20°	1733.7	1728.0	1717.7	1728.0	1722.4
22.5°	1694.2	1689.5	1680.1	1689.5	1682.0
25°	1650.0	1644.4	1634.0	1641.6	1635.0
27.5°	1599.2	1591.7	1582.3	1588.0	1584.2
30°	1538.1	1528.7	1522.1	1522.1	1515.6
32.5°	1471.4	1464.8	1453.5	1446.9	1438.5
35°	1395.2	1385.8	1369.8	1357.6	1338.8
37.5°	1313.4	1302.1	1282.4	1251.4	1226.0
40°	1221.3	1207.2	1190.3	1129.2	1083.1
42.5°	1122.6	1119.8	1090.6	986.2	922.3
45°	1018.2	1022.0	979.7	839.6	781.3
47.5°	912.9	926.1	849.0	711.7	681.6
50°	820.8	825.5	723.0	617.7	600.8
52.5°	725.8	718.3	616.8	543.4	531.2
55°	639.3	609.2	529.3	473.9	472.9
57.5°	563.2	507.7	452.2	410.9	415.6
60°	483.3	421.2	379.8	357.3	363.8
62.5°	412.7	353.5	316.8	310.3	321.5
65°	358.2	297.1	257.6	274.5	283.9
67.5°	306.5	254.8	209.7	250.1	253.8
70°	258.5	220.9	176.8	230.3	231.3
72.5°	219.1	195.6	153.2	208.7	211.5
75°	190.9	170.2	141.0	186.2	195.6
77.5°	167.4	145.7	130.7	160.8	176.8
80°	142.0	117.5	119.4	134.4	150.4
82.5°	109.1	91.2	95.0	110.9	122.2
85°	74.3	70.5	63.9	82.7	88.4
87.5°	39.5	37.6	32.9	47.0	44.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)