

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: P291081

Luminaire Tested: **14GR-LD5-43-A-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291081
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-5000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4119.0 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

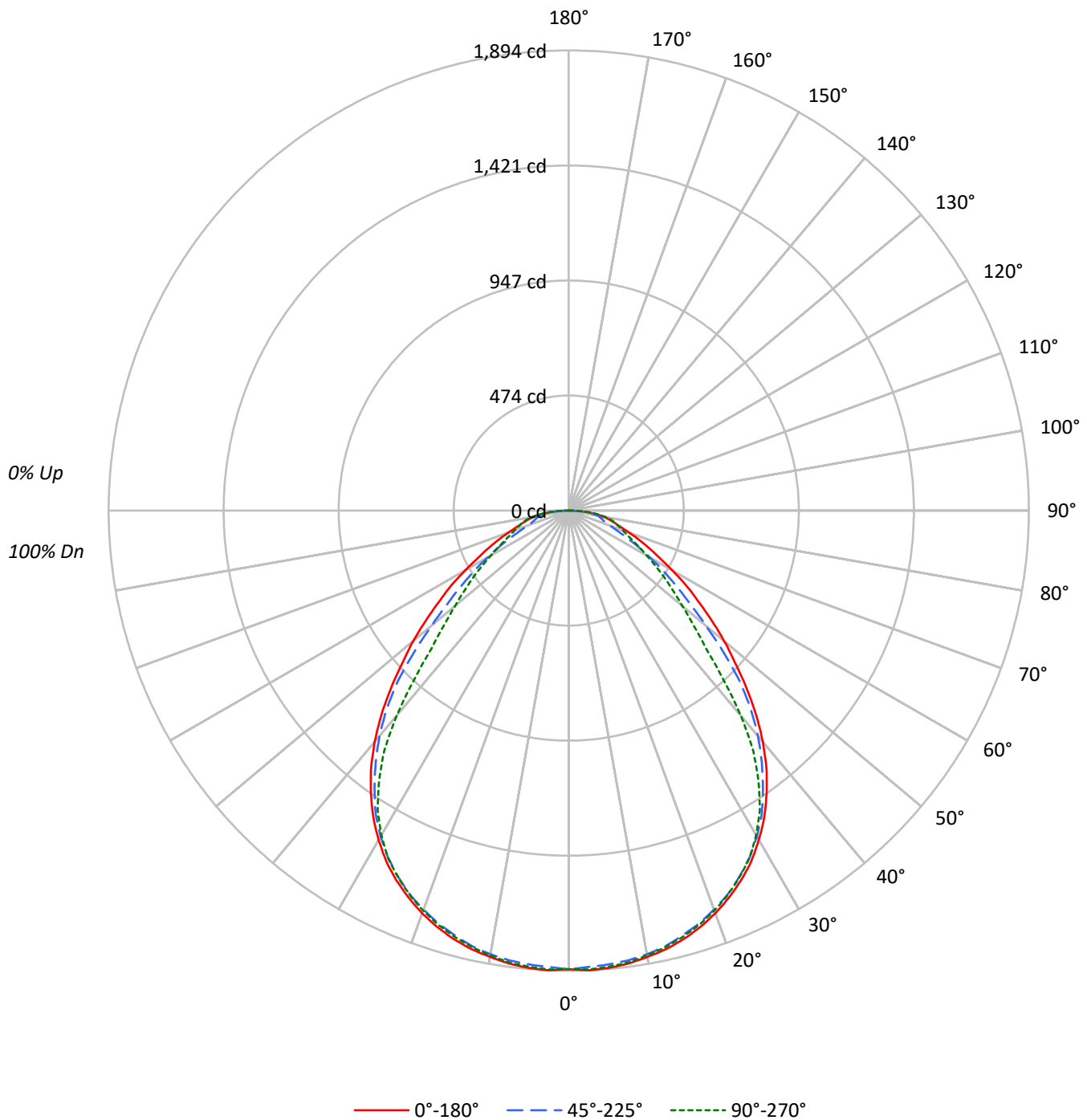
Input Watts (W): 38.13
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291081

CATALOG NUMBER: 14GR-LD5-43-A-UNV-L93050-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P291081

CATALOG NUMBER: 14GR-LD5-43-A-UNV-L93050-W2A1-U-5000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
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	73	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°	5079	5079	5079
5°	5104	5065	5091
10°	5097	5066	5079
15°	5088	5042	5059
20°	5052	5005	5019
25°	4985	4937	4940
30°	4863	4813	4792
35°	4664	4579	4475
40°	4365	4254	3871
45°	3943	3793	3025
50°	3496	3080	2559
55°	3052	2527	2258
60°	2646	2080	1992
65°	2321	1669	1840
70°	2070	1415	1851
75°	2019	1492	2069
80°	2239	1883	2373
85°	2334	2010	2776



TEST NUMBER: P291081

CATALOG NUMBER: 14GR-LD5-43-A-UNV-L93050-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	179.1	4.3
10°-20°	513.0	12.5
20°-30°	767.4	18.6
30°-40°	866.3	21.0
40°-50°	734.9	17.8
50°-60°	497.3	12.1
60°-70°	296.8	7.2
70°-80°	185.9	4.5
80°-90°	78.2	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°	1459.6	35.4
0°-40°	2325.9	56.5
0°-60°	3558.1	86.4
0°-90°	4119.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4119.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1888	1888	1888	1888	1888	
5°	1889	1884	1875	1888	1885	180
15°	1826	1822	1810	1822	1816	515
25°	1679	1673	1663	1670	1664	772
35°	1420	1410	1394	1381	1362	885
45°	1036	1040	997	854	795	798
55°	650	620	539	482	481	586
65°	364	302	262	279	289	364
75°	194	173	144	189	199	209
85°	76	72	65	84	90	81
90°	0	0	0	0	0	



TEST NUMBER: P291081

CATALOG NUMBER: 14GR-LD5-43-A-UNV-L93050-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1887.5	1887.5	1887.5	1887.5	1887.5
2.5°	1894.2	1888.5	1879.9	1891.3	1890.4
5°	1889.4	1883.7	1875.1	1888.5	1884.6
7.5°	1880.8	1876.0	1867.4	1879.9	1876.0
10°	1865.5	1861.7	1854.0	1864.5	1858.8
12.5°	1849.2	1846.4	1836.8	1846.4	1840.6
15°	1826.3	1822.5	1810.0	1822.5	1815.8
17.5°	1797.6	1792.8	1782.3	1792.8	1787.1
20°	1764.1	1758.4	1747.8	1758.4	1752.6
22.5°	1723.9	1719.1	1709.6	1719.1	1711.5
25°	1679.0	1673.2	1662.7	1670.3	1663.6
27.5°	1627.3	1619.6	1610.1	1615.8	1612.0
30°	1565.1	1555.5	1548.8	1548.8	1542.2
32.5°	1497.2	1490.5	1479.0	1472.3	1463.7
35°	1419.7	1410.1	1393.9	1381.4	1362.3
37.5°	1336.5	1325.0	1304.9	1273.3	1247.5
40°	1242.7	1228.4	1211.1	1149.0	1102.1
42.5°	1142.3	1139.4	1109.7	1003.5	938.5
45°	1036.1	1039.9	996.8	854.3	795.0
47.5°	928.9	942.3	863.9	724.2	693.6
50°	835.2	840.0	735.7	628.5	611.3
52.5°	738.5	730.9	627.6	553.0	540.5
55°	650.5	619.9	538.6	482.2	481.2
57.5°	573.0	516.6	460.2	418.1	422.8
60°	491.7	428.6	386.5	363.5	370.2
62.5°	420.0	359.7	322.4	315.7	327.2
65°	364.5	302.3	262.1	279.3	288.9
67.5°	311.9	259.3	213.3	254.5	258.3
70°	263.1	224.8	179.9	234.4	235.3
72.5°	222.9	199.0	155.9	212.4	215.3
75°	194.2	173.2	143.5	189.4	199.0
77.5°	170.3	148.3	133.0	163.6	179.9
80°	144.5	119.6	121.5	136.8	153.1
82.5°	111.0	92.8	96.6	112.9	124.4
85°	75.6	71.8	65.1	84.2	89.9
87.5°	40.2	38.3	33.5	47.8	45.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)