

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: P291074

Luminaire Tested: **14GR-LD5-40-A-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291074
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-LD5-40-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: 3796.0 lumens
Efficiency: N/A
Efficacy: 110.0 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

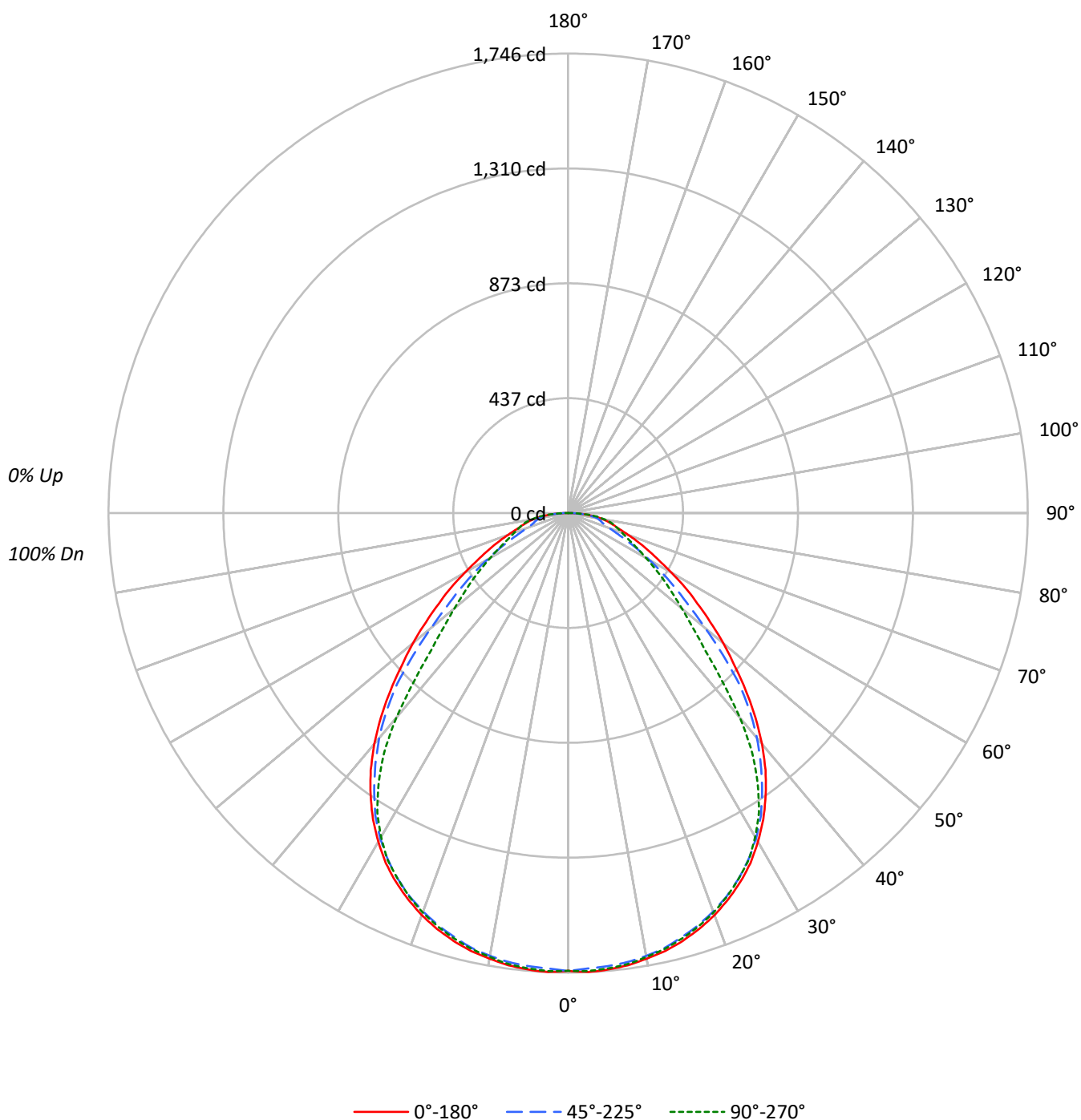
Input Watts (W): 34.503
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291074

CATALOG NUMBER: 14GR-LD5-40-A-UNV-L93050-W2A1-U-4000K

Luminous Intensity Polar Plot



TEST NUMBER: P291074

CATALOG NUMBER: 14GR-LD5-40-A-UNV-L93050-W2A1-U-4000K

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	0		
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	101	94	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74		
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64		
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56		
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50		
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44		
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40		
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36		
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33		
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4681	4681	4681
5°	4704	4668	4692
10°	4698	4669	4681
15°	4689	4647	4662
20°	4656	4613	4625
25°	4594	4550	4552
30°	4482	4435	4416
35°	4298	4220	4124
40°	4023	3921	3568
45°	3634	3496	2788
50°	3222	2838	2359
55°	2813	2329	2081
60°	2439	1917	1836
65°	2139	1538	1696
70°	1908	1304	1707
75°	1861	1375	1907
80°	2063	1736	2187
85°	2152	1853	2560



TEST NUMBER: P291074

CATALOG NUMBER: 14GR-LD5-40-A-UNV-L93050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.0	4.3
10°-20°	472.8	12.5
20°-30°	707.3	18.6
30°-40°	798.4	21.0
40°-50°	677.3	17.8
50°-60°	458.3	12.1
60°-70°	273.5	7.2
70°-80°	171.3	4.5
80°-90°	72.1	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°	1345.1	35.4
0°-40°	2143.5	56.5
0°-60°	3279.1	86.4
0°-90°	3796.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3796.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1740	1740	1740	1740	1740	
5°	1741	1736	1728	1740	1737	166
15°	1683	1680	1668	1680	1673	475
25°	1547	1542	1532	1539	1533	711
35°	1308	1300	1285	1273	1256	815
45°	955	958	919	787	733	736
55°	600	571	496	444	444	540
65°	336	279	242	257	266	336
75°	179	160	132	175	183	192
85°	70	66	60	78	83	75
90°	0	0	0	0	0	



TEST NUMBER: P291074

CATALOG NUMBER: 14GR-LD5-40-A-UNV-L93050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1739.5	1739.5	1739.5	1739.5	1739.5
2.5°	1745.7	1740.4	1732.4	1743.0	1742.1
5°	1741.3	1736.0	1728.0	1740.4	1736.9
7.5°	1733.3	1728.9	1721.0	1732.4	1728.9
10°	1719.2	1715.7	1708.6	1718.3	1713.0
12.5°	1704.2	1701.6	1692.8	1701.6	1696.3
15°	1683.1	1679.5	1668.1	1679.5	1673.4
17.5°	1656.6	1652.2	1642.5	1652.2	1646.9
20°	1625.8	1620.5	1610.8	1620.5	1615.2
22.5°	1588.7	1584.3	1575.5	1584.3	1577.3
25°	1547.3	1542.0	1532.3	1539.4	1533.2
27.5°	1499.7	1492.6	1483.8	1489.1	1485.6
30°	1442.4	1433.6	1427.4	1427.4	1421.2
32.5°	1379.8	1373.6	1363.0	1356.9	1348.9
35°	1308.4	1299.6	1284.6	1273.1	1255.5
37.5°	1231.7	1221.1	1202.6	1173.5	1149.7
40°	1145.3	1132.0	1116.2	1058.9	1015.7
42.5°	1052.7	1050.0	1022.7	924.9	864.9
45°	954.8	958.4	918.7	787.3	732.7
47.5°	856.1	868.4	796.1	667.4	639.2
50°	769.7	774.1	678.0	579.2	563.4
52.5°	680.6	673.6	578.4	509.6	498.1
55°	599.5	571.3	496.4	444.4	443.5
57.5°	528.1	476.1	424.1	385.3	389.7
60°	453.2	395.0	356.2	335.0	341.2
62.5°	387.0	331.5	297.1	290.9	301.5
65°	335.9	278.6	241.6	257.4	266.3
67.5°	287.4	238.9	196.6	234.5	238.0
70°	242.5	207.2	165.8	216.0	216.9
72.5°	205.4	183.4	143.7	195.7	198.4
75°	179.0	159.6	132.2	174.6	183.4
77.5°	156.9	136.7	122.5	150.8	165.8
80°	133.1	110.2	112.0	126.1	141.1
82.5°	102.3	85.5	89.0	104.0	114.6
85°	69.7	66.1	60.0	77.6	82.9
87.5°	37.0	35.3	30.9	44.1	41.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)