

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: P290589

Luminaire Tested: **14GR-LD5-43-F1-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290589
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-43-F1-UNV-L83050-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4581.0 lumens
Efficiency: N/A
Efficacy: 122.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

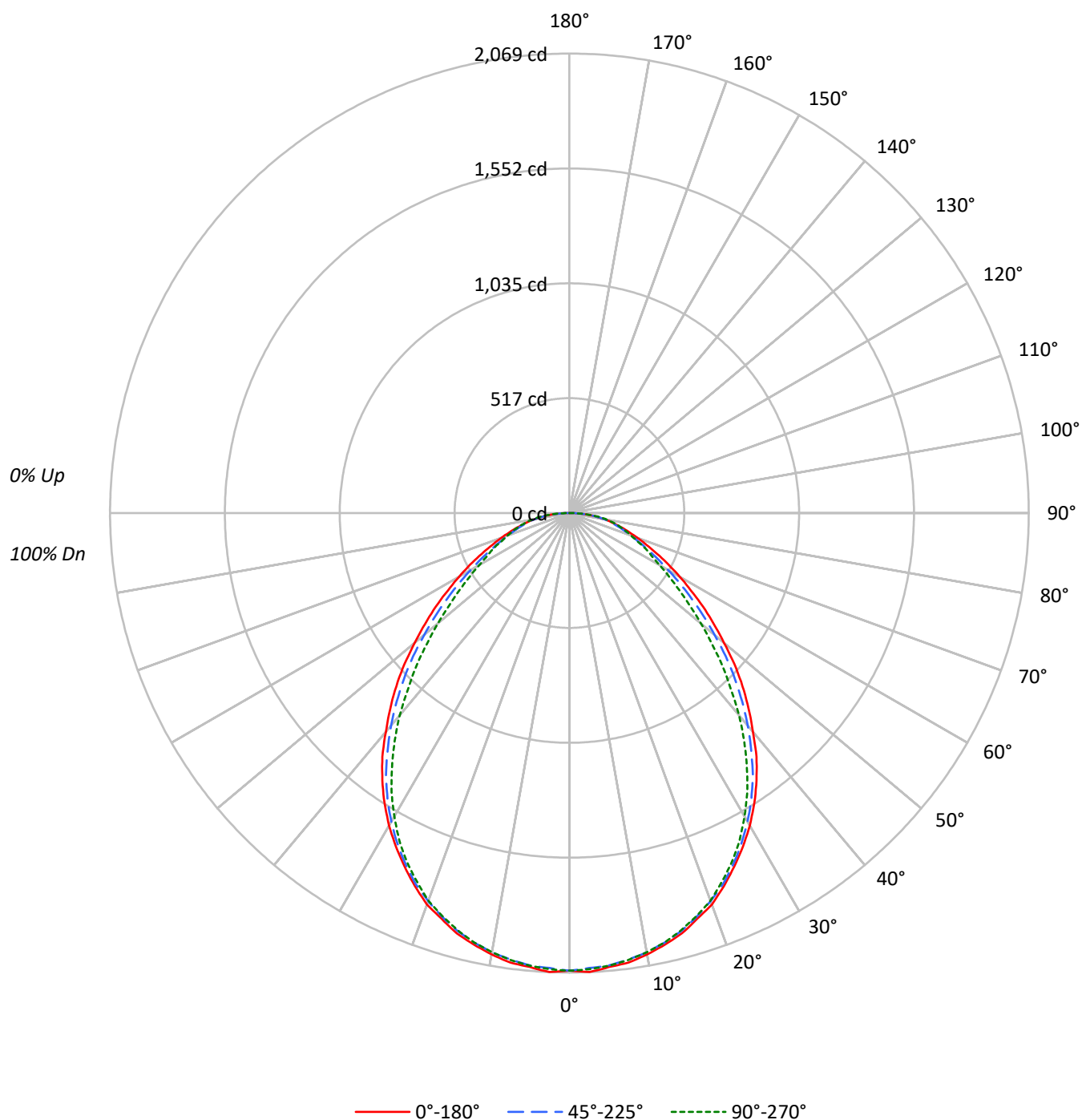
Input Watts (W): 37.386
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	101	98	107	103	99	96		99	96	93		95	92	90		91	89	87
2	101	93	87	81	98	91	85	80		88	83	78		84	80	77		81	78	75
3	92	83	75	69	90	81	74	68		78	72	67		75	70	66		73	69	65
4	85	74	66	59	83	73	65	59		70	64	58		68	62	57		66	61	57
5	79	67	58	52	77	66	58	52		64	57	51		62	55	51		60	54	50
6	73	61	52	46	71	60	52	46		58	51	45		56	50	45		55	49	45
7	68	55	47	41	66	54	47	41		53	46	41		52	45	40		50	44	40
8	64	51	43	37	62	50	42	37		49	42	37		47	41	36		46	41	36
9	60	47	39	34	58	46	39	33		45	38	33		44	38	33		43	37	33
10	56	43	36	31	55	43	35	31		42	35	30		41	35	30		40	34	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5544	5544	5544
5°	5542	5522	5525
10°	5515	5489	5486
15°	5459	5426	5418
20°	5371	5325	5319
25°	5216	5182	5144
30°	5047	4986	4901
35°	4826	4733	4577
40°	4519	4393	4176
45°	4196	4008	3716
50°	3807	3569	3235
55°	3444	3153	2828
60°	3091	2764	2520
65°	2775	2467	2414
70°	2561	2297	2322
75°	2445	2304	2435
80°	2473	2458	2653
85°	2563	2529	2822



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.5	4.2
10°-20°	549.8	12.0
20°-30°	803.0	17.5
30°-40°	894.7	19.5
40°-50°	806.2	17.6
50°-60°	602.6	13.2
60°-70°	397.5	8.7
70°-80°	242.7	5.3
80°-90°	90.0	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°	1547.3	33.8
0°-40°	2442.0	53.3
0°-60°	3850.8	84.1
0°-90°	4581.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4581.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2060	2060	2060	2060	2060	
5°	2052	2050	2044	2055	2046	195
15°	1959	1952	1948	1959	1945	551
25°	1757	1750	1745	1748	1733	809
35°	1469	1456	1441	1416	1393	916
45°	1102	1091	1053	1005	976	849
55°	734	722	672	616	603	657
65°	436	422	388	372	379	437
75°	235	231	222	229	234	251
85°	83	80	82	90	91	88
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2060.2	2060.2	2060.2	2060.2	2060.2
2.5°	2068.6	2059.1	2050.7	2063.3	2056.0
5°	2051.8	2049.7	2044.4	2054.9	2045.5
7.5°	2041.3	2033.9	2027.6	2040.2	2029.7
10°	2018.2	2014.0	2008.7	2019.2	2007.7
12.5°	1989.8	1985.6	1980.4	1993.0	1980.4
15°	1959.4	1952.0	1947.8	1959.4	1944.7
17.5°	1915.3	1912.1	1905.8	1917.4	1902.7
20°	1875.4	1863.8	1859.6	1868.0	1857.5
22.5°	1817.6	1809.2	1808.2	1813.4	1795.6
25°	1756.7	1750.4	1745.2	1748.3	1732.6
27.5°	1692.7	1684.3	1678.0	1676.9	1660.1
30°	1624.4	1613.9	1604.5	1596.1	1577.2
32.5°	1549.9	1537.3	1524.7	1511.0	1491.1
35°	1469.0	1456.4	1440.7	1415.5	1393.4
37.5°	1384.0	1369.3	1344.1	1314.7	1292.6
40°	1286.3	1279.0	1250.6	1212.8	1188.7
42.5°	1195.0	1186.6	1150.9	1108.8	1076.3
45°	1102.5	1091.0	1053.2	1004.9	976.5
47.5°	1008.0	996.5	954.5	894.6	869.4
50°	909.3	903.0	852.6	798.0	772.8
52.5°	819.0	811.7	760.2	705.6	682.5
55°	734.0	722.4	672.0	616.4	602.7
57.5°	648.9	636.3	589.1	541.8	532.4
60°	574.4	558.6	513.5	476.7	468.3
62.5°	504.0	486.2	448.4	420.0	415.8
65°	435.8	422.1	387.5	371.7	379.1
67.5°	377.0	363.3	338.1	331.8	329.7
70°	325.5	312.9	291.9	294.0	295.1
72.5°	278.3	270.9	255.2	260.4	264.6
75°	235.2	231.0	221.6	228.9	234.2
77.5°	196.4	193.2	189.0	195.3	203.7
80°	159.6	157.5	158.6	162.8	171.2
82.5°	122.9	118.7	121.8	130.2	135.5
85°	83.0	79.8	81.9	90.3	91.4
87.5°	38.9	38.9	37.8	44.1	44.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)