

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: P291424

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291424
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-4000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3970.0 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

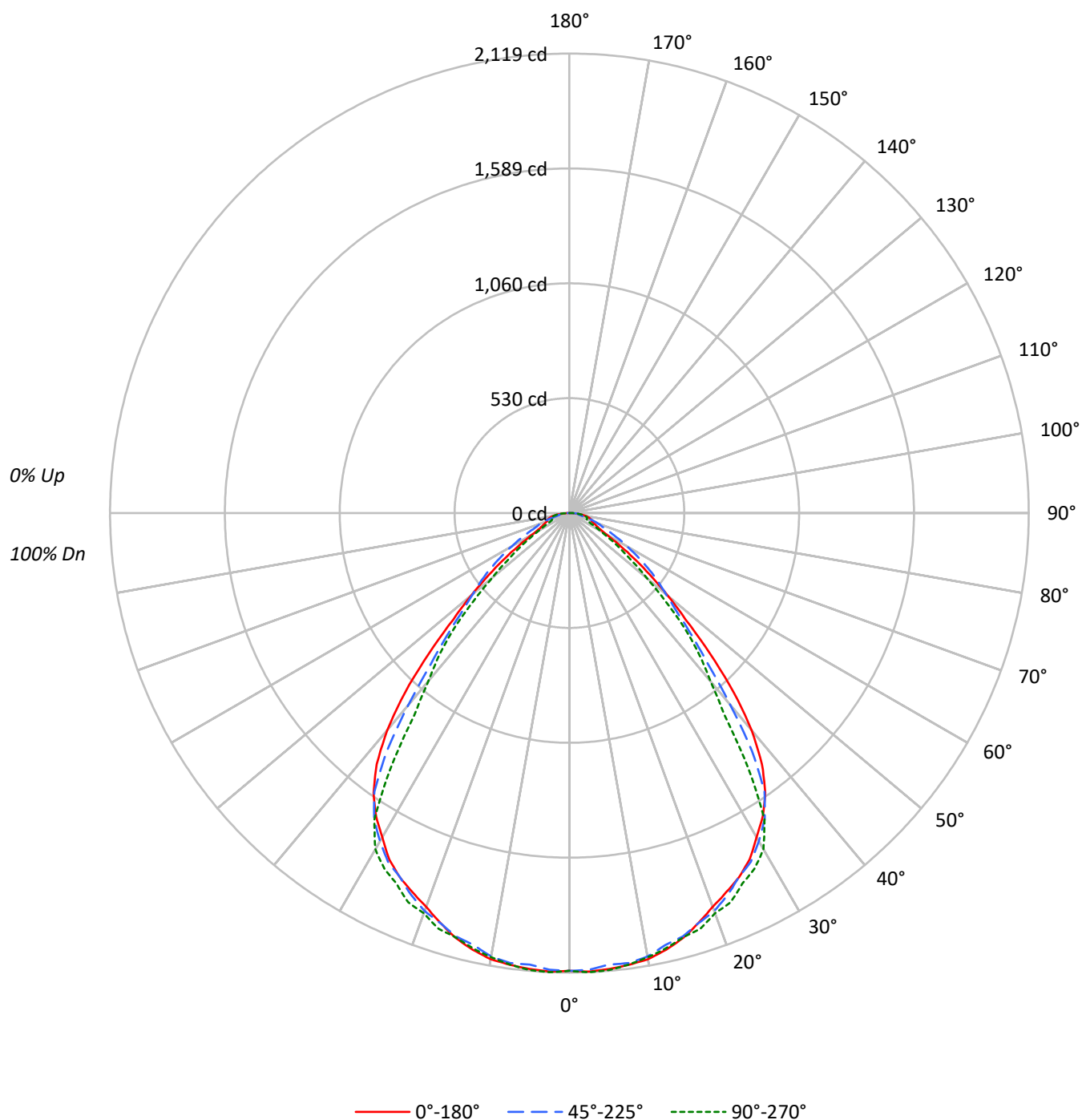
Input Watts (W): 34.038
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	100	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	87	83		88	84	81		85
3	95	87	80	74	93	85	79	74	82	77	73		80	75	71		77
4	89	79	71	65	87	77	70	65	75	69	64		73	68	63		71
5	83	71	64	58	81	70	63	58	68	62	57		67	61	57		65
6	77	65	58	52	75	64	57	52	63	56	51		61	55	51		60
7	72	60	52	47	70	59	52	47	58	51	46		56	51	46		55
8	67	55	48	43	66	55	47	42	53	47	42		52	46	42		51
9	63	51	44	39	62	51	44	39	50	43	39		49	43	38		48
10	60	48	40	36	58	47	40	36	46	40	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5681	5681	5681
5°	5700	5646	5712
10°	5709	5674	5684
15°	5651	5631	5643
20°	5533	5593	5624
25°	5499	5497	5602
30°	5365	5430	5563
35°	5174	5153	4735
40°	4594	4054	3550
45°	3486	3033	2871
50°	2473	2427	1948
55°	1693	2072	1339
60°	1047	1653	895
65°	862	1273	648
70°	858	1109	665
75°	1030	793	888
80°	1182	733	1113
85°	1124	1291	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.3	5.0
10°-20°	571.7	14.4
20°-30°	859.8	21.7
30°-40°	937.3	23.6
40°-50°	656.3	16.5
50°-60°	371.5	9.4
60°-70°	203.3	5.1
70°-80°	123.2	3.1
80°-90°	46.7	1.2
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°	1631.8	41.1
0°-40°	2569.0	64.7
0°-60°	3596.8	90.6
0°-90°	3970.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3970.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2111	2111	2111	2111	2111	
5°	2110	2106	2090	2115	2115	201
15°	2028	2023	2021	2050	2026	570
25°	1852	1856	1851	1894	1887	851
35°	1575	1568	1569	1489	1441	970
45°	916	956	797	787	754	711
55°	361	432	442	438	285	330
65°	135	223	200	253	102	139
75°	99	143	76	150	85	103
85°	36	59	42	51	41	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2111.1	2111.1	2111.1	2111.1	2111.1
2.5°	2116.5	2113.8	2107.5	2120.2	2119.3
5°	2110.2	2106.5	2090.2	2114.7	2114.7
7.5°	2101.1	2092.0	2092.9	2106.5	2100.2
10°	2089.3	2073.8	2076.6	2080.2	2080.2
12.5°	2062.0	2047.5	2040.2	2052.0	2055.7
15°	2028.4	2022.9	2021.1	2050.2	2025.7
17.5°	1981.1	1993.0	1982.0	2005.7	2009.3
20°	1932.1	1954.8	1953.0	1969.3	1963.9
22.5°	1892.1	1906.6	1906.6	1926.6	1943.0
25°	1852.1	1855.7	1851.2	1893.9	1886.6
27.5°	1800.3	1797.6	1812.1	1833.9	1848.5
30°	1726.7	1727.6	1747.6	1776.7	1790.3
32.5°	1659.4	1651.2	1675.8	1688.5	1674.0
35°	1574.9	1567.6	1568.6	1488.6	1441.3
37.5°	1459.5	1465.9	1382.3	1235.9	1174.1
40°	1307.7	1320.5	1154.1	1045.1	1010.6
42.5°	1124.2	1127.8	946.0	910.6	887.9
45°	916.0	956.0	797.0	787.0	754.3
47.5°	726.1	800.6	668.0	674.3	596.2
50°	590.7	665.2	579.8	582.5	465.3
52.5°	467.1	539.8	511.6	503.5	365.3
55°	360.8	431.7	441.7	438.0	285.4
57.5°	265.4	341.7	370.8	384.4	219.9
60°	194.5	279.0	307.2	334.4	166.3
62.5°	154.5	241.7	251.7	291.7	129.0
65°	135.4	222.7	199.9	252.6	101.8
67.5°	120.9	211.7	162.7	223.6	89.1
70°	109.1	190.8	140.9	199.9	84.5
72.5°	109.1	167.2	110.9	177.2	85.4
75°	99.1	142.7	76.3	149.9	85.4
77.5°	88.2	121.8	57.3	121.8	80.0
80°	76.3	95.4	47.3	93.6	71.8
82.5°	56.3	71.8	40.9	70.0	58.2
85°	36.4	59.1	41.8	50.9	40.9
87.5°	17.3	30.0	26.4	25.4	20.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)