

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: P291369

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291369
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-L83050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4215.0 lumens
Efficiency: N/A
Efficacy: 119.3 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

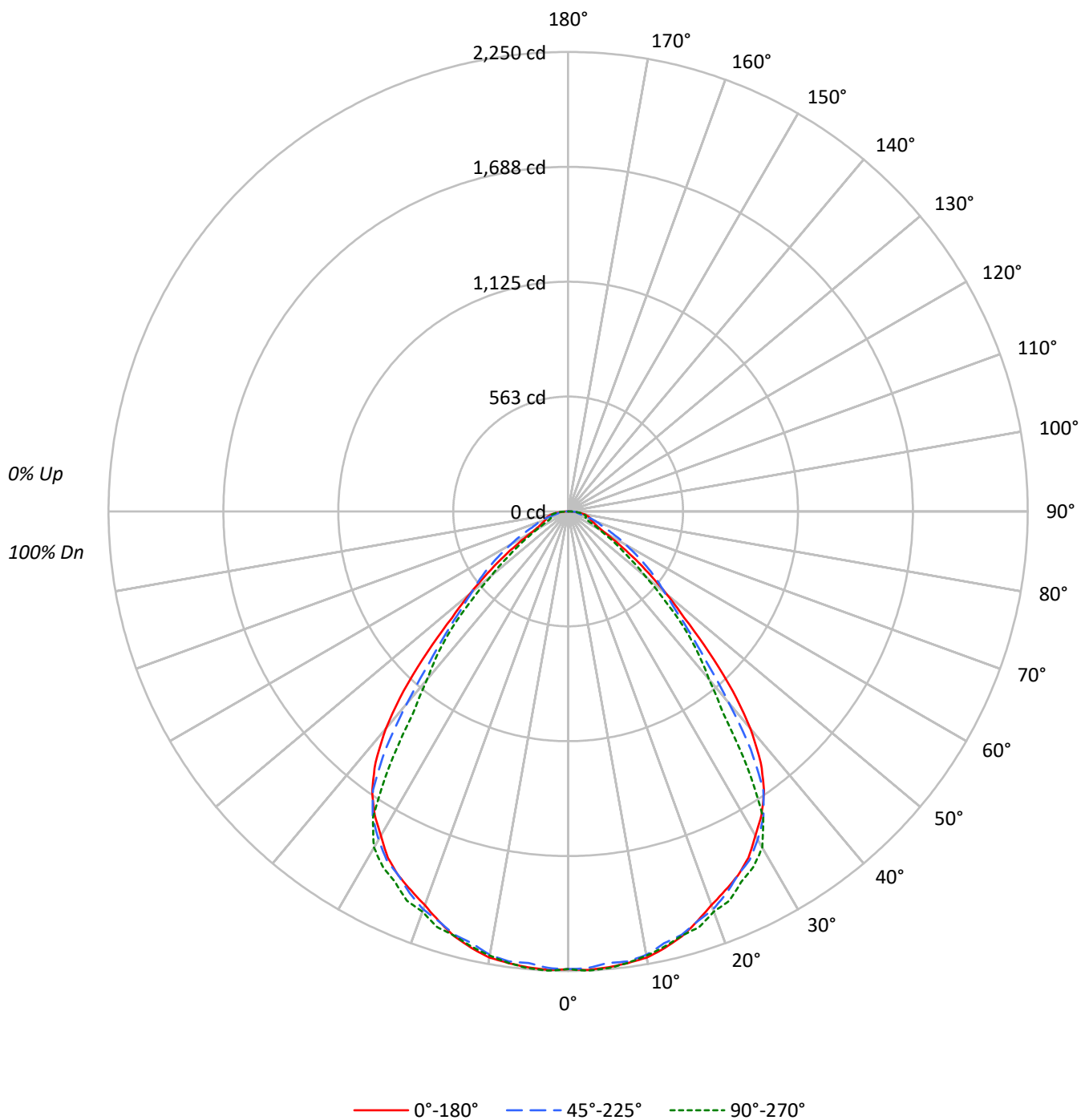
Input Watts (W): 35.34
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291369

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P291369

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4500K

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°	6032	6032	6032
5°	6052	5995	6065
10°	6061	6024	6035
15°	6000	5978	5992
20°	5874	5938	5971
25°	5839	5836	5948
30°	5696	5765	5906
35°	5493	5471	5027
40°	4877	4305	3769
45°	3701	3220	3048
50°	2626	2577	2068
55°	1797	2200	1422
60°	1111	1755	950
65°	916	1352	688
70°	911	1177	706
75°	1094	842	943
80°	1255	778	1181
85°	1192	1371	1340



TEST NUMBER: P291369

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.7	5.0
10°-20°	607.0	14.4
20°-30°	912.8	21.7
30°-40°	995.1	23.6
40°-50°	696.8	16.5
50°-60°	394.4	9.4
60°-70°	215.8	5.1
70°-80°	130.8	3.1
80°-90°	49.6	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°	1732.5	41.1
0°-40°	2727.6	64.7
0°-60°	3818.8	90.6
0°-90°	4215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2241	2241	2241	2241	2241	
5°	2240	2236	2219	2245	2245	213
15°	2154	2148	2146	2177	2151	606
25°	1966	1970	1965	2011	2003	903
35°	1672	1664	1665	1580	1530	1030
45°	973	1015	846	836	801	755
55°	383	458	469	465	303	350
65°	144	236	212	268	108	148
75°	105	152	81	159	91	109
85°	39	63	44	54	43	43
90°	0	0	0	0	0	



TEST NUMBER: P291369

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L83050-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2241.4	2241.4	2241.4	2241.4	2241.4
2.5°	2247.2	2244.3	2237.5	2251.0	2250.1
5°	2240.4	2236.5	2219.2	2245.2	2245.2
7.5°	2230.8	2221.1	2222.1	2236.5	2229.8
10°	2218.2	2201.8	2204.7	2208.6	2208.6
12.5°	2189.3	2173.8	2166.1	2178.7	2182.5
15°	2153.6	2147.8	2145.9	2176.7	2150.7
17.5°	2103.4	2115.9	2104.4	2129.4	2133.3
20°	2051.3	2075.4	2073.5	2090.9	2085.1
22.5°	2008.8	2024.3	2024.3	2045.5	2062.9
25°	1966.4	1970.2	1965.4	2010.8	2003.1
27.5°	1911.4	1908.5	1923.9	1947.1	1962.5
30°	1833.2	1834.2	1855.4	1886.3	1900.8
32.5°	1761.8	1753.2	1779.2	1792.7	1777.3
35°	1672.1	1664.4	1665.4	1580.4	1530.3
37.5°	1549.6	1556.3	1467.6	1312.2	1246.6
40°	1388.4	1401.9	1225.4	1109.6	1072.9
42.5°	1193.5	1197.4	1004.4	966.8	942.7
45°	972.6	1015.0	846.2	835.6	800.8
47.5°	770.9	850.0	709.2	715.9	632.9
50°	627.2	706.3	615.6	618.5	494.0
52.5°	495.9	573.1	543.2	534.5	387.9
55°	383.0	458.3	468.9	465.1	303.0
57.5°	281.7	362.8	393.7	408.1	233.5
60°	206.5	296.2	326.1	355.1	176.6
62.5°	164.0	256.7	267.3	309.7	137.0
65°	143.8	236.4	212.3	268.2	108.1
67.5°	128.3	224.8	172.7	237.4	94.6
70°	115.8	202.6	149.6	212.3	89.7
72.5°	115.8	177.5	117.7	188.1	90.7
75°	105.2	151.5	81.0	159.2	90.7
77.5°	93.6	129.3	60.8	129.3	84.9
80°	81.0	101.3	50.2	99.4	76.2
82.5°	59.8	76.2	43.4	74.3	61.8
85°	38.6	62.7	44.4	54.0	43.4
87.5°	18.3	31.8	28.0	27.0	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)