

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: P291429

Luminaire Tested: **14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291429
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-6500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4157.0 lumens
Efficiency: N/A
Efficacy: 118.3 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

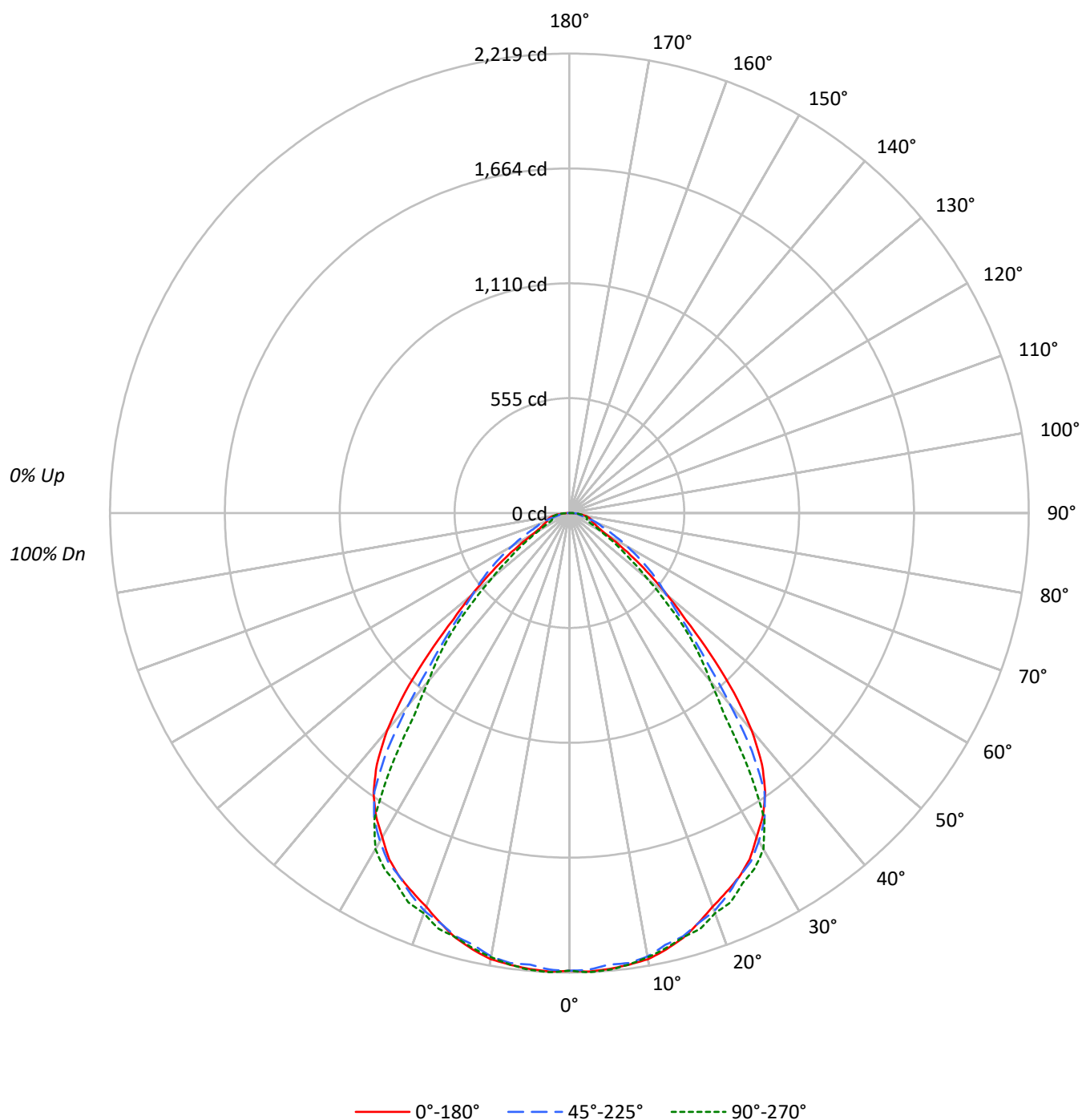
Input Watts (W): 35.154
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P291429

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-6500K

Luminous Intensity Polar Plot





TEST NUMBER: P291429

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-6500K

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°	5948	5948	5948
5°	5969	5912	5981
10°	5978	5942	5952
15°	5917	5896	5909
20°	5794	5856	5889
25°	5758	5755	5866
30°	5618	5686	5825
35°	5417	5395	4958
40°	4810	4245	3717
45°	3650	3176	3006
50°	2589	2542	2040
55°	1772	2170	1402
60°	1096	1731	937
65°	903	1333	679
70°	899	1161	696
75°	1078	831	930
80°	1238	767	1165
85°	1176	1352	1321



TEST NUMBER: P291429

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-6500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	209.7	5.0
10°-20°	598.6	14.4
20°-30°	900.3	21.7
30°-40°	981.4	23.6
40°-50°	687.2	16.5
50°-60°	389.0	9.4
60°-70°	212.8	5.1
70°-80°	129.0	3.1
80°-90°	48.9	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°	1708.6	41.1
0°-40°	2690.0	64.7
0°-60°	3766.2	90.6
0°-90°	4157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4157.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2210	2206	2189	2214	2214	210
15°	2124	2118	2116	2147	2121	597
25°	1939	1943	1938	1983	1976	891
35°	1649	1642	1642	1559	1509	1016
45°	959	1001	834	824	790	745
55°	378	452	462	459	299	345
65°	142	233	209	264	107	146
75°	104	149	80	157	89	108
85°	38	62	44	53	43	42
90°	0	0	0	0	0	



TEST NUMBER: P291429

CATALOG NUMBER: 14GR-LD5-40-A19/156-UNV-L82765-W2A1-U-6500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2210.5	2210.5	2210.5	2210.5	2210.5
2.5°	2216.2	2213.4	2206.7	2220.0	2219.1
5°	2209.6	2205.8	2188.6	2214.3	2214.3
7.5°	2200.1	2190.5	2191.5	2205.8	2199.1
10°	2187.7	2171.5	2174.4	2178.2	2178.2
12.5°	2159.1	2143.9	2136.3	2148.7	2152.5
15°	2123.9	2118.2	2116.3	2146.8	2121.1
17.5°	2074.5	2086.8	2075.4	2100.1	2104.0
20°	2023.1	2046.9	2045.0	2062.1	2056.4
22.5°	1981.2	1996.4	1996.4	2017.4	2034.5
25°	1939.3	1943.1	1938.4	1983.1	1975.5
27.5°	1885.1	1882.2	1897.5	1920.3	1935.5
30°	1808.0	1809.0	1829.9	1860.3	1874.6
32.5°	1737.6	1729.0	1754.7	1768.0	1752.8
35°	1649.1	1641.5	1642.4	1558.7	1509.2
37.5°	1528.2	1534.9	1447.4	1294.2	1229.4
40°	1369.3	1382.7	1208.5	1094.3	1058.2
42.5°	1177.1	1180.9	990.6	953.5	929.7
45°	959.2	1001.1	834.5	824.1	789.8
47.5°	760.3	838.3	699.4	706.1	624.2
50°	618.5	696.6	607.1	610.0	487.2
52.5°	489.1	565.2	535.7	527.2	382.5
55°	377.8	452.0	462.5	458.7	298.8
57.5°	277.9	357.8	388.2	402.5	230.3
60°	203.6	292.1	321.6	350.2	174.1
62.5°	161.8	253.1	263.6	305.5	135.1
65°	141.8	233.1	209.3	264.5	106.6
67.5°	126.6	221.7	170.3	234.1	93.3
70°	114.2	199.8	147.5	209.3	88.5
72.5°	114.2	175.1	116.1	185.6	89.4
75°	103.7	149.4	79.9	157.0	89.4
77.5°	92.3	127.5	59.9	127.5	83.7
80°	79.9	99.9	49.5	98.0	75.2
82.5°	59.0	75.2	42.8	73.3	60.9
85°	38.1	61.9	43.8	53.3	42.8
87.5°	18.1	31.4	27.6	26.6	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)