

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: P291356

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291356
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-LD5-32-A19/156-UNV-L83050-W2A1-U-3000K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3004.0 lumens
Efficiency: N/A
Efficacy: 117.5 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

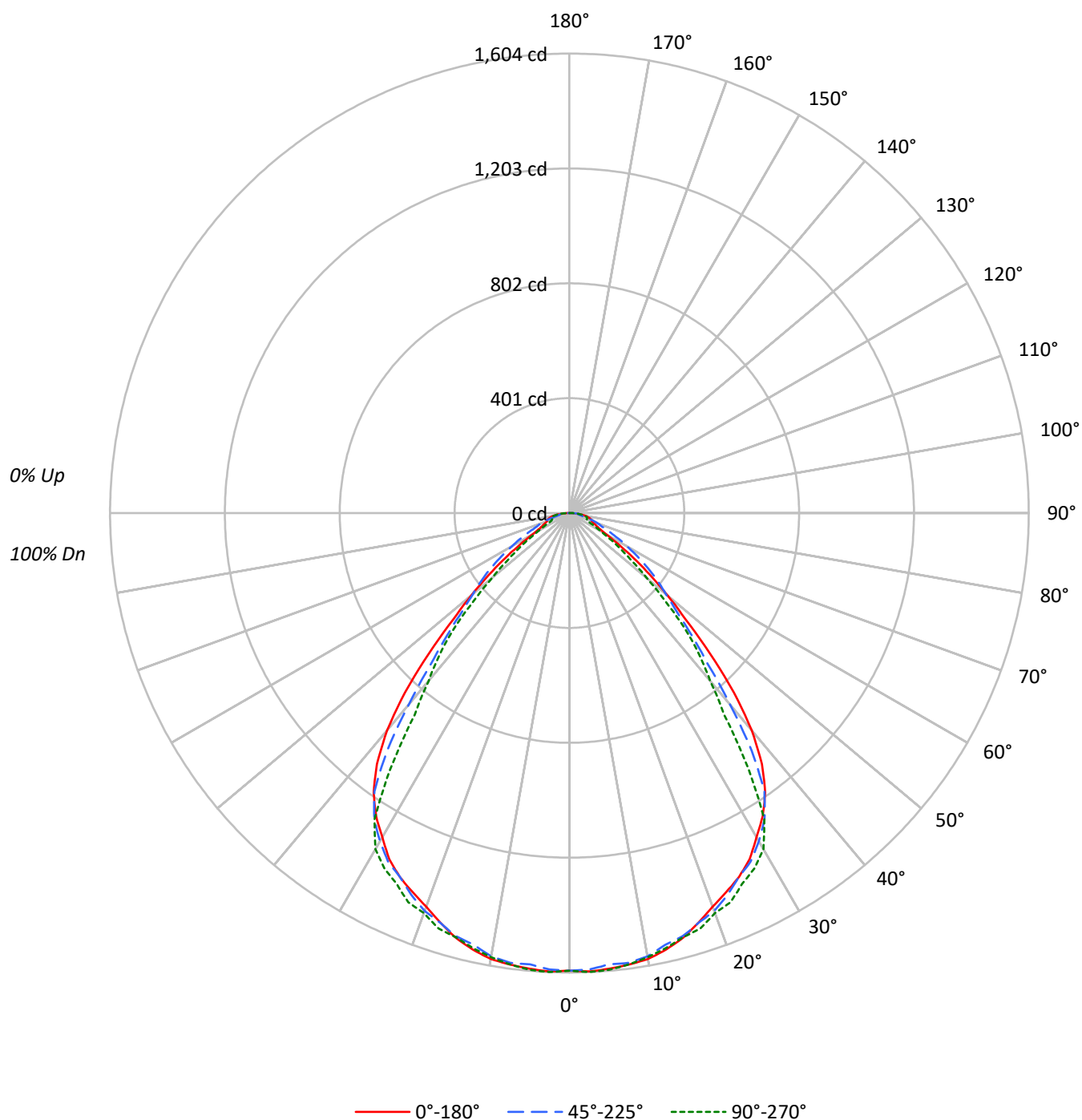
Input Watts (W): 25.575
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4299	4299	4299
5°	4313	4272	4323
10°	4320	4294	4301
15°	4276	4260	4270
20°	4186	4232	4255
25°	4161	4159	4239
30°	4060	4109	4209
35°	3915	3899	3583
40°	3476	3068	2686
45°	2638	2295	2172
50°	1871	1837	1474
55°	1281	1568	1013
60°	792	1251	677
65°	653	963	490
70°	649	839	504
75°	780	601	672
80°	896	555	841
85°	849	976	954



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.6	5.0
10°-20°	432.6	14.4
20°-30°	650.6	21.7
30°-40°	709.2	23.6
40°-50°	496.6	16.5
50°-60°	281.1	9.4
60°-70°	153.8	5.1
70°-80°	93.2	3.1
80°-90°	35.3	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°	1234.7	41.1
0°-40°	1943.9	64.7
0°-60°	2721.6	90.6
0°-90°	3004.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3004.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1597	1594	1582	1600	1600	152
15°	1535	1531	1529	1551	1533	432
25°	1401	1404	1401	1433	1428	644
35°	1192	1186	1187	1126	1091	734
45°	693	723	603	596	571	538
55°	273	327	334	331	216	250
65°	102	168	151	191	77	105
75°	75	108	58	114	65	78
85°	28	45	32	38	31	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1597.4	1597.4	1597.4	1597.4	1597.4
2.5°	1601.5	1599.5	1594.7	1604.3	1603.6
5°	1596.7	1594.0	1581.6	1600.2	1600.2
7.5°	1589.8	1583.0	1583.7	1594.0	1589.2
10°	1580.9	1569.2	1571.3	1574.0	1574.0
12.5°	1560.3	1549.3	1543.8	1552.7	1555.5
15°	1534.8	1530.7	1529.3	1551.3	1532.8
17.5°	1499.1	1508.0	1499.8	1517.6	1520.4
20°	1461.9	1479.1	1477.8	1490.1	1486.0
22.5°	1431.7	1442.7	1442.7	1457.8	1470.2
25°	1401.4	1404.2	1400.7	1433.1	1427.6
27.5°	1362.2	1360.2	1371.2	1387.7	1398.7
30°	1306.5	1307.2	1322.4	1344.4	1354.7
32.5°	1255.6	1249.5	1268.0	1277.7	1266.7
35°	1191.7	1186.2	1186.9	1126.4	1090.6
37.5°	1104.4	1109.2	1045.9	935.2	888.4
40°	989.5	999.2	873.3	790.8	764.7
42.5°	850.6	853.4	715.8	689.0	671.8
45°	693.2	723.4	603.1	595.5	570.7
47.5°	549.4	605.8	505.4	510.2	451.1
50°	447.0	503.4	438.7	440.8	352.1
52.5°	353.5	408.5	387.1	381.0	276.4
55°	273.0	326.6	334.2	331.4	215.9
57.5°	200.8	258.6	280.6	290.9	166.4
60°	147.2	211.1	232.4	253.1	125.8
62.5°	116.9	182.9	190.5	220.7	97.6
65°	102.5	168.5	151.3	191.2	77.0
67.5°	91.5	160.2	123.1	169.2	67.4
70°	82.5	144.4	106.6	151.3	64.0
72.5°	82.5	126.5	83.9	134.1	64.6
75°	75.0	108.0	57.8	113.5	64.6
77.5°	66.7	92.1	43.3	92.1	60.5
80°	57.8	72.2	35.8	70.8	54.3
82.5°	42.6	54.3	30.9	52.9	44.0
85°	27.5	44.7	31.6	38.5	30.9
87.5°	13.1	22.7	19.9	19.3	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)