

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: P291406

Luminaire Tested: **14GR-LD5-32-A19/156-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P291406
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-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: 3174.0 lumens
Efficiency: N/A
Efficacy: 122.3 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

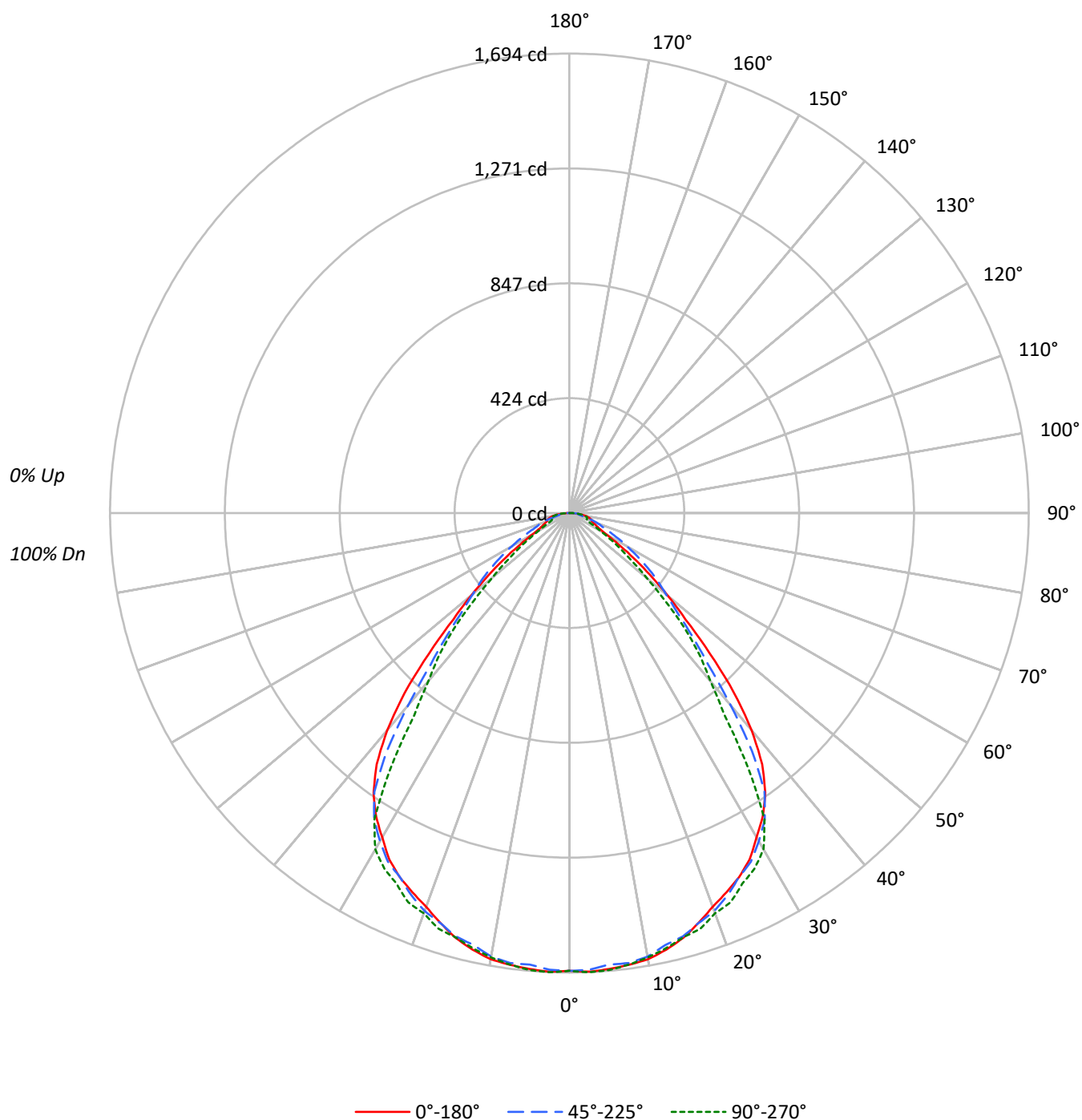
Input Watts (W): 25.947
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77		
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68		
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61		
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54		
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49		
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44		
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40		
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37		
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4542	4542	4542
5°	4557	4514	4567
10°	4564	4536	4544
15°	4518	4502	4512
20°	4424	4471	4496
25°	4396	4394	4478
30°	4290	4341	4447
35°	4136	4120	3785
40°	3673	3241	2838
45°	2787	2425	2295
50°	1977	1940	1557
55°	1353	1657	1070
60°	837	1322	716
65°	690	1018	518
70°	686	886	532
75°	823	634	710
80°	945	586	890
85°	898	1031	1010



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.1	5.0
10°-20°	457.1	14.4
20°-30°	687.4	21.7
30°-40°	749.3	23.6
40°-50°	524.7	16.5
50°-60°	297.0	9.4
60°-70°	162.5	5.1
70°-80°	98.5	3.1
80°-90°	37.3	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°	1304.6	41.1
0°-40°	2053.9	64.7
0°-60°	2875.6	90.6
0°-90°	3174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3174.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1688	1688	1688	1688	1688	
5°	1687	1684	1671	1691	1691	160
15°	1622	1617	1616	1639	1620	456
25°	1481	1484	1480	1514	1508	680
35°	1259	1253	1254	1190	1152	776
45°	732	764	637	629	603	569
55°	288	345	353	350	228	264
65°	108	178	160	202	81	111
75°	79	114	61	120	68	82
85°	29	47	33	41	33	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1687.8	1687.8	1687.8	1687.8	1687.8
2.5°	1692.2	1690.0	1684.9	1695.1	1694.3
5°	1687.1	1684.2	1671.1	1690.7	1690.7
7.5°	1679.8	1672.6	1673.3	1684.2	1679.1
10°	1670.4	1658.0	1660.2	1663.1	1663.1
12.5°	1648.6	1637.0	1631.1	1640.6	1643.5
15°	1621.7	1617.3	1615.9	1639.1	1619.5
17.5°	1583.9	1593.4	1584.6	1603.5	1606.4
20°	1544.7	1562.8	1561.4	1574.5	1570.1
22.5°	1512.7	1524.3	1524.3	1540.3	1553.4
25°	1480.7	1483.6	1480.0	1514.2	1508.3
27.5°	1439.3	1437.1	1448.8	1466.2	1477.8
30°	1380.5	1381.2	1397.2	1420.4	1431.3
32.5°	1326.7	1320.2	1339.8	1350.0	1338.3
35°	1259.1	1253.3	1254.1	1190.1	1152.3
37.5°	1166.9	1171.9	1105.1	988.1	938.7
40°	1045.5	1055.7	922.7	835.5	807.9
42.5°	898.8	901.7	756.4	728.0	709.9
45°	732.4	764.3	637.2	629.2	603.0
47.5°	580.5	640.1	534.0	539.1	476.6
50°	472.3	531.8	463.5	465.7	372.0
52.5°	373.5	431.6	409.1	402.5	292.1
55°	288.4	345.1	353.1	350.2	228.1
57.5°	212.2	273.2	296.4	307.3	175.8
60°	155.5	223.1	245.6	267.4	133.0
62.5°	123.5	193.3	201.3	233.2	103.2
65°	108.3	178.0	159.8	202.0	81.4
67.5°	96.6	169.3	130.1	178.7	71.2
70°	87.2	152.6	112.6	159.8	67.6
72.5°	87.2	133.7	88.6	141.7	68.3
75°	79.2	114.1	61.0	119.9	68.3
77.5°	70.5	97.4	45.8	97.4	63.9
80°	61.0	76.3	37.8	74.8	57.4
82.5°	45.0	57.4	32.7	55.9	46.5
85°	29.1	47.2	33.4	40.7	32.7
87.5°	13.8	24.0	21.1	20.3	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)