

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: P293924

Luminaire Tested: **24GR-LD5-34-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293924
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-34-A19/156-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3568.0 lumens
Efficiency: N/A
Efficacy: 151.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

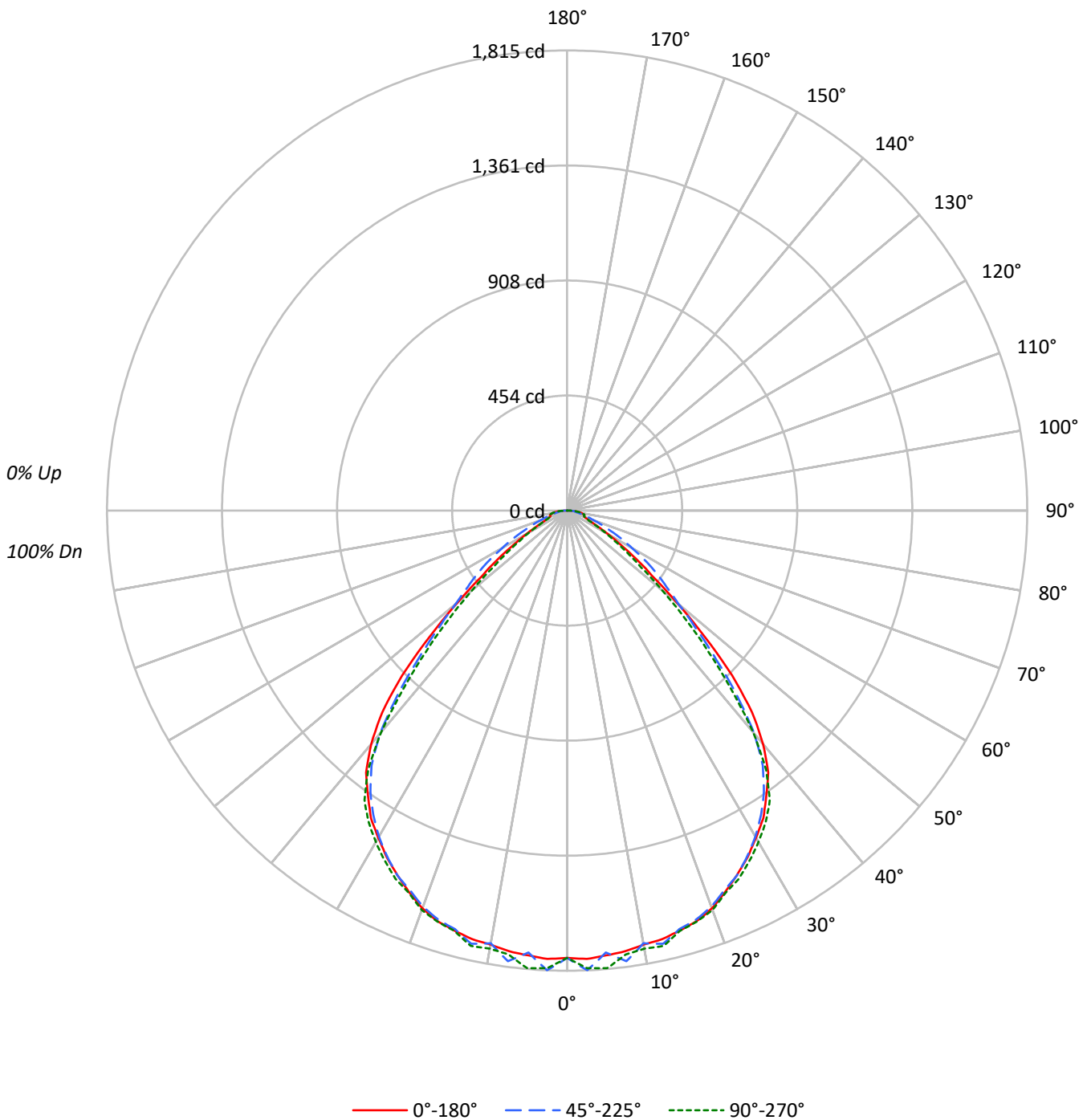
Input Watts (W): 23.529
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	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	86	83	88	84	81	85	82	79	77
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2374	2374	2374
5°	2379	2363	2447
10°	2375	2368	2397
15°	2389	2381	2390
20°	2391	2381	2401
25°	2354	2355	2378
30°	2315	2307	2345
35°	2249	2222	2289
40°	2112	2018	2007
45°	1751	1584	1502
50°	1178	1202	1027
55°	777	1008	673
60°	498	796	461
65°	321	607	312
70°	284	435	284
75°	366	346	370
80°	449	298	470
85°	522	443	548



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.9	4.7
10°-20°	485.0	13.6
20°-30°	730.2	20.5
30°-40°	846.4	23.7
40°-50°	661.1	18.5
50°-60°	353.0	9.9
60°-70°	181.5	5.1
70°-80°	102.7	2.9
80°-90°	39.0	1.1
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°	1384.2	38.8
0°-40°	2230.6	62.5
0°-60°	3244.7	90.9
0°-90°	3568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3568.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1764	1764	1764	1764	1764	
5°	1761	1811	1750	1798	1812	167
15°	1715	1726	1709	1720	1716	484
25°	1586	1580	1587	1584	1602	731
35°	1370	1363	1353	1380	1394	854
45°	920	921	833	825	790	693
55°	331	419	430	387	287	306
65°	101	210	191	210	98	111
75°	70	132	66	124	71	71
85°	34	44	29	44	36	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1764.3	1764.3	1764.3	1764.3	1764.3
2.5°	1770.0	1802.1	1814.7	1799.2	1806.1
5°	1761.4	1810.7	1749.9	1798.1	1811.8
7.5°	1753.4	1748.2	1792.4	1746.5	1766.0
10°	1738.5	1741.9	1733.3	1766.0	1754.5
12.5°	1731.6	1751.7	1749.9	1733.3	1758.5
15°	1715.0	1725.9	1709.3	1720.2	1716.1
17.5°	1698.4	1693.2	1691.5	1696.1	1700.1
20°	1669.7	1652.5	1662.9	1664.0	1676.6
22.5°	1628.5	1618.2	1620.5	1630.8	1631.9
25°	1585.5	1580.3	1586.6	1584.4	1602.1
27.5°	1540.8	1533.9	1537.9	1546.5	1557.4
30°	1489.8	1488.1	1485.2	1492.7	1509.3
32.5°	1439.4	1425.6	1423.3	1438.8	1457.7
35°	1369.5	1363.2	1352.9	1379.8	1393.5
37.5°	1303.0	1283.5	1266.9	1283.0	1288.7
40°	1202.7	1187.8	1148.9	1150.6	1142.6
42.5°	1079.5	1068.6	994.2	981.0	958.6
45°	920.2	920.8	832.6	825.1	789.6
47.5°	735.2	767.8	691.0	682.4	629.7
50°	562.7	621.7	574.1	560.4	490.5
52.5°	422.3	508.8	493.9	464.1	367.9
55°	331.2	418.9	429.8	387.3	287.1
57.5°	249.3	344.9	362.7	327.8	221.8
60°	185.1	290.5	295.7	281.9	171.3
62.5°	137.5	247.0	240.1	241.8	127.2
65°	100.8	210.3	190.8	209.7	98.0
67.5°	82.5	182.2	148.4	181.6	79.6
70°	72.2	161.6	110.6	159.9	72.2
72.5°	69.9	148.4	87.7	142.1	70.5
75°	70.5	132.4	66.5	123.8	71.1
77.5°	64.7	108.9	50.4	105.4	67.6
80°	57.9	82.5	38.4	83.7	60.7
82.5°	49.3	60.2	30.9	61.9	51.0
85°	33.8	44.1	28.7	44.1	35.5
87.5°	16.0	26.4	17.8	25.2	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)