

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: P476031

Luminaire Tested: **22GR-LD5-43-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476031
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-A-UNV-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ A LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4078.3 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

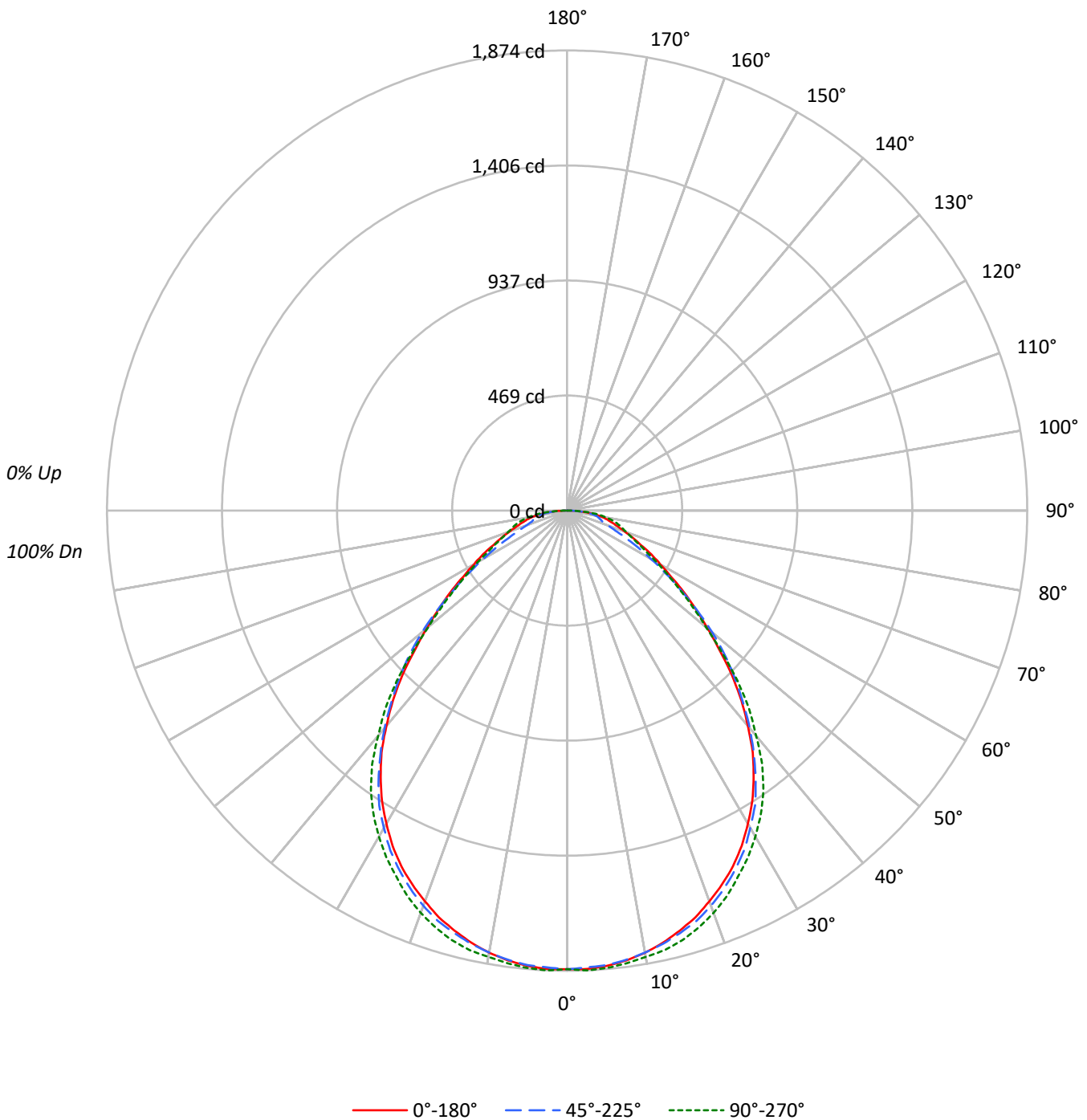
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5026	5026	5026
5°	5027	5020	5051
10°	4997	4995	5044
15°	4934	4960	5047
20°	4848	4905	4993
25°	4745	4799	4886
30°	4574	4636	4763
35°	4349	4399	4577
40°	4021	4064	4207
45°	3612	3677	3735
50°	3123	3234	3091
55°	2725	2653	2618
60°	2360	2125	2268
65°	2109	1668	2037
70°	1956	1381	2009
75°	1953	1460	2230
80°	2163	1836	2514
85°	2257	1991	2847



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.8	4.3
10°-20°	503.4	12.3
20°-30°	744.5	18.3
30°-40°	840.2	20.6
40°-50°	740.6	18.2
50°-60°	508.1	12.5
60°-70°	299.8	7.4
70°-80°	187.1	4.6
80°-90°	78.0	1.9
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°	1424.7	34.9
0°-40°	2264.8	55.5
0°-60°	3513.5	86.1
0°-90°	4078.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4078.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1861	1857	1858	1865	1870	177
15°	1771	1773	1780	1802	1812	499
25°	1598	1604	1616	1637	1646	734
35°	1324	1335	1339	1371	1393	825
45°	949	954	966	972	981	729
55°	581	567	566	547	558	521
65°	331	291	262	303	320	334
75°	188	169	140	196	214	202
85°	73	68	64	84	92	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1867.7	1867.7	1867.7	1867.7	1867.7
2.5°	1868.7	1863.9	1862.1	1869.7	1874.4
5°	1861.1	1857.4	1858.4	1864.9	1869.7
7.5°	1847.8	1845.1	1845.1	1854.4	1859.1
10°	1828.7	1828.0	1828.0	1839.3	1845.8
12.5°	1802.4	1803.1	1806.9	1822.2	1833.5
15°	1771.0	1772.7	1780.5	1802.4	1811.7
17.5°	1736.8	1736.8	1751.9	1769.0	1780.5
20°	1693.1	1695.9	1713.0	1732.1	1743.4
22.5°	1648.4	1653.2	1667.5	1689.4	1699.7
25°	1598.2	1604.0	1616.3	1637.1	1645.7
27.5°	1539.4	1547.0	1560.3	1575.3	1593.4
30°	1471.9	1483.4	1492.0	1512.8	1532.7
32.5°	1403.6	1414.1	1423.7	1445.5	1468.1
35°	1324.0	1335.3	1339.0	1371.4	1393.3
37.5°	1242.3	1247.1	1248.9	1281.3	1304.9
40°	1144.7	1153.9	1157.0	1182.6	1197.6
42.5°	1050.5	1054.5	1060.0	1079.1	1097.2
45°	949.0	953.8	966.1	971.9	981.4
47.5°	842.8	857.1	871.2	853.1	854.1
50°	745.9	757.4	772.5	738.3	738.3
52.5°	659.5	665.2	666.3	637.9	643.4
55°	580.9	566.6	565.5	546.7	558.0
57.5°	502.0	483.2	476.4	470.6	483.9
60°	438.5	404.3	394.8	403.3	421.4
62.5°	386.2	342.5	324.5	346.3	362.6
65°	331.2	291.3	261.9	302.9	319.9
67.5°	288.5	250.6	212.7	270.5	282.8
70°	248.6	219.2	175.5	245.9	255.4
72.5°	216.5	193.6	151.9	222.0	233.6
75°	187.8	169.0	140.4	196.4	214.5
77.5°	165.2	144.1	131.1	169.8	191.6
80°	139.6	118.5	118.5	142.4	162.2
82.5°	110.0	92.9	95.9	115.8	130.1
85°	73.1	68.3	64.5	84.4	92.2
87.5°	36.9	37.9	34.2	43.7	44.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)