

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: P475992

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475992  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-32-A19/156-UNV-L835-CD1-U  
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3109.2 lumens  
Efficiency: N/A  
Efficacy: 124.4 lumens/watt  
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

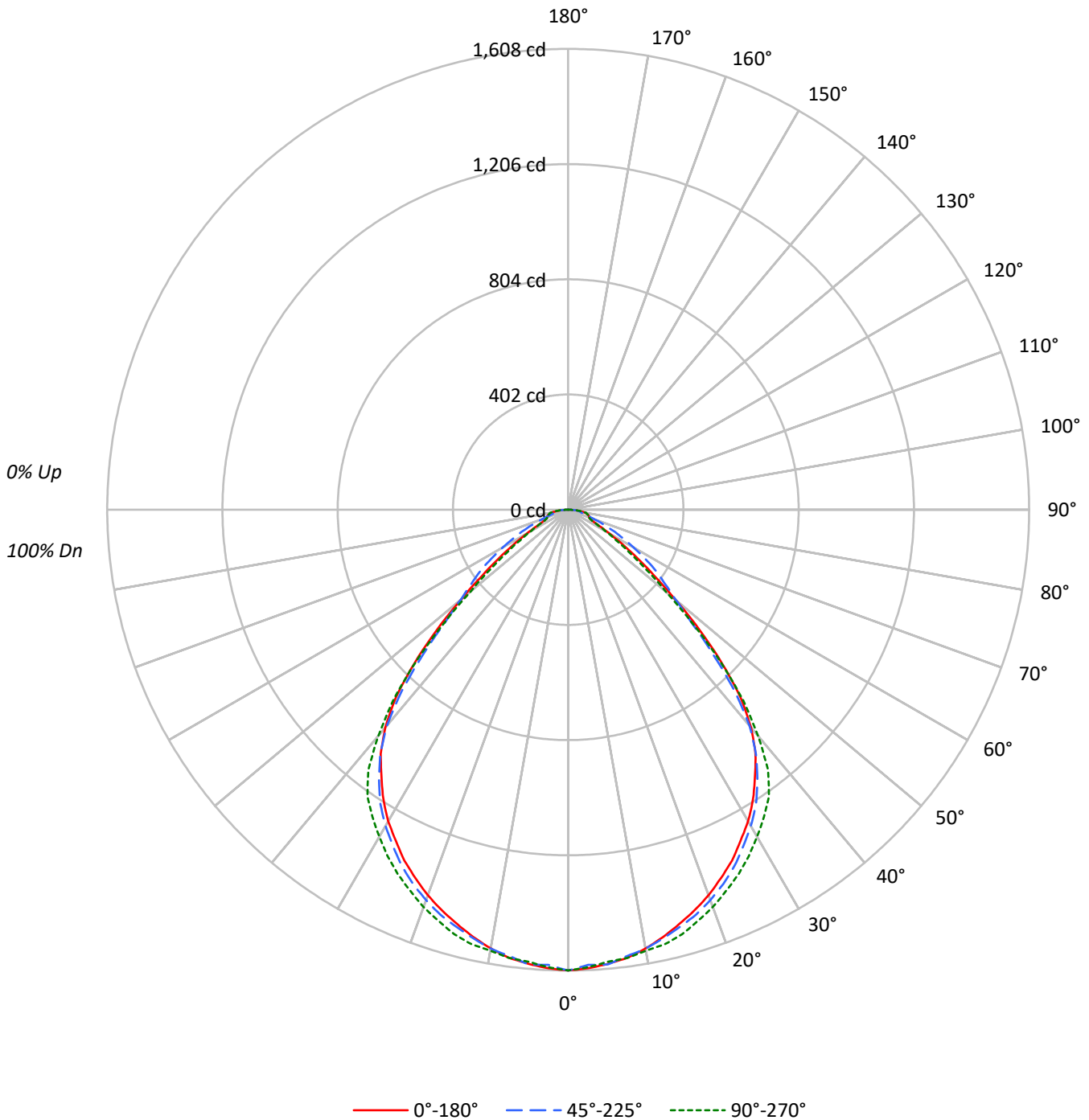
Input Watts (W): 25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	101	99	100	98	95	97	95	93	93	91	90	88
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	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	54	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	54	47	41	65	54	46	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°	4327	4327	4327
5°	4296	4301	4277
10°	4248	4250	4269
15°	4170	4198	4273
20°	4100	4151	4225
25°	4012	4074	4170
30°	3900	3959	4094
35°	3733	3780	4011
40°	3484	3457	3619
45°	2893	2730	2869
50°	2039	2049	1869
55°	1369	1761	1232
60°	883	1413	819
65°	612	1095	589
70°	615	747	611
75°	757	583	751
80°	925	676	981
85°	902	920	994



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.5	4.8
10°-20°	426.1	13.7
20°-30°	631.9	20.3
30°-40°	722.9	23.2
40°-50°	572.2	18.4
50°-60°	312.2	10.0
60°-70°	163.4	5.3
70°-80°	94.3	3.0
80°-90°	35.7	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°	1208.6	38.9
0°-40°	1931.4	62.1
0°-60°	2815.9	90.6
0°-90°	3109.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3109.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1608	1608	1608	1608	1608	
5°	1590	1579	1592	1587	1583	151
15°	1497	1504	1507	1519	1534	422
25°	1351	1353	1372	1389	1404	621
35°	1136	1136	1151	1192	1221	709
45°	760	756	717	753	754	578
55°	292	365	375	350	263	271
65°	96	193	172	184	92	104
75°	73	116	56	115	72	76
85°	29	38	30	39	32	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1607.8	1607.8	1607.8	1607.8	1607.8
2.5°	1601.8	1592.3	1589.9	1594.7	1597.6
5°	1590.5	1579.1	1592.3	1586.9	1583.3
7.5°	1577.4	1573.2	1570.8	1579.1	1577.4
10°	1554.7	1548.7	1555.3	1560.0	1562.4
12.5°	1527.2	1530.2	1531.4	1546.3	1553.5
15°	1496.8	1504.5	1506.9	1518.9	1533.8
17.5°	1465.8	1467.5	1481.9	1497.4	1504.5
20°	1431.7	1434.7	1449.6	1464.0	1475.3
22.5°	1391.7	1395.3	1413.8	1429.9	1439.5
25°	1351.2	1353.0	1372.1	1389.4	1404.3
27.5°	1302.2	1311.8	1323.1	1347.0	1363.1
30°	1255.1	1261.0	1274.2	1300.4	1317.7
32.5°	1199.6	1202.0	1218.7	1247.3	1270.6
35°	1136.3	1136.3	1150.6	1192.4	1221.1
37.5°	1073.7	1065.3	1076.6	1124.4	1144.7
40°	991.9	985.9	984.1	1017.0	1030.1
42.5°	891.6	880.3	860.0	893.4	904.2
45°	760.3	756.2	717.4	752.6	753.8
47.5°	623.1	626.0	582.5	617.7	591.4
50°	487.0	518.0	489.4	504.3	446.4
52.5°	379.0	436.9	426.1	420.2	341.4
55°	291.8	364.6	375.4	349.7	262.6
57.5°	222.6	310.9	317.5	299.6	199.9
60°	164.1	262.6	262.6	254.2	152.2
62.5°	122.3	225.6	213.7	216.0	116.4
65°	96.1	193.4	171.9	183.8	92.5
67.5°	80.6	161.1	130.1	158.7	80.6
70°	78.2	140.2	94.9	143.2	77.6
72.5°	77.6	128.9	71.0	130.1	78.2
75°	72.8	116.4	56.1	114.6	72.2
77.5°	66.8	96.7	46.6	96.7	67.4
80°	59.7	73.4	43.6	75.2	63.3
82.5°	46.0	52.5	38.8	53.1	48.9
85°	29.2	38.2	29.8	38.8	32.2
87.5°	13.1	20.3	13.1	20.9	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)