

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: P476016

Luminaire Tested: **22GR-LD5-32-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P476016  
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-L850-CD1-U  
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3171.4 lumens  
Efficiency: N/A  
Efficacy: 126.9 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

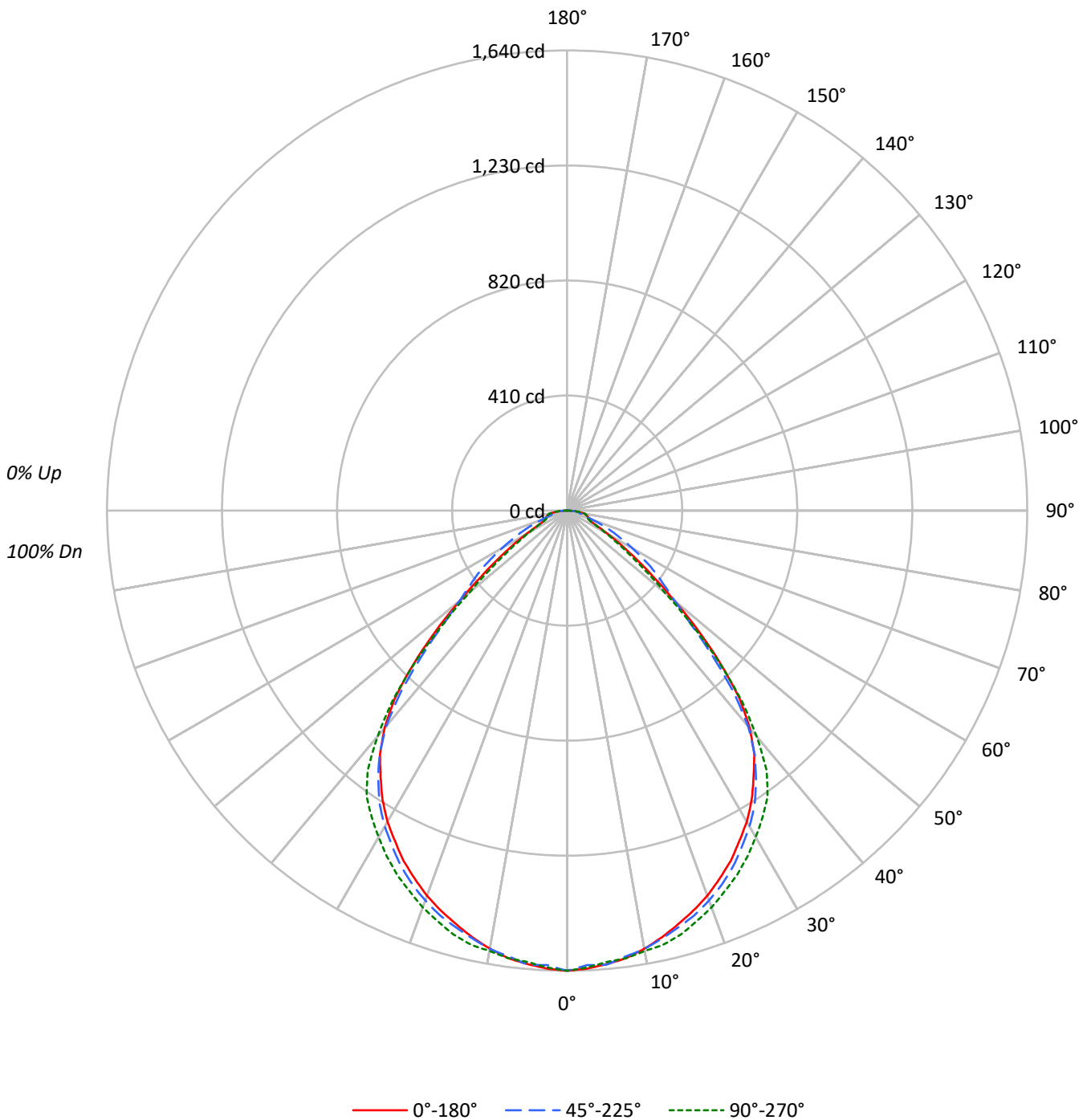
Input Watts (W): 25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					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°	4413	4413	4413
5°	4382	4387	4363
10°	4333	4335	4355
15°	4253	4282	4359
20°	4182	4234	4309
25°	4092	4155	4253
30°	3978	4039	4176
35°	3807	3856	4092
40°	3554	3526	3691
45°	2951	2785	2926
50°	2079	2090	1906
55°	1397	1796	1256
60°	901	1441	835
65°	624	1116	601
70°	627	762	622
75°	773	595	766
80°	944	688	1000
85°	920	939	1016



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	153.6	4.8
10°-20°	434.6	13.7
20°-30°	644.6	20.3
30°-40°	737.3	23.2
40°-50°	583.7	18.4
50°-60°	318.5	10.0
60°-70°	166.6	5.3
70°-80°	96.2	3.0
80°-90°	36.4	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°	1232.7	38.9
0°-40°	1970.1	62.1
0°-60°	2872.2	90.6
0°-90°	3171.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3171.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1640	1640	1640	1640	1640	
5°	1622	1611	1624	1619	1615	154
15°	1527	1535	1537	1549	1564	431
25°	1378	1380	1400	1417	1432	634
35°	1159	1159	1174	1216	1246	723
45°	776	771	732	768	769	590
55°	298	372	383	357	268	276
65°	98	197	175	188	94	106
75°	74	119	57	117	74	77
85°	30	39	30	40	33	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1639.9	1639.9	1639.9	1639.9	1639.9
2.5°	1633.9	1624.1	1621.7	1626.6	1629.6
5°	1622.3	1610.7	1624.1	1618.6	1615.0
7.5°	1608.9	1604.6	1602.2	1610.7	1608.9
10°	1585.8	1579.7	1586.4	1591.2	1593.7
12.5°	1557.8	1560.8	1562.0	1577.2	1584.6
15°	1526.7	1534.6	1537.1	1549.2	1564.5
17.5°	1495.1	1496.9	1511.5	1527.3	1534.6
20°	1460.4	1463.4	1478.6	1493.2	1504.8
22.5°	1419.6	1423.2	1442.1	1458.5	1468.3
25°	1378.2	1380.0	1399.5	1417.1	1432.4
27.5°	1328.3	1338.0	1349.6	1373.9	1390.4
30°	1280.2	1286.3	1299.7	1326.4	1344.1
32.5°	1223.6	1226.0	1243.0	1272.3	1296.0
35°	1159.0	1159.0	1173.7	1216.3	1245.5
37.5°	1095.1	1086.6	1098.2	1146.9	1167.6
40°	1011.7	1005.6	1003.8	1037.3	1050.7
42.5°	909.5	897.9	877.2	911.3	922.2
45°	775.5	771.3	731.7	767.6	768.8
47.5°	635.5	638.6	594.1	630.0	603.3
50°	496.7	528.4	499.2	514.4	455.3
52.5°	386.6	445.6	434.6	428.6	348.2
55°	297.7	371.9	382.9	356.7	267.8
57.5°	227.1	317.2	323.8	305.6	203.9
60°	167.4	267.8	267.8	259.3	155.2
62.5°	124.8	230.1	217.9	220.4	118.7
65°	98.0	197.2	175.3	187.5	94.4
67.5°	82.2	164.4	132.7	161.9	82.2
70°	79.7	143.1	96.8	146.1	79.1
72.5°	79.1	131.5	72.4	132.7	79.7
75°	74.3	118.7	57.2	116.9	73.7
77.5°	68.2	98.6	47.5	98.6	68.8
80°	60.9	74.9	44.4	76.7	64.5
82.5°	46.9	53.6	39.6	54.2	49.9
85°	29.8	39.0	30.4	39.6	32.9
87.5°	13.4	20.7	13.4	21.3	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)