

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: P213897

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P213897  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-43-A19/156-UNV-L930-CD1-U  
Description: METALUX GR 2X2 LED TROFFER WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3385.8 lumens  
Efficiency: N/A  
Efficacy: 84.4 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21  
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')  
CIE Type: Direct

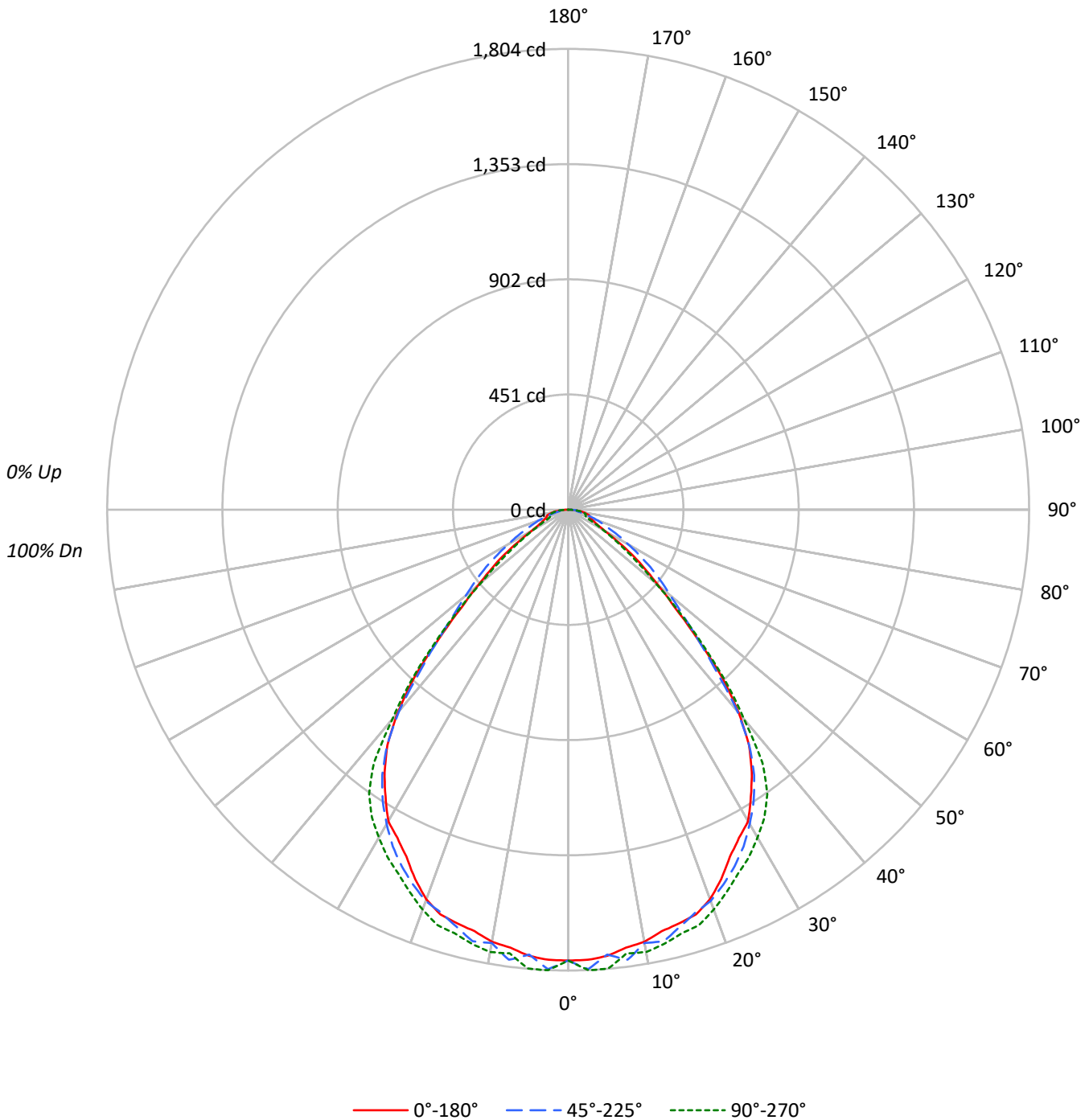
Input Watts (W): 40.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	102	99	101	98	96	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62					60				
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56					54				
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50					48				
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45					44				
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41					40				
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38					36				
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35					33				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5651	5651	5651
5°	5637	5619	5796
10°	5585	5601	5717
15°	5559	5602	5692
20°	5530	5557	5677
25°	5294	5443	5556
30°	5207	5254	5478
35°	4897	4959	5311
40°	4339	4309	4479
45°	3241	3248	3338
50°	2281	2595	2210
55°	1683	2191	1510
60°	1052	1732	986
65°	858	1372	689
70°	851	1142	680
75°	1057	839	879
80°	1177	662	1073
85°	1172	1231	1202



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	168.0	5.0
10°-20°	478.5	14.1
20°-30°	708.6	20.9
30°-40°	793.8	23.4
40°-50°	583.2	17.2
50°-60°	326.0	9.6
60°-70°	181.7	5.4
70°-80°	106.8	3.2
80°-90°	39.2	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°	1355.1	40.0
0°-40°	2148.8	63.5
0°-60°	3058.1	90.3
0°-90°	3385.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3385.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1765	1765	1765	1765	1765	
5°	1753	1786	1748	1784	1803	166
15°	1677	1687	1690	1715	1717	474
25°	1498	1510	1540	1562	1572	694
35°	1252	1253	1268	1326	1358	776
45°	716	774	717	768	737	559
55°	302	367	392	392	270	269
65°	113	201	181	232	91	117
75°	85	120	68	136	71	86
85°	32	47	34	43	33	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1764.6	1764.6	1764.6	1764.6	1764.6
2.5°	1763.7	1779.7	1800.5	1802.9	1804.5
5°	1753.4	1786.1	1747.8	1783.7	1802.9
7.5°	1729.5	1749.4	1777.4	1741.4	1751.8
10°	1717.5	1722.3	1722.3	1766.9	1758.2
12.5°	1690.3	1722.3	1730.3	1721.5	1740.6
15°	1676.8	1687.2	1689.6	1715.1	1716.7
17.5°	1661.6	1659.3	1653.7	1672.1	1704.8
20°	1622.6	1613.8	1630.6	1652.9	1665.7
22.5°	1565.1	1567.5	1587.4	1605.8	1620.2
25°	1498.1	1510.1	1540.5	1561.9	1572.4
27.5°	1447.9	1465.4	1486.2	1511.7	1532.4
30°	1408.0	1406.4	1420.7	1457.5	1481.4
32.5°	1330.6	1336.2	1351.4	1395.2	1428.8
35°	1252.5	1253.2	1268.4	1325.9	1358.5
37.5°	1162.3	1155.9	1164.6	1226.9	1248.4
40°	1037.9	1039.4	1030.7	1074.5	1071.3
42.5°	892.7	905.4	859.9	917.4	913.4
45°	715.5	773.8	717.2	768.2	737.1
47.5°	564.8	650.9	603.8	641.4	583.1
50°	457.9	546.4	520.9	537.7	443.5
52.5°	375.7	447.6	455.5	459.5	346.2
55°	301.5	367.0	392.5	391.7	270.4
57.5°	222.5	298.3	327.8	339.8	205.0
60°	164.3	248.1	270.4	296.8	154.0
62.5°	132.4	217.8	223.4	260.0	117.3
65°	113.2	201.1	181.1	232.1	90.9
67.5°	100.5	187.5	147.6	207.4	77.4
70°	90.9	166.7	122.0	185.9	72.6
72.5°	88.6	142.0	94.1	166.0	71.8
75°	85.4	120.5	67.8	136.4	71.0
77.5°	73.4	102.9	48.6	105.3	66.2
80°	63.8	82.2	35.9	79.0	58.2
82.5°	49.4	62.2	31.9	59.9	47.1
85°	31.9	47.1	33.5	43.0	32.7
87.5°	15.2	26.3	23.9	23.1	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)