

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: P219206

Luminaire Tested: **24GR-LD5-38-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219206  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-38-A19/156-UNV-L930-CD1-U  
Description: METALUX GR 2X4 LED TROFFER WITH A19/156 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3044.1 lumens  
Efficiency: N/A  
Efficacy: 99.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

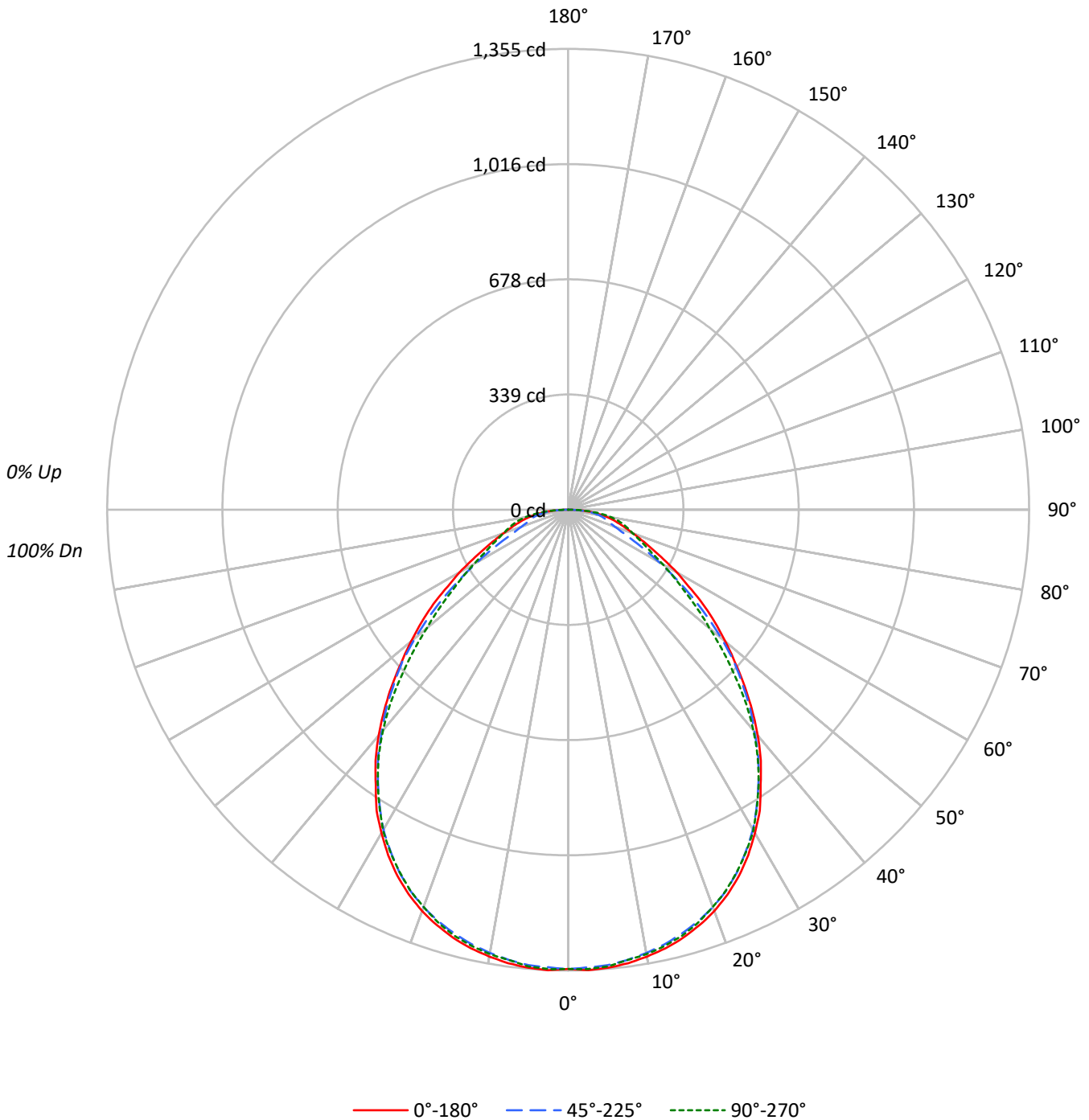
Input Watts (W): 30.624  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

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

	0°	45°	90°
0°	2069	2069	2069
5°	2079	2067	2072
10°	2075	2058	2064
15°	2067	2046	2055
20°	2047	2027	2026
25°	2008	1986	1984
30°	1941	1921	1925
35°	1844	1823	1825
40°	1734	1704	1693
45°	1589	1568	1505
50°	1437	1398	1292
55°	1290	1174	1114
60°	1129	945	980
65°	985	743	902
70°	901	648	901
75°	902	690	994
80°	978	813	1133
85°	1075	917	1214



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	127.9	4.2
10°-20°	365.0	12.0
20°-30°	541.2	17.8
30°-40°	610.6	20.1
40°-50°	553.0	18.2
50°-60°	398.9	13.1
60°-70°	238.2	7.8
70°-80°	147.2	4.8
80°-90°	62.0	2.0
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°	1034.1	34.0
0°-40°	1644.7	54.0
0°-60°	2596.6	85.3
0°-90°	3044.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3044.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1351	1351	1351	1351	1351	
5°	1352	1350	1344	1343	1348	128
15°	1304	1296	1290	1291	1296	367
25°	1188	1181	1175	1171	1174	546
35°	986	985	975	975	976	617
45°	734	729	724	706	695	565
55°	483	468	440	418	417	431
65°	272	239	205	233	249	273
75°	152	132	117	145	168	163
85°	61	54	52	68	69	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1350.6	1350.6	1350.6	1350.6	1350.6
2.5°	1355.3	1351.5	1346.8	1349.7	1352.0
5°	1352.0	1350.1	1344.5	1343.1	1347.8
7.5°	1345.0	1340.3	1335.1	1337.4	1335.5
10°	1334.1	1330.0	1323.3	1323.8	1327.1
12.5°	1321.0	1315.9	1308.8	1310.7	1313.5
15°	1303.6	1295.6	1290.4	1290.9	1296.1
17.5°	1281.5	1275.3	1268.8	1270.2	1272.6
20°	1256.1	1252.8	1243.4	1240.6	1243.0
22.5°	1224.1	1218.0	1212.9	1211.4	1211.9
25°	1187.9	1181.3	1175.2	1171.0	1174.2
27.5°	1145.6	1140.0	1131.9	1130.5	1133.3
30°	1097.7	1093.4	1086.3	1084.4	1088.7
32.5°	1048.7	1041.6	1031.8	1031.8	1032.7
35°	986.1	984.7	974.9	975.3	976.3
37.5°	929.7	923.2	917.5	911.8	914.7
40°	867.2	859.7	852.1	848.4	847.0
42.5°	799.9	794.3	791.0	777.4	774.1
45°	733.7	728.9	723.7	705.9	695.0
47.5°	665.9	664.9	660.8	629.2	618.4
50°	602.9	601.5	586.5	553.0	542.2
52.5°	543.2	533.7	514.0	481.1	479.2
55°	483.0	467.9	439.7	418.0	417.1
57.5°	419.5	401.6	372.9	361.2	367.3
60°	368.7	341.4	308.5	309.9	319.8
62.5°	316.0	285.4	253.0	267.1	278.9
65°	271.8	239.4	205.0	232.8	248.8
67.5°	233.3	203.2	170.2	207.4	222.9
70°	201.3	176.8	144.8	183.8	201.3
72.5°	175.9	153.3	128.4	165.1	185.3
75°	152.4	132.2	116.6	145.3	167.9
77.5°	132.2	112.4	105.4	128.4	150.5
80°	110.9	93.2	92.2	111.9	128.4
82.5°	86.5	74.3	74.3	93.6	103.5
85°	61.2	53.6	52.2	68.2	69.1
87.5°	31.5	30.1	27.3	35.8	35.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)