

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: P219041

Luminaire Tested: **24GR-LD5-38-F1-UNV-L935-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P219041  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35585)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-38-F1-UNV-L935-CD1-U  
Description: METALUX GR 2X4 LED TROFFER WITH F1 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

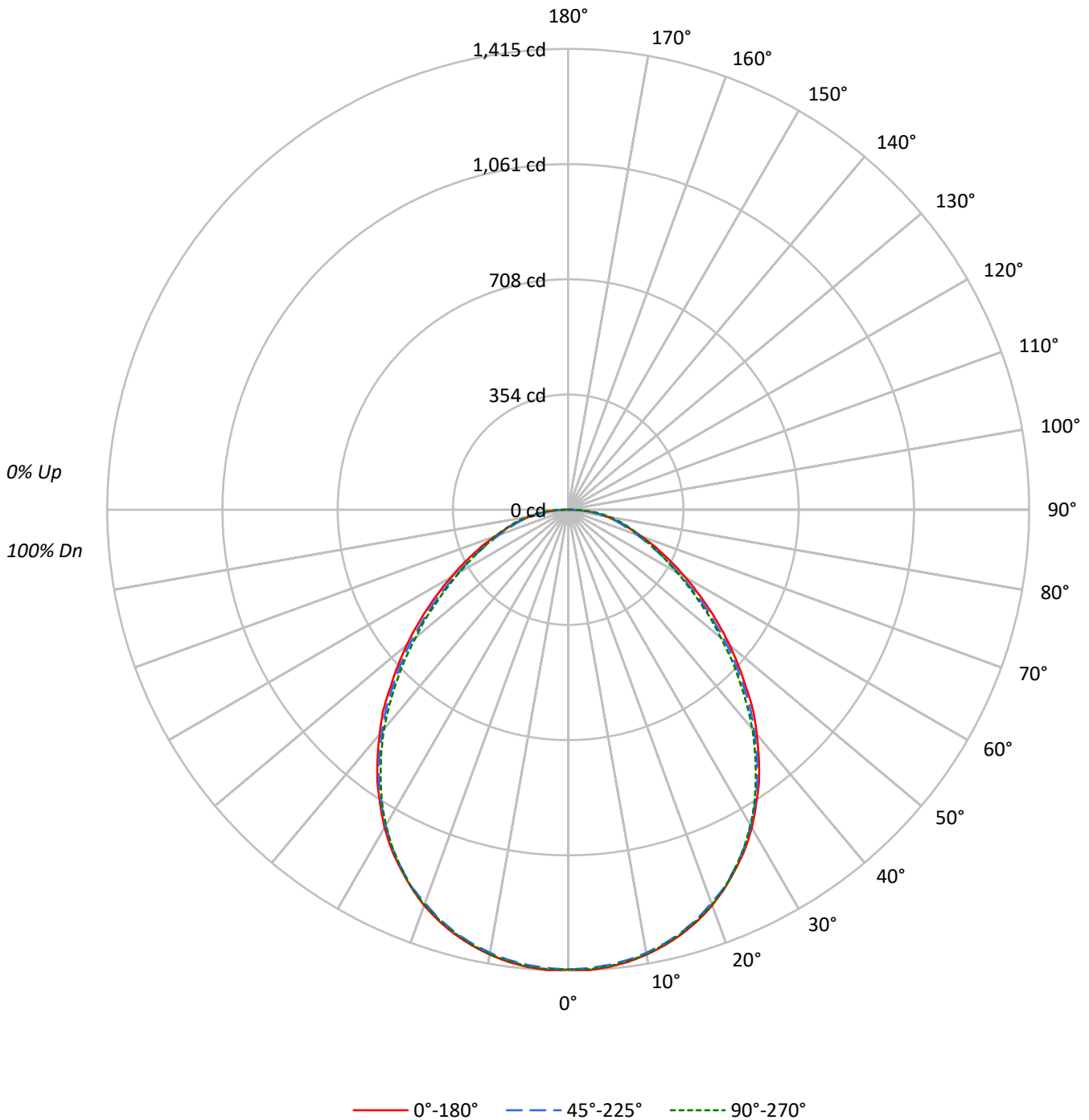
Lumens per Lamp: N/A  
Luminaire Lumens: 3298.0 lumens  
Efficiency: N/A  
Efficacy: 107.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.26  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	80	98	90	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	72	60	51	45	71	59	51	45	57	50	44	55	49	44	54	48	44	42
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	33
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28

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

	0°	45°	90°
0°	2163	2163	2163
5°	2168	2158	2164
10°	2157	2148	2156
15°	2139	2129	2134
20°	2108	2095	2104
25°	2056	2049	2051
30°	1994	1982	1978
35°	1909	1894	1877
40°	1799	1776	1759
45°	1672	1642	1611
50°	1541	1501	1456
55°	1401	1352	1310
60°	1269	1202	1181
65°	1161	1084	1091
70°	1068	1006	1054
75°	1038	984	1075
80°	1041	1013	1143
85°	1144	1081	1260



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.4	4.0
10°-20°	378.6	11.5
20°-30°	557.9	16.9
30°-40°	631.0	19.1
40°-50°	585.3	17.7
50°-60°	454.7	13.8
60°-70°	304.9	9.2
70°-80°	182.7	5.5
80°-90°	69.5	2.1
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°	1070.0	32.4
0°-40°	1700.9	51.6
0°-60°	2740.9	83.1
0°-90°	3298.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3298.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1412	1412	1412	1412	1412	
5°	1410	1406	1403	1402	1408	134
15°	1349	1343	1343	1340	1346	380
25°	1217	1215	1213	1211	1214	560
35°	1021	1017	1013	1007	1004	636
45°	772	769	758	746	744	597
55°	525	519	506	494	491	471
65°	320	310	299	298	301	320
75°	175	169	166	174	182	185
85°	65	61	62	72	72	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1412.0	1412.0	1412.0	1412.0	1412.0
2.5°	1415.1	1410.5	1408.5	1407.5	1412.0
5°	1410.0	1406.0	1403.4	1402.4	1407.5
7.5°	1400.9	1396.3	1394.8	1392.7	1397.8
10°	1387.1	1383.0	1381.1	1379.6	1386.1
12.5°	1369.9	1366.3	1364.2	1363.2	1367.3
15°	1349.0	1343.4	1342.9	1340.4	1346.0
17.5°	1323.1	1318.0	1317.0	1316.0	1319.5
20°	1293.1	1288.0	1285.5	1284.9	1290.6
22.5°	1257.0	1253.4	1254.4	1251.4	1255.4
25°	1216.8	1215.2	1212.7	1210.7	1213.7
27.5°	1175.1	1170.0	1170.0	1165.9	1169.0
30°	1127.3	1123.8	1120.7	1116.6	1118.7
32.5°	1073.4	1071.8	1067.3	1063.3	1064.3
35°	1021.0	1016.9	1012.9	1006.8	1003.8
37.5°	961.0	956.9	951.9	943.2	942.2
40°	900.0	896.5	888.3	879.2	879.7
42.5°	842.0	836.5	826.3	814.0	811.6
45°	771.9	768.8	758.1	746.5	743.9
47.5°	709.3	707.3	694.1	681.9	678.8
50°	646.8	641.2	630.0	617.8	611.2
52.5°	585.2	578.2	563.9	555.7	552.8
55°	524.8	518.7	506.4	493.8	490.7
57.5°	468.4	461.7	446.9	437.8	436.3
60°	414.4	408.3	392.5	385.9	385.4
62.5°	366.6	356.4	345.8	341.2	341.7
65°	320.4	310.2	299.0	298.0	301.0
67.5°	279.6	269.0	257.8	261.9	264.9
70°	238.5	230.9	224.7	231.4	235.4
72.5°	203.4	198.8	193.2	202.4	207.5
75°	175.4	169.3	166.3	174.4	181.6
77.5°	145.4	140.3	140.3	149.0	156.7
80°	118.0	114.4	114.9	125.1	129.6
82.5°	92.6	87.5	88.0	100.6	103.7
85°	65.1	61.0	61.5	72.2	71.7
87.5°	34.1	32.6	34.1	41.7	39.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)