

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: P213351

Luminaire Tested: **14GR-LD5-40-F1-UNV-L940-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P213351  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35602)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14GR-LD5-40-F1-UNV-L940-CD1-U  
Description: METALUX GR 1X4 LED TROFFER WITH F1 LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3478.7 lumens  
Efficiency: N/A  
Efficacy: 89.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

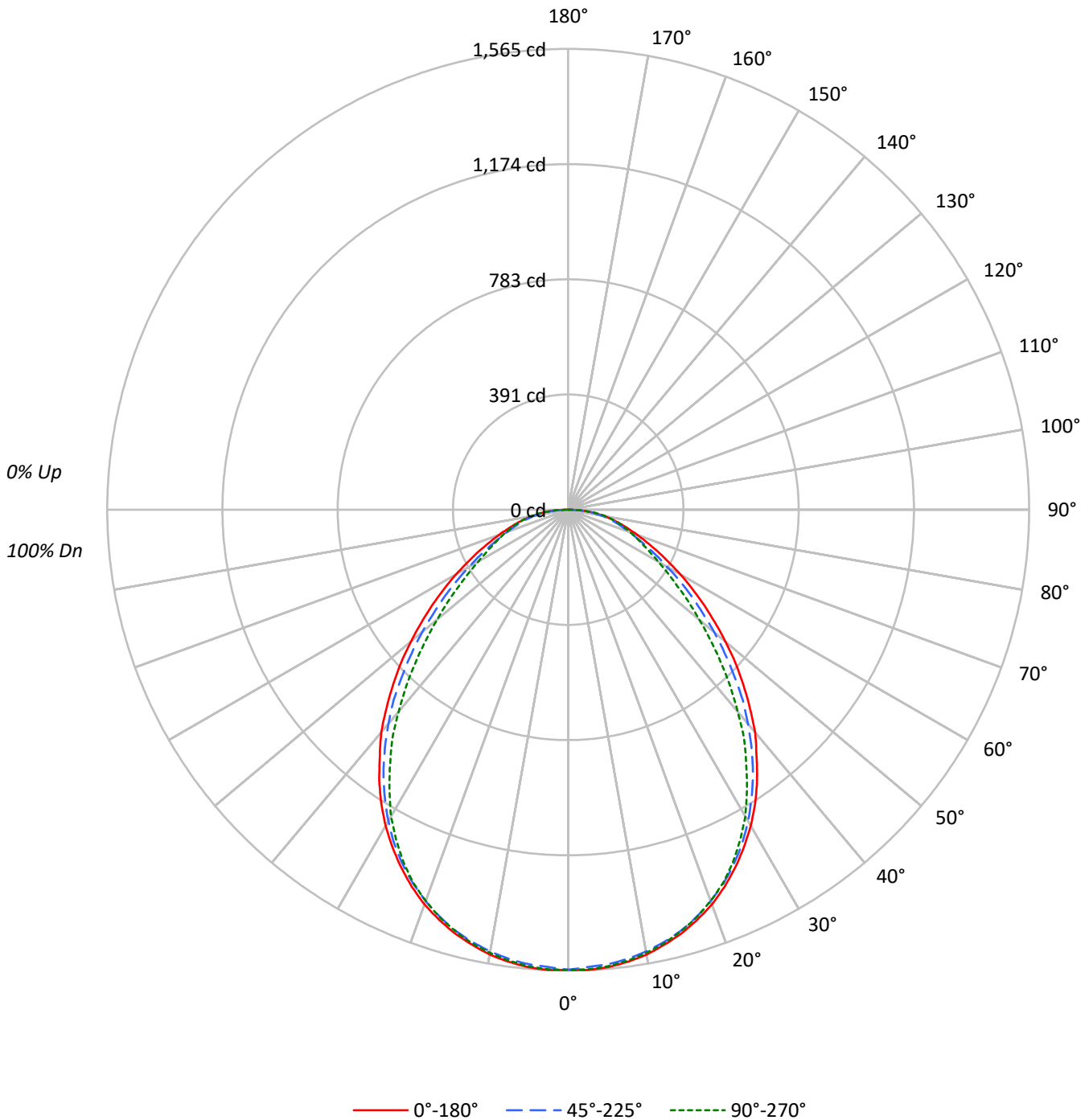
Input Watts (W): 38.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	58	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	46	41	36	34
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	30	41	35	30	40	34	30	29

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

	0°	45°	90°
0°	5265	5265	5265
5°	5274	5241	5263
10°	5249	5212	5229
15°	5195	5164	5167
20°	5116	5073	5070
25°	4988	4942	4915
30°	4822	4752	4679
35°	4600	4496	4336
40°	4344	4176	3936
45°	4005	3796	3491
50°	3648	3393	3048
55°	3297	3001	2657
60°	2966	2610	2375
65°	2661	2331	2227
70°	2456	2168	2208
75°	2368	2147	2325
80°	2379	2237	2521
85°	2544	2324	2637



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	147.6	4.2
10°-20°	418.0	12.0
20°-30°	611.9	17.6
30°-40°	680.1	19.6
40°-50°	611.4	17.6
50°-60°	457.2	13.1
60°-70°	301.1	8.7
70°-80°	183.0	5.3
80°-90°	68.5	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°	1177.5	33.9
0°-40°	1857.6	53.4
0°-60°	2926.1	84.1
0°-90°	3478.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3478.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1562	1562	1562	1562	1562	
5°	1559	1556	1549	1558	1556	148
15°	1489	1486	1480	1485	1481	420
25°	1342	1339	1329	1327	1322	617
35°	1118	1112	1093	1070	1054	698
45°	840	832	797	754	732	648
55°	561	549	511	468	452	504
65°	334	322	292	280	279	334
75°	182	174	165	173	179	193
85°	66	61	60	70	68	70
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1562.4	1562.4	1562.4	1562.4	1562.4
2.5°	1564.9	1561.6	1554.3	1563.2	1562.4
5°	1559.2	1555.9	1549.4	1557.5	1555.9
7.5°	1548.6	1544.6	1538.9	1547.0	1544.6
10°	1534.0	1529.9	1523.4	1532.3	1528.3
12.5°	1512.8	1510.4	1503.9	1510.4	1508.0
15°	1489.3	1486.1	1480.4	1485.2	1481.2
17.5°	1459.2	1456.0	1449.5	1456.0	1451.2
20°	1426.7	1422.7	1414.6	1419.4	1413.8
22.5°	1386.1	1382.1	1374.8	1377.2	1372.4
25°	1341.5	1339.1	1329.3	1326.9	1322.0
27.5°	1292.0	1287.9	1279.0	1274.1	1264.4
30°	1239.2	1235.1	1221.3	1213.2	1202.6
32.5°	1181.6	1175.0	1158.8	1145.0	1129.5
35°	1118.2	1112.5	1093.1	1069.5	1054.0
37.5°	1050.0	1046.7	1022.4	993.1	981.0
40°	987.5	975.2	949.3	913.6	894.9
42.5°	912.7	904.6	877.0	837.2	813.6
45°	840.5	831.5	796.6	753.6	732.5
47.5°	769.8	760.1	720.2	678.0	653.7
50°	695.9	687.8	647.2	600.1	581.4
52.5°	626.9	616.4	574.1	531.9	515.7
55°	561.2	548.9	510.8	468.5	452.3
57.5°	498.6	484.0	447.5	410.9	400.3
60°	440.1	423.9	387.3	360.5	352.4
62.5°	383.3	371.1	338.7	318.3	313.5
65°	333.8	321.6	292.3	280.2	279.3
67.5°	288.3	276.1	253.4	250.1	251.7
70°	249.3	238.7	220.1	221.7	224.1
72.5°	212.8	203.0	191.6	195.7	200.6
75°	181.9	173.8	164.9	172.9	178.6
77.5°	152.6	144.6	139.7	147.8	154.3
80°	122.6	117.0	115.3	124.3	129.9
82.5°	95.0	90.1	87.7	99.1	101.5
85°	65.8	60.9	60.1	69.8	68.2
87.5°	34.9	30.9	30.9	36.6	32.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)