

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: P213646

Luminaire Tested: **22GR-LD5-43-F1-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P213646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35595)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-F1-UNV-L930-CD1-U
Description: METALUX GR 2X2 LED TROFFER WITH F1 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3439.1 lumens
Efficiency: N/A
Efficacy: 85.8 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.18 / 1.24
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

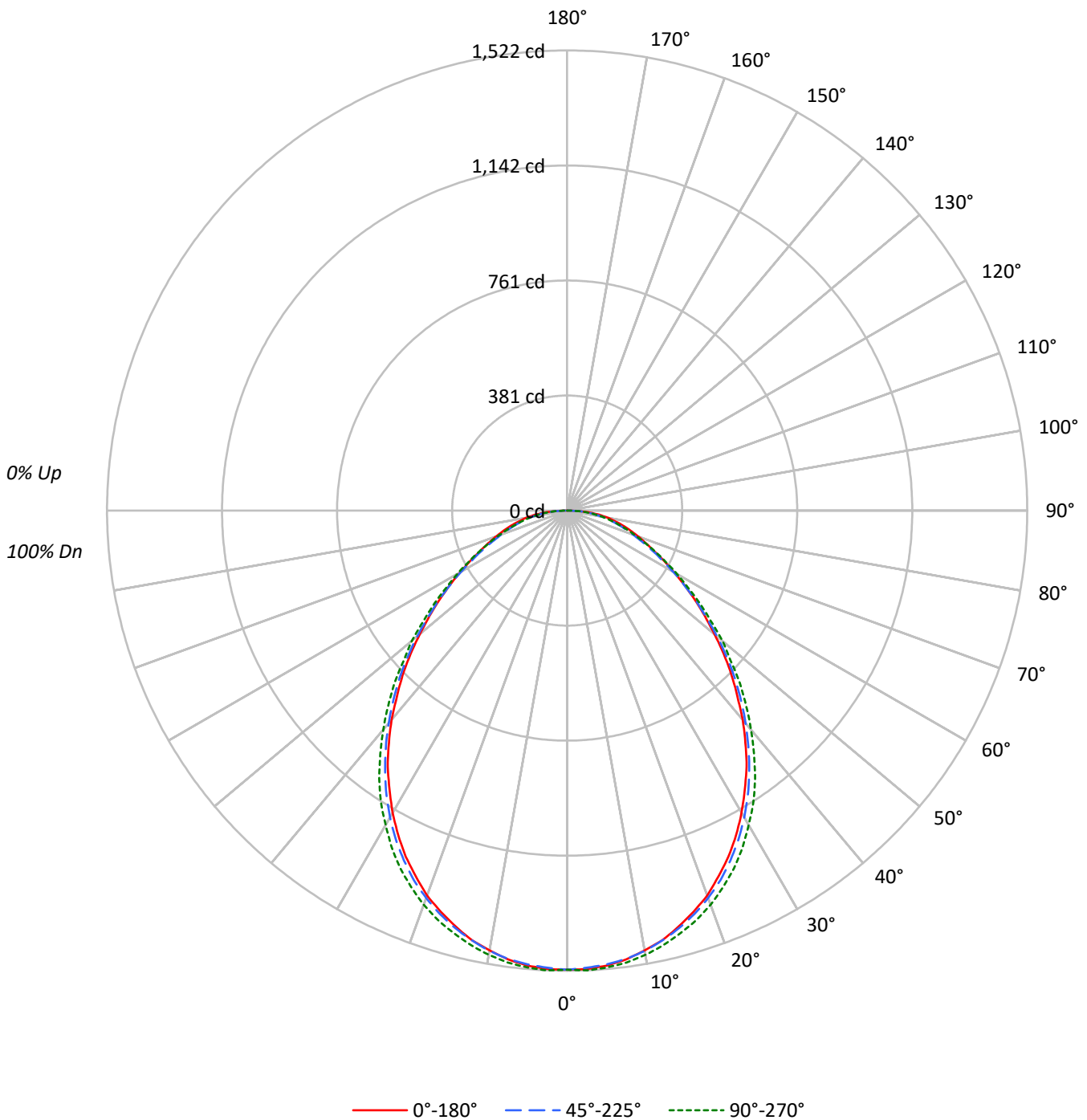
Input Watts (W): 40.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4863	4863	4863
5°	4856	4843	4876
10°	4804	4810	4853
15°	4723	4741	4799
20°	4618	4648	4728
25°	4462	4512	4613
30°	4267	4331	4439
35°	4046	4104	4237
40°	3775	3839	3957
45°	3483	3551	3658
50°	3167	3226	3340
55°	2880	2902	2990
60°	2612	2592	2688
65°	2403	2337	2432
70°	2334	2164	2245
75°	2362	2117	2147
80°	2516	2167	2196
85°	2782	2319	2289



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.2	4.2
10°-20°	403.7	11.7
20°-30°	588.4	17.1
30°-40°	657.8	19.1
40°-50°	604.9	17.6
50°-60°	468.7	13.6
60°-70°	314.2	9.1
70°-80°	187.9	5.5
80°-90°	70.3	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°	1135.3	33.0
0°-40°	1793.1	52.1
0°-60°	2866.7	83.4
0°-90°	3439.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3439.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1510	1507	1506	1513	1517	143
15°	1424	1426	1430	1441	1447	401
25°	1263	1266	1277	1295	1305	580
35°	1035	1036	1050	1070	1084	645
45°	769	771	784	796	808	592
55°	516	517	520	528	536	463
65°	317	315	308	312	321	319
75°	191	183	171	170	174	202
85°	76	76	63	59	62	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1518.4	1518.4	1518.4	1518.4	1518.4
2.5°	1517.6	1514.5	1513.6	1518.4	1522.3
5°	1510.5	1507.3	1506.5	1512.8	1516.8
7.5°	1497.1	1494.7	1495.5	1501.8	1507.3
10°	1477.4	1476.6	1479.0	1486.8	1492.3
12.5°	1455.3	1453.7	1456.1	1466.3	1471.8
15°	1424.5	1426.1	1430.0	1441.1	1447.4
17.5°	1390.6	1392.2	1399.2	1410.3	1420.6
20°	1355.1	1354.3	1363.7	1378.7	1387.4
22.5°	1308.6	1312.5	1323.6	1339.3	1348.0
25°	1262.8	1266.0	1277.0	1295.2	1305.4
27.5°	1210.0	1215.5	1227.3	1244.7	1256.5
30°	1154.0	1158.7	1171.3	1191.0	1200.5
32.5°	1093.2	1099.5	1113.0	1134.2	1146.1
35°	1034.8	1036.4	1049.8	1070.3	1083.8
37.5°	968.6	972.5	985.1	1008.0	1015.2
40°	903.1	906.3	918.2	937.0	946.5
42.5°	833.0	838.4	851.1	865.3	876.3
45°	769.1	771.4	784.0	795.9	807.7
47.5°	702.0	704.4	715.4	728.0	732.8
50°	635.7	638.9	647.6	660.2	670.4
52.5°	574.2	575.8	579.7	593.9	598.7
55°	515.9	516.6	519.8	527.7	535.5
57.5°	460.7	459.9	459.0	466.2	473.2
60°	407.8	406.2	404.7	410.2	419.6
62.5°	361.3	359.7	353.3	359.7	367.5
65°	317.1	314.7	308.4	311.6	321.0
67.5°	282.4	277.7	267.4	271.3	278.5
70°	249.3	243.0	231.1	234.3	239.8
72.5°	220.1	210.6	200.3	201.1	206.6
75°	190.9	183.0	171.1	169.6	173.5
77.5°	163.3	156.9	144.3	141.9	145.1
80°	136.4	130.1	117.5	112.8	119.1
82.5°	107.3	104.9	90.7	87.6	90.0
85°	75.7	76.5	63.1	59.1	62.3
87.5°	38.6	40.3	32.3	31.6	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)