

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: P213686

Luminaire Tested: **22GR-LD5-40-F1-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P213686
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-LD5-40-F1-UNV-L940-CD1-U
Description: METALUX GR 2X2 LED TROFFER WITH F1 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3524.2 lumens
Efficiency: N/A
Efficacy: 90.8 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

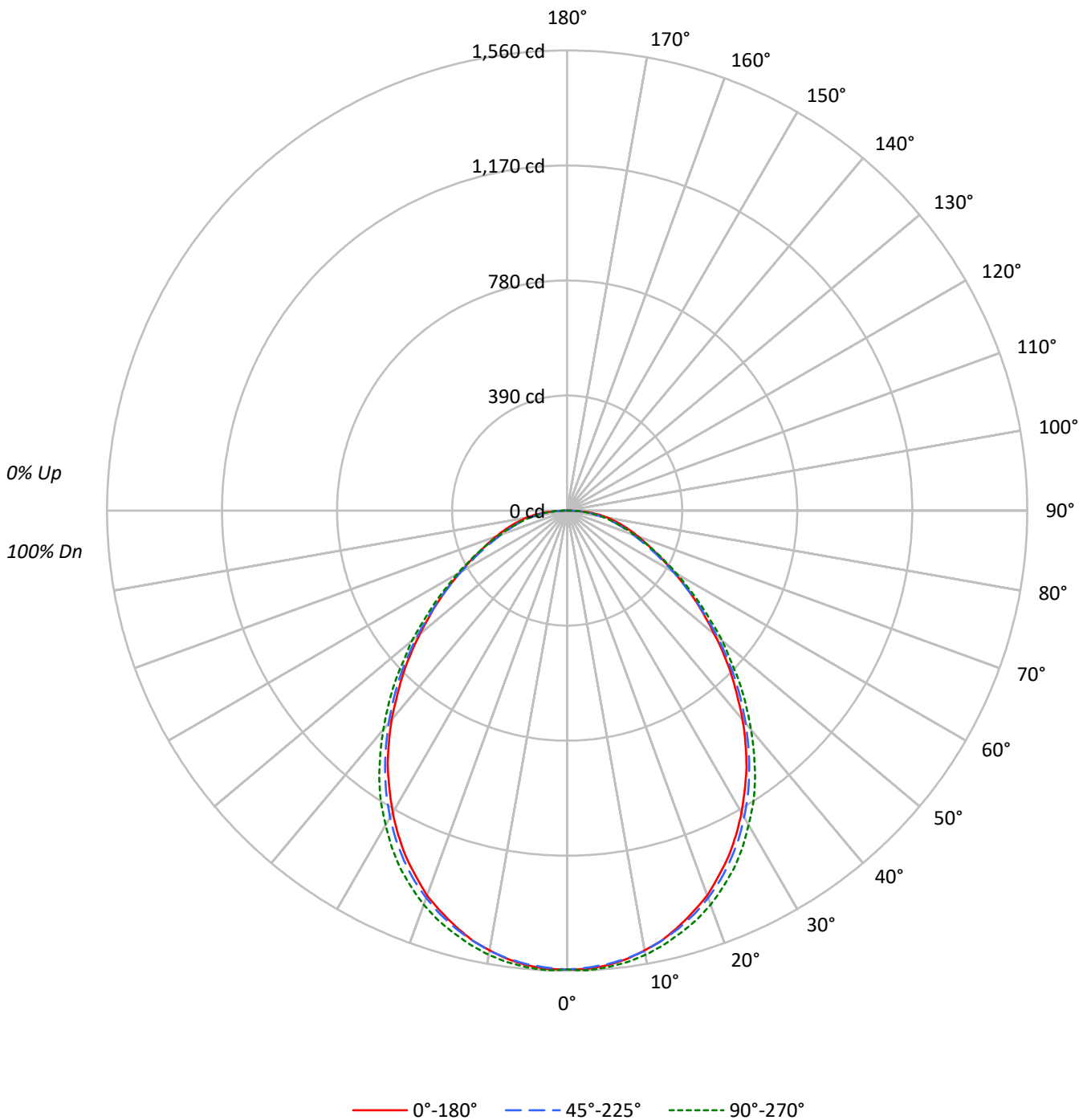
Input Watts (W): 38.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74	72					72			
3	92	82	74	68	90	81	73	68	78	72	67	75	70	65	72	68	64	62					62			
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56	54					54			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	49	47					47			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42					42			
7	68	55	46	40	66	54	46	40	52	45	40	51	45	40	50	44	39	38					38			
8	63	50	42	36	62	49	42	36	48	41	36	47	41	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31					31			
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4983	4983	4983
5°	4976	4963	4997
10°	4923	4929	4973
15°	4840	4858	4917
20°	4732	4763	4846
25°	4573	4624	4727
30°	4373	4439	4549
35°	4146	4206	4342
40°	3869	3933	4055
45°	3569	3639	3749
50°	3246	3306	3423
55°	2951	2974	3065
60°	2677	2656	2754
65°	2462	2395	2493
70°	2391	2217	2301
75°	2420	2170	2200
80°	2578	2220	2250
85°	2851	2377	2348



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.8	4.2
10°-20°	413.7	11.7
20°-30°	603.0	17.1
30°-40°	674.1	19.1
40°-50°	619.9	17.6
50°-60°	480.3	13.6
60°-70°	321.9	9.1
70°-80°	192.6	5.5
80°-90°	72.0	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°	1163.4	33.0
0°-40°	1837.5	52.1
0°-60°	2937.7	83.4
0°-90°	3524.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3524.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1556	1556	1556	1556	1556	
5°	1548	1545	1544	1550	1554	147
15°	1460	1461	1465	1477	1483	411
25°	1294	1297	1309	1327	1338	594
35°	1060	1062	1076	1097	1111	661
45°	788	790	804	816	828	607
55°	529	529	533	541	549	474
65°	325	322	316	319	329	327
75°	196	188	175	174	178	207
85°	78	78	65	61	64	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1556.0	1556.0	1556.0	1556.0	1556.0
2.5°	1555.1	1552.0	1551.1	1556.0	1560.0
5°	1547.9	1544.6	1543.9	1550.3	1554.4
7.5°	1534.2	1531.7	1532.5	1539.1	1544.6
10°	1513.9	1513.2	1515.6	1523.7	1529.3
12.5°	1491.3	1489.7	1492.1	1502.7	1508.3
15°	1459.8	1461.4	1465.4	1476.8	1483.2
17.5°	1425.0	1426.7	1434.0	1445.2	1455.7
20°	1388.6	1387.9	1397.6	1412.9	1421.8
22.5°	1341.0	1345.0	1356.3	1372.5	1381.4
25°	1294.1	1297.3	1308.7	1327.2	1337.7
27.5°	1239.9	1245.6	1257.8	1275.5	1287.6
30°	1182.6	1187.4	1200.3	1220.5	1230.2
32.5°	1120.3	1126.8	1140.5	1162.4	1174.5
35°	1060.5	1062.1	1075.9	1096.8	1110.6
37.5°	992.6	996.7	1009.6	1033.0	1040.3
40°	925.5	928.7	940.8	960.3	970.0
42.5°	853.6	859.2	872.1	886.7	898.0
45°	788.1	790.5	803.5	815.5	827.7
47.5°	719.4	721.8	733.2	746.0	751.0
50°	651.5	654.7	663.6	676.6	687.1
52.5°	588.4	590.0	594.1	608.6	613.5
55°	528.6	529.4	532.7	540.8	548.9
57.5°	472.1	471.3	470.4	477.7	485.0
60°	417.9	416.2	414.7	420.3	430.0
62.5°	370.2	368.6	362.1	368.6	376.7
65°	324.9	322.5	316.0	319.3	329.0
67.5°	289.4	284.5	274.0	278.0	285.3
70°	255.4	249.0	236.8	240.0	245.7
72.5°	225.5	215.9	205.3	206.1	211.8
75°	195.6	187.6	175.4	173.8	177.8
77.5°	167.4	160.8	147.9	145.5	148.7
80°	139.8	133.4	120.4	115.6	122.0
82.5°	109.9	107.5	93.0	89.7	92.1
85°	77.6	78.4	64.7	60.6	63.9
87.5°	39.6	41.2	33.1	32.3	32.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)