

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: P225809

Luminaire Tested: **22GR-LD5-20-F1-UNV-L940-CD1-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P225809  
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-LD5-20-F1-UNV-L940-CD1-U  
Description: METALUX GR 2X2 LED TROFFER WITH F1 LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1808.6 lumens  
Efficiency: N/A  
Efficacy: 112.1 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

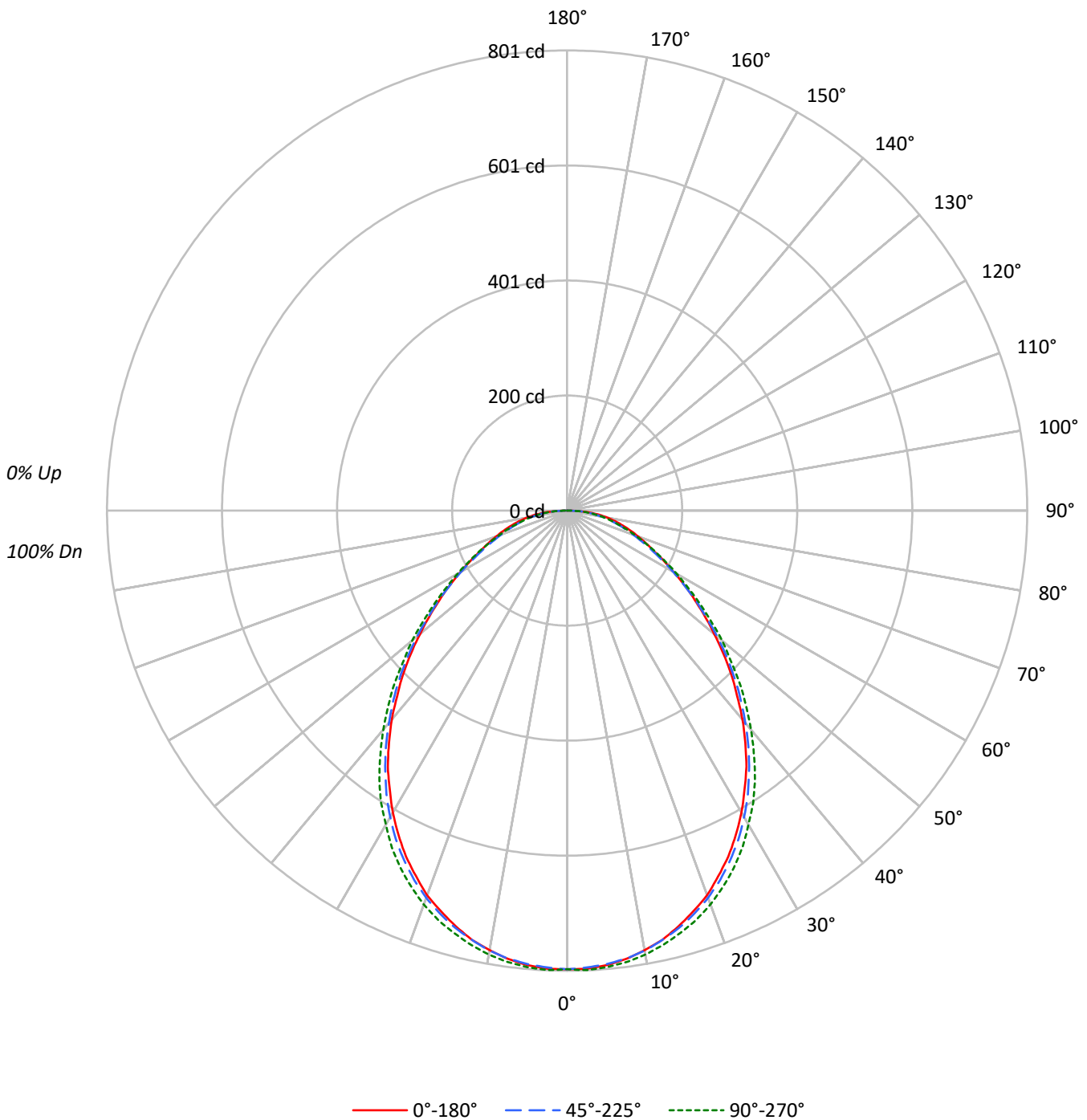
Input Watts (W): 16.13  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2557	2557	2557
5°	2554	2547	2564
10°	2526	2529	2552
15°	2484	2494	2524
20°	2429	2444	2486
25°	2347	2373	2426
30°	2244	2278	2334
35°	2128	2158	2228
40°	1986	2018	2081
45°	1832	1867	1924
50°	1666	1697	1757
55°	1514	1526	1572
60°	1374	1363	1414
65°	1264	1229	1279
70°	1228	1138	1181
75°	1242	1114	1128
80°	1322	1140	1154
85°	1462	1220	1205



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.3	4.2
10°-20°	212.3	11.7
20°-30°	309.4	17.1
30°-40°	345.9	19.1
40°-50°	318.1	17.6
50°-60°	246.5	13.6
60°-70°	165.2	9.1
70°-80°	98.8	5.5
80°-90°	37.0	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°	597.0	33.0
0°-40°	943.0	52.1
0°-60°	1507.6	83.4
0°-90°	1808.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1808.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	798	798	798	798	798	
5°	794	793	792	796	798	75
15°	749	750	752	758	761	211
25°	664	666	672	681	686	305
35°	544	545	552	563	570	339
45°	404	406	412	419	425	311
55°	271	272	273	278	282	243
65°	167	166	162	164	169	168
75°	100	96	90	89	91	106
85°	40	40	33	31	33	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	798.5	798.5	798.5	798.5	798.5
2.5°	798.1	796.4	796.0	798.5	800.6
5°	794.4	792.7	792.3	795.6	797.6
7.5°	787.3	786.0	786.5	789.8	792.7
10°	776.9	776.5	777.8	781.9	784.8
12.5°	765.3	764.5	765.7	771.2	774.0
15°	749.1	750.0	752.1	757.8	761.2
17.5°	731.3	732.1	735.9	741.7	747.1
20°	712.6	712.3	717.2	725.1	729.6
22.5°	688.2	690.2	696.0	704.3	708.9
25°	664.1	665.7	671.6	681.1	686.5
27.5°	636.3	639.2	645.4	654.5	660.8
30°	606.8	609.3	616.0	626.3	631.3
32.5°	574.9	578.3	585.3	596.5	602.7
35°	544.2	545.1	552.1	562.9	569.9
37.5°	509.4	511.4	518.1	530.1	533.9
40°	475.0	476.6	482.8	492.8	497.8
42.5°	438.0	440.9	447.5	455.0	460.9
45°	404.5	405.7	412.3	418.6	424.8
47.5°	369.2	370.4	376.2	382.9	385.4
50°	334.4	336.0	340.6	347.2	352.6
52.5°	301.9	302.8	304.9	312.4	314.8
55°	271.2	271.7	273.4	277.5	281.6
57.5°	242.3	241.8	241.4	245.2	248.9
60°	214.5	213.6	212.8	215.7	220.7
62.5°	190.0	189.1	185.8	189.1	193.3
65°	166.8	165.5	162.2	163.8	168.8
67.5°	148.5	146.0	140.6	142.7	146.5
70°	131.1	127.8	121.5	123.2	126.1
72.5°	115.8	110.8	105.4	105.8	108.7
75°	100.4	96.2	90.0	89.2	91.2
77.5°	85.8	82.6	75.9	74.6	76.3
80°	71.7	68.5	61.8	59.3	62.6
82.5°	56.4	55.1	47.7	46.0	47.3
85°	39.8	40.2	33.2	31.1	32.8
87.5°	20.3	21.2	17.0	16.6	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)