

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: P475893

Luminaire Tested: **22GR-LD5-20-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475893
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-F1-UNV-L835-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2044.3 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

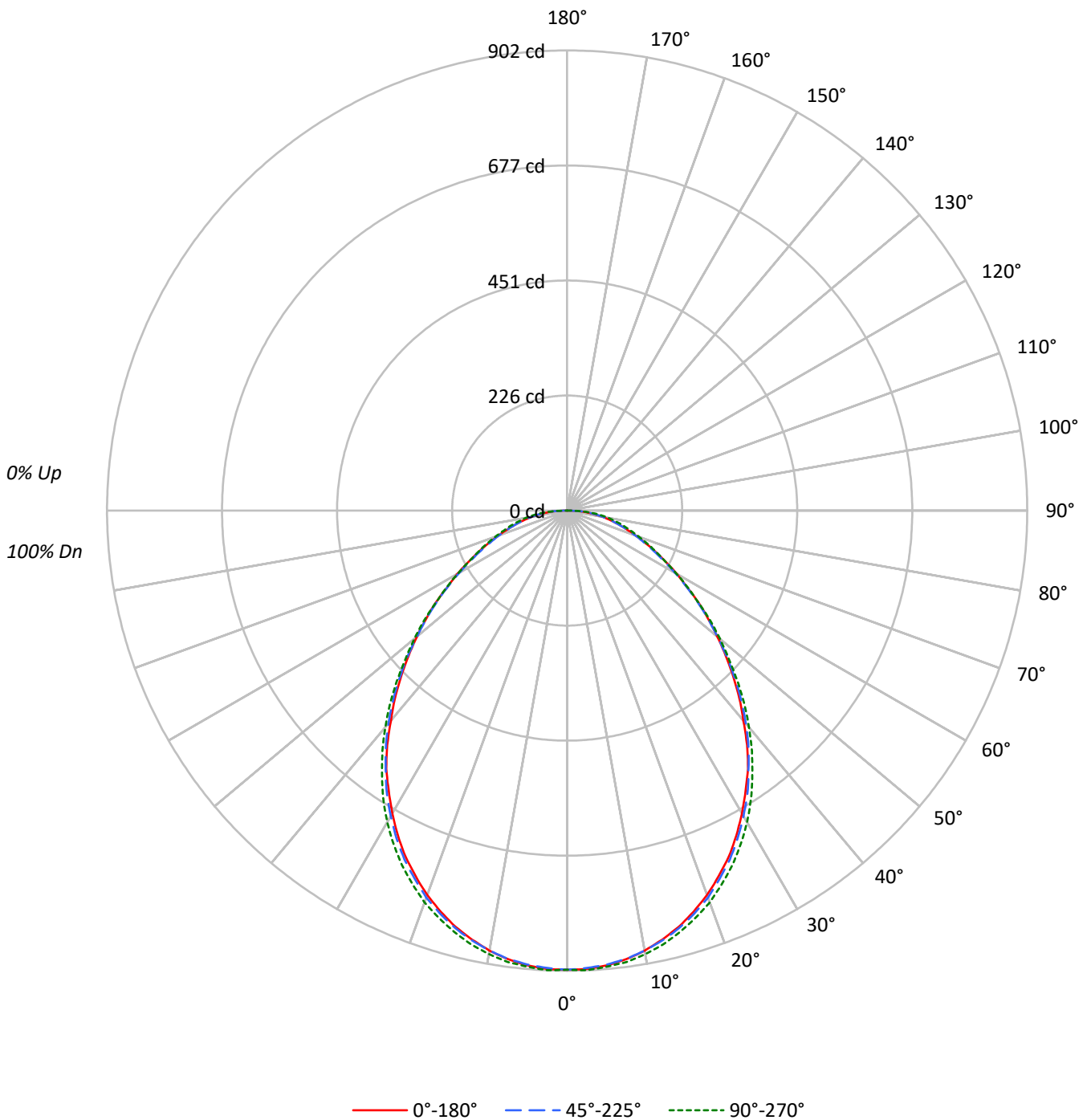
Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	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	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	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2422	2422	2422
5°	2417	2413	2424
10°	2393	2393	2412
15°	2354	2361	2383
20°	2296	2311	2340
25°	2224	2240	2276
30°	2130	2148	2191
35°	2031	2036	2079
40°	1887	1914	1948
45°	1752	1768	1795
50°	1610	1610	1635
55°	1476	1460	1468
60°	1336	1313	1331
65°	1219	1191	1230
70°	1126	1120	1174
75°	1084	1076	1183
80°	1096	1096	1255
85°	1145	1198	1439



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.9	4.2
10°-20°	238.9	11.7
20°-30°	347.4	17.0
30°-40°	388.9	19.0
40°-50°	358.9	17.6
50°-60°	280.1	13.7
60°-70°	189.6	9.3
70°-80°	113.2	5.5
80°-90°	42.5	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°	671.2	32.8
0°-40°	1060.1	51.9
0°-60°	1699.0	83.1
0°-90°	2044.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2044.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	900	900	900	900	900	
5°	895	893	893	897	898	85
15°	845	845	848	853	855	238
25°	749	749	754	762	766	344
35°	618	617	620	629	633	385
45°	460	463	465	468	472	355
55°	315	312	311	313	313	281
65°	191	190	187	190	193	191
75°	104	104	104	110	114	111
85°	37	36	39	45	47	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	900.1	900.1	900.1	900.1	900.1
2.5°	899.2	897.5	897.5	900.1	901.8
5°	894.9	893.2	893.2	896.6	897.5
7.5°	887.1	886.3	886.3	889.7	892.3
10°	875.9	875.1	875.9	879.4	882.8
12.5°	861.3	861.3	863.0	867.3	870.8
15°	844.9	844.9	847.5	852.7	855.2
17.5°	824.2	825.1	828.5	834.6	837.1
20°	801.8	803.5	807.0	812.1	817.3
22.5°	775.9	777.7	781.1	788.9	792.3
25°	749.2	749.2	754.4	762.1	766.4
27.5°	718.2	719.0	724.2	732.8	737.1
30°	685.4	688.0	691.4	699.2	705.2
32.5°	650.9	653.5	657.8	666.4	670.7
35°	618.2	617.3	619.9	629.4	632.8
37.5°	579.4	580.2	583.7	590.6	594.9
40°	537.1	541.4	544.9	550.0	554.4
42.5°	500.0	502.6	505.2	510.4	513.8
45°	460.4	463.0	464.7	468.1	471.6
47.5°	421.6	422.4	425.0	426.8	429.3
50°	384.5	385.4	384.5	387.1	390.6
52.5°	348.3	347.4	347.4	348.3	353.5
55°	314.7	312.1	311.2	313.0	313.0
57.5°	277.6	276.7	276.7	275.9	280.2
60°	248.3	245.7	244.0	245.7	247.4
62.5°	218.1	215.5	213.8	217.3	217.3
65°	191.4	189.7	187.1	190.5	193.1
67.5°	165.5	163.8	162.9	167.3	170.7
70°	143.1	142.3	142.3	146.6	149.2
72.5°	122.4	121.6	121.6	127.6	130.2
75°	104.3	103.5	103.5	109.5	113.8
77.5°	86.2	85.4	87.9	93.1	97.4
80°	70.7	69.8	70.7	77.6	81.0
82.5°	53.5	53.5	55.2	62.1	65.5
85°	37.1	36.2	38.8	44.8	46.6
87.5°	19.0	19.8	20.7	24.1	24.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)