

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: P475894

Luminaire Tested: **22GR-LD5-24-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475894
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-24-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: 2432.2 lumens
Efficiency: N/A
Efficacy: 135.9 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

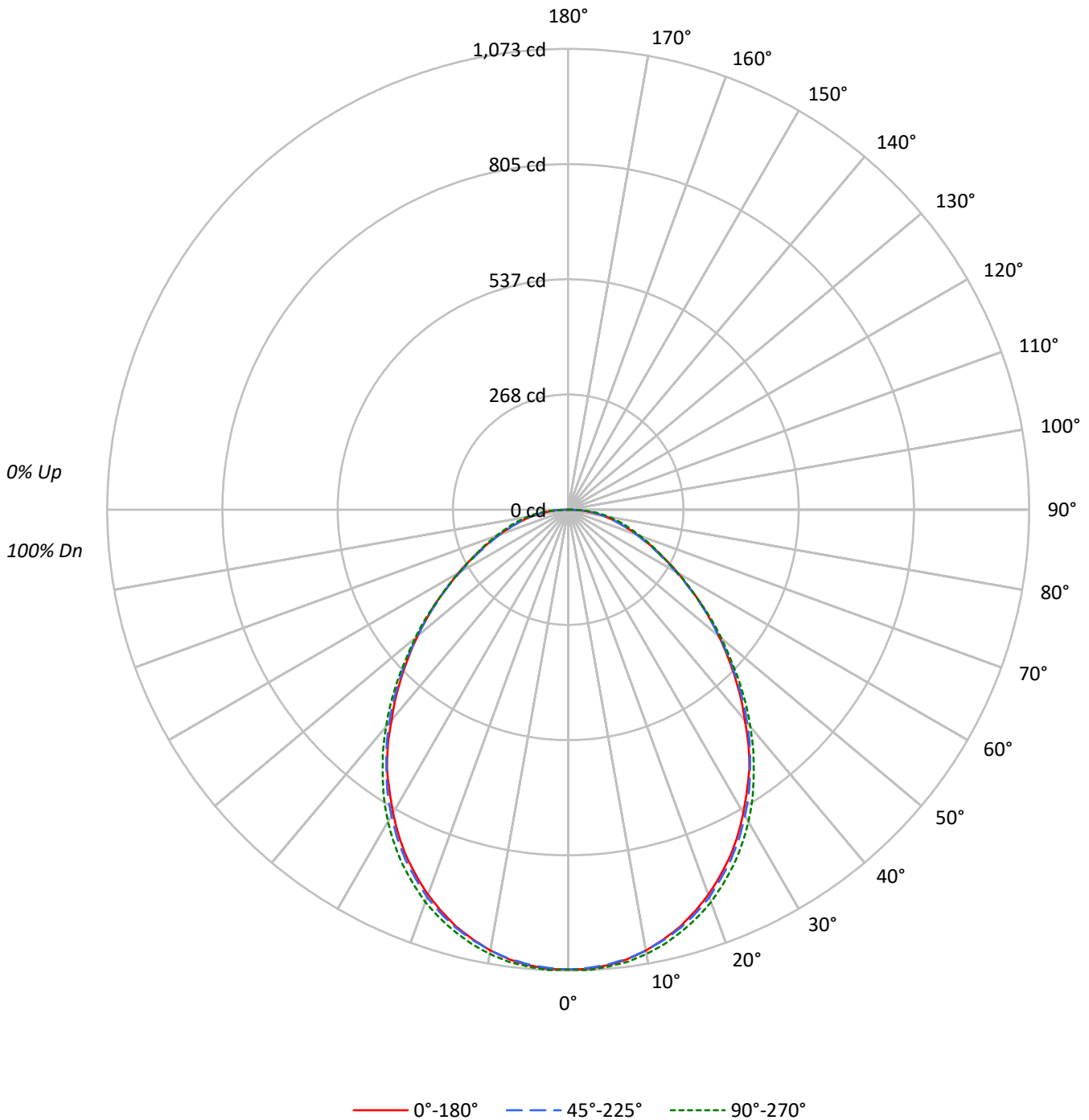
Input Watts (W): 17.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62					62			
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	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	44	40	50	44	39	37					37			
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31					31			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28					28			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2882	2882	2882
5°	2876	2870	2884
10°	2848	2848	2870
15°	2800	2809	2835
20°	2732	2749	2785
25°	2646	2665	2708
30°	2534	2556	2607
35°	2416	2423	2473
40°	2245	2277	2317
45°	2084	2104	2135
50°	1915	1915	1945
55°	1757	1737	1747
60°	1590	1562	1584
65°	1450	1417	1463
70°	1340	1331	1396
75°	1290	1280	1408
80°	1303	1303	1494
85°	1362	1426	1711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.0	4.2
10°-20°	284.3	11.7
20°-30°	413.3	17.0
30°-40°	462.6	19.0
40°-50°	427.0	17.6
50°-60°	333.2	13.7
60°-70°	225.6	9.3
70°-80°	134.7	5.5
80°-90°	50.6	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°	798.5	32.8
0°-40°	1261.2	51.9
0°-60°	2021.4	83.1
0°-90°	2432.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2432.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1071	1071	1071	1071	1071	
5°	1065	1063	1063	1067	1068	101
15°	1005	1005	1008	1014	1018	283
25°	891	891	898	907	912	409
35°	735	734	738	749	753	457
45°	548	551	553	557	561	423
55°	374	371	370	372	372	334
65°	228	226	223	227	230	227
75°	124	123	123	130	135	132
85°	44	43	46	53	55	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1070.8	1070.8	1070.8	1070.8	1070.8
2.5°	1069.8	1067.8	1067.8	1070.8	1072.9
5°	1064.7	1062.6	1062.6	1066.7	1067.8
7.5°	1055.5	1054.4	1054.4	1058.5	1061.6
10°	1042.1	1041.1	1042.1	1046.2	1050.3
12.5°	1024.7	1024.7	1026.7	1031.9	1036.0
15°	1005.2	1005.2	1008.3	1014.4	1017.5
17.5°	980.6	981.6	985.7	992.9	996.0
20°	953.9	956.0	960.1	966.2	972.4
22.5°	923.1	925.2	929.3	938.5	942.6
25°	891.3	891.3	897.5	906.7	911.9
27.5°	854.4	855.4	861.6	871.9	877.0
30°	815.4	818.5	822.6	831.9	839.0
32.5°	774.4	777.5	782.6	792.9	798.0
35°	735.4	734.4	737.5	748.8	752.9
37.5°	689.3	690.3	694.4	702.6	707.7
40°	639.0	644.2	648.3	654.4	659.5
42.5°	594.9	598.0	601.1	607.2	611.3
45°	547.7	550.8	552.9	557.0	561.1
47.5°	501.6	502.6	505.7	507.7	510.8
50°	457.5	458.5	457.5	460.5	464.6
52.5°	414.4	413.4	413.4	414.4	420.5
55°	374.4	371.3	370.3	372.3	372.3
57.5°	330.3	329.3	329.3	328.2	333.4
60°	295.4	292.3	290.3	292.3	294.4
62.5°	259.5	256.4	254.4	258.5	258.5
65°	227.7	225.7	222.6	226.7	229.8
67.5°	196.9	194.9	193.9	199.0	203.1
70°	170.3	169.2	169.2	174.4	177.4
72.5°	145.7	144.6	144.6	151.8	154.9
75°	124.1	123.1	123.1	130.3	135.4
77.5°	102.6	101.5	104.6	110.8	115.9
80°	84.1	83.1	84.1	92.3	96.4
82.5°	63.6	63.6	65.6	73.9	78.0
85°	44.1	43.1	46.2	53.3	55.4
87.5°	22.6	23.6	24.6	28.7	28.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)