

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: P475917

Luminaire Tested: **22GR-LD5-20-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475917
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-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2085.2 lumens
Efficiency: N/A
Efficacy: 138.1 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

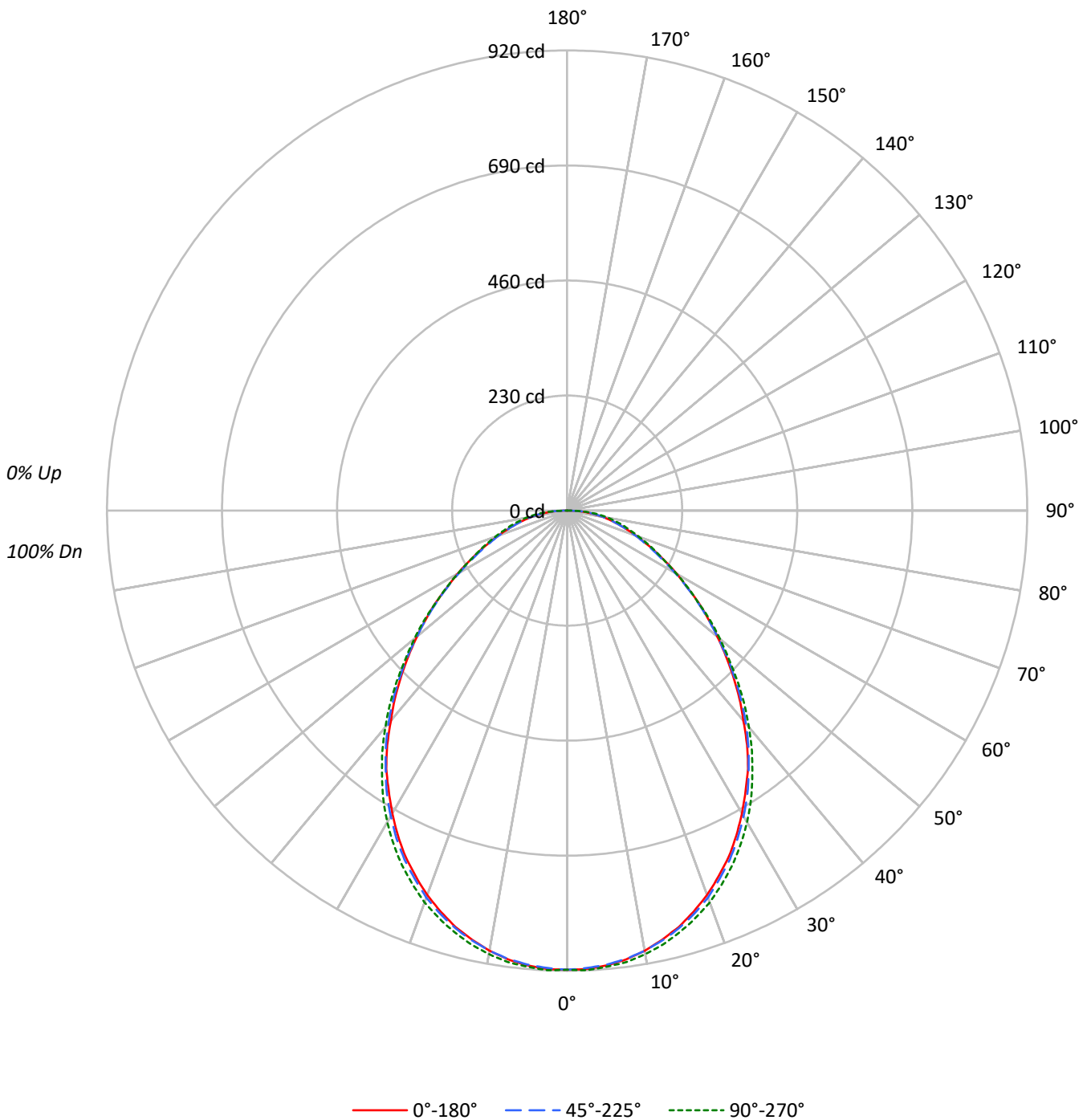
Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2471	2471	2471
5°	2466	2461	2473
10°	2441	2441	2461
15°	2401	2408	2430
20°	2342	2357	2387
25°	2269	2285	2321
30°	2172	2192	2235
35°	2071	2077	2121
40°	1925	1952	1986
45°	1787	1804	1831
50°	1642	1642	1668
55°	1506	1490	1498
60°	1363	1340	1358
65°	1243	1215	1254
70°	1149	1142	1197
75°	1106	1097	1207
80°	1117	1117	1282
85°	1167	1223	1467



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.6	4.2
10°-20°	243.7	11.7
20°-30°	354.3	17.0
30°-40°	396.6	19.0
40°-50°	366.1	17.6
50°-60°	285.7	13.7
60°-70°	193.4	9.3
70°-80°	115.5	5.5
80°-90°	43.4	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°	684.6	32.8
0°-40°	1081.3	51.9
0°-60°	1733.0	83.1
0°-90°	2085.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2085.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	913	911	911	915	915	87
15°	862	862	864	870	872	242
25°	764	764	770	777	782	351
35°	630	630	632	642	646	392
45°	470	472	474	478	481	362
55°	321	318	318	319	319	286
65°	195	194	191	194	197	194
75°	106	106	106	112	116	113
85°	38	37	40	46	48	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.1	918.1	918.1	918.1	918.1
2.5°	917.2	915.4	915.4	918.1	919.8
5°	912.8	911.0	911.0	914.6	915.4
7.5°	904.9	904.0	904.0	907.5	910.2
10°	893.5	892.6	893.5	897.0	900.5
12.5°	878.5	878.5	880.3	884.7	888.2
15°	861.8	861.8	864.4	869.7	872.3
17.5°	840.7	841.6	845.1	851.2	853.9
20°	817.8	819.6	823.1	828.4	833.7
22.5°	791.4	793.2	796.7	804.6	808.2
25°	764.2	764.2	769.5	777.4	781.8
27.5°	732.5	733.4	738.7	747.5	751.9
30°	699.1	701.7	705.3	713.2	719.3
32.5°	663.9	666.6	671.0	679.8	684.2
35°	630.5	629.6	632.3	642.0	645.5
37.5°	590.9	591.8	595.3	602.4	606.8
40°	547.9	552.3	555.8	561.0	565.4
42.5°	510.0	512.7	515.3	520.6	524.1
45°	469.6	472.2	474.0	477.5	481.0
47.5°	430.0	430.9	433.5	435.3	437.9
50°	392.2	393.1	392.2	394.8	398.4
52.5°	355.3	354.4	354.4	355.3	360.5
55°	321.0	318.3	317.5	319.2	319.2
57.5°	283.2	282.3	282.3	281.4	285.8
60°	253.3	250.6	248.9	250.6	252.4
62.5°	222.5	219.8	218.1	221.6	221.6
65°	195.2	193.5	190.8	194.3	197.0
67.5°	168.8	167.1	166.2	170.6	174.1
70°	146.0	145.1	145.1	149.5	152.1
72.5°	124.9	124.0	124.0	130.1	132.8
75°	106.4	105.5	105.5	111.7	116.1
77.5°	87.9	87.1	89.7	95.0	99.4
80°	72.1	71.2	72.1	79.1	82.7
82.5°	54.5	54.5	56.3	63.3	66.8
85°	37.8	36.9	39.6	45.7	47.5
87.5°	19.3	20.2	21.1	24.6	24.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)