

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: P476127

Luminaire Tested: **22GR-LD5-43-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476127
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-FGW080-UNV-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3573.8 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

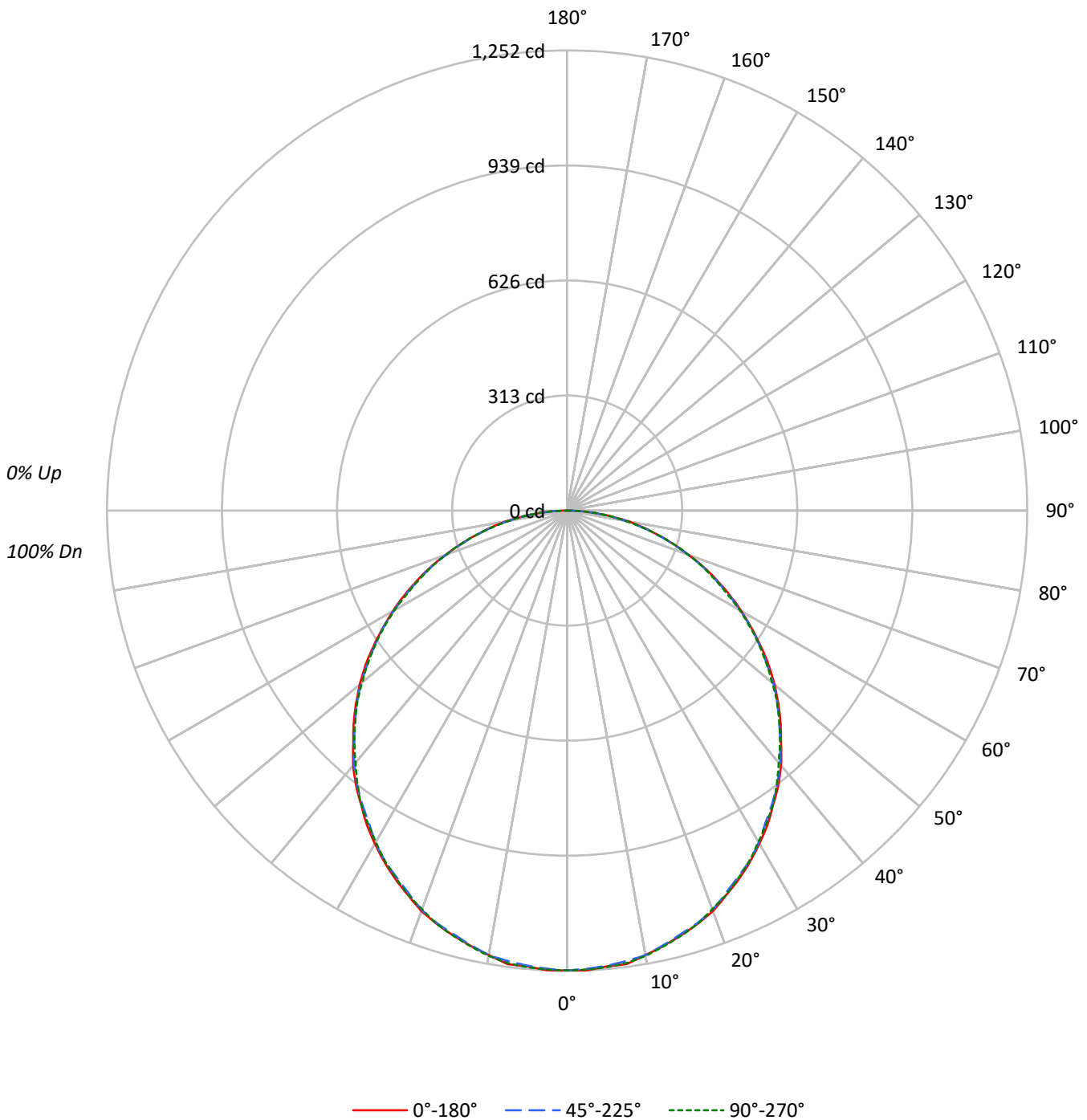
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3366	3366	3366
5°	3362	3357	3368
10°	3355	3355	3361
15°	3333	3324	3336
20°	3321	3312	3306
25°	3284	3265	3275
30°	3251	3241	3234
35°	3210	3196	3210
40°	3182	3167	3145
45°	3127	3107	3107
50°	3084	3066	3049
55°	3018	2998	2994
60°	2948	2931	2920
65°	2872	2839	2826
70°	2758	2750	2758
75°	2662	2629	2651
80°	2633	2503	2486
85°	2334	2269	2303



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.3	3.3
10°-20°	337.6	9.4
20°-30°	508.4	14.2
30°-40°	610.1	17.1
40°-50°	631.3	17.7
50°-60°	572.1	16.0
60°-70°	443.4	12.4
70°-80°	269.2	7.5
80°-90°	83.3	2.3
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°	964.4	27.0
0°-40°	1574.5	44.1
0°-60°	2777.9	77.7
0°-90°	3573.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3573.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1251	1251	1251	1251	1251	
5°	1245	1245	1243	1246	1247	119
15°	1196	1196	1193	1198	1197	338
25°	1106	1104	1100	1104	1103	510
35°	977	977	973	974	977	613
45°	822	821	816	816	816	634
55°	643	642	639	638	638	575
65°	451	451	446	448	444	446
75°	256	255	253	253	255	272
85°	76	75	74	74	75	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1251.0	1251.0	1251.0	1251.0	1251.0
2.5°	1252.0	1246.8	1247.8	1249.9	1249.9
5°	1244.7	1244.7	1242.6	1245.7	1246.8
7.5°	1244.7	1239.4	1236.3	1239.4	1241.5
10°	1227.9	1225.8	1227.9	1226.8	1230.0
12.5°	1213.2	1211.1	1211.1	1214.2	1214.2
15°	1196.4	1196.4	1193.2	1198.5	1197.4
17.5°	1179.5	1179.5	1177.4	1177.4	1179.5
20°	1159.6	1154.3	1156.4	1155.4	1154.3
22.5°	1132.3	1129.1	1127.0	1130.2	1131.2
25°	1106.0	1103.9	1099.7	1103.9	1102.9
27.5°	1077.7	1075.6	1074.5	1072.4	1074.5
30°	1046.2	1044.1	1043.0	1040.9	1040.9
32.5°	1014.6	1010.4	1005.2	1010.4	1009.4
35°	977.1	977.1	972.9	973.9	977.1
37.5°	943.5	941.4	939.3	936.1	937.2
40°	905.7	902.5	901.5	899.4	895.2
42.5°	861.6	861.6	857.4	858.4	857.4
45°	821.6	820.6	816.4	816.4	816.4
47.5°	779.6	778.6	775.4	773.3	775.4
50°	736.6	732.4	732.4	729.2	728.2
52.5°	691.7	688.5	684.3	685.4	683.3
55°	643.3	642.3	639.1	638.1	638.1
57.5°	595.0	596.1	594.0	589.8	590.8
60°	547.8	546.7	544.6	542.5	542.5
62.5°	499.4	499.4	495.2	495.2	491.0
65°	451.1	451.1	445.9	448.0	443.8
67.5°	403.1	402.0	398.9	397.8	398.9
70°	350.6	351.6	349.5	349.5	350.6
72.5°	303.3	302.2	301.2	301.2	303.3
75°	256.0	255.0	252.9	252.9	255.0
77.5°	213.0	207.7	206.7	208.8	205.6
80°	169.9	162.5	161.5	160.4	160.4
82.5°	119.7	116.6	117.6	116.6	118.7
85°	75.6	74.6	73.5	73.5	74.6
87.5°	35.7	33.6	33.6	32.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)