

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: P476151

Luminaire Tested: **22GR-LD5-43-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476151
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-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ FGW080 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3773.8 lumens
Efficiency: N/A
Efficacy: 108.4 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

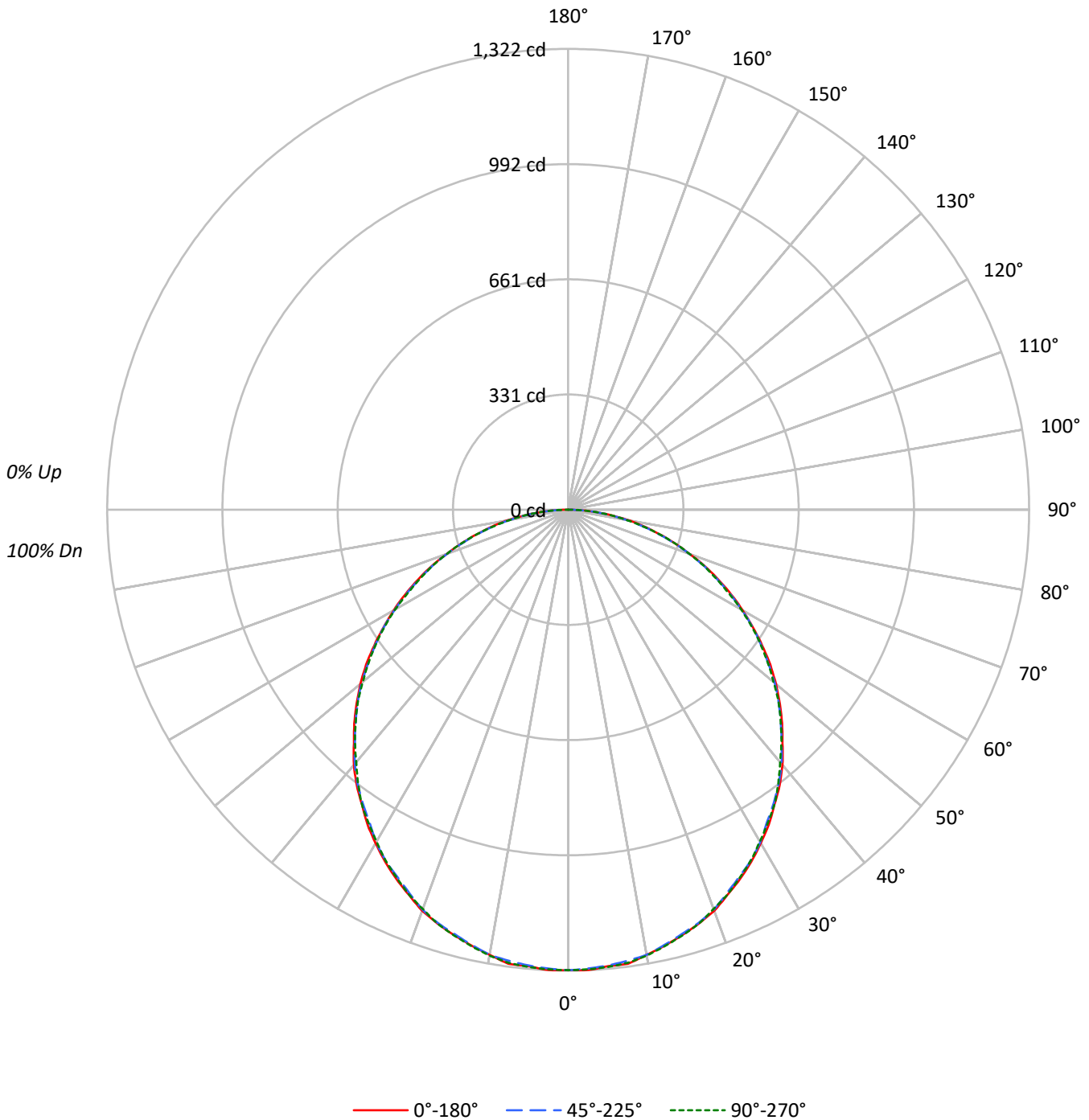
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3555	3555	3555
5°	3550	3544	3556
10°	3543	3543	3549
15°	3519	3510	3522
20°	3507	3497	3491
25°	3468	3448	3458
30°	3433	3422	3415
35°	3390	3375	3390
40°	3359	3344	3321
45°	3302	3281	3281
50°	3256	3237	3219
55°	3187	3166	3161
60°	3113	3095	3083
65°	3033	2998	2984
70°	2913	2904	2913
75°	2811	2776	2799
80°	2780	2642	2625
85°	2467	2396	2430



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	3.3
10°-20°	356.5	9.4
20°-30°	536.8	14.2
30°-40°	644.3	17.1
40°-50°	666.6	17.7
50°-60°	604.1	16.0
60°-70°	468.3	12.4
70°-80°	284.2	7.5
80°-90°	88.0	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°	1018.3	27.0
0°-40°	1662.6	44.1
0°-60°	2933.3	77.7
0°-90°	3773.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3773.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1321	1321	1321	1321	1321	
5°	1314	1314	1312	1315	1316	125
15°	1263	1263	1260	1266	1264	357
25°	1168	1166	1161	1166	1165	538
35°	1032	1032	1027	1028	1032	647
45°	868	866	862	862	862	670
55°	679	678	675	674	674	607
65°	476	476	471	473	469	471
75°	270	269	267	267	269	288
85°	80	79	78	78	79	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1321.0	1321.0	1321.0	1321.0	1321.0
2.5°	1322.1	1316.5	1317.6	1319.9	1319.9
5°	1314.3	1314.3	1312.1	1315.4	1316.5
7.5°	1314.3	1308.8	1305.4	1308.8	1311.0
10°	1296.6	1294.4	1296.6	1295.5	1298.8
12.5°	1281.0	1278.8	1278.8	1282.2	1282.2
15°	1263.3	1263.3	1260.0	1265.5	1264.4
17.5°	1245.6	1245.6	1243.3	1243.3	1245.6
20°	1224.5	1218.9	1221.2	1220.0	1218.9
22.5°	1195.6	1192.3	1190.1	1193.4	1194.5
25°	1167.9	1165.7	1161.3	1165.7	1164.6
27.5°	1138.0	1135.7	1134.6	1132.4	1134.6
30°	1104.7	1102.5	1101.4	1099.1	1099.1
32.5°	1071.4	1067.0	1061.4	1067.0	1065.9
35°	1031.8	1031.8	1027.3	1028.4	1031.8
37.5°	996.3	994.1	991.8	988.5	989.6
40°	956.3	953.0	951.9	949.7	945.3
42.5°	909.8	909.8	905.3	906.4	905.3
45°	867.6	866.5	862.1	862.1	862.1
47.5°	823.3	822.1	818.8	816.6	818.8
50°	777.8	773.3	773.3	770.0	768.9
52.5°	730.4	727.0	722.6	723.7	721.5
55°	679.3	678.2	674.9	673.8	673.8
57.5°	628.3	629.4	627.2	622.8	623.9
60°	578.4	577.3	575.1	572.9	572.9
62.5°	527.4	527.4	523.0	523.0	518.5
65°	476.4	476.4	470.8	473.0	468.6
67.5°	425.6	424.5	421.2	420.1	421.2
70°	370.2	371.3	369.1	369.1	370.2
72.5°	320.3	319.2	318.0	318.0	320.3
75°	270.4	269.2	267.0	267.0	269.2
77.5°	224.9	219.3	218.2	220.4	217.1
80°	179.4	171.6	170.5	169.4	169.4
82.5°	126.4	123.1	124.2	123.1	125.3
85°	79.9	78.7	77.6	77.6	78.7
87.5°	37.7	35.5	35.5	34.4	34.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)