

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: P476145

Luminaire Tested: **22GR-LD5-20-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476145
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-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: 1771.3 lumens
Efficiency: N/A
Efficacy: 117.3 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

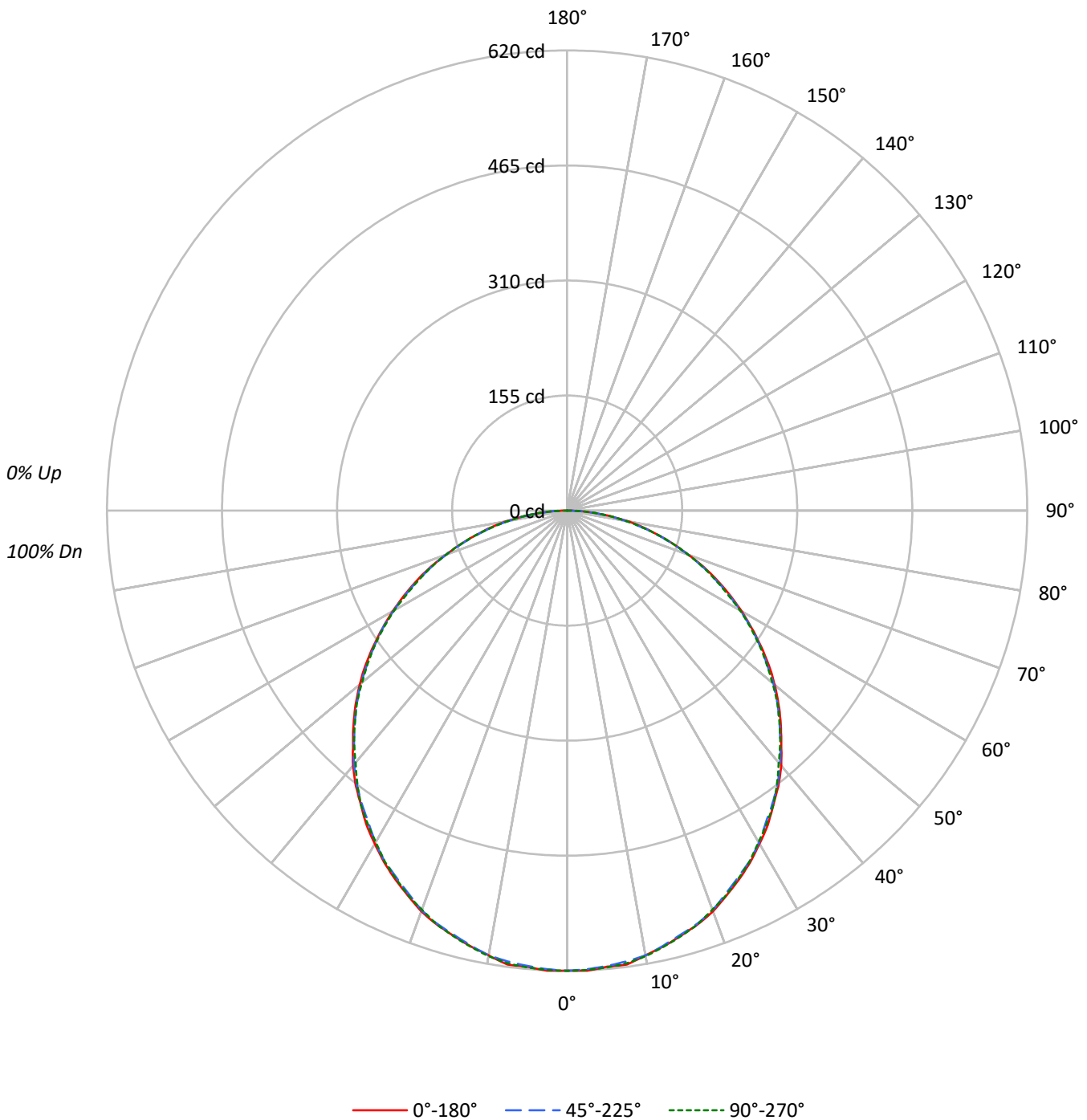
Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1668	1668	1668
5°	1666	1663	1669
10°	1663	1663	1666
15°	1652	1648	1653
20°	1646	1641	1638
25°	1628	1618	1623
30°	1611	1606	1603
35°	1591	1584	1591
40°	1577	1570	1559
45°	1550	1540	1540
50°	1528	1520	1511
55°	1496	1486	1484
60°	1461	1453	1447
65°	1424	1407	1400
70°	1367	1363	1367
75°	1319	1303	1314
80°	1305	1240	1232
85°	1158	1124	1142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.6	3.3
10°-20°	167.3	9.4
20°-30°	252.0	14.2
30°-40°	302.4	17.1
40°-50°	312.9	17.7
50°-60°	283.5	16.0
60°-70°	219.8	12.4
70°-80°	133.4	7.5
80°-90°	41.3	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°	478.0	27.0
0°-40°	780.4	44.1
0°-60°	1376.8	77.7
0°-90°	1771.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1771.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	620	620	620	620	620	
5°	617	617	616	617	618	59
15°	593	593	591	594	594	167
25°	548	547	545	547	547	253
35°	484	484	482	483	484	304
45°	407	407	405	405	405	314
55°	319	318	317	316	316	285
65°	224	224	221	222	220	221
75°	127	126	125	125	126	135
85°	38	37	36	36	37	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	620.0	620.0	620.0	620.0	620.0
2.5°	620.5	617.9	618.5	619.5	619.5
5°	616.9	616.9	615.8	617.4	617.9
7.5°	616.9	614.3	612.7	614.3	615.3
10°	608.6	607.5	608.6	608.0	609.6
12.5°	601.3	600.2	600.2	601.8	601.8
15°	592.9	592.9	591.4	594.0	593.5
17.5°	584.6	584.6	583.6	583.6	584.6
20°	574.7	572.1	573.2	572.6	572.1
22.5°	561.2	559.6	558.6	560.1	560.7
25°	548.2	547.1	545.0	547.1	546.6
27.5°	534.1	533.1	532.6	531.5	532.6
30°	518.5	517.5	516.9	515.9	515.9
32.5°	502.9	500.8	498.2	500.8	500.3
35°	484.3	484.3	482.2	482.7	484.3
37.5°	467.6	466.6	465.5	464.0	464.5
40°	448.9	447.3	446.8	445.7	443.7
42.5°	427.0	427.0	424.9	425.4	424.9
45°	407.2	406.7	404.6	404.6	404.6
47.5°	386.4	385.9	384.3	383.3	384.3
50°	365.1	363.0	363.0	361.4	360.9
52.5°	342.8	341.2	339.2	339.7	338.6
55°	318.9	318.3	316.8	316.3	316.3
57.5°	294.9	295.4	294.4	292.3	292.8
60°	271.5	271.0	269.9	268.9	268.9
62.5°	247.5	247.5	245.5	245.5	243.4
65°	223.6	223.6	221.0	222.0	219.9
67.5°	199.8	199.3	197.7	197.2	197.7
70°	173.7	174.3	173.2	173.2	173.7
72.5°	150.3	149.8	149.3	149.3	150.3
75°	126.9	126.4	125.3	125.3	126.4
77.5°	105.5	102.9	102.4	103.5	101.9
80°	84.2	80.6	80.0	79.5	79.5
82.5°	59.3	57.8	58.3	57.8	58.8
85°	37.5	37.0	36.4	36.4	37.0
87.5°	17.7	16.7	16.7	16.1	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)