

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: P476121

Luminaire Tested: **22GR-LD5-20-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476121
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-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: 1677.4 lumens
Efficiency: N/A
Efficacy: 111.1 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

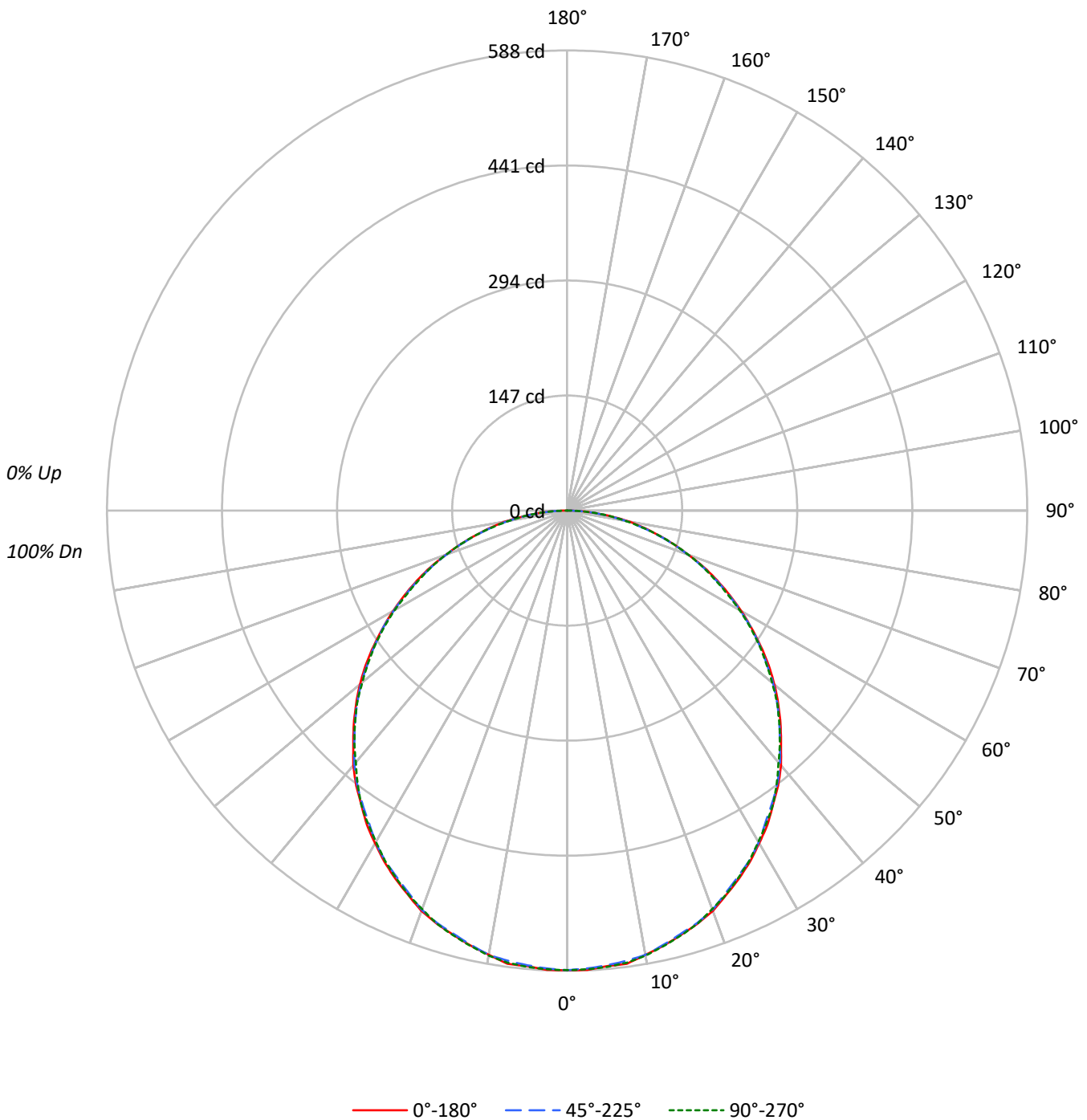
Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1580	1580	1580
5°	1578	1575	1581
10°	1575	1575	1577
15°	1564	1560	1566
20°	1559	1554	1552
25°	1541	1533	1537
30°	1526	1521	1518
35°	1507	1500	1507
40°	1493	1486	1476
45°	1467	1458	1458
50°	1447	1439	1431
55°	1417	1407	1405
60°	1384	1376	1370
65°	1348	1333	1326
70°	1294	1290	1294
75°	1250	1234	1245
80°	1235	1175	1167
85°	1096	1065	1081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.5	3.3
10°-20°	158.5	9.4
20°-30°	238.6	14.2
30°-40°	286.4	17.1
40°-50°	296.3	17.7
50°-60°	268.5	16.0
60°-70°	208.1	12.4
70°-80°	126.4	7.5
80°-90°	39.1	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°	452.6	27.0
0°-40°	739.0	44.1
0°-60°	1303.8	77.7
0°-90°	1677.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1677.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	587	587	587	587	587	
5°	584	584	583	585	585	56
15°	562	562	560	562	562	159
25°	519	518	516	518	518	239
35°	459	459	457	457	459	287
45°	386	385	383	383	383	298
55°	302	302	300	300	300	270
65°	212	212	209	210	208	209
75°	120	120	119	119	120	128
85°	36	35	34	34	35	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	587.2	587.2	587.2	587.2	587.2
2.5°	587.6	585.2	585.7	586.7	586.7
5°	584.2	584.2	583.2	584.7	585.2
7.5°	584.2	581.7	580.3	581.7	582.7
10°	576.3	575.3	576.3	575.8	577.3
12.5°	569.4	568.4	568.4	569.9	569.9
15°	561.5	561.5	560.0	562.5	562.0
17.5°	553.6	553.6	552.6	552.6	553.6
20°	544.3	541.8	542.8	542.3	541.8
22.5°	531.4	530.0	529.0	530.5	531.0
25°	519.1	518.1	516.2	518.1	517.6
27.5°	505.8	504.8	504.3	503.3	504.3
30°	491.0	490.0	489.5	488.6	488.6
32.5°	476.2	474.3	471.8	474.3	473.8
35°	458.6	458.6	456.6	457.1	458.6
37.5°	442.8	441.8	440.9	439.4	439.9
40°	425.1	423.6	423.1	422.1	420.2
42.5°	404.4	404.4	402.4	402.9	402.4
45°	385.6	385.2	383.2	383.2	383.2
47.5°	365.9	365.4	364.0	363.0	364.0
50°	345.7	343.7	343.7	342.3	341.8
52.5°	324.6	323.2	321.2	321.7	320.7
55°	302.0	301.5	300.0	299.5	299.5
57.5°	279.3	279.8	278.8	276.8	277.3
60°	257.1	256.6	255.6	254.6	254.6
62.5°	234.4	234.4	232.4	232.4	230.5
65°	211.7	211.7	209.3	210.3	208.3
67.5°	189.2	188.7	187.2	186.7	187.2
70°	164.5	165.0	164.0	164.0	164.5
72.5°	142.4	141.9	141.4	141.4	142.4
75°	120.2	119.7	118.7	118.7	119.7
77.5°	100.0	97.5	97.0	98.0	96.5
80°	79.7	76.3	75.8	75.3	75.3
82.5°	56.2	54.7	55.2	54.7	55.7
85°	35.5	35.0	34.5	34.5	35.0
87.5°	16.8	15.8	15.8	15.3	15.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)