

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: P476049

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476049
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-20-A-UNV-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2021.3 lumens
Efficiency: N/A
Efficacy: 133.9 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.22 / 1.25
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

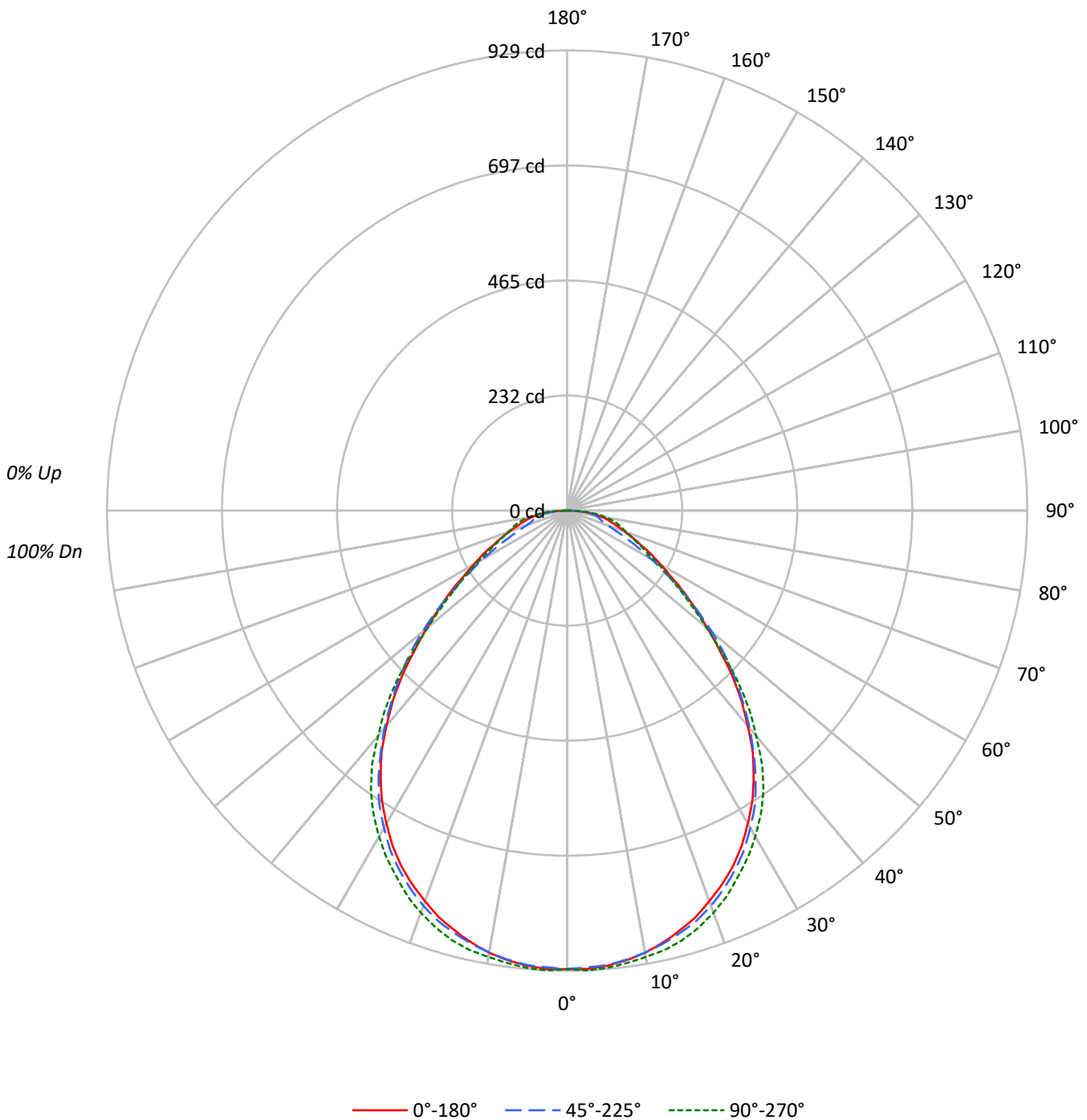
Input Watts (W): 15.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	94	87	82	99	92	86	81	88	84	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	66	60	71	65	60	69	63	59	67	62	58	56
5	80	68	59	53	78	67	59	53	65	58	53	63	57	52	61	56	51	49
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	55	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2491	2491	2491
5°	2492	2488	2503
10°	2477	2476	2500
15°	2445	2459	2501
20°	2403	2431	2474
25°	2352	2379	2422
30°	2267	2298	2360
35°	2156	2180	2268
40°	1993	2014	2085
45°	1790	1822	1851
50°	1548	1603	1532
55°	1351	1315	1298
60°	1169	1053	1124
65°	1046	826	1010
70°	969	685	996
75°	968	724	1105
80°	1072	910	1246
85°	1118	988	1411



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.6	4.3
10°-20°	249.5	12.3
20°-30°	369.0	18.3
30°-40°	416.4	20.6
40°-50°	367.1	18.2
50°-60°	251.8	12.5
60°-70°	148.6	7.4
70°-80°	92.7	4.6
80°-90°	38.7	1.9
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°	706.1	34.9
0°-40°	1122.5	55.5
0°-60°	1741.4	86.1
0°-90°	2021.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2021.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	926	926	926	926	926	
5°	922	921	921	924	927	88
15°	878	879	882	893	898	247
25°	792	795	801	811	816	364
35°	656	662	664	680	690	409
45°	470	473	479	482	486	361
55°	288	281	280	271	277	258
65°	164	144	130	150	159	165
75°	93	84	70	97	106	100
85°	36	34	32	42	46	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	925.7	925.7	925.7	925.7	925.7
2.5°	926.2	923.8	922.9	926.7	929.0
5°	922.4	920.6	921.1	924.3	926.7
7.5°	915.8	914.5	914.5	919.1	921.4
10°	906.4	906.0	906.0	911.6	914.8
12.5°	893.3	893.7	895.5	903.1	908.7
15°	877.7	878.6	882.5	893.3	897.9
17.5°	860.8	860.8	868.3	876.7	882.5
20°	839.2	840.5	849.0	858.4	864.0
22.5°	817.0	819.4	826.5	837.3	842.4
25°	792.1	795.0	801.1	811.4	815.6
27.5°	763.0	766.7	773.3	780.8	789.7
30°	729.5	735.2	739.5	749.8	759.6
32.5°	695.6	700.9	705.6	716.4	727.6
35°	656.2	661.8	663.7	679.7	690.5
37.5°	615.7	618.1	619.0	635.0	646.7
40°	567.3	571.9	573.4	586.1	593.6
42.5°	520.6	522.6	525.4	534.8	543.8
45°	470.4	472.7	478.8	481.7	486.4
47.5°	417.7	424.8	431.8	422.8	423.3
50°	369.7	375.4	382.9	365.9	365.9
52.5°	326.8	329.7	330.2	316.1	318.9
55°	287.9	280.8	280.3	271.0	276.6
57.5°	248.8	239.5	236.1	233.3	239.8
60°	217.3	200.4	195.7	199.9	208.9
62.5°	191.4	169.8	160.8	171.6	179.7
65°	164.2	144.4	129.8	150.1	158.6
67.5°	143.0	124.2	105.4	134.1	140.1
70°	123.2	108.7	87.0	121.9	126.6
72.5°	107.3	96.0	75.3	110.0	115.8
75°	93.1	83.8	69.6	97.3	106.3
77.5°	81.9	71.4	65.0	84.1	95.0
80°	69.2	58.7	58.7	70.6	80.4
82.5°	54.5	46.1	47.5	57.4	64.5
85°	36.2	33.9	32.0	41.8	45.7
87.5°	18.3	18.8	16.9	21.7	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)