

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: P476027

Luminaire Tested: **22GR-LD5-28-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476027
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-28-A-UNV-L830-CD1-U
Description: GR 2'X2' LED TROFFER w/ A LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2658.4 lumens
Efficiency: N/A
Efficacy: 126.6 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

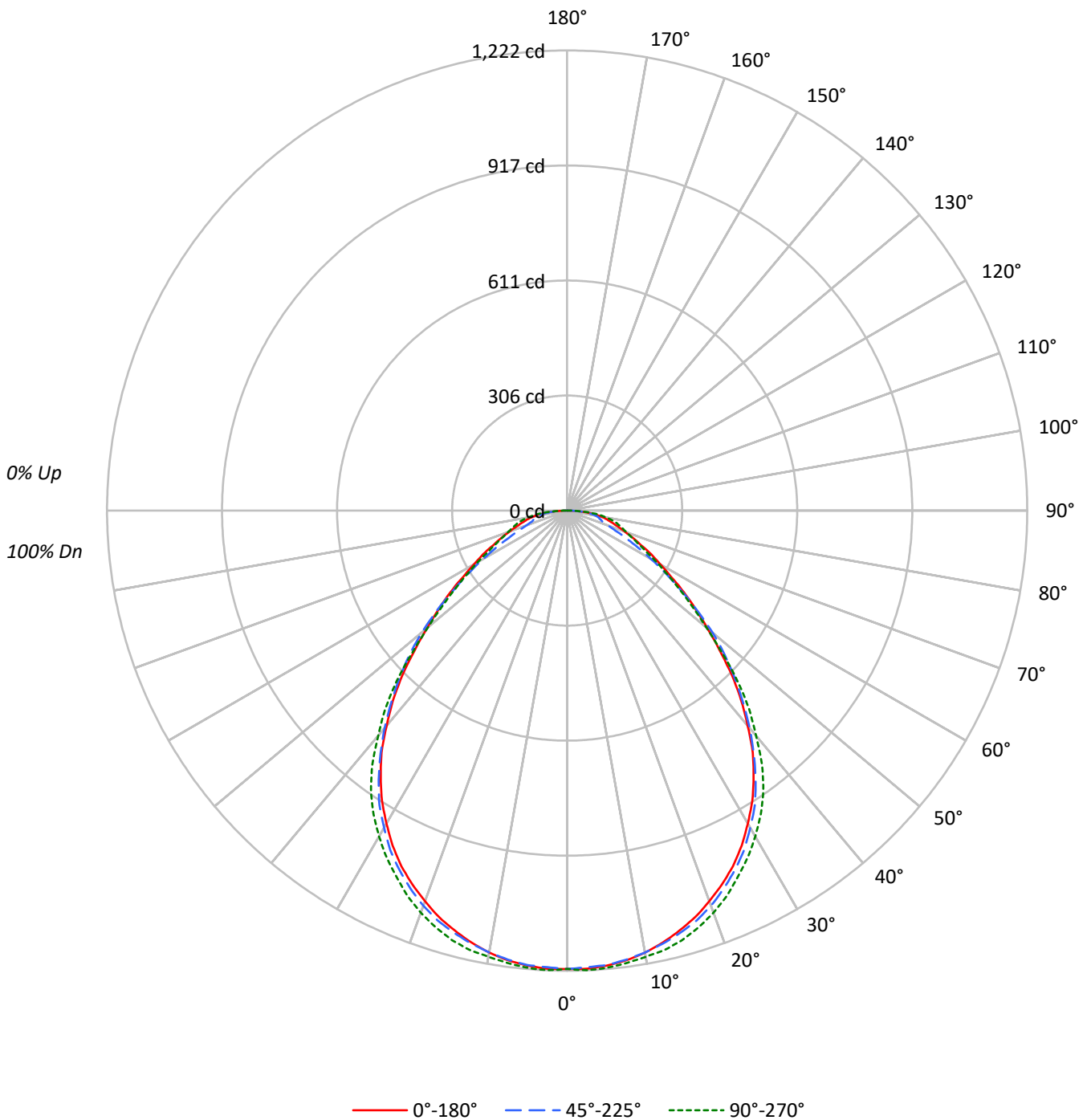
Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3276	3276	3276
5°	3277	3272	3292
10°	3257	3256	3287
15°	3216	3233	3290
20°	3160	3198	3254
25°	3093	3128	3185
30°	2981	3022	3104
35°	2835	2867	2984
40°	2621	2649	2742
45°	2354	2396	2434
50°	2035	2108	2015
55°	1776	1729	1706
60°	1538	1385	1478
65°	1375	1087	1328
70°	1275	900	1310
75°	1273	951	1454
80°	1410	1198	1638
85°	1470	1300	1856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.2	4.3
10°-20°	328.1	12.3
20°-30°	485.3	18.3
30°-40°	547.6	20.6
40°-50°	482.8	18.2
50°-60°	331.2	12.5
60°-70°	195.4	7.4
70°-80°	121.9	4.6
80°-90°	50.8	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°	928.6	34.9
0°-40°	1476.3	55.5
0°-60°	2290.2	86.1
0°-90°	2658.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2658.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1213	1211	1211	1216	1219	115
15°	1154	1156	1161	1175	1181	325
25°	1042	1046	1054	1067	1073	478
35°	863	870	873	894	908	538
45°	619	622	630	634	640	475
55°	379	369	369	356	364	340
65°	216	190	171	197	208	218
75°	122	110	92	128	140	131
85°	48	44	42	55	60	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1217.4	1217.4	1217.4	1217.4	1217.4
2.5°	1218.0	1214.9	1213.8	1218.7	1221.8
5°	1213.1	1210.7	1211.3	1215.6	1218.7
7.5°	1204.5	1202.7	1202.7	1208.7	1211.8
10°	1192.0	1191.5	1191.5	1198.9	1203.1
12.5°	1174.8	1175.3	1177.8	1187.8	1195.1
15°	1154.4	1155.5	1160.6	1174.8	1180.9
17.5°	1132.1	1132.1	1141.9	1153.1	1160.6
20°	1103.6	1105.4	1116.6	1129.0	1136.4
22.5°	1074.5	1077.6	1086.9	1101.2	1107.9
25°	1041.7	1045.5	1053.5	1067.1	1072.7
27.5°	1003.4	1008.4	1017.0	1026.8	1038.6
30°	959.4	966.9	972.5	986.1	999.0
32.5°	914.9	921.8	928.0	942.2	957.0
35°	863.0	870.4	872.8	893.9	908.2
37.5°	809.8	812.9	814.0	835.2	850.6
40°	746.1	752.2	754.1	770.8	780.7
42.5°	684.7	687.3	691.0	703.4	715.2
45°	618.6	621.7	629.7	633.5	639.7
47.5°	549.4	558.7	567.9	556.1	556.7
50°	486.2	493.7	503.5	481.3	481.3
52.5°	429.9	433.6	434.3	415.8	419.4
55°	378.6	369.3	368.6	356.4	363.7
57.5°	327.2	314.9	310.5	306.8	315.4
60°	285.8	263.5	257.3	262.9	274.7
62.5°	251.8	223.3	211.5	225.7	236.4
65°	215.9	189.9	170.7	197.4	208.5
67.5°	188.1	163.4	138.6	176.3	184.3
70°	162.1	142.9	114.4	160.3	166.5
72.5°	141.1	126.2	99.0	144.7	152.2
75°	122.4	110.2	91.5	128.0	139.8
77.5°	107.7	94.0	85.4	110.7	124.9
80°	91.0	77.3	77.3	92.8	105.7
82.5°	71.7	60.6	62.5	75.5	84.8
85°	47.6	44.5	42.1	55.0	60.1
87.5°	24.1	24.7	22.3	28.5	29.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)