

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: P476277

Luminaire Tested: **14GR-LD5-20-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476277
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-20-A-UNV-L830-CD1-U
Description: GR 1'X4' LED TROFFER w/ A LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

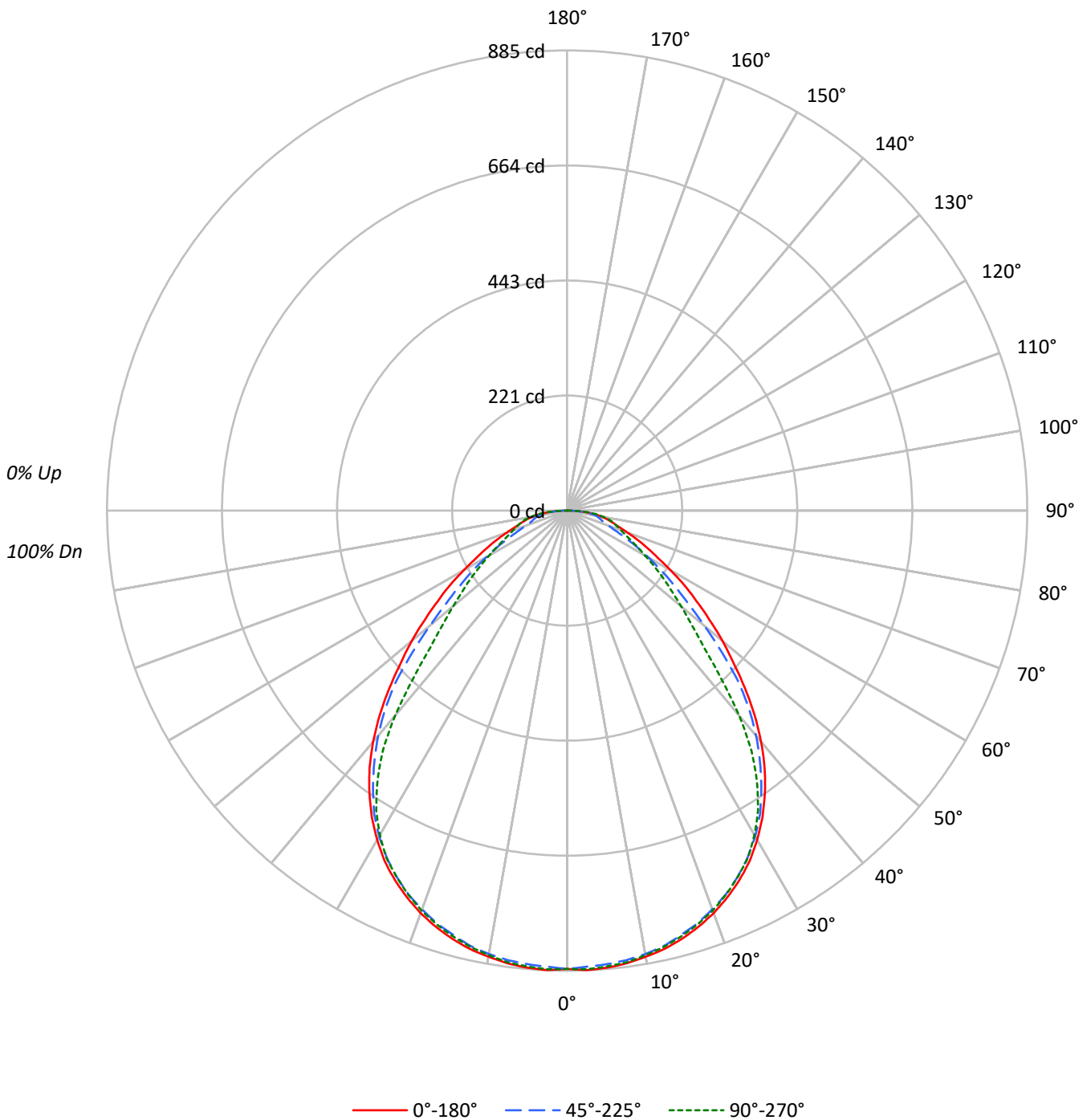
Lumens per Lamp: N/A
Luminaire Lumens: 1923.6 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 16
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	88	83	99	92	86	82	88	84	80	85	81	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	57	48	43	67	56	48	43	54	47	42	53	47	42	52	46	42	40
8	65	52	44	38	63	51	44	38	50	43	38	49	43	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	35	44	39	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	31	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2970	2970	2970
5°	2985	2962	2977
10°	2981	2962	2970
15°	2975	2949	2958
20°	2954	2927	2935
25°	2915	2887	2888
30°	2844	2814	2802
35°	2727	2678	2617
40°	2553	2488	2264
45°	2305	2219	1769
50°	2045	1801	1497
55°	1785	1477	1320
60°	1547	1216	1165
65°	1357	976	1076
70°	1211	828	1083
75°	1181	874	1209
80°	1308	1100	1387
85°	1365	1175	1624



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	83.6	4.3
10°-20°	239.6	12.5
20°-30°	358.4	18.6
30°-40°	404.6	21.0
40°-50°	343.2	17.8
50°-60°	232.2	12.1
60°-70°	138.6	7.2
70°-80°	86.8	4.5
80°-90°	36.5	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°	681.6	35.4
0°-40°	1086.2	56.5
0°-60°	1661.7	86.4
0°-90°	1923.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1923.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	882	882	882	882	882	
5°	882	880	876	882	880	84
15°	853	851	845	851	848	241
25°	784	781	776	780	777	361
35°	663	659	651	645	636	413
45°	484	486	466	399	371	373
55°	304	290	252	225	225	274
65°	170	141	122	130	135	170
75°	91	81	67	88	93	98
85°	35	34	30	39	42	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	881.5	881.5	881.5	881.5	881.5
2.5°	884.6	881.9	877.9	883.3	882.8
5°	882.4	879.7	875.7	881.9	880.1
7.5°	878.3	876.1	872.1	877.9	876.1
10°	871.2	869.4	865.8	870.7	868.1
12.5°	863.6	862.3	857.8	862.3	859.6
15°	852.9	851.1	845.3	851.1	847.9
17.5°	839.5	837.2	832.4	837.2	834.5
20°	823.8	821.2	816.2	821.2	818.5
22.5°	805.1	802.8	798.4	802.8	799.3
25°	784.1	781.4	776.5	780.0	776.9
27.5°	760.0	756.4	751.9	754.6	752.8
30°	730.9	726.5	723.3	723.3	720.2
32.5°	699.2	696.1	690.7	687.6	683.5
35°	663.0	658.6	651.0	645.2	636.2
37.5°	624.2	618.8	609.4	594.6	582.6
40°	580.4	573.6	565.6	536.6	514.7
42.5°	533.5	532.1	518.3	468.7	438.3
45°	483.8	485.6	465.6	399.0	371.3
47.5°	433.8	440.1	403.5	338.2	323.9
50°	390.1	392.2	343.5	293.6	285.5
52.5°	345.0	341.3	293.1	258.2	252.4
55°	303.8	289.5	251.5	225.2	224.7
57.5°	267.6	241.2	214.9	195.3	197.5
60°	229.6	200.1	180.4	169.8	172.9
62.5°	196.1	168.0	150.5	147.4	152.8
65°	170.2	141.2	122.4	130.5	135.0
67.5°	145.7	121.1	99.6	118.8	120.6
70°	122.9	104.9	84.0	109.5	109.9
72.5°	104.1	92.9	72.8	99.2	100.5
75°	90.7	80.8	67.1	88.4	92.9
77.5°	79.5	69.2	62.1	76.4	84.0
80°	67.4	55.8	56.7	63.9	71.5
82.5°	51.9	43.3	45.1	52.7	58.1
85°	35.3	33.5	30.4	39.3	42.0
87.5°	18.8	17.9	15.7	22.3	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)