

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: P476295

Luminaire Tested: **14GR-LD5-20-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476295
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-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ A LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

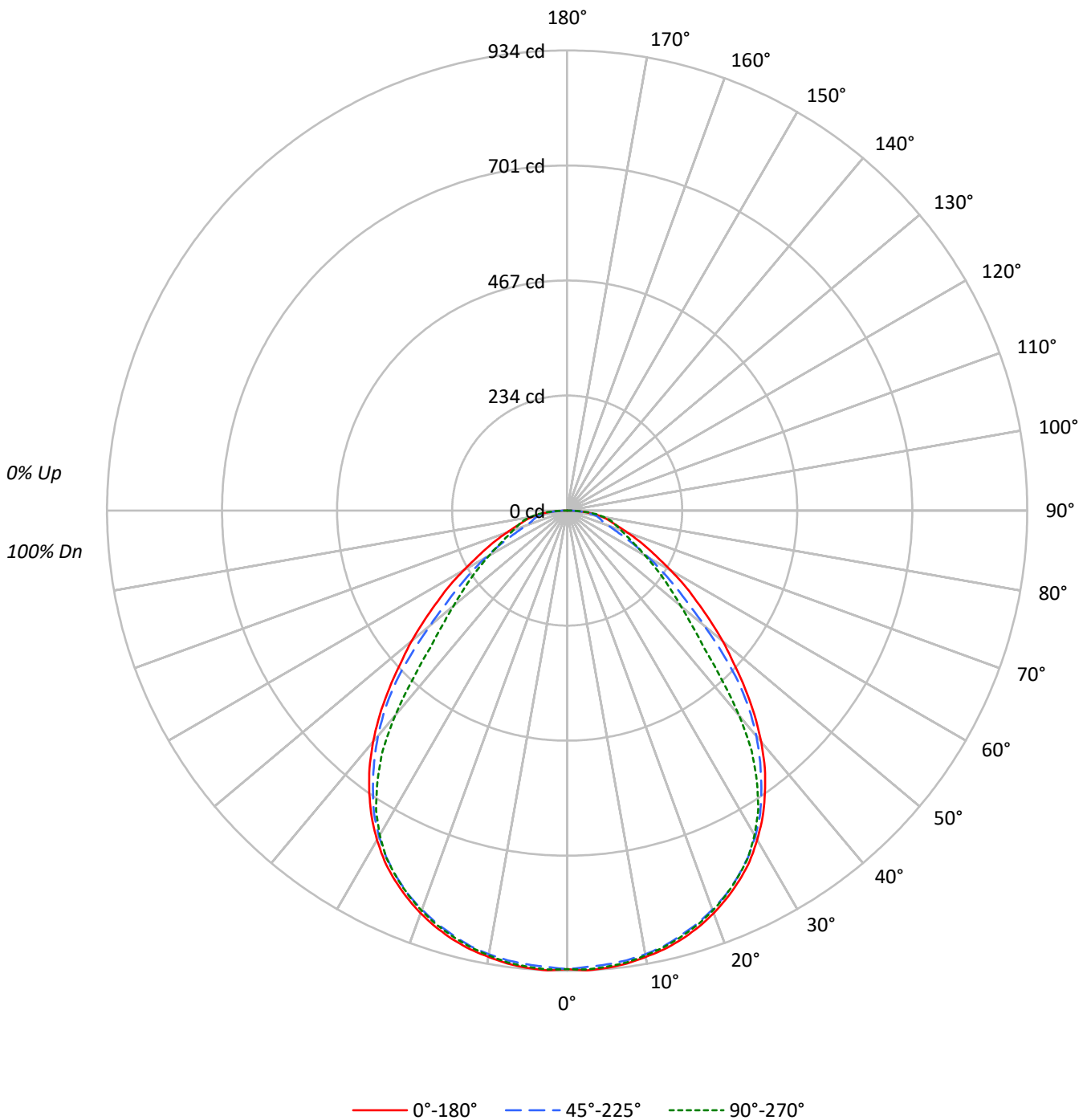
Lumens per Lamp: N/A
Luminaire Lumens: 2031.2 lumens
Efficiency: N/A
Efficacy: 127.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

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°	3136	3136	3136
5°	3151	3128	3144
10°	3147	3128	3137
15°	3142	3114	3124
20°	3119	3091	3099
25°	3078	3048	3050
30°	3003	2972	2959
35°	2880	2828	2763
40°	2696	2627	2391
45°	2435	2343	1868
50°	2159	1902	1581
55°	1885	1560	1394
60°	1634	1284	1231
65°	1433	1030	1136
70°	1278	874	1144
75°	1247	922	1277
80°	1382	1162	1465
85°	1438	1241	1717



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	4.3
10°-20°	253.0	12.5
20°-30°	378.5	18.6
30°-40°	427.2	21.0
40°-50°	362.4	17.8
50°-60°	245.2	12.1
60°-70°	146.4	7.2
70°-80°	91.7	4.5
80°-90°	38.6	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°	719.8	35.4
0°-40°	1147.0	56.5
0°-60°	1754.6	86.4
0°-90°	2031.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2031.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	931	931	931	931	931	
5°	932	929	925	931	929	89
15°	901	899	893	899	895	254
25°	828	825	820	824	820	381
35°	700	695	687	681	672	436
45°	511	513	492	421	392	394
55°	321	306	266	238	237	289
65°	180	149	129	138	142	180
75°	96	85	71	93	98	103
85°	37	35	32	42	44	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.8	930.8	930.8	930.8	930.8
2.5°	934.1	931.2	927.0	932.7	932.2
5°	931.7	929.0	924.7	931.2	929.4
7.5°	927.5	925.1	920.9	927.0	925.1
10°	919.9	918.1	914.3	919.4	916.7
12.5°	911.9	910.5	905.8	910.5	907.7
15°	900.6	898.7	892.6	898.7	895.4
17.5°	886.5	884.1	878.9	884.1	881.2
20°	869.9	867.2	861.9	867.2	864.3
22.5°	850.1	847.7	843.1	847.7	844.0
25°	827.9	825.2	819.9	823.7	820.4
27.5°	802.5	798.7	794.0	796.8	795.0
30°	771.8	767.1	763.8	763.8	760.5
32.5°	738.3	735.0	729.4	726.0	721.8
35°	700.1	695.4	687.4	681.3	671.8
37.5°	659.1	653.4	643.5	627.9	615.2
40°	612.8	605.7	597.3	566.6	543.5
42.5°	563.3	561.8	547.3	494.9	462.8
45°	510.9	512.8	491.6	421.3	392.1
47.5°	458.0	464.7	426.1	357.1	342.1
50°	411.9	414.2	362.8	310.0	301.5
52.5°	364.3	360.4	309.5	272.6	266.5
55°	320.8	305.7	265.6	237.8	237.3
57.5°	282.5	254.7	226.9	206.2	208.6
60°	242.4	211.3	190.5	179.3	182.6
62.5°	207.1	177.4	159.0	155.7	161.3
65°	179.7	149.0	129.2	137.8	142.5
67.5°	153.8	127.9	105.2	125.5	127.4
70°	129.7	110.8	88.7	115.6	116.1
72.5°	109.9	98.1	76.9	104.8	106.2
75°	95.8	85.4	70.8	93.4	98.1
77.5°	84.0	73.1	65.6	80.7	88.7
80°	71.2	58.9	59.9	67.4	75.5
82.5°	54.8	45.8	47.6	55.7	61.3
85°	37.2	35.4	32.1	41.5	44.4
87.5°	19.8	18.9	16.5	23.6	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)