

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: P476242

Luminaire Tested: **14GR-LD5-24-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021



Test Information

Test Method: LM-79-08
Report Number: P476242
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-24-A19/156-UNV-L830-CD1-U
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

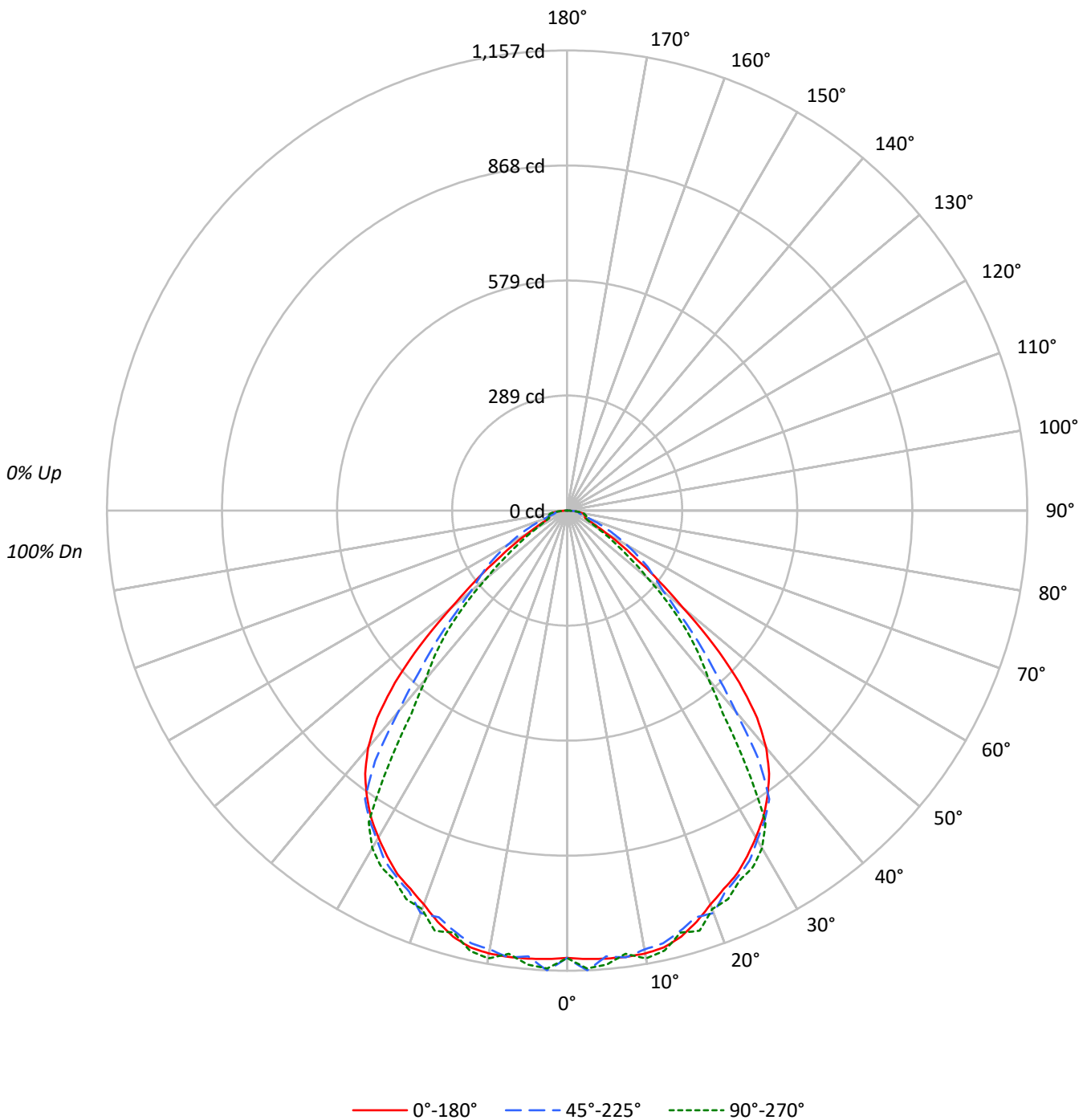
Lumens per Lamp: N/A
Luminaire Lumens: 2195.2 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 18.5
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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	101	94	89	85	91	87	83	88	84	81	85	82	79	78
3	96	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	51	43	39	49	43	38	48	43	38	48	42	38	36
10	60	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3027	3027	3027
5°	3054	3039	3095
10°	3090	3061	3124
15°	3089	3051	3060
20°	3017	3083	3054
25°	2996	3016	3047
30°	2949	2971	3045
35°	2884	2910	2582
40°	2733	2317	1942
45°	2331	1767	1609
50°	1592	1323	1111
55°	1003	1159	738
60°	606	928	476
65°	381	717	366
70°	380	479	389
75°	478	383	502
80°	623	463	659
85°	602	639	639



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.5	4.9
10°-20°	311.1	14.2
20°-30°	469.5	21.4
30°-40°	523.6	23.9
40°-50°	380.8	17.3
50°-60°	208.8	9.5
60°-70°	106.2	4.8
70°-80°	62.4	2.8
80°-90°	24.1	1.1
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°	889.1	40.5
0°-40°	1412.8	64.4
0°-60°	2002.4	91.2
0°-90°	2195.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2195.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1125	1125	1125	1125	1125	
5°	1131	1155	1125	1146	1146	108
15°	1109	1104	1095	1118	1098	311
25°	1009	1009	1016	1035	1026	464
35°	878	877	886	826	786	546
45°	612	565	464	431	423	460
55°	214	264	247	221	157	202
65°	60	128	113	116	58	67
75°	46	82	37	74	48	48
85°	20	25	21	26	21	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1124.9	1124.9	1124.9	1124.9	1124.9
2.5°	1128.4	1151.4	1157.1	1157.1	1152.5
5°	1130.7	1154.8	1124.9	1145.6	1145.6
7.5°	1131.8	1135.3	1133.0	1137.6	1123.8
10°	1130.7	1122.6	1120.3	1149.1	1143.3
12.5°	1124.9	1093.9	1114.6	1105.4	1133.0
15°	1108.8	1104.2	1095.1	1118.0	1098.5
17.5°	1083.6	1085.9	1072.1	1083.6	1107.7
20°	1053.7	1064.0	1076.7	1080.1	1066.3
22.5°	1029.6	1033.0	1037.6	1049.1	1057.1
25°	1008.9	1008.9	1015.8	1035.3	1026.1
27.5°	980.1	982.4	992.8	998.5	1011.2
30°	949.1	951.4	956.0	982.4	980.1
32.5°	916.9	919.2	923.8	941.1	928.4
35°	877.9	876.7	885.9	826.2	786.0
37.5°	834.2	833.1	792.8	680.2	642.3
40°	777.9	773.3	659.6	571.1	552.7
42.5°	706.7	687.1	551.5	499.8	490.6
45°	612.4	565.3	464.2	430.9	422.9
47.5°	501.0	465.4	378.0	363.1	343.6
50°	380.3	382.6	316.0	305.6	265.4
52.5°	290.7	318.3	278.1	258.5	205.7
55°	213.7	264.3	247.0	220.6	157.4
57.5°	158.6	219.5	209.1	189.6	120.7
60°	112.6	182.7	172.4	163.2	88.5
62.5°	81.6	152.8	141.3	137.9	67.8
65°	59.8	127.5	112.6	116.1	57.5
67.5°	48.3	106.9	85.0	101.1	49.4
70°	48.3	95.4	60.9	89.6	49.4
72.5°	48.3	89.6	48.3	81.6	51.7
75°	46.0	81.6	36.8	73.5	48.3
77.5°	42.5	66.6	31.0	63.2	46.0
80°	40.2	49.4	29.9	49.4	42.5
82.5°	31.0	34.5	27.6	36.8	33.3
85°	19.5	25.3	20.7	26.4	20.7
87.5°	9.2	13.8	9.2	13.8	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)