

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: P475663

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475663
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-A19/156-UNV-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6759.0 lumens
Efficiency: N/A
Efficacy: 138.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

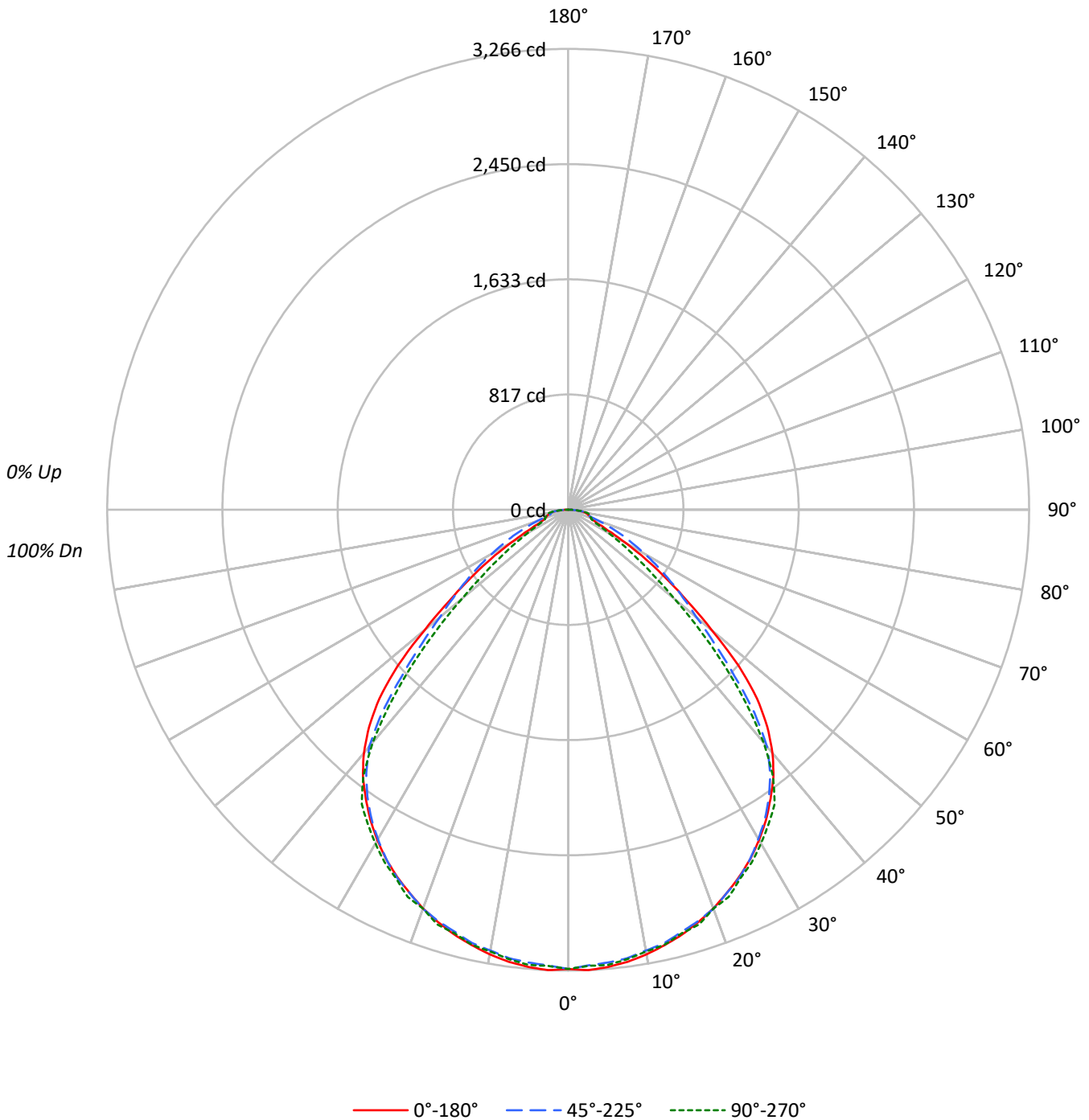
Input Watts (W): 48.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475663

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475663

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L835-CD1-U

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	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					100			
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78					76				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61					59				
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49					47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40					38				
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36					34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4379	4379	4379
5°	4393	4350	4373
10°	4372	4334	4344
15°	4343	4315	4330
20°	4306	4309	4307
25°	4260	4267	4281
30°	4200	4188	4243
35°	4105	4074	4187
40°	3956	3852	3783
45°	3601	3169	2989
50°	2779	2485	2054
55°	1974	2073	1359
60°	1250	1674	887
65°	725	1317	649
70°	671	907	688
75°	773	690	819
80°	965	955	1082
85°	1051	1116	1158



TEST NUMBER: P475663

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	306.7	4.5
10°-20°	877.3	13.0
20°-30°	1323.7	19.6
30°-40°	1553.8	23.0
40°-50°	1308.1	19.4
50°-60°	743.0	11.0
60°-70°	370.8	5.5
70°-80°	194.4	2.9
80°-90°	81.1	1.2
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°	2507.8	37.1
0°-40°	4061.5	60.1
0°-60°	6112.6	90.4
0°-90°	6759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6759.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3255	3255	3255	3255	3255	
5°	3253	3229	3221	3226	3238	309
15°	3118	3110	3098	3106	3108	879
25°	2869	2871	2874	2882	2884	1322
35°	2499	2485	2481	2523	2549	1561
45°	1892	1817	1665	1636	1571	1425
55°	842	900	884	762	579	766
65°	228	472	414	351	204	259
75°	149	229	133	200	158	157
85°	68	81	72	92	75	72
90°	0	0	0	0	0	



TEST NUMBER: P475663

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3254.7	3254.7	3254.7	3254.7	3254.7
2.5°	3266.4	3250.6	3232.7	3227.9	3236.2
5°	3252.7	3229.3	3221.0	3226.5	3237.5
7.5°	3231.3	3207.3	3205.9	3196.2	3212.8
10°	3199.7	3183.9	3172.2	3177.7	3179.7
12.5°	3159.8	3155.0	3146.0	3138.4	3157.0
15°	3117.8	3110.2	3097.8	3106.1	3108.2
17.5°	3064.1	3060.0	3057.9	3064.1	3082.0
20°	3007.0	3007.0	3009.1	3010.5	3007.7
22.5°	2938.9	2936.8	2939.6	2945.1	2971.2
25°	2869.4	2870.8	2874.2	2881.8	2883.8
27.5°	2792.3	2793.0	2791.6	2799.2	2817.1
30°	2703.6	2700.8	2695.3	2711.8	2731.1
32.5°	2607.2	2601.7	2595.5	2621.0	2641.6
35°	2499.2	2485.4	2480.6	2522.6	2549.4
37.5°	2388.4	2360.2	2349.9	2380.8	2384.3
40°	2252.2	2210.2	2193.0	2162.7	2153.8
42.5°	2088.4	2045.0	1952.2	1905.4	1872.3
45°	1892.3	1816.6	1665.2	1636.3	1570.9
47.5°	1639.1	1558.6	1407.2	1345.2	1270.9
50°	1327.4	1280.6	1187.0	1109.9	981.2
52.5°	1061.1	1070.7	1026.7	920.0	760.4
55°	841.6	900.0	883.5	761.7	579.4
57.5°	647.5	773.4	753.5	626.9	442.5
60°	464.5	662.6	622.0	516.1	329.6
62.5°	318.6	565.6	509.9	425.9	252.5
65°	227.8	472.0	413.6	350.9	203.7
67.5°	187.2	386.0	317.2	297.9	177.5
70°	170.6	311.0	230.5	260.1	174.8
72.5°	162.4	260.8	169.3	227.8	166.5
75°	148.6	229.1	132.8	199.6	157.6
77.5°	137.6	198.2	123.9	174.8	153.4
80°	124.5	156.9	123.2	147.9	139.7
82.5°	100.5	114.2	103.9	121.1	112.8
85°	68.1	81.2	72.3	91.5	75.0
87.5°	33.7	39.9	32.3	43.4	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)