

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: P475677

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475677
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-64-A19/156-UNV-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6135.2 lumens
Efficiency: N/A
Efficacy: 141.4 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

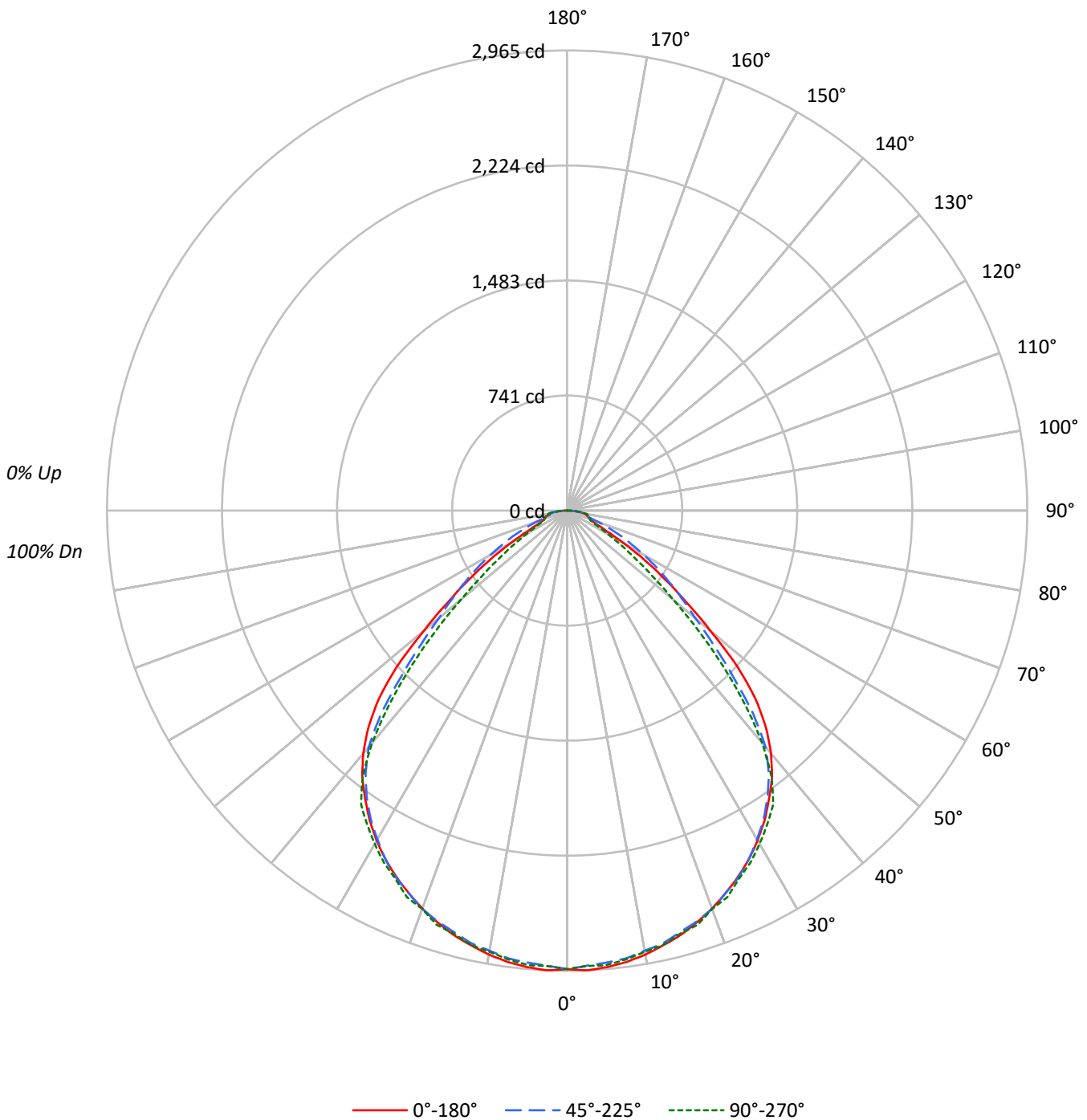
Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475677

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475677

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L840-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°	3975	3975	3975
5°	3988	3949	3969
10°	3968	3934	3943
15°	3942	3917	3930
20°	3908	3911	3909
25°	3867	3873	3886
30°	3813	3801	3852
35°	3726	3699	3801
40°	3591	3496	3434
45°	3268	2876	2713
50°	2522	2255	1864
55°	1792	1881	1234
60°	1135	1519	805
65°	658	1195	589
70°	609	823	624
75°	701	626	743
80°	876	866	982
85°	954	1013	1051



TEST NUMBER: P475677

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.4	4.5
10°-20°	796.3	13.0
20°-30°	1201.6	19.6
30°-40°	1410.4	23.0
40°-50°	1187.3	19.4
50°-60°	674.5	11.0
60°-70°	336.6	5.5
70°-80°	176.5	2.9
80°-90°	73.6	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°	2276.3	37.1
0°-40°	3686.7	60.1
0°-60°	5548.5	90.4
0°-90°	6135.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6135.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2954	2954	2954	2954	2954	
5°	2952	2931	2924	2929	2939	280
15°	2830	2823	2812	2820	2821	798
25°	2605	2606	2609	2616	2618	1200
35°	2269	2256	2252	2290	2314	1417
45°	1718	1649	1512	1485	1426	1293
55°	764	817	802	691	526	695
65°	207	428	375	318	185	235
75°	135	208	120	181	143	143
85°	62	74	66	83	68	65
90°	0	0	0	0	0	



TEST NUMBER: P475677

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2954.4	2954.4	2954.4	2954.4	2954.4
2.5°	2965.0	2950.6	2934.4	2930.0	2937.5
5°	2952.5	2931.3	2923.8	2928.8	2938.8
7.5°	2933.1	2911.3	2910.0	2901.3	2916.3
10°	2904.4	2890.1	2879.4	2884.4	2886.3
12.5°	2868.2	2863.8	2855.7	2848.8	2865.7
15°	2830.1	2823.2	2812.0	2819.5	2821.3
17.5°	2781.4	2777.6	2775.7	2781.4	2797.6
20°	2729.5	2729.5	2731.4	2732.6	2730.2
22.5°	2667.7	2665.8	2668.3	2673.3	2697.0
25°	2604.6	2605.9	2609.0	2615.8	2617.7
27.5°	2534.6	2535.3	2534.0	2540.9	2557.1
30°	2454.1	2451.6	2446.6	2461.6	2479.1
32.5°	2366.6	2361.6	2356.0	2379.1	2397.9
35°	2268.6	2256.1	2251.7	2289.8	2314.2
37.5°	2168.0	2142.4	2133.0	2161.1	2164.3
40°	2044.3	2006.2	1990.6	1963.1	1955.0
42.5°	1895.7	1856.3	1772.0	1729.5	1699.6
45°	1717.7	1649.0	1511.5	1485.3	1426.0
47.5°	1487.8	1414.7	1277.3	1221.1	1153.6
50°	1204.9	1162.4	1077.4	1007.5	890.7
52.5°	963.1	971.9	931.9	835.1	690.2
55°	763.9	817.0	802.0	691.4	525.9
57.5°	587.8	702.1	683.9	569.0	401.6
60°	421.6	601.5	564.6	468.5	299.2
62.5°	289.2	513.4	462.8	386.6	229.2
65°	206.7	428.5	375.4	318.5	184.9
67.5°	169.9	350.4	287.9	270.5	161.1
70°	154.9	282.3	209.2	236.1	158.6
72.5°	147.4	236.7	153.7	206.7	151.2
75°	134.9	208.0	120.5	181.1	143.0
77.5°	124.9	179.9	112.4	158.6	139.3
80°	113.1	142.4	111.8	134.3	126.8
82.5°	91.2	103.7	94.3	109.9	102.4
85°	61.8	73.7	65.6	83.1	68.1
87.5°	30.6	36.2	29.4	39.4	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)