

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: P475985

Luminaire Tested: **22GR-LD5-60-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475985
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-60-A19/156-UNV-L830-CD1-U
Description: GR 2'X2' 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: 5473.7 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

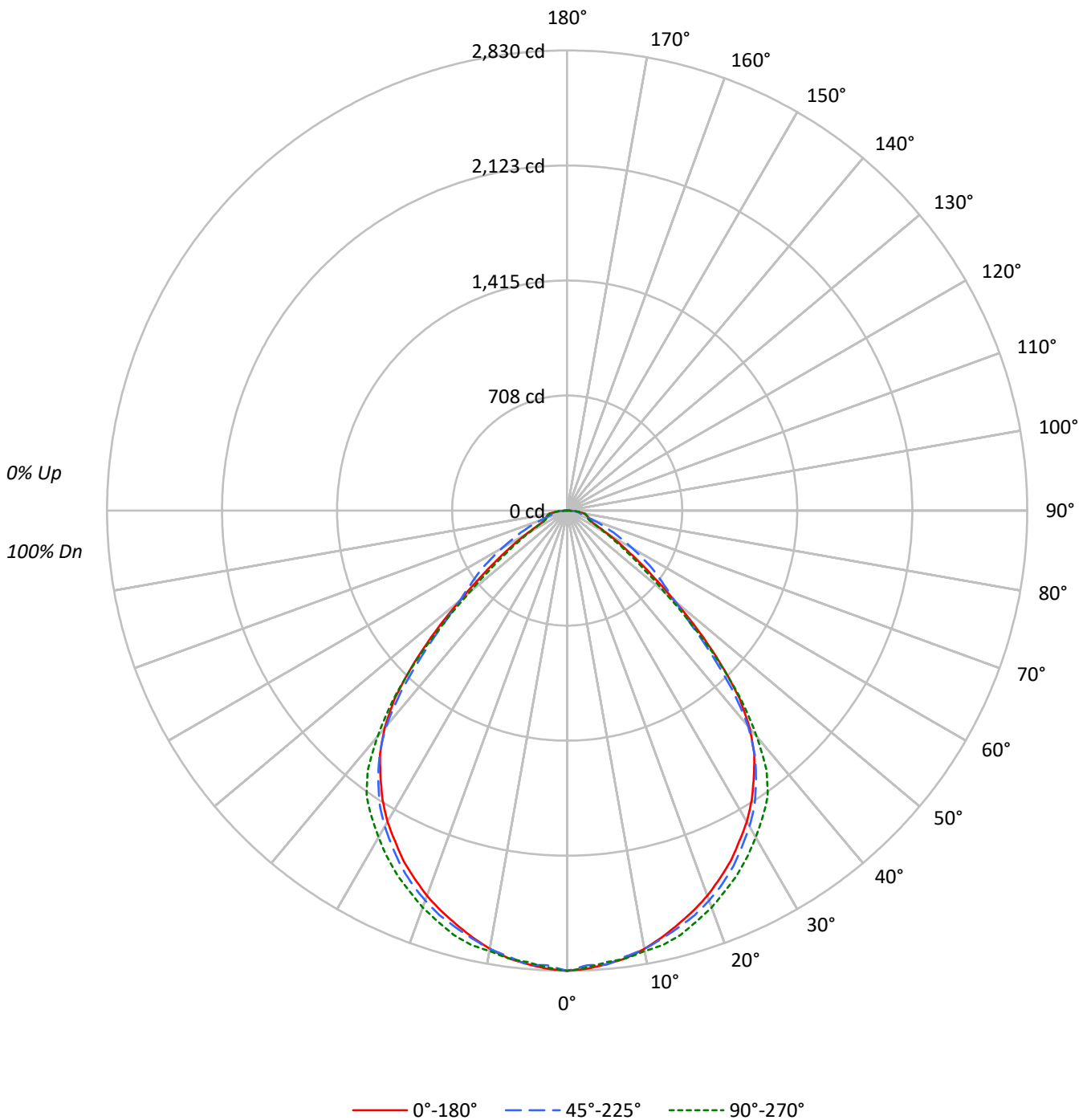
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475985

CATALOG NUMBER: 22GR-LD5-60-A19/156-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475985

CATALOG NUMBER: 22GR-LD5-60-A19/156-UNV-L830-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	105	101	99	100	98	95	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79					77				
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70					68				
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62					60				
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55					53				
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50					48				
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45					43				
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41					39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37					36				
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7617	7617	7617
5°	7564	7572	7529
10°	7479	7482	7516
15°	7341	7391	7523
20°	7218	7308	7438
25°	7063	7172	7340
30°	6866	6970	7208
35°	6571	6655	7062
40°	6134	6086	6370
45°	5094	4806	5050
50°	3589	3607	3290
55°	2411	3101	2169
60°	1555	2488	1442
65°	1077	1927	1037
70°	1083	1315	1075
75°	1333	1027	1321
80°	1629	1189	1726
85°	1590	1621	1751



TEST NUMBER: P475985

CATALOG NUMBER: 22GR-LD5-60-A19/156-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.0	4.8
10°-20°	750.2	13.7
20°-30°	1112.5	20.3
30°-40°	1272.6	23.2
40°-50°	1007.4	18.4
50°-60°	549.7	10.0
60°-70°	287.6	5.3
70°-80°	166.1	3.0
80°-90°	62.8	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°	2127.6	38.9
0°-40°	3400.2	62.1
0°-60°	4957.3	90.6
0°-90°	5473.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5473.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2830	2830	2830	2830	2830	
5°	2800	2780	2803	2794	2787	265
15°	2635	2649	2653	2674	2700	743
25°	2379	2382	2416	2446	2472	1093
35°	2000	2000	2026	2099	2150	1248
45°	1338	1331	1263	1325	1327	1018
55°	514	642	661	616	462	477
65°	169	340	303	324	163	183
75°	128	205	99	202	127	133
85°	52	67	52	68	57	57
90°	0	0	0	0	0	



TEST NUMBER: P475985

CATALOG NUMBER: 22GR-LD5-60-A19/156-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2830.5	2830.5	2830.5	2830.5	2830.5
2.5°	2820.0	2803.1	2798.9	2807.4	2812.6
5°	2800.0	2780.0	2803.1	2793.7	2787.4
7.5°	2776.9	2769.5	2765.3	2780.0	2776.9
10°	2737.0	2726.5	2738.0	2746.4	2750.6
12.5°	2688.6	2693.9	2696.0	2722.2	2734.9
15°	2635.0	2648.7	2652.9	2673.9	2700.2
17.5°	2580.4	2583.6	2608.8	2636.1	2648.7
20°	2520.5	2525.8	2552.0	2577.3	2597.2
22.5°	2450.1	2456.4	2489.0	2517.4	2534.2
25°	2378.7	2381.8	2415.5	2445.9	2472.2
27.5°	2292.5	2309.3	2329.3	2371.3	2399.7
30°	2209.5	2220.0	2243.1	2289.4	2319.8
32.5°	2111.8	2116.0	2145.4	2195.9	2236.8
35°	2000.4	2000.4	2025.7	2099.2	2149.6
37.5°	1890.1	1875.4	1895.4	1979.4	2015.2
40°	1746.2	1735.7	1732.5	1790.3	1813.4
42.5°	1569.7	1549.7	1514.0	1572.8	1591.7
45°	1338.5	1331.2	1262.9	1324.9	1327.0
47.5°	1096.9	1102.1	1025.4	1087.4	1041.2
50°	857.3	912.0	861.5	887.8	785.9
52.5°	667.2	769.1	750.2	739.7	601.0
55°	513.8	642.0	660.9	615.7	462.3
57.5°	391.9	547.4	558.9	527.4	352.0
60°	288.9	462.3	462.3	447.6	267.9
62.5°	215.4	397.1	376.1	380.3	204.9
65°	169.2	340.4	302.6	323.6	162.9
67.5°	141.8	283.7	229.0	279.5	141.8
70°	137.6	246.9	167.1	252.2	136.6
72.5°	136.6	226.9	125.0	229.0	137.6
75°	128.2	204.9	98.8	201.7	127.1
77.5°	117.7	170.2	82.0	170.2	118.7
80°	105.1	129.2	76.7	132.4	111.4
82.5°	80.9	92.5	68.3	93.5	86.2
85°	51.5	67.2	52.5	68.3	56.7
87.5°	23.1	35.7	23.1	36.8	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)