

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: P234157

Luminaire Tested: **22GR-LD5-90-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P234157
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33284)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-90-A19/156-UNV-L930-CD1-U
Description: METALUX 2X2 GRLED TROFFER
WITH A19/156 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6982.6 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.21
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

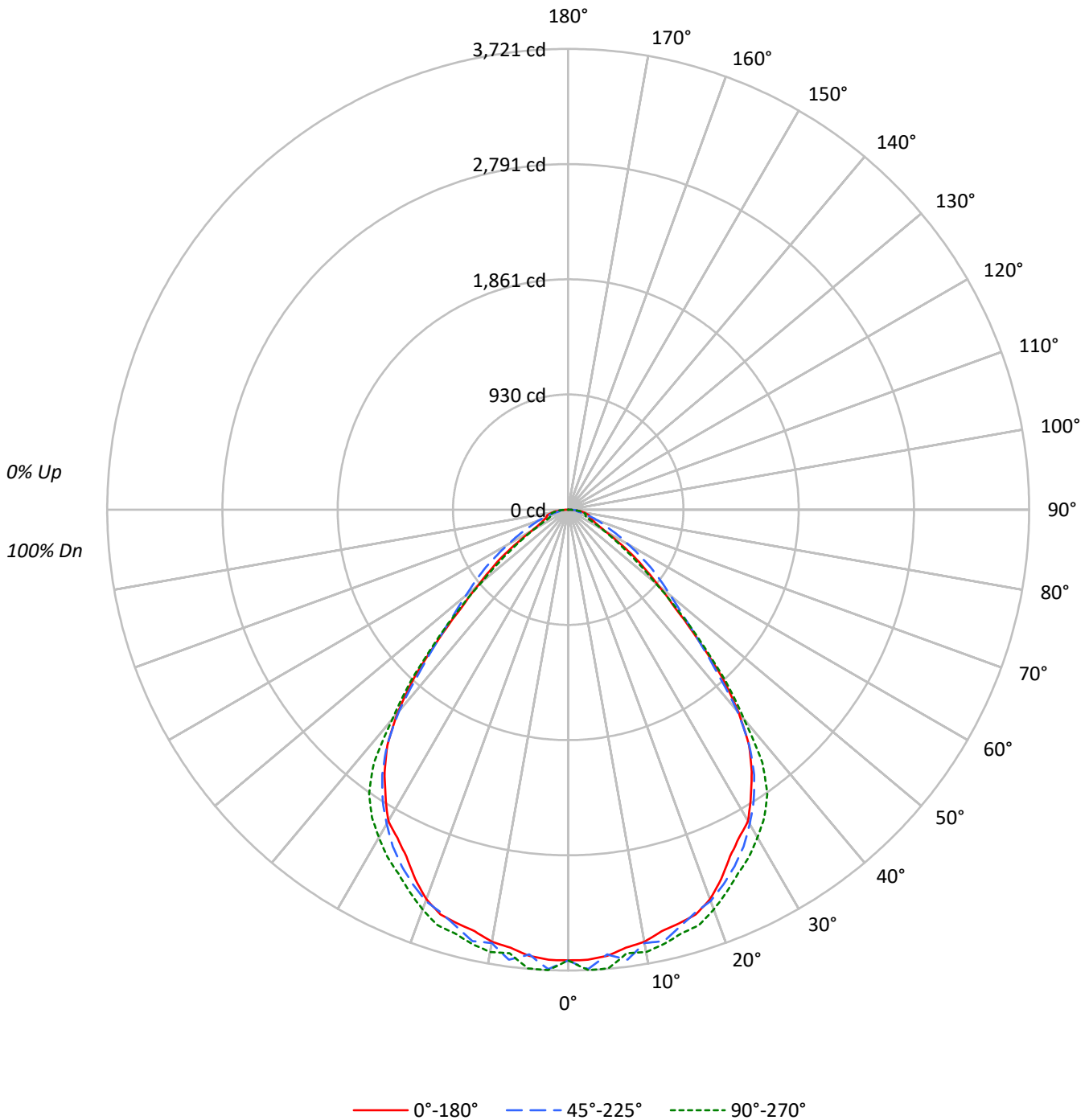
Input Watts (W): 85.94
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	102	99	101	98	96	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62					60				
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56					54				
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50					48				
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45					44				
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41					40				
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38					36				
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11654	11654	11654
5°	11625	11588	11953
10°	11519	11550	11791
15°	11466	11553	11738
20°	11404	11460	11707
25°	10917	11225	11458
30°	10738	10835	11297
35°	10098	10227	10953
40°	8948	8886	9237
45°	6684	6698	6885
50°	4705	5352	4557
55°	3472	4519	3114
60°	2171	3572	2034
65°	1770	2830	1421
70°	1756	2357	1402
75°	2179	1730	1813
80°	2427	1365	2215
85°	2418	2539	2480



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.4	5.0
10°-20°	986.7	14.1
20°-30°	1461.4	20.9
30°-40°	1637.0	23.4
40°-50°	1202.8	17.2
50°-60°	672.3	9.6
60°-70°	374.7	5.4
70°-80°	220.2	3.2
80°-90°	80.9	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°	2794.6	40.0
0°-40°	4431.6	63.5
0°-60°	6306.8	90.3
0°-90°	6982.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6982.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3639	3639	3639	3639	3639	
5°	3616	3684	3605	3679	3718	342
15°	3458	3480	3484	3537	3540	977
25°	3090	3114	3177	3221	3243	1432
35°	2583	2585	2616	2734	2802	1600
45°	1476	1596	1479	1584	1520	1153
55°	622	757	809	808	558	555
65°	234	415	373	479	188	242
75°	176	248	140	281	146	177
85°	66	97	69	89	68	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3639.2	3639.2	3639.2	3639.2	3639.2
2.5°	3637.5	3670.4	3713.1	3718.1	3721.4
5°	3616.1	3683.5	3604.6	3678.6	3718.1
7.5°	3566.8	3607.8	3665.5	3591.4	3612.8
10°	3542.1	3551.9	3551.9	3644.1	3626.0
12.5°	3486.1	3551.9	3568.4	3550.3	3589.8
15°	3458.2	3479.5	3484.5	3537.2	3540.4
17.5°	3426.9	3421.9	3410.5	3448.3	3515.8
20°	3346.3	3328.2	3362.7	3408.8	3435.1
22.5°	3227.8	3232.8	3273.9	3311.7	3341.3
25°	3089.6	3114.3	3176.8	3221.3	3242.6
27.5°	2986.0	3022.2	3065.0	3117.6	3160.4
30°	2903.7	2900.4	2930.0	3005.7	3055.1
32.5°	2744.1	2755.7	2786.9	2877.4	2946.5
35°	2582.9	2584.6	2615.8	2734.3	2801.7
37.5°	2397.0	2383.8	2401.9	2530.3	2574.7
40°	2140.4	2143.6	2125.6	2216.0	2209.5
42.5°	1841.0	1867.3	1773.5	1892.0	1883.7
45°	1475.8	1595.8	1479.0	1584.3	1520.1
47.5°	1164.8	1342.4	1245.4	1322.7	1202.6
50°	944.3	1126.9	1074.3	1108.9	914.7
52.5°	774.9	922.9	939.4	947.6	714.0
55°	621.9	756.8	809.4	807.8	557.7
57.5°	459.0	615.3	676.2	700.9	422.8
60°	338.9	511.7	557.7	612.0	317.5
62.5°	273.1	449.1	460.7	536.4	241.8
65°	233.6	414.6	373.4	478.7	187.5
67.5°	207.3	386.6	304.4	427.7	159.6
70°	187.5	343.8	251.7	383.3	149.7
72.5°	182.6	292.8	194.1	342.2	148.1
75°	176.1	248.5	139.8	281.3	146.5
77.5°	151.4	212.2	100.4	217.1	136.5
80°	131.6	169.4	74.0	162.9	120.1
82.5°	102.0	128.3	65.8	123.4	97.1
85°	65.8	97.1	69.1	88.8	67.5
87.5°	31.2	54.3	49.4	47.7	34.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)