

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: P234153

Luminaire Tested: **22GR-LD5-85-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P234153
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-LD5-85-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: 6643.4 lumens
Efficiency: N/A
Efficacy: 82.0 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

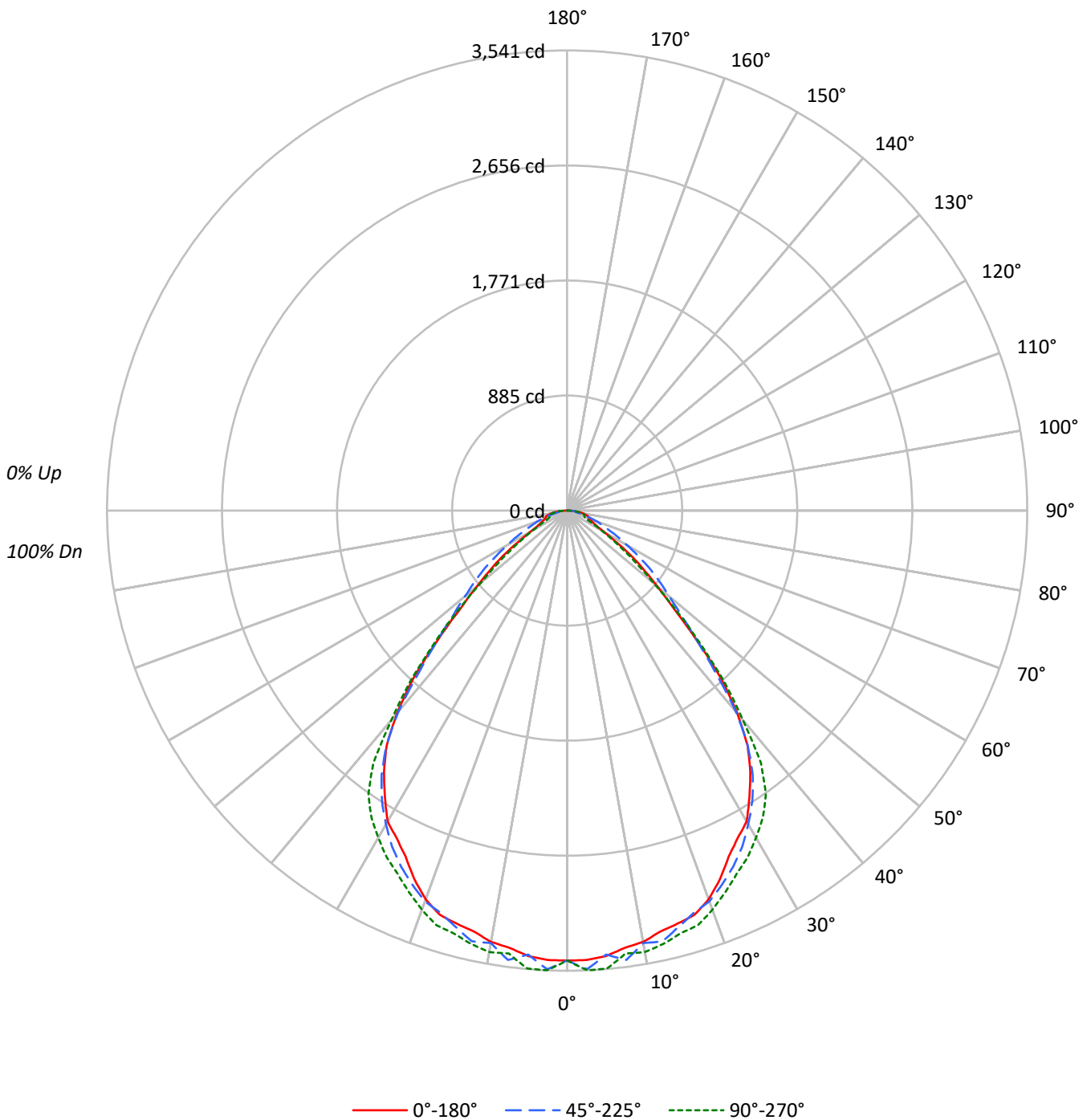
Input Watts (W): 81.06
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	11088	11088	11088
5°	11060	11025	11372
10°	10959	10989	11218
15°	10909	10992	11168
20°	10850	10904	11138
25°	10387	10680	10902
30°	10216	10309	10749
35°	9608	9730	10422
40°	8513	8454	8788
45°	6359	6373	6550
50°	4476	5092	4336
55°	3303	4300	2963
60°	2065	3398	1935
65°	1685	2692	1352
70°	1670	2243	1333
75°	2071	1647	1724
80°	2309	1298	2106
85°	2300	2418	2359



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.6	5.0
10°-20°	938.8	14.1
20°-30°	1390.4	20.9
30°-40°	1557.5	23.4
40°-50°	1144.4	17.2
50°-60°	639.7	9.6
60°-70°	356.5	5.4
70°-80°	209.4	3.2
80°-90°	77.0	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°	2658.8	40.0
0°-40°	4216.3	63.5
0°-60°	6000.4	90.3
0°-90°	6643.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6643.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3462	3462	3462	3462	3462	
5°	3440	3505	3430	3500	3538	326
15°	3290	3310	3315	3365	3368	929
25°	2940	2963	3022	3065	3085	1362
35°	2458	2459	2489	2601	2666	1522
45°	1404	1518	1407	1507	1446	1097
55°	592	720	770	769	531	528
65°	222	394	355	456	178	230
75°	167	236	133	268	139	168
85°	63	92	66	84	64	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3462.4	3462.4	3462.4	3462.4	3462.4
2.5°	3460.8	3492.1	3532.8	3537.5	3540.6
5°	3440.5	3504.6	3429.5	3499.9	3537.5
7.5°	3393.5	3432.6	3487.4	3416.9	3437.4
10°	3370.0	3379.4	3379.4	3467.0	3449.8
12.5°	3316.8	3379.4	3395.0	3377.8	3415.4
15°	3290.2	3310.5	3315.3	3365.4	3368.5
17.5°	3260.5	3255.7	3244.8	3280.8	3344.9
20°	3183.7	3166.5	3199.4	3243.3	3268.3
22.5°	3071.1	3075.7	3114.9	3150.8	3179.1
25°	2939.5	2963.1	3022.5	3064.8	3085.2
27.5°	2841.0	2875.4	2916.1	2966.2	3006.9
30°	2762.7	2759.5	2787.8	2859.8	2906.7
32.5°	2610.9	2621.8	2651.6	2737.7	2803.4
35°	2457.5	2459.0	2488.8	2601.4	2665.7
37.5°	2280.6	2268.0	2285.3	2407.4	2449.7
40°	2036.4	2039.5	2022.3	2108.4	2102.2
42.5°	1751.5	1776.6	1687.4	1800.1	1792.2
45°	1404.0	1518.3	1407.2	1507.3	1446.3
47.5°	1108.2	1277.2	1184.9	1258.5	1144.2
50°	898.5	1072.2	1022.1	1055.0	870.3
52.5°	737.3	878.1	893.8	901.6	679.3
55°	591.6	720.0	770.1	768.6	530.6
57.5°	436.7	585.4	643.3	666.8	402.3
60°	322.4	486.8	530.6	582.3	302.1
62.5°	259.9	427.3	438.3	510.3	230.1
65°	222.3	394.4	355.3	455.5	178.4
67.5°	197.2	367.9	289.5	407.0	151.9
70°	178.4	327.2	239.5	364.7	142.4
72.5°	173.8	278.6	184.7	325.5	140.9
75°	167.4	236.3	133.1	267.6	139.3
77.5°	144.0	201.9	95.4	206.6	129.9
80°	125.2	161.2	70.4	155.0	114.2
82.5°	97.0	122.1	62.6	117.4	92.3
85°	62.6	92.3	65.8	84.5	64.2
87.5°	29.8	51.7	47.0	45.4	32.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)