

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: P234159

Luminaire Tested: **22GR-LD5-90-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P234159
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-L940-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: 7613.6 lumens
Efficiency: N/A
Efficacy: 88.6 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

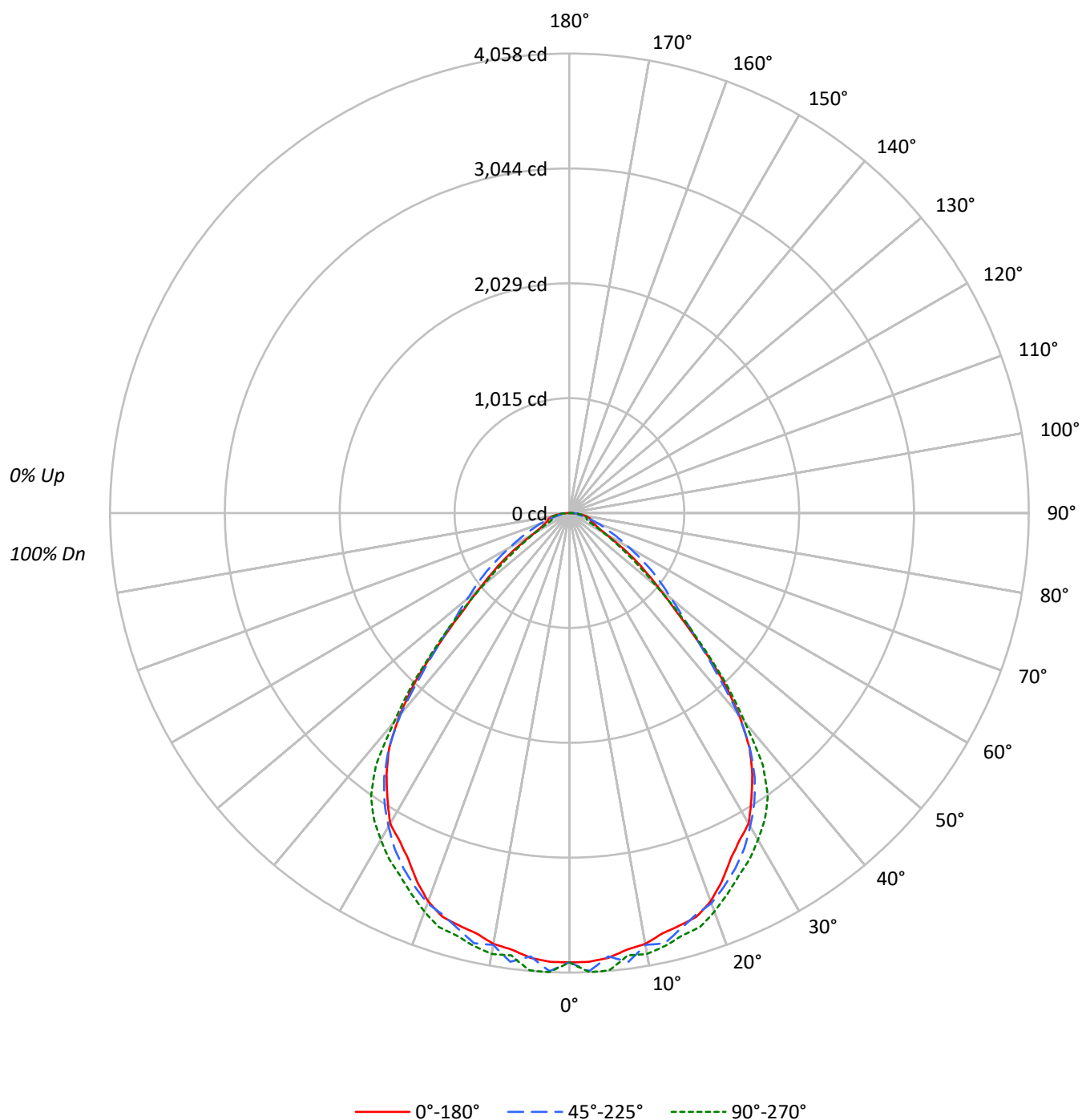
Input Watts (W): 85.94
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	103	100	108	105	102	99		101	98	96		97	95	93		93	91	90
2	103	96	90	85	100	94	89	85		91	86	83		88	84	81		85	82	79
3	95	86	79	74	93	85	79	73		82	77	72		79	75	71		77	73	70
4	88	78	71	65	86	77	70	64		75	68	64		72	67	63		70	66	62
5	82	71	63	58	80	70	63	57		68	62	57		66	61	56		64	59	56
6	77	65	57	51	75	64	57	51		62	56	51		61	55	50		59	54	50
7	72	60	52	46	70	59	51	46		57	51	46		56	50	46		55	49	45
8	67	55	47	42	66	54	47	42		53	46	42		52	46	41		51	45	41
9	63	51	43	38	62	50	43	38		49	43	38		48	42	38		47	42	38
10	59	47	40	35	58	47	40	35		46	39	35		45	39	35		44	39	35

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12707	12707	12707
5°	12675	12635	13033
10°	12559	12594	12857
15°	12502	12597	12799
20°	12435	12496	12765
25°	11904	12240	12493
30°	11708	11814	12318
35°	11010	11151	11943
40°	9757	9689	10071
45°	7288	7304	7507
50°	5130	5836	4969
55°	3786	4927	3395
60°	2367	3895	2217
65°	1930	3086	1550
70°	1915	2569	1528
75°	2376	1887	1975
80°	2646	1490	2416
85°	2635	2767	2701



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	377.7	5.0
10°-20°	1075.9	14.1
20°-30°	1593.5	20.9
30°-40°	1784.9	23.4
40°-50°	1311.5	17.2
50°-60°	733.1	9.6
60°-70°	408.6	5.4
70°-80°	240.1	3.2
80°-90°	88.2	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°	3047.1	40.0
0°-40°	4832.1	63.5
0°-60°	6876.7	90.3
0°-90°	7613.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7613.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3968	3968	3968	3968	3968	
5°	3943	4016	3930	4011	4054	373
15°	3771	3794	3799	3857	3860	1065
25°	3369	3396	3464	3512	3536	1561
35°	2816	2818	2852	2981	3055	1745
45°	1609	1740	1613	1728	1658	1257
55°	678	825	882	881	608	605
65°	255	452	407	522	204	263
75°	192	271	152	307	160	193
85°	72	106	75	97	74	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3968.0	3968.0	3968.0	3968.0	3968.0
2.5°	3966.2	4002.1	4048.7	4054.1	4057.7
5°	3942.8	4016.5	3930.3	4011.0	4054.1
7.5°	3889.1	3933.9	3996.7	3915.9	3939.3
10°	3862.2	3872.9	3872.9	3973.4	3953.7
12.5°	3801.2	3872.9	3890.8	3871.1	3914.2
15°	3770.7	3794.0	3799.4	3856.8	3860.4
17.5°	3736.6	3731.2	3718.6	3759.9	3833.4
20°	3648.7	3628.9	3666.6	3716.8	3745.6
22.5°	3519.6	3524.9	3569.8	3611.1	3643.3
25°	3368.9	3395.7	3463.9	3512.3	3535.6
27.5°	3255.8	3295.3	3342.0	3399.3	3446.0
30°	3166.2	3162.6	3194.8	3277.4	3331.2
32.5°	2992.1	3004.7	3038.8	3137.5	3212.8
35°	2816.3	2818.1	2852.2	2981.4	3054.9
37.5°	2613.6	2599.3	2619.0	2759.0	2807.4
40°	2333.8	2337.4	2317.6	2416.3	2409.1
42.5°	2007.3	2036.0	1933.8	2062.9	2053.9
45°	1609.1	1740.0	1612.7	1727.5	1657.5
47.5°	1270.0	1463.8	1357.9	1442.2	1311.3
50°	1029.7	1228.8	1171.4	1209.1	997.3
52.5°	844.9	1006.4	1024.3	1033.3	778.6
55°	678.1	825.2	882.5	880.8	608.1
57.5°	500.5	670.9	737.3	764.2	461.0
60°	369.5	557.9	608.1	667.3	346.2
62.5°	297.8	489.7	502.2	584.8	263.7
65°	254.7	452.0	407.2	522.0	204.5
67.5°	226.0	421.6	331.9	466.4	174.0
70°	204.5	374.9	274.4	418.0	163.2
72.5°	199.1	319.3	211.6	373.2	161.4
75°	192.0	270.9	152.5	306.8	159.6
77.5°	165.0	231.4	109.4	236.8	148.9
80°	143.5	184.7	80.8	177.6	131.0
82.5°	111.2	139.9	71.7	134.5	105.9
85°	71.7	105.9	75.3	96.8	73.5
87.5°	34.1	59.2	53.8	52.0	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)