

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: P213896

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L930-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P213896
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-LD5-40-A19/156-UNV-L930-CD1-U
Description: METALUX GR 2X2 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3182.4 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

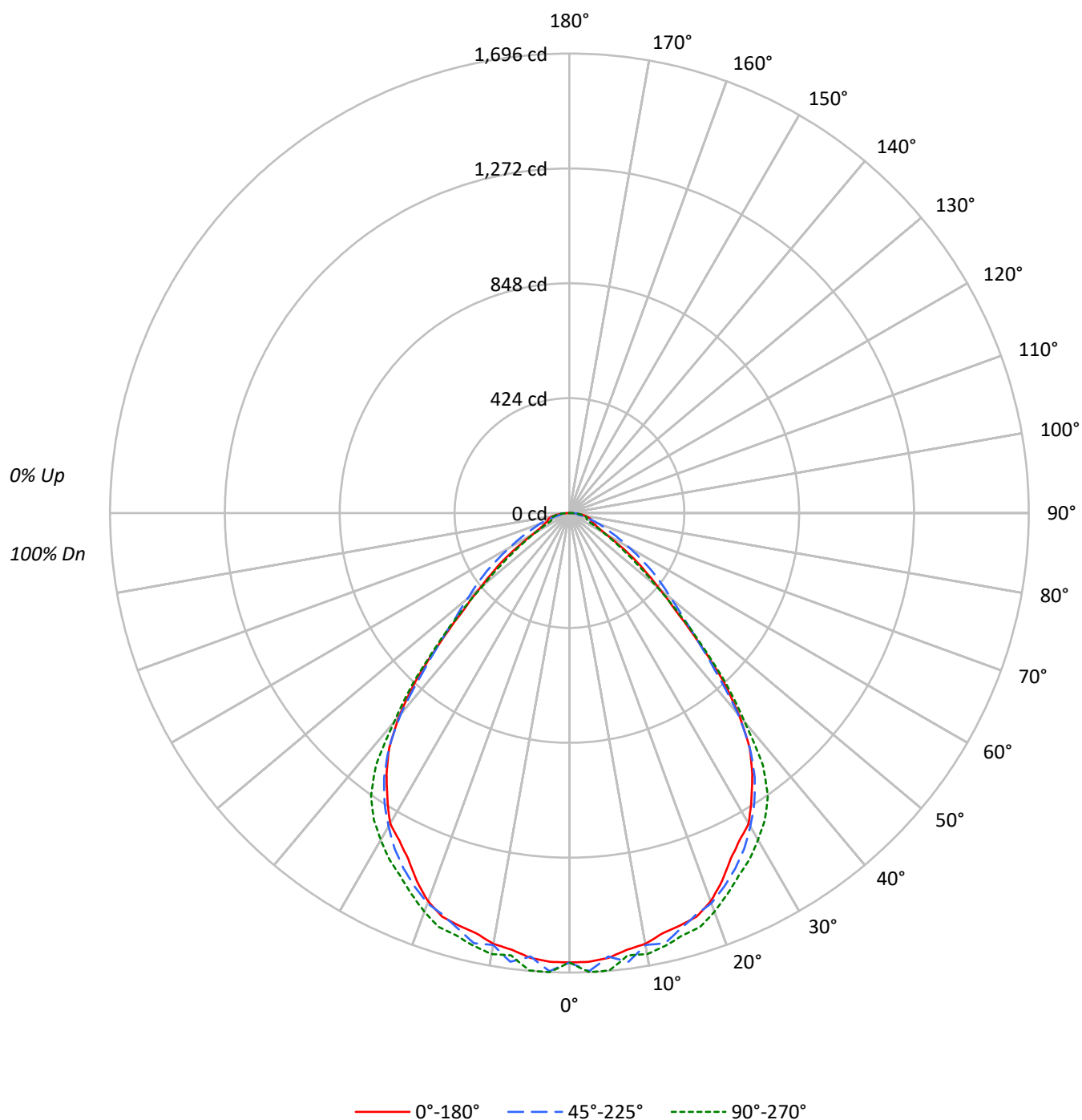
Input Watts (W): 38.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	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	100		100
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	91	90	88		88
2	103	96	90	85	100	94	89	85	91	86	83	88	84	81	85	82	79	77		77
3	95	86	79	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68		68
4	88	78	71	65	86	77	70	64	75	68	64	72	67	63	70	66	62	60		60
5	82	71	63	58	80	70	63	57	68	62	57	66	61	56	64	59	56	54		54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48		48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44		44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	41	51	45	41	40		40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36		36
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5312	5312	5312
5°	5298	5281	5448
10°	5250	5264	5374
15°	5225	5265	5350
20°	5198	5223	5336
25°	4976	5116	5222
30°	4894	4939	5149
35°	4602	4661	4992
40°	4078	4050	4210
45°	3046	3053	3138
50°	2144	2439	2077
55°	1582	2060	1419
60°	990	1628	927
65°	806	1290	647
70°	800	1074	639
75°	992	788	825
80°	1107	622	1011
85°	1102	1157	1128



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.9	5.0
10°-20°	449.7	14.1
20°-30°	666.1	20.9
30°-40°	746.1	23.4
40°-50°	548.2	17.2
50°-60°	306.4	9.6
60°-70°	170.8	5.4
70°-80°	100.3	3.2
80°-90°	36.9	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°	1273.7	40.0
0°-40°	2019.8	63.5
0°-60°	2874.4	90.3
0°-90°	3182.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3182.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1659	1659	1659	1659	1659	
5°	1648	1679	1643	1677	1695	156
15°	1576	1586	1588	1612	1614	445
25°	1408	1419	1448	1468	1478	653
35°	1177	1178	1192	1246	1277	729
45°	673	727	674	722	693	525
55°	283	345	369	368	254	253
65°	106	189	170	218	85	110
75°	80	113	64	128	67	81
85°	30	44	32	40	31	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1658.6	1658.6	1658.6	1658.6	1658.6
2.5°	1657.9	1672.8	1692.3	1694.6	1696.1
5°	1648.1	1678.9	1642.9	1676.6	1694.6
7.5°	1625.6	1644.3	1670.6	1636.9	1646.6
10°	1614.3	1618.8	1618.8	1660.8	1652.6
12.5°	1588.8	1618.8	1626.3	1618.1	1636.1
15°	1576.1	1585.9	1588.1	1612.1	1613.6
17.5°	1561.9	1559.6	1554.4	1571.6	1602.4
20°	1525.1	1516.8	1532.6	1553.7	1565.6
22.5°	1471.2	1473.4	1492.2	1509.4	1522.9
25°	1408.2	1419.4	1447.9	1468.1	1477.9
27.5°	1360.9	1377.4	1396.9	1420.9	1440.4
30°	1323.4	1321.9	1335.5	1369.9	1392.4
32.5°	1250.7	1255.9	1270.2	1311.4	1342.9
35°	1177.2	1177.9	1192.2	1246.2	1276.9
37.5°	1092.5	1086.5	1094.7	1153.2	1173.4
40°	975.5	977.0	968.7	1010.0	1007.0
42.5°	839.0	851.1	808.3	862.3	858.5
45°	672.6	727.3	674.1	722.1	692.8
47.5°	530.9	611.9	567.6	602.9	548.1
50°	430.4	513.6	489.6	505.4	416.9
52.5°	353.2	420.7	428.1	431.9	325.5
55°	283.4	344.9	368.9	368.2	254.2
57.5°	209.2	280.4	308.2	319.4	192.7
60°	154.5	233.2	254.2	279.0	144.7
62.5°	124.5	204.7	209.9	244.4	110.2
65°	106.4	188.9	170.2	218.2	85.4
67.5°	94.5	176.2	138.7	194.9	72.7
70°	85.4	156.7	114.7	174.7	68.2
72.5°	83.2	133.5	88.5	156.0	67.5
75°	80.2	113.2	63.7	128.2	66.7
77.5°	69.0	96.8	45.8	99.0	62.2
80°	60.0	77.2	33.7	74.2	54.8
82.5°	46.5	58.5	30.0	56.3	44.3
85°	30.0	44.3	31.5	40.5	30.7
87.5°	14.3	24.8	22.5	21.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)