

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: P225841

Luminaire Tested: **14GR-LD5-36-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P225841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33288)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-36-A19/156-UNV-L940-CD1-U
Description: METALUX GR 1X4 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3121.8 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.23 / 1.18
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

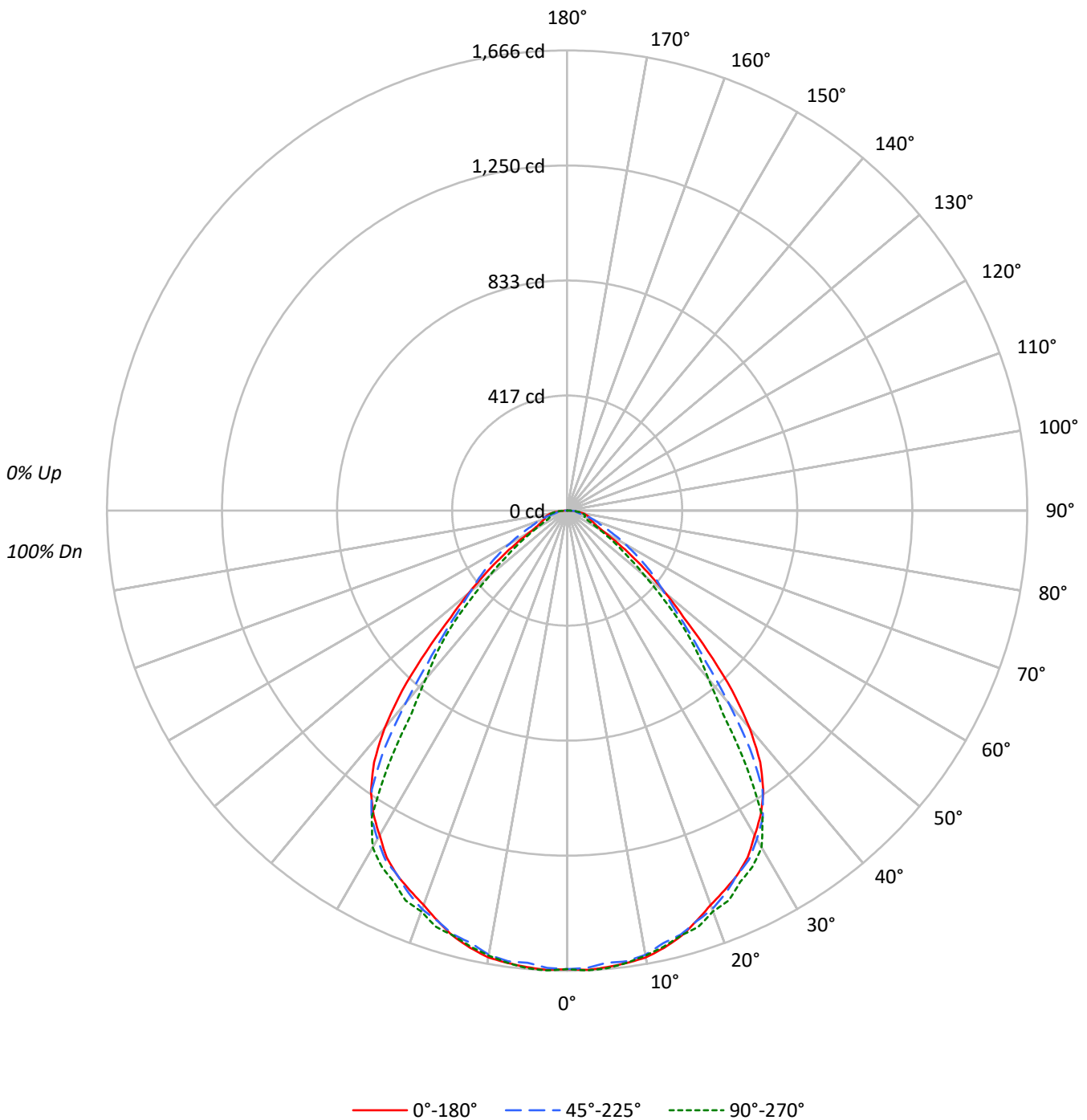
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	90	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	74	93	85	79	74	82	77	73	80	75	71	77	73	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	51	46	55	50	46	44					44			
8	67	55	48	43	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	51	44	39	50	43	39	49	43	38	48	42	38	37					37			
10	60	48	40	36	58	47	40	36	46	40	35	45	39	35	44	39	35	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5594	5594	5594
5°	5613	5559	5625
10°	5621	5587	5597
15°	5564	5544	5557
20°	5448	5507	5538
25°	5415	5412	5516
30°	5283	5347	5478
35°	5094	5074	4662
40°	4523	3992	3495
45°	3432	2986	2826
50°	2435	2390	1918
55°	1667	2040	1318
60°	1030	1628	881
65°	849	1253	639
70°	844	1092	655
75°	1014	781	875
80°	1164	722	1094
85°	1106	1272	1245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.5	5.0
10°-20°	449.6	14.4
20°-30°	676.1	21.7
30°-40°	737.0	23.6
40°-50°	516.1	16.5
50°-60°	292.1	9.4
60°-70°	159.9	5.1
70°-80°	96.9	3.1
80°-90°	36.7	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°	1283.1	41.1
0°-40°	2020.2	64.7
0°-60°	2828.3	90.6
0°-90°	3121.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3121.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1660	1660	1660	1660	1660	
5°	1659	1656	1644	1663	1663	158
15°	1595	1591	1589	1612	1593	449
25°	1456	1459	1456	1489	1484	669
35°	1238	1233	1233	1170	1133	763
45°	720	752	627	619	593	559
55°	284	339	347	344	224	259
65°	106	175	157	199	80	109
75°	78	112	60	118	67	81
85°	29	46	33	40	32	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1660.1	1660.1	1660.1	1660.1	1660.1
2.5°	1664.4	1662.2	1657.2	1667.2	1666.5
5°	1659.4	1656.4	1643.6	1662.9	1662.9
7.5°	1652.2	1645.0	1645.8	1656.4	1651.5
10°	1642.9	1630.7	1632.9	1635.7	1635.7
12.5°	1621.4	1610.0	1604.3	1613.6	1616.5
15°	1595.0	1590.7	1589.3	1612.2	1592.9
17.5°	1557.9	1567.2	1558.6	1577.2	1580.0
20°	1519.3	1537.2	1535.7	1548.6	1544.3
22.5°	1487.8	1499.2	1499.2	1515.0	1527.9
25°	1456.4	1459.2	1455.6	1489.3	1483.5
27.5°	1415.6	1413.5	1424.9	1442.1	1453.5
30°	1357.8	1358.5	1374.2	1397.1	1407.8
32.5°	1304.9	1298.4	1317.8	1327.8	1316.3
35°	1238.4	1232.7	1233.4	1170.5	1133.4
37.5°	1147.7	1152.7	1087.0	971.9	923.3
40°	1028.3	1038.4	907.6	821.8	794.6
42.5°	884.0	886.8	743.9	716.0	698.1
45°	720.3	751.8	626.7	618.9	593.1
47.5°	571.0	629.6	525.2	530.3	468.8
50°	464.5	523.1	455.9	458.0	365.8
52.5°	367.3	424.5	402.3	395.9	287.2
55°	283.7	339.4	347.3	344.4	224.4
57.5°	208.6	268.7	291.5	302.3	172.9
60°	152.9	219.4	241.6	263.0	130.8
62.5°	121.5	190.1	198.0	229.4	101.5
65°	106.5	175.1	157.2	198.7	80.1
67.5°	95.0	166.5	127.9	175.8	70.0
70°	85.7	150.1	110.8	157.2	66.5
72.5°	85.7	131.5	87.2	139.3	67.2
75°	77.9	112.2	60.0	117.9	67.2
77.5°	69.3	95.7	45.0	95.7	62.9
80°	60.0	75.0	37.2	73.6	56.4
82.5°	44.3	56.4	32.2	55.0	45.8
85°	28.6	46.4	32.9	40.0	32.2
87.5°	13.6	23.6	20.7	20.0	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)