

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: P213938

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P213938
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-L940-CD1-U
Description: METALUX GR 2X2 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3470.1 lumens
Efficiency: N/A
Efficacy: 89.4 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

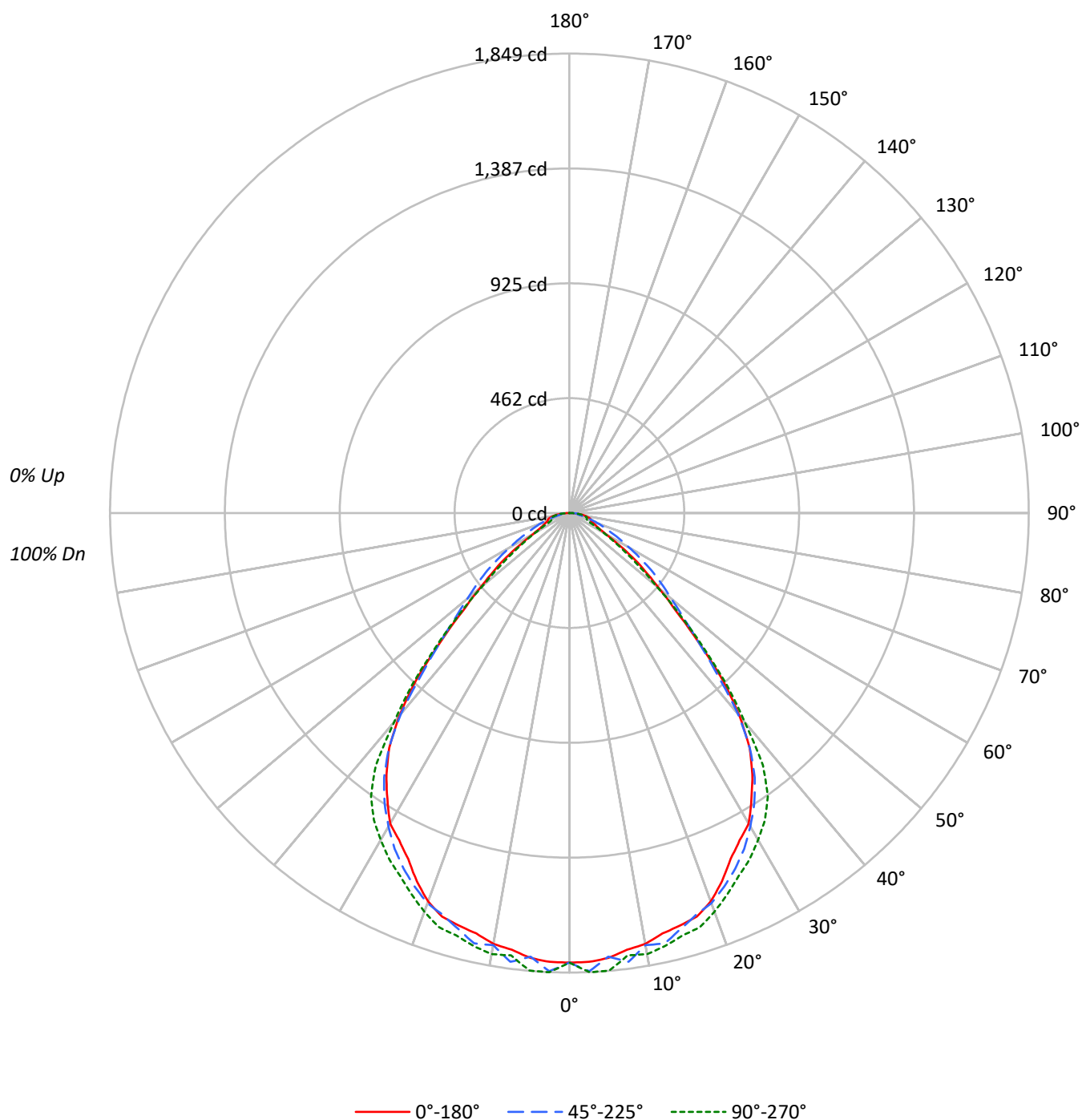
Input Watts (W): 38.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	5792	5792	5792
5°	5777	5759	5940
10°	5724	5740	5860
15°	5698	5741	5834
20°	5668	5695	5818
25°	5425	5579	5694
30°	5336	5385	5614
35°	5018	5082	5443
40°	4446	4416	4590
45°	3322	3329	3421
50°	2338	2660	2265
55°	1726	2246	1548
60°	1079	1775	1011
65°	880	1406	706
70°	873	1171	697
75°	1083	860	901
80°	1206	679	1101
85°	1202	1260	1231



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.2	5.0
10°-20°	490.4	14.1
20°-30°	726.3	20.9
30°-40°	813.5	23.4
40°-50°	597.8	17.2
50°-60°	334.1	9.6
60°-70°	186.2	5.4
70°-80°	109.4	3.2
80°-90°	40.2	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°	1388.8	40.0
0°-40°	2202.3	63.5
0°-60°	3134.2	90.3
0°-90°	3470.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3470.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1808	1808	1808	1808	1808	
5°	1797	1831	1791	1828	1848	170
15°	1719	1729	1732	1758	1760	485
25°	1535	1548	1579	1601	1612	712
35°	1284	1284	1300	1359	1392	795
45°	733	793	735	787	755	573
55°	309	376	402	401	277	276
65°	116	206	186	238	93	120
75°	88	124	70	140	73	88
85°	33	48	34	44	34	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1808.5	1808.5	1808.5	1808.5	1808.5
2.5°	1807.7	1824.1	1845.3	1847.8	1849.4
5°	1797.1	1830.6	1791.4	1828.1	1847.8
7.5°	1772.5	1793.0	1821.6	1784.8	1795.4
10°	1760.2	1765.2	1765.2	1811.0	1802.0
12.5°	1732.5	1765.2	1773.4	1764.4	1784.0
15°	1718.6	1729.2	1731.7	1757.8	1759.5
17.5°	1703.1	1700.6	1694.9	1713.6	1747.2
20°	1663.0	1654.0	1671.2	1694.0	1707.1
22.5°	1604.2	1606.6	1627.0	1645.8	1660.6
25°	1535.4	1547.7	1578.8	1600.9	1611.5
27.5°	1483.9	1501.9	1523.1	1549.4	1570.6
30°	1443.1	1441.4	1456.2	1493.7	1518.2
32.5°	1363.8	1369.5	1385.0	1430.0	1464.3
35°	1283.6	1284.4	1300.0	1358.8	1392.3
37.5°	1191.3	1184.7	1193.7	1257.5	1279.5
40°	1063.6	1065.4	1056.3	1101.3	1098.0
42.5°	914.9	927.9	881.3	940.2	936.1
45°	733.4	793.1	735.0	787.3	755.4
47.5°	578.9	667.2	618.9	657.4	597.7
50°	469.3	560.0	533.9	551.1	454.6
52.5°	385.1	458.6	466.8	470.9	354.8
55°	309.1	376.1	402.2	401.4	277.2
57.5°	228.1	305.8	336.0	348.3	210.1
60°	168.4	254.3	277.2	304.2	157.8
62.5°	135.7	223.2	228.9	266.5	120.2
65°	116.1	206.1	185.6	238.0	93.2
67.5°	103.0	192.1	151.3	212.6	79.3
70°	93.2	170.9	125.1	190.5	74.4
72.5°	90.7	145.5	96.5	170.0	73.6
75°	87.5	123.5	69.5	139.8	72.8
77.5°	75.2	105.4	49.9	107.9	67.9
80°	65.4	84.2	36.8	80.9	59.7
82.5°	50.7	63.8	32.7	61.3	48.2
85°	32.7	48.2	34.3	44.1	33.5
87.5°	15.6	27.0	24.5	23.7	17.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)