

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: P213939

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P213939
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-LD5-43-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: 3692.0 lumens
Efficiency: N/A
Efficacy: 92.1 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

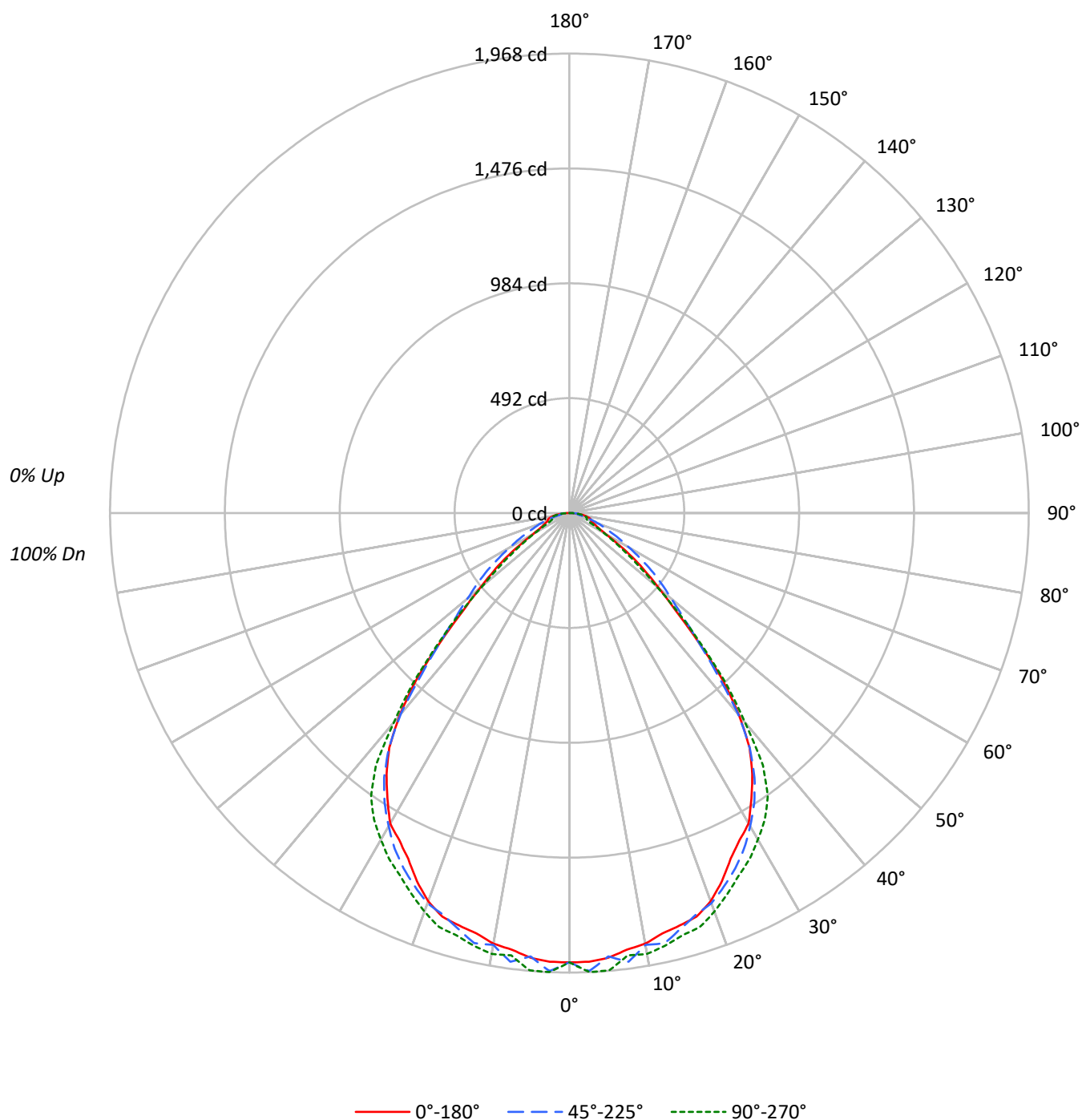
Input Watts (W): 40.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6162	6162	6162
5°	6147	6127	6320
10°	6090	6107	6235
15°	6062	6108	6207
20°	6030	6059	6190
25°	5773	5936	6058
30°	5678	5729	5973
35°	5339	5407	5792
40°	4731	4698	4884
45°	3534	3542	3640
50°	2488	2830	2410
55°	1836	2389	1647
60°	1148	1889	1075
65°	936	1497	752
70°	929	1246	741
75°	1152	916	958
80°	1284	721	1171
85°	1279	1345	1312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.2	5.0
10°-20°	521.7	14.1
20°-30°	772.7	20.9
30°-40°	865.5	23.4
40°-50°	636.0	17.2
50°-60°	355.5	9.6
60°-70°	198.1	5.4
70°-80°	116.4	3.2
80°-90°	42.8	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°	1477.6	40.0
0°-40°	2343.2	63.5
0°-60°	3334.6	90.3
0°-90°	3692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3692.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1924	1924	1924	1924	1924	
5°	1912	1948	1906	1945	1966	181
15°	1828	1840	1842	1870	1872	516
25°	1634	1647	1680	1703	1714	757
35°	1366	1366	1383	1446	1481	846
45°	780	844	782	838	804	610
55°	329	400	428	427	295	293
65°	124	219	198	253	99	128
75°	93	131	74	149	77	94
85°	35	51	37	47	36	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1924.2	1924.2	1924.2	1924.2	1924.2
2.5°	1923.3	1940.7	1963.3	1965.9	1967.7
5°	1912.0	1947.6	1905.9	1945.1	1965.9
7.5°	1885.9	1907.7	1938.1	1899.0	1910.2
10°	1872.8	1878.1	1878.1	1926.7	1917.2
12.5°	1843.2	1878.1	1886.8	1877.2	1898.0
15°	1828.4	1839.8	1842.4	1870.2	1872.0
17.5°	1811.9	1809.4	1803.2	1823.3	1858.9
20°	1769.3	1759.7	1778.0	1802.4	1816.3
22.5°	1706.7	1709.3	1731.0	1751.0	1766.7
25°	1633.7	1646.6	1679.8	1703.2	1714.5
27.5°	1578.8	1598.0	1620.6	1648.4	1671.1
30°	1535.4	1533.6	1549.2	1589.3	1615.3
32.5°	1450.9	1457.0	1473.5	1521.4	1558.0
35°	1365.7	1366.5	1383.1	1445.7	1481.4
37.5°	1267.4	1260.4	1270.0	1337.9	1361.4
40°	1131.7	1133.5	1123.8	1171.8	1168.2
42.5°	973.3	987.3	937.7	1000.4	996.0
45°	780.3	843.7	782.0	837.7	803.8
47.5°	615.8	709.8	658.5	699.4	635.9
50°	499.3	595.9	568.0	586.3	483.7
52.5°	409.7	488.0	496.7	501.0	377.5
55°	328.8	400.2	427.9	427.1	294.9
57.5°	242.7	325.3	357.5	370.6	223.6
60°	179.2	270.6	294.9	323.6	167.9
62.5°	144.4	237.4	243.6	283.5	127.9
65°	123.5	219.2	197.5	253.1	99.2
67.5°	109.6	204.4	160.9	226.2	84.4
70°	99.2	181.8	133.1	202.7	79.1
72.5°	96.6	154.8	102.7	180.9	78.3
75°	93.1	131.3	74.0	148.8	77.4
77.5°	80.1	112.2	53.1	114.8	72.2
80°	69.6	89.6	39.1	86.1	63.5
82.5°	53.9	67.9	34.8	65.3	51.3
85°	34.8	51.3	36.6	47.0	35.7
87.5°	16.5	28.7	26.1	25.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)