

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: P219238

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L940-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P219238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/12/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-48-A19/156-UNV-L940-CD1-U
Description: METALUX GR 2X4 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4103.6 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

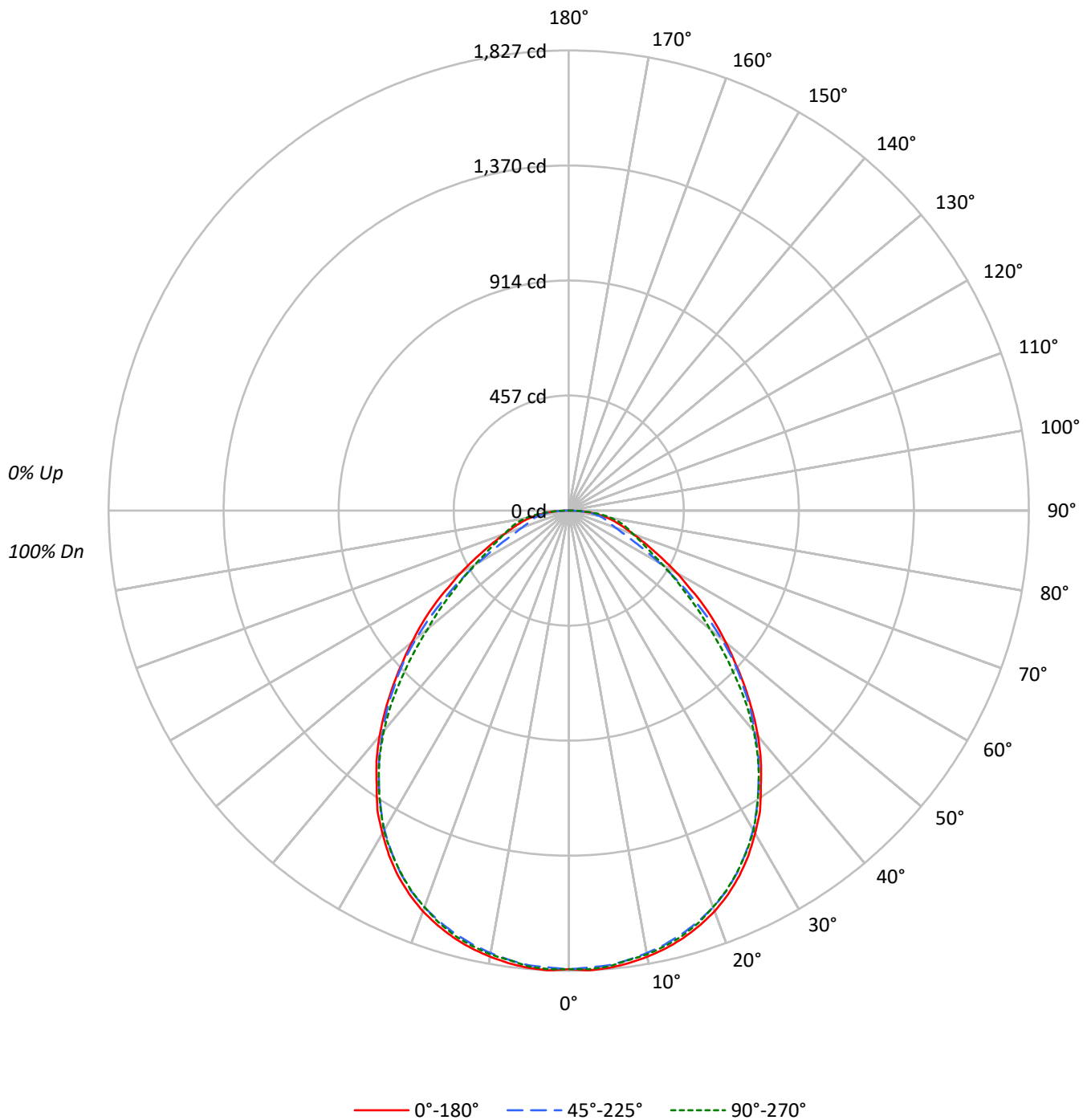
Input Watts (W): 37.486
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	110	105	101	98	107	103	99	96		99	96	93		95	93	90		91	89	88
2	101	93	87	82	98	91	86	81		88	83	79		85	81	77		82	78	75
3	93	83	75	69	90	81	74	69		79	73	68		76	71	67		73	69	65
4	86	74	66	60	83	73	65	60		71	64	59		68	63	58		66	61	57
5	79	67	59	53	77	66	58	52		64	57	52		62	56	51		60	55	51
6	73	61	53	46	72	60	52	46		58	51	46		57	50	45		55	49	45
7	68	56	47	42	67	55	47	41		53	46	41		52	46	41		51	45	41
8	64	51	43	37	62	50	43	37		49	42	37		48	41	37		47	41	37
9	60	47	39	34	58	46	39	34		45	38	34		44	38	33		43	38	33
10	56	44	36	31	55	43	36	31		42	35	31		41	35	31		40	35	30

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2789	2789	2789
5°	2802	2787	2793
10°	2797	2775	2783
15°	2786	2758	2770
20°	2760	2732	2731
25°	2706	2677	2675
30°	2617	2590	2596
35°	2486	2457	2461
40°	2337	2297	2283
45°	2142	2113	2030
50°	1936	1884	1742
55°	1739	1583	1502
60°	1522	1274	1321
65°	1328	1002	1216
70°	1215	874	1215
75°	1216	930	1340
80°	1320	1096	1526
85°	1448	1235	1638



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.4	4.2
10°-20°	492.1	12.0
20°-30°	729.6	17.8
30°-40°	823.1	20.1
40°-50°	745.5	18.2
50°-60°	537.8	13.1
60°-70°	321.1	7.8
70°-80°	198.5	4.8
80°-90°	83.6	2.0
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°	1394.1	34.0
0°-40°	2217.2	54.0
0°-60°	3500.4	85.3
0°-90°	4103.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4103.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1821	1821	1821	1821	1821	
5°	1823	1820	1812	1811	1817	173
15°	1757	1747	1740	1740	1747	495
25°	1601	1592	1584	1578	1583	736
35°	1329	1328	1314	1315	1316	832
45°	989	983	976	952	937	762
55°	651	631	593	564	562	581
65°	366	323	276	314	335	369
75°	205	178	157	196	226	219
85°	82	72	70	92	93	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1820.7	1820.7	1820.7	1820.7	1820.7
2.5°	1827.1	1822.0	1815.6	1819.5	1822.6
5°	1822.6	1820.1	1812.5	1810.6	1816.9
7.5°	1813.1	1806.8	1799.8	1803.0	1800.4
10°	1798.5	1792.8	1784.0	1784.6	1789.1
12.5°	1780.8	1773.8	1764.3	1766.9	1770.7
15°	1757.3	1746.6	1739.6	1740.2	1747.2
17.5°	1727.6	1719.3	1710.5	1712.3	1715.5
20°	1693.3	1688.9	1676.2	1672.4	1675.5
22.5°	1650.2	1642.0	1634.9	1633.1	1633.7
25°	1601.4	1592.5	1584.3	1578.5	1583.0
27.5°	1544.3	1536.7	1526.0	1524.0	1527.9
30°	1479.6	1474.0	1464.5	1461.9	1467.6
32.5°	1413.8	1404.2	1390.9	1390.9	1392.2
35°	1329.4	1327.5	1314.2	1314.9	1316.1
37.5°	1253.4	1244.5	1236.9	1229.3	1233.1
40°	1169.0	1158.8	1148.7	1143.6	1141.7
42.5°	1078.4	1070.8	1066.3	1047.9	1043.5
45°	989.0	982.6	975.7	951.6	937.0
47.5°	897.7	896.5	890.7	848.2	833.7
50°	812.7	810.8	790.5	745.5	731.0
52.5°	732.2	719.6	692.9	648.5	646.0
55°	651.1	630.8	592.7	563.6	562.4
57.5°	565.5	541.4	502.8	486.8	495.1
60°	497.0	460.3	415.9	417.8	431.1
62.5°	426.0	384.8	341.1	360.1	375.9
65°	366.4	322.7	276.4	313.8	335.4
67.5°	314.4	273.9	229.5	279.6	300.5
70°	271.3	238.4	195.2	247.9	271.3
72.5°	237.1	206.7	173.0	222.5	249.7
75°	205.4	178.1	157.2	195.9	226.4
77.5°	178.1	151.5	142.0	173.0	202.9
80°	149.6	125.6	124.3	150.8	173.0
82.5°	116.6	100.2	100.2	126.2	139.5
85°	82.4	72.2	70.3	91.9	93.2
87.5°	42.5	40.6	36.8	48.2	48.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)