

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: P213959

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L950-CD1-U**

Issue Date: 3/12/2020

Test Information

Test Method: LM-79-08
Report Number: P213959
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-L950-CD1-U
Description: METALUX GR 2X2 LED TROFFER WITH A19/156 LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4051.3 lumens
Efficiency: N/A
Efficacy: 104.4 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

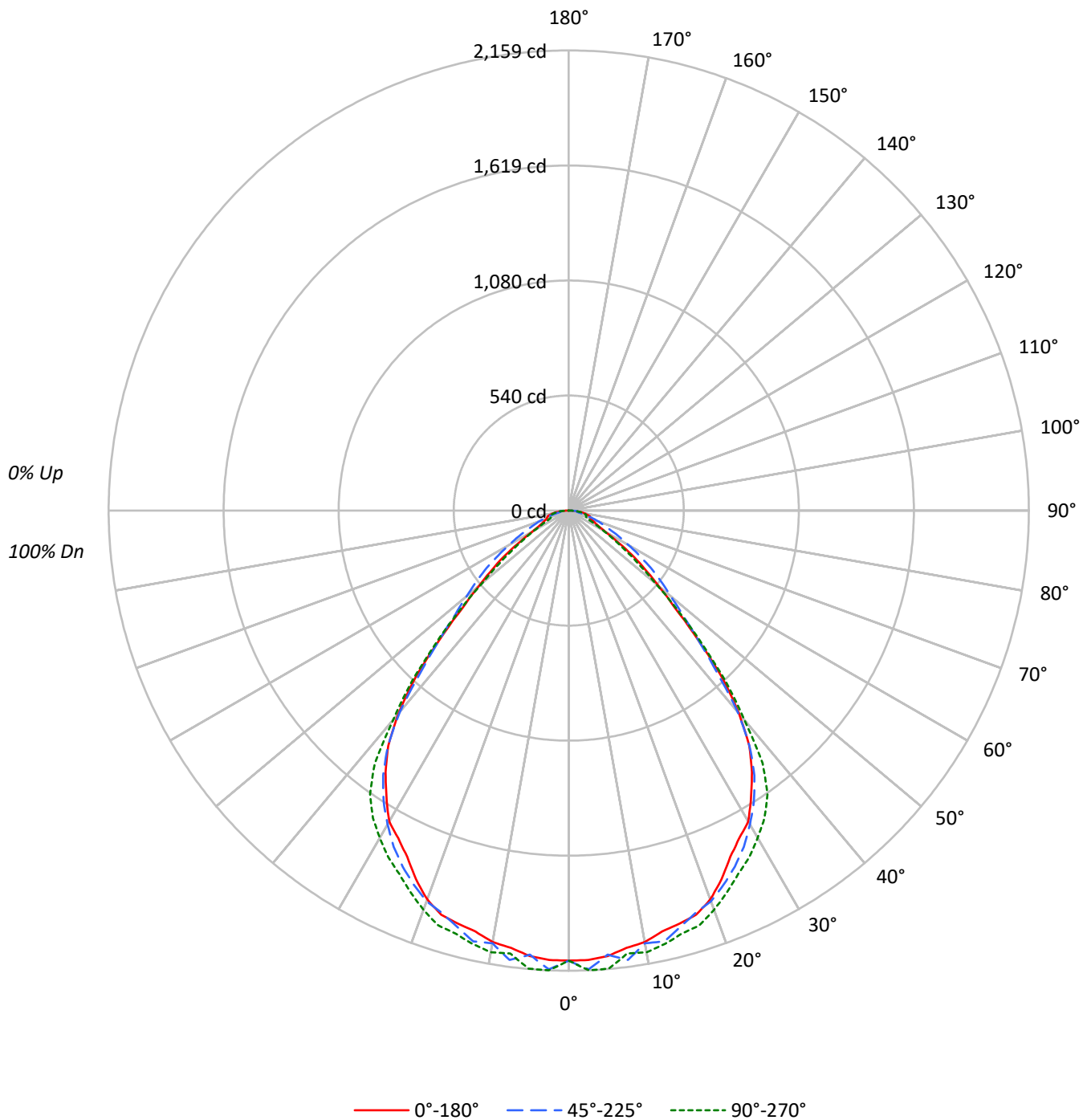
Input Watts (W): 38.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6762	6762	6762
5°	6745	6723	6935
10°	6683	6702	6841
15°	6652	6703	6810
20°	6617	6649	6793
25°	6334	6513	6648
30°	6230	6287	6555
35°	5859	5933	6355
40°	5192	5155	5359
45°	3878	3886	3995
50°	2730	3106	2644
55°	2014	2623	1807
60°	1260	2073	1180
65°	1027	1642	824
70°	1019	1368	814
75°	1263	1005	1052
80°	1407	793	1285
85°	1404	1473	1437



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	201.0	5.0
10°-20°	572.5	14.1
20°-30°	847.9	20.9
30°-40°	949.8	23.4
40°-50°	697.9	17.2
50°-60°	390.1	9.6
60°-70°	217.4	5.4
70°-80°	127.8	3.2
80°-90°	46.9	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°	1621.4	40.0
0°-40°	2571.2	63.5
0°-60°	3659.2	90.3
0°-90°	4051.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4051.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2112	2112	2112	2112	2112	
5°	2098	2137	2091	2134	2157	199
15°	2006	2019	2022	2052	2054	567
25°	1793	1807	1843	1869	1881	831
35°	1499	1500	1518	1586	1626	928
45°	856	926	858	919	882	669
55°	361	439	470	469	324	322
65°	136	240	217	278	109	140
75°	102	144	81	163	85	103
85°	38	56	40	52	39	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2111.5	2111.5	2111.5	2111.5	2111.5
2.5°	2110.5	2129.6	2154.4	2157.2	2159.2
5°	2098.1	2137.2	2091.4	2134.3	2157.2
7.5°	2069.4	2093.3	2126.7	2083.7	2096.2
10°	2055.1	2060.9	2060.9	2114.3	2103.8
12.5°	2022.7	2060.9	2070.4	2059.9	2082.8
15°	2006.5	2018.8	2021.7	2052.2	2054.1
17.5°	1988.3	1985.4	1978.8	2000.7	2039.9
20°	1941.5	1931.0	1951.0	1977.8	1993.1
22.5°	1872.8	1875.7	1899.5	1921.5	1938.7
25°	1792.6	1806.9	1843.2	1869.0	1881.4
27.5°	1732.5	1753.5	1778.3	1808.8	1833.6
30°	1684.8	1682.9	1700.1	1743.9	1772.6
32.5°	1592.1	1598.9	1617.0	1669.5	1709.6
35°	1498.6	1499.6	1517.7	1586.4	1625.5
37.5°	1390.8	1383.1	1393.7	1468.1	1493.9
40°	1241.9	1243.8	1233.2	1285.7	1281.9
42.5°	1068.2	1083.4	1029.0	1097.7	1092.9
45°	856.2	925.9	858.1	919.2	882.0
47.5°	675.9	778.9	722.5	767.4	697.8
50°	547.9	653.8	623.4	643.4	530.7
52.5°	449.6	535.5	545.0	549.8	414.2
55°	360.8	439.1	469.7	468.6	323.6
57.5°	266.4	357.0	392.3	406.6	245.3
60°	196.7	296.8	323.6	355.1	184.2
62.5°	158.4	260.6	267.3	311.2	140.3
65°	135.5	240.5	216.7	277.7	108.8
67.5°	120.3	224.3	176.6	248.2	92.5
70°	108.8	199.5	146.1	222.4	86.9
72.5°	105.9	169.9	112.7	198.6	85.9
75°	102.1	144.1	81.2	163.3	85.0
77.5°	87.8	123.1	58.2	126.0	79.3
80°	76.3	98.3	43.0	94.5	69.7
82.5°	59.2	74.4	38.2	71.6	56.3
85°	38.2	56.3	40.1	51.5	39.1
87.5°	18.1	31.5	28.7	27.7	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)