

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: P475994

Luminaire Tested: **22GR-LD5-40-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475994
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-40-A19/156-UNV-L835-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3906.2 lumens
Efficiency: N/A
Efficacy: 120.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

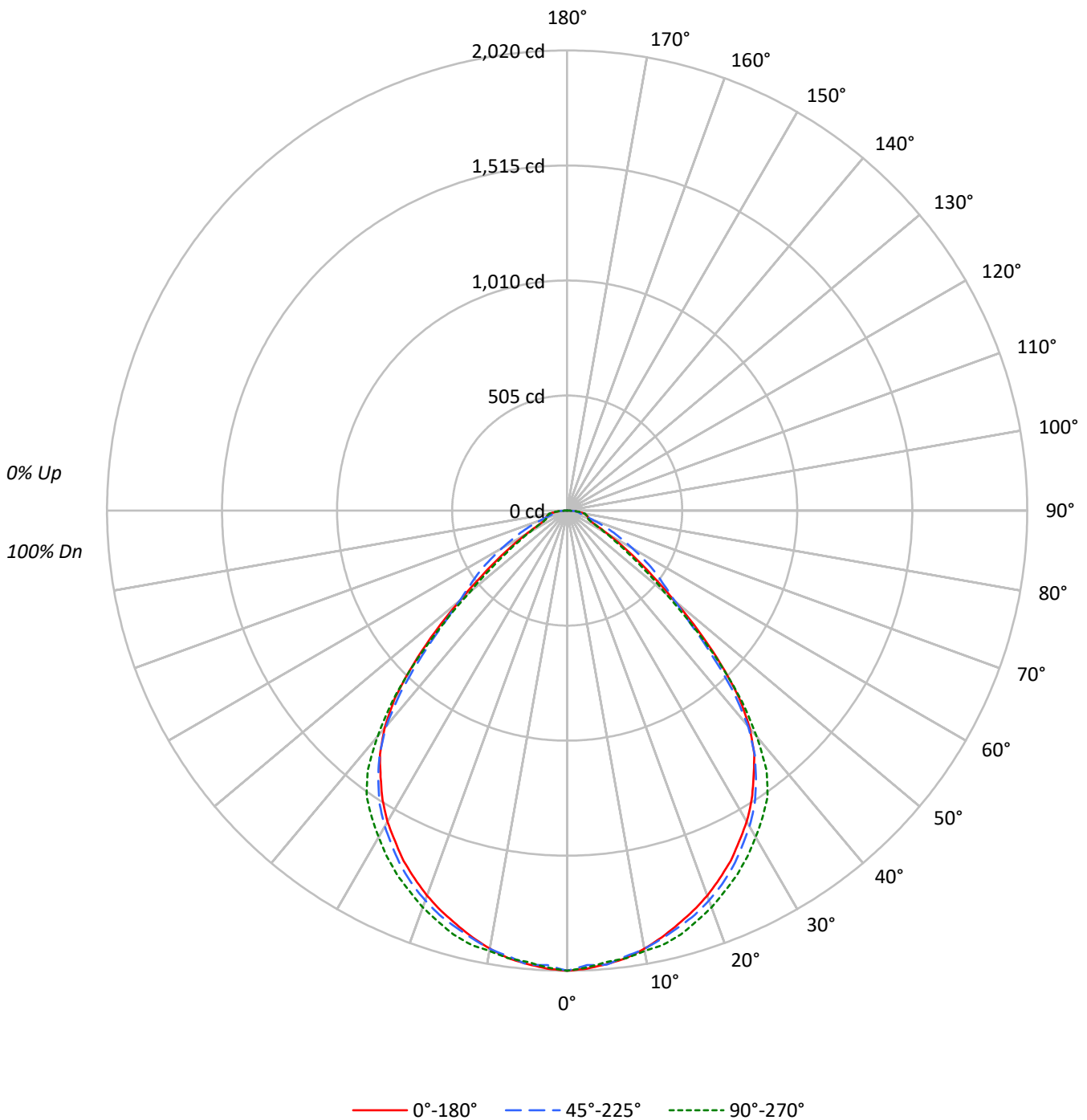
Input Watts (W): 32.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90					88				
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79					77				
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70					68				
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62					60				
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55					53				
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50					48				
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45					43				
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41					39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37					36				
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34					33				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5436	5436	5436
5°	5398	5404	5373
10°	5337	5339	5364
15°	5239	5274	5368
20°	5151	5215	5308
25°	5040	5118	5239
30°	4900	4974	5144
35°	4690	4749	5040
40°	4377	4343	4546
45°	3635	3430	3604
50°	2561	2574	2348
55°	1720	2213	1548
60°	1110	1776	1029
65°	769	1375	740
70°	773	938	767
75°	951	733	943
80°	1162	848	1232
85°	1133	1158	1250



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.1	4.8
10°-20°	535.3	13.7
20°-30°	793.9	20.3
30°-40°	908.2	23.2
40°-50°	718.9	18.4
50°-60°	392.3	10.0
60°-70°	205.2	5.3
70°-80°	118.5	3.0
80°-90°	44.8	1.1
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°	1518.4	38.9
0°-40°	2426.5	62.1
0°-60°	3537.7	90.6
0°-90°	3906.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3906.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2020	2020	2020	2020	2020	
5°	1998	1984	2000	1994	1989	189
15°	1880	1890	1893	1908	1927	530
25°	1698	1700	1724	1746	1764	780
35°	1428	1428	1446	1498	1534	890
45°	955	950	901	946	947	726
55°	367	458	472	439	330	340
65°	121	243	216	231	116	130
75°	92	146	70	144	91	95
85°	37	48	38	49	40	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2019.9	2019.9	2019.9	2019.9	2019.9
2.5°	2012.4	2000.4	1997.4	2003.4	2007.2
5°	1998.2	1983.9	2000.4	1993.7	1989.2
7.5°	1981.7	1976.4	1973.4	1983.9	1981.7
10°	1953.2	1945.7	1953.9	1959.9	1962.9
12.5°	1918.7	1922.5	1924.0	1942.7	1951.7
15°	1880.5	1890.2	1893.2	1908.2	1927.0
17.5°	1841.5	1843.7	1861.7	1881.2	1890.2
20°	1798.7	1802.5	1821.2	1839.2	1853.5
22.5°	1748.5	1753.0	1776.2	1796.5	1808.5
25°	1697.5	1699.8	1723.8	1745.5	1764.3
27.5°	1636.0	1648.0	1662.3	1692.3	1712.5
30°	1576.8	1584.3	1600.8	1633.8	1655.5
32.5°	1507.1	1510.1	1531.1	1567.1	1596.3
35°	1427.6	1427.6	1445.6	1498.1	1534.1
37.5°	1348.9	1338.4	1352.6	1412.6	1438.1
40°	1246.1	1238.7	1236.4	1277.6	1294.1
42.5°	1120.2	1105.9	1080.4	1122.4	1135.9
45°	955.2	950.0	901.2	945.5	947.0
47.5°	782.8	786.5	731.8	776.0	743.0
50°	611.8	650.8	614.8	633.6	560.8
52.5°	476.1	548.8	535.3	527.9	428.9
55°	366.6	458.1	471.6	439.4	329.9
57.5°	279.7	390.6	398.9	376.4	251.2
60°	206.2	329.9	329.9	319.4	191.2
62.5°	153.7	283.4	268.4	271.4	146.2
65°	120.7	242.9	215.9	230.9	116.2
67.5°	101.2	202.4	163.5	199.4	101.2
70°	98.2	176.2	119.2	179.9	97.5
72.5°	97.5	162.0	89.2	163.5	98.2
75°	91.5	146.2	70.5	144.0	90.7
77.5°	84.0	121.5	58.5	121.5	84.7
80°	75.0	92.2	54.7	94.5	79.5
82.5°	57.7	66.0	48.7	66.7	61.5
85°	36.7	48.0	37.5	48.7	40.5
87.5°	16.5	25.5	16.5	26.2	18.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)