

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: P475995

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475995
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-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: 4139.0 lumens
Efficiency: N/A
Efficacy: 118.9 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

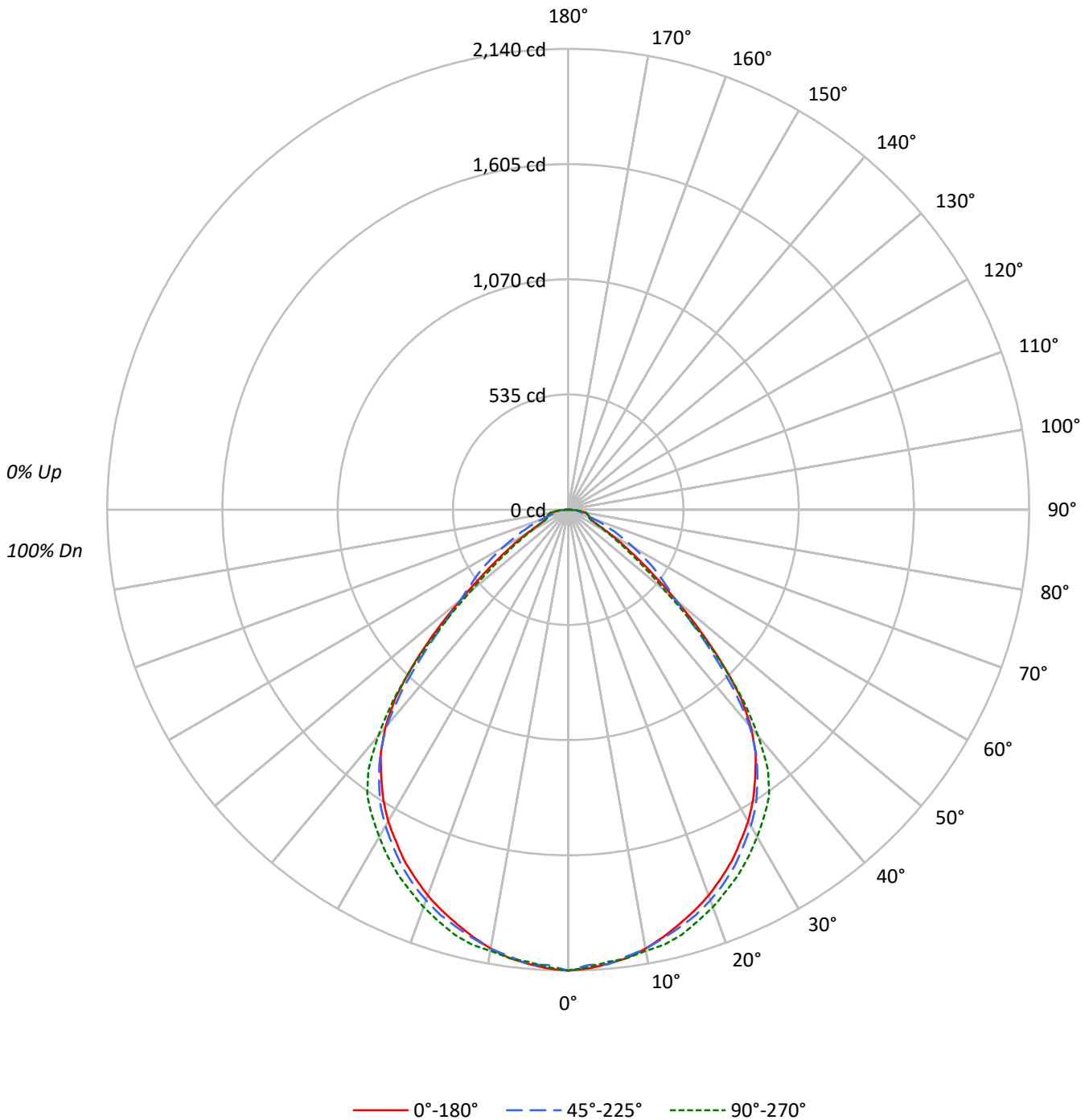
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	5760	5760	5760
5°	5719	5726	5693
10°	5655	5657	5683
15°	5551	5589	5688
20°	5458	5526	5624
25°	5341	5423	5551
30°	5192	5271	5451
35°	4969	5032	5340
40°	4638	4602	4817
45°	3852	3634	3819
50°	2714	2727	2488
55°	1823	2344	1640
60°	1176	1882	1090
65°	814	1457	784
70°	819	994	813
75°	1007	777	999
80°	1230	899	1305
85°	1201	1226	1325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.4	4.8
10°-20°	567.2	13.7
20°-30°	841.2	20.3
30°-40°	962.3	23.2
40°-50°	761.8	18.4
50°-60°	415.6	10.0
60°-70°	217.5	5.3
70°-80°	125.6	3.0
80°-90°	47.5	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°	1608.8	38.9
0°-40°	2571.1	62.1
0°-60°	3748.5	90.6
0°-90°	4139.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4139.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2140	2140	2140	2140	2140	
5°	2117	2102	2120	2112	2108	201
15°	1992	2003	2006	2022	2042	562
25°	1799	1801	1826	1850	1869	827
35°	1513	1513	1532	1587	1626	943
45°	1012	1007	955	1002	1003	770
55°	388	485	500	466	350	360
65°	128	257	229	245	123	138
75°	97	155	75	152	96	101
85°	39	51	40	52	43	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2140.3	2140.3	2140.3	2140.3	2140.3
2.5°	2132.3	2119.6	2116.4	2122.8	2126.8
5°	2117.2	2102.1	2119.6	2112.5	2107.7
7.5°	2099.8	2094.2	2091.0	2102.1	2099.8
10°	2069.6	2061.6	2070.4	2076.7	2079.9
12.5°	2033.0	2037.0	2038.6	2058.5	2068.0
15°	1992.5	2002.8	2006.0	2021.9	2041.8
17.5°	1951.2	1953.6	1972.7	1993.3	2002.8
20°	1905.9	1909.9	1929.7	1948.8	1963.9
22.5°	1852.7	1857.5	1882.1	1903.5	1916.2
25°	1798.7	1801.0	1826.5	1849.5	1869.4
27.5°	1733.5	1746.2	1761.3	1793.1	1814.6
30°	1670.8	1678.7	1696.2	1731.1	1754.2
32.5°	1596.9	1600.0	1622.3	1660.4	1691.4
35°	1512.7	1512.7	1531.7	1587.3	1625.5
37.5°	1429.2	1418.1	1433.2	1496.8	1523.8
40°	1320.4	1312.5	1310.1	1353.8	1371.2
42.5°	1186.9	1171.8	1144.8	1189.3	1203.6
45°	1012.1	1006.6	954.9	1001.8	1003.4
47.5°	829.4	833.4	775.4	822.3	787.3
50°	648.3	689.6	651.5	671.3	594.3
52.5°	504.5	581.5	567.2	559.3	454.4
55°	388.5	485.4	499.7	465.6	349.6
57.5°	296.3	413.9	422.7	398.8	266.1
60°	218.5	349.6	349.6	338.4	202.6
62.5°	162.9	300.3	284.4	287.6	154.9
65°	127.9	257.4	228.8	244.7	123.1
67.5°	107.3	214.5	173.2	211.3	107.3
70°	104.1	186.7	126.3	190.7	103.3
72.5°	103.3	171.6	94.5	173.2	104.1
75°	96.9	154.9	74.7	152.5	96.1
77.5°	89.0	128.7	62.0	128.7	89.8
80°	79.4	97.7	58.0	100.1	84.2
82.5°	61.2	69.9	51.6	70.7	65.1
85°	38.9	50.8	39.7	51.6	42.9
87.5°	17.5	27.0	17.5	27.8	19.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)