

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: P476007

Luminaire Tested: **22GR-LD5-43-A19/156-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476007
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-L840-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4217.6 lumens
Efficiency: N/A
Efficacy: 121.2 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

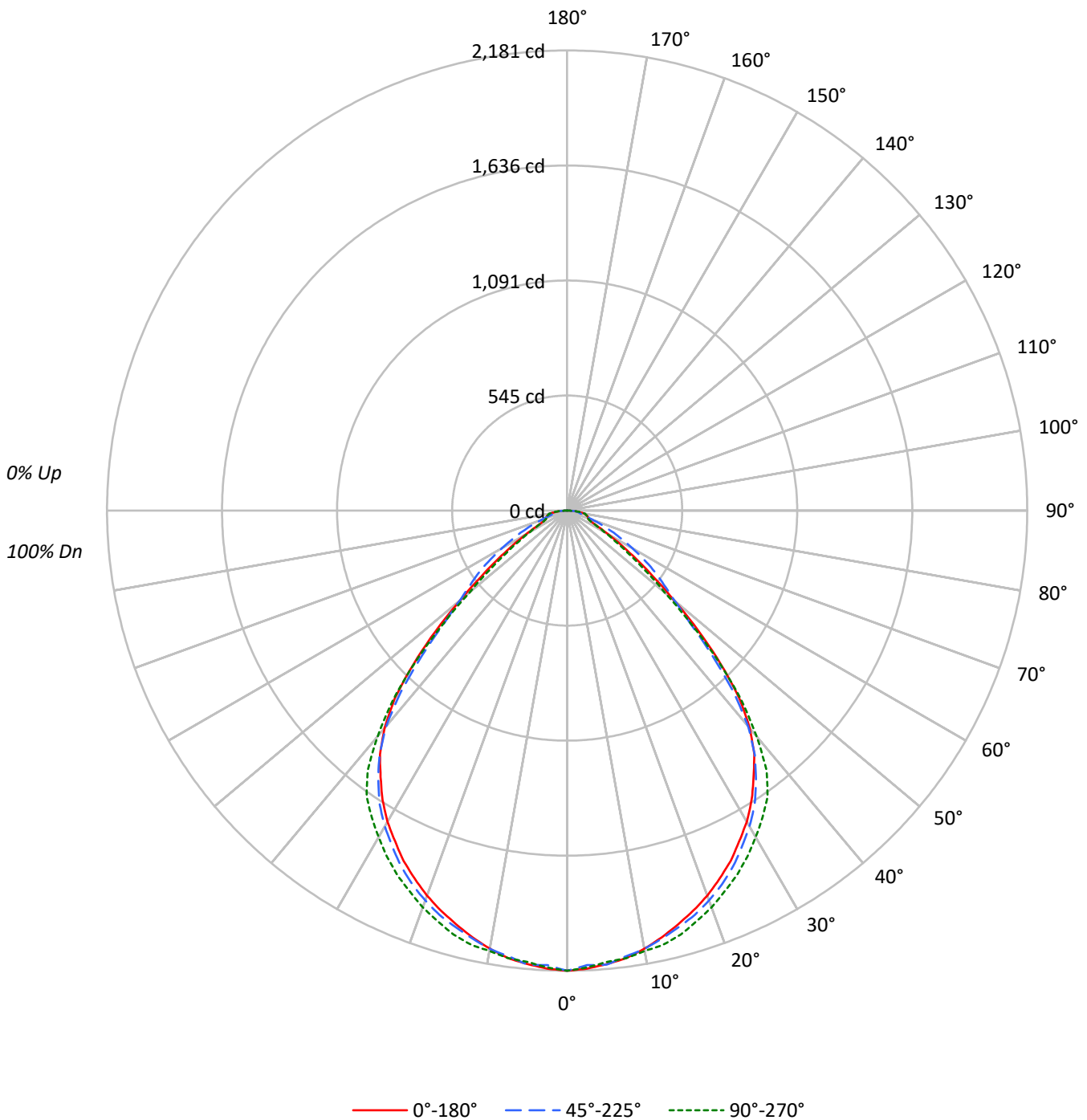
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	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°	5869	5869	5869
5°	5828	5834	5802
10°	5763	5765	5791
15°	5657	5695	5796
20°	5562	5631	5731
25°	5442	5526	5656
30°	5290	5371	5554
35°	5064	5127	5441
40°	4727	4690	4908
45°	3925	3703	3891
50°	2766	2779	2535
55°	1857	2389	1671
60°	1198	1917	1111
65°	830	1485	799
70°	835	1013	828
75°	1027	791	1019
80°	1255	916	1330
85°	1226	1250	1349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.2	4.8
10°-20°	578.0	13.7
20°-30°	857.2	20.3
30°-40°	980.6	23.2
40°-50°	776.2	18.4
50°-60°	423.5	10.0
60°-70°	221.6	5.3
70°-80°	127.9	3.0
80°-90°	48.4	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°	1639.4	38.9
0°-40°	2620.0	62.1
0°-60°	3819.7	90.6
0°-90°	4217.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4217.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2181	2181	2181	2181	2181	
5°	2158	2142	2160	2153	2148	205
15°	2030	2041	2044	2060	2081	573
25°	1833	1835	1861	1885	1905	843
35°	1541	1541	1561	1618	1656	961
45°	1031	1026	973	1021	1022	784
55°	396	495	509	474	356	367
65°	130	262	233	249	126	141
75°	99	158	76	155	98	103
85°	40	52	40	53	44	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2180.9	2180.9	2180.9	2180.9	2180.9
2.5°	2172.9	2159.9	2156.7	2163.1	2167.2
5°	2157.5	2142.1	2159.9	2152.6	2147.8
7.5°	2139.7	2134.0	2130.8	2142.1	2139.7
10°	2108.9	2100.8	2109.7	2116.2	2119.4
12.5°	2071.7	2075.7	2077.3	2097.6	2107.3
15°	2030.4	2040.9	2044.1	2060.3	2080.6
17.5°	1988.3	1990.7	2010.1	2031.2	2040.9
20°	1942.1	1946.2	1966.4	1985.8	2001.2
22.5°	1887.9	1892.7	1917.8	1939.7	1952.7
25°	1832.8	1835.3	1861.2	1884.6	1904.9
27.5°	1766.5	1779.4	1794.8	1827.2	1849.0
30°	1702.5	1710.6	1728.4	1764.0	1787.5
32.5°	1627.2	1630.4	1653.1	1692.0	1723.5
35°	1541.4	1541.4	1560.8	1617.5	1656.4
37.5°	1456.4	1445.1	1460.4	1525.2	1552.7
40°	1345.5	1337.4	1335.0	1379.5	1397.3
42.5°	1209.5	1194.1	1166.6	1211.9	1226.5
45°	1031.4	1025.7	973.1	1020.9	1022.5
47.5°	845.2	849.2	790.1	837.9	802.3
50°	660.6	702.7	663.8	684.1	605.5
52.5°	514.1	592.6	578.0	569.9	463.1
55°	395.9	494.6	509.2	474.4	356.2
57.5°	302.0	421.8	430.7	406.4	271.2
60°	222.6	356.2	356.2	344.9	206.4
62.5°	166.0	306.0	289.8	293.1	157.9
65°	130.3	262.3	233.2	249.3	125.5
67.5°	109.3	218.6	176.5	215.3	109.3
70°	106.1	190.2	128.7	194.3	105.2
72.5°	105.2	174.9	96.3	176.5	106.1
75°	98.8	157.9	76.1	155.4	98.0
77.5°	90.7	131.1	63.1	131.1	91.5
80°	81.0	99.6	59.1	102.0	85.8
82.5°	62.3	71.2	52.6	72.1	66.4
85°	39.7	51.8	40.5	52.6	43.7
87.5°	17.8	27.5	17.8	28.3	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)