

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: P475899

Luminaire Tested: **22GR-LD5-43-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475899
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-43-F1-UNV-L835-CD1-U
Description: GR 2'X2' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4355.6 lumens
Efficiency: N/A
Efficacy: 125.2 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

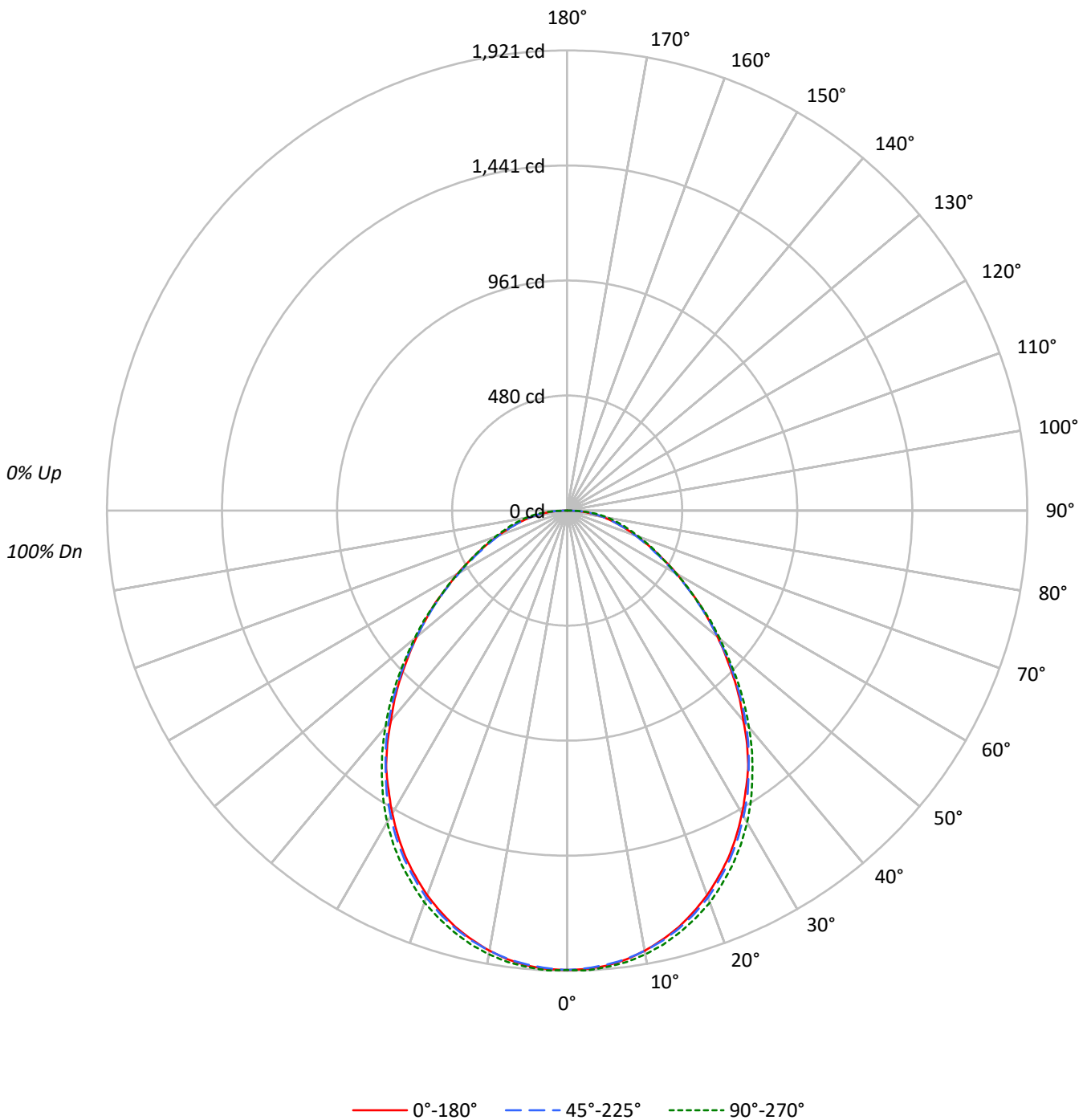
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5160	5160	5160
5°	5150	5140	5165
10°	5099	5099	5140
15°	5015	5030	5076
20°	4892	4924	4987
25°	4739	4772	4849
30°	4538	4578	4669
35°	4326	4339	4429
40°	4020	4078	4149
45°	3733	3768	3824
50°	3430	3430	3484
55°	3145	3111	3128
60°	2847	2798	2837
65°	2597	2538	2620
70°	2399	2385	2500
75°	2311	2292	2521
80°	2334	2334	2676
85°	2439	2553	3063



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.8	4.2
10°-20°	509.0	11.7
20°-30°	740.1	17.0
30°-40°	828.5	19.0
40°-50°	764.7	17.6
50°-60°	596.7	13.7
60°-70°	403.9	9.3
70°-80°	241.2	5.5
80°-90°	90.6	2.1
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°	1430.0	32.8
0°-40°	2258.5	51.9
0°-60°	3619.9	83.1
0°-90°	4355.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4355.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1918	1918	1918	1918	1918	
5°	1907	1903	1903	1910	1912	181
15°	1800	1800	1806	1817	1822	506
25°	1596	1596	1607	1624	1633	733
35°	1317	1315	1321	1341	1348	819
45°	981	986	990	997	1005	757
55°	670	665	663	667	667	598
65°	408	404	399	406	412	406
75°	222	220	220	233	242	236
85°	79	77	83	96	99	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1917.7	1917.7	1917.7	1917.7	1917.7
2.5°	1915.8	1912.2	1912.2	1917.7	1921.3
5°	1906.6	1903.0	1903.0	1910.3	1912.2
7.5°	1890.1	1888.3	1888.3	1895.6	1901.1
10°	1866.2	1864.4	1866.2	1873.6	1880.9
12.5°	1835.0	1835.0	1838.7	1847.9	1855.2
15°	1800.1	1800.1	1805.6	1816.6	1822.2
17.5°	1756.0	1757.9	1765.2	1778.1	1783.6
20°	1708.3	1711.9	1719.3	1730.3	1741.3
22.5°	1653.2	1656.8	1664.2	1680.7	1688.1
25°	1596.2	1596.2	1607.2	1623.8	1633.0
27.5°	1530.1	1531.9	1543.0	1561.3	1570.5
30°	1460.3	1465.8	1473.2	1489.7	1502.5
32.5°	1386.8	1392.3	1401.5	1419.9	1429.1
35°	1317.0	1315.2	1320.7	1340.9	1348.2
37.5°	1234.4	1236.2	1243.5	1258.2	1267.4
40°	1144.4	1153.5	1160.9	1171.9	1181.1
42.5°	1065.4	1070.9	1076.4	1087.4	1094.8
45°	980.9	986.4	990.1	997.4	1004.8
47.5°	898.2	900.1	905.6	909.2	914.7
50°	819.2	821.1	819.2	824.7	832.1
52.5°	742.1	740.2	740.2	742.1	753.1
55°	670.4	664.9	663.1	666.8	666.8
57.5°	591.5	589.6	589.6	587.8	597.0
60°	529.0	523.5	519.8	523.5	527.2
62.5°	464.7	459.2	455.5	462.9	462.9
65°	407.8	404.1	398.6	405.9	411.5
67.5°	352.7	349.0	347.2	356.3	363.7
70°	304.9	303.1	303.1	312.3	317.8
72.5°	260.8	259.0	259.0	271.9	277.4
75°	222.3	220.4	220.4	233.3	242.5
77.5°	183.7	181.8	187.4	198.4	207.6
80°	150.6	148.8	150.6	165.3	172.7
82.5°	113.9	113.9	117.6	132.3	139.6
85°	79.0	77.1	82.7	95.5	99.2
87.5°	40.4	42.2	44.1	51.4	51.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)