

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: P474897

Luminaire Tested: **22CZ2-70VHE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474897
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-70VHE-S-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6863.9 lumens
Efficiency: N/A
Efficacy: 139.2 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

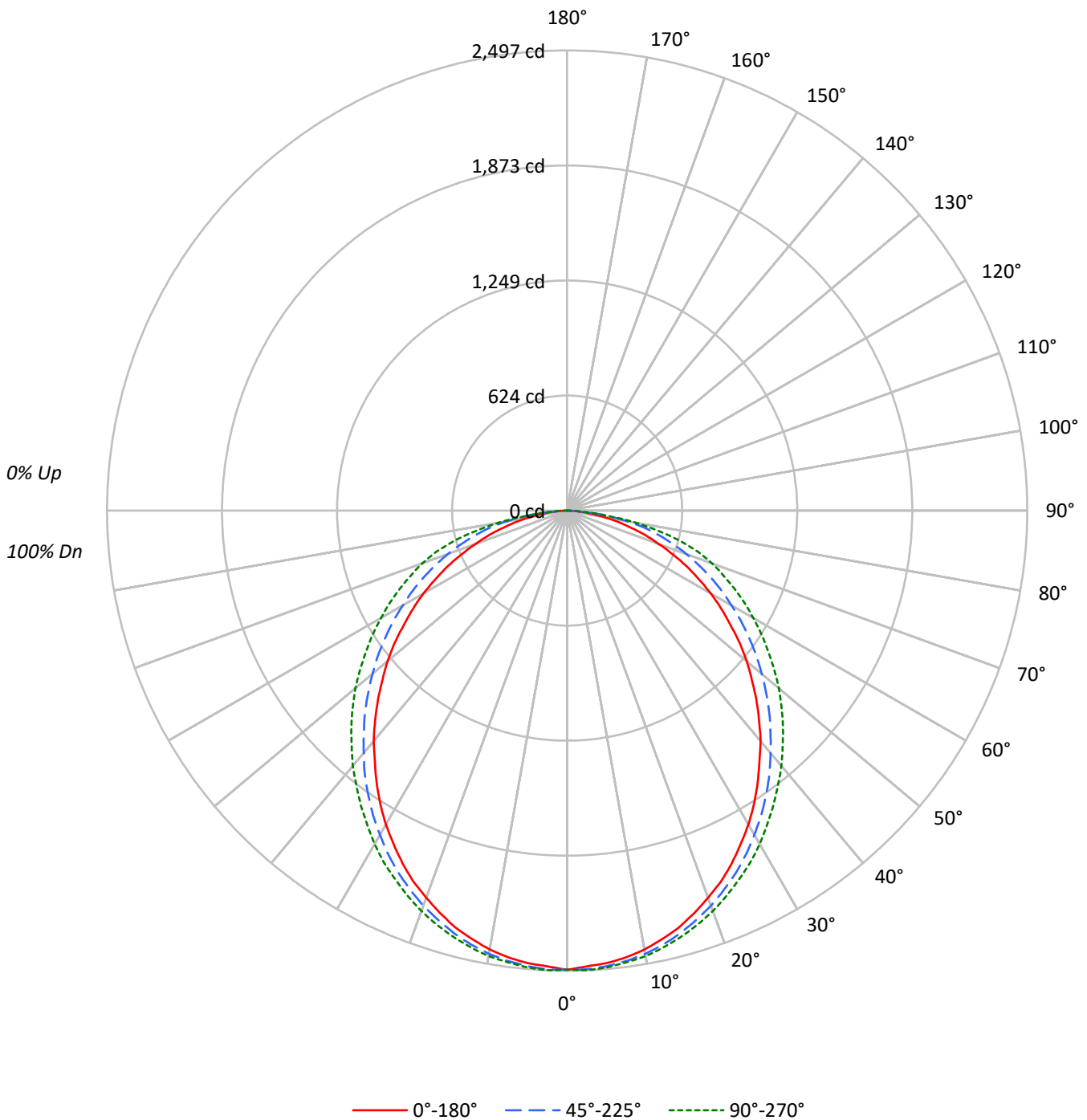
Input Watts (W): 49.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	99	95	106	101	97	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6705	6705	6705
5°	6659	6703	6722
10°	6609	6672	6709
15°	6525	6613	6668
20°	6403	6536	6621
25°	6274	6436	6555
30°	6111	6312	6493
35°	5921	6183	6412
40°	5736	6033	6354
45°	5525	5904	6302
50°	5327	5772	6279
55°	5073	5658	6250
60°	4845	5543	6276
65°	4548	5479	6367
70°	4156	5411	6574
75°	3730	5371	6580
80°	3141	5071	5844
85°	2359	3436	3180



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.3	3.4
10°-20°	668.3	9.7
20°-30°	996.5	14.5
30°-40°	1175.8	17.1
40°-50°	1197.9	17.5
50°-60°	1080.4	15.7
60°-70°	848.5	12.4
70°-80°	530.4	7.7
80°-90°	130.7	1.9
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°	1900.1	27.7
0°-40°	3075.9	44.8
0°-60°	5354.3	78.0
0°-90°	6863.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6863.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2492	2492	2492	2492	2492	
5°	2465	2470	2482	2487	2488	234
15°	2342	2350	2374	2390	2394	659
25°	2113	2124	2168	2199	2208	972
35°	1802	1827	1882	1934	1952	1127
45°	1452	1477	1551	1626	1656	1120
55°	1081	1116	1206	1299	1332	970
65°	714	752	860	957	1000	705
75°	359	409	517	605	633	384
85°	76	98	111	110	103	93
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2491.6	2491.6	2491.6	2491.6	2491.6
2.5°	2475.0	2480.0	2491.6	2496.6	2496.6
5°	2465.0	2470.0	2481.6	2486.6	2488.3
7.5°	2445.1	2451.7	2465.0	2471.7	2471.7
10°	2418.5	2426.8	2441.8	2451.7	2455.1
12.5°	2382.0	2391.9	2411.9	2423.5	2426.8
15°	2342.1	2350.4	2373.7	2390.3	2393.6
17.5°	2290.6	2303.9	2328.8	2350.4	2355.4
20°	2235.8	2250.7	2282.3	2307.2	2312.2
22.5°	2179.3	2190.9	2225.8	2255.7	2262.4
25°	2112.9	2124.5	2167.7	2199.3	2207.6
27.5°	2039.8	2059.7	2102.9	2139.5	2152.7
30°	1966.7	1986.6	2031.5	2074.7	2089.6
32.5°	1887.0	1908.6	1960.1	2004.9	2019.9
35°	1802.3	1827.2	1882.0	1933.5	1951.8
37.5°	1714.2	1742.5	1803.9	1858.7	1878.7
40°	1632.8	1652.8	1717.5	1780.7	1808.9
42.5°	1541.5	1568.0	1632.8	1704.3	1730.8
45°	1451.8	1476.7	1551.4	1626.2	1656.1
47.5°	1358.8	1390.3	1465.1	1548.1	1578.0
50°	1272.4	1299.0	1378.7	1466.7	1499.9
52.5°	1179.4	1207.6	1294.0	1385.3	1415.2
55°	1081.4	1116.2	1205.9	1299.0	1332.2
57.5°	991.7	1024.9	1119.6	1215.9	1250.8
60°	900.3	933.5	1029.9	1127.9	1166.1
62.5°	804.0	842.2	946.8	1041.5	1084.7
65°	714.3	752.5	860.4	956.8	1000.0
67.5°	619.6	664.4	772.4	873.7	916.9
70°	528.2	581.4	687.7	787.3	835.5
72.5°	446.8	490.0	601.3	706.0	745.8
75°	358.8	408.6	516.6	604.6	632.9
77.5°	284.0	327.2	430.2	488.4	506.6
80°	202.7	250.8	327.2	362.1	377.1
82.5°	134.5	174.4	222.6	229.2	225.9
85°	76.4	98.0	111.3	109.6	103.0
87.5°	29.9	33.2	24.9	14.9	11.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)