

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: P474926

Luminaire Tested: **22CZ2-70VHE-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474926
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-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7112.8 lumens
Efficiency: N/A
Efficacy: 144.3 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

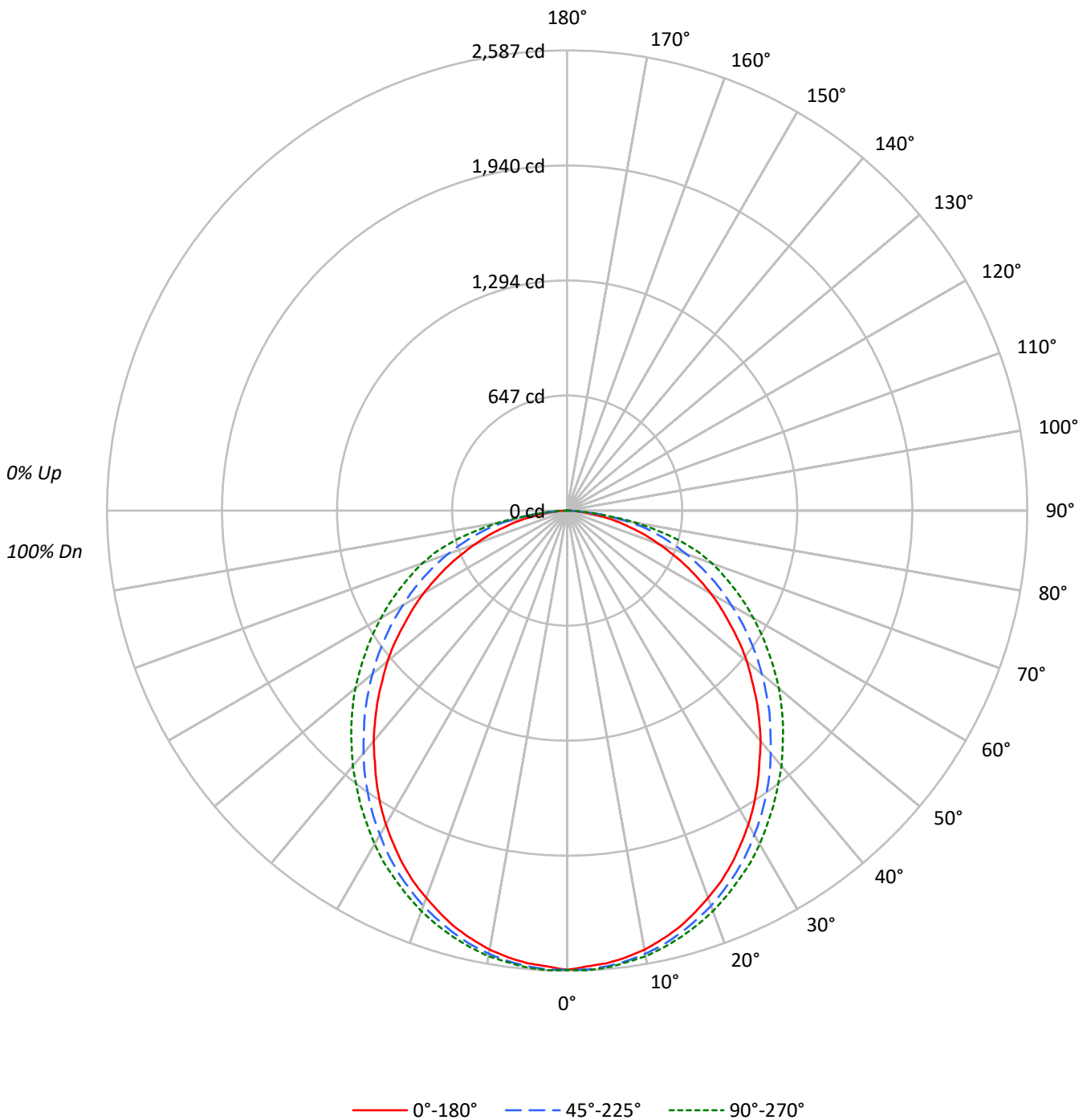
Input Watts (W): 49.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6948	6948	6948
5°	6900	6947	6965
10°	6848	6914	6952
15°	6761	6853	6910
20°	6635	6773	6862
25°	6501	6670	6792
30°	6333	6541	6728
35°	6135	6407	6644
40°	5944	6252	6585
45°	5725	6118	6531
50°	5520	5981	6507
55°	5257	5863	6477
60°	5021	5744	6504
65°	4713	5677	6598
70°	4307	5607	6812
75°	3866	5566	6818
80°	3254	5255	6055
85°	2445	3560	3294



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.9	3.4
10°-20°	692.6	9.7
20°-30°	1032.6	14.5
30°-40°	1218.4	17.1
40°-50°	1241.4	17.5
50°-60°	1119.6	15.7
60°-70°	879.2	12.4
70°-80°	549.7	7.7
80°-90°	135.5	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°	1969.1	27.7
0°-40°	3187.5	44.8
0°-60°	5548.4	78.0
0°-90°	7112.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7112.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2582	2582	2582	2582	2582	
5°	2554	2560	2572	2577	2578	242
15°	2427	2436	2460	2477	2480	683
25°	2190	2202	2246	2279	2288	1007
35°	1868	1893	1950	2004	2022	1168
45°	1504	1530	1608	1685	1716	1161
55°	1121	1157	1250	1346	1380	1005
65°	740	780	892	992	1036	731
75°	372	423	535	627	656	397
85°	79	102	115	114	107	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2582.0	2582.0	2582.0	2582.0	2582.0
2.5°	2564.8	2569.9	2582.0	2587.1	2587.1
5°	2554.4	2559.6	2571.6	2576.8	2578.5
7.5°	2533.8	2540.7	2554.4	2561.3	2561.3
10°	2506.2	2514.8	2530.3	2540.7	2544.1
12.5°	2468.4	2478.7	2499.3	2511.4	2514.8
15°	2427.0	2435.7	2459.8	2477.0	2480.4
17.5°	2373.7	2387.5	2413.3	2435.7	2440.8
20°	2316.9	2332.4	2365.1	2390.9	2396.1
22.5°	2258.4	2270.4	2306.6	2337.5	2344.4
25°	2189.5	2201.6	2246.3	2279.0	2287.6
27.5°	2113.8	2134.4	2179.2	2217.0	2230.8
30°	2038.0	2058.7	2105.2	2149.9	2165.4
32.5°	1955.4	1977.8	2031.1	2077.6	2093.1
35°	1867.6	1893.4	1950.2	2003.6	2022.5
37.5°	1776.4	1805.7	1869.3	1926.1	1946.8
40°	1692.0	1712.7	1779.8	1845.2	1874.5
42.5°	1597.4	1624.9	1692.0	1766.1	1793.6
45°	1504.4	1530.2	1607.7	1685.2	1716.1
47.5°	1408.0	1440.7	1518.2	1604.3	1635.2
50°	1318.5	1346.1	1428.7	1519.9	1554.3
52.5°	1222.1	1251.4	1340.9	1435.6	1466.6
55°	1120.6	1156.7	1249.7	1346.1	1380.5
57.5°	1027.6	1062.0	1160.2	1260.0	1296.1
60°	933.0	967.4	1067.2	1168.8	1208.4
62.5°	833.1	872.7	981.1	1079.3	1124.0
65°	740.2	779.8	891.6	991.5	1036.2
67.5°	642.0	688.5	800.4	905.4	950.2
70°	547.4	602.5	712.6	815.9	865.8
72.5°	463.0	507.8	623.1	731.6	772.9
75°	371.8	423.4	535.3	626.6	655.8
77.5°	294.3	339.1	445.8	506.1	525.0
80°	210.0	259.9	339.1	375.2	390.7
82.5°	139.4	180.7	230.7	237.5	234.1
85°	79.2	101.6	115.3	113.6	106.7
87.5°	31.0	34.4	25.8	15.5	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)