

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: P474918

Luminaire Tested: **22CZ2-24VHE-S-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474918
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24VHE-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: 2466.5 lumens
Efficiency: N/A
Efficacy: 149.5 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

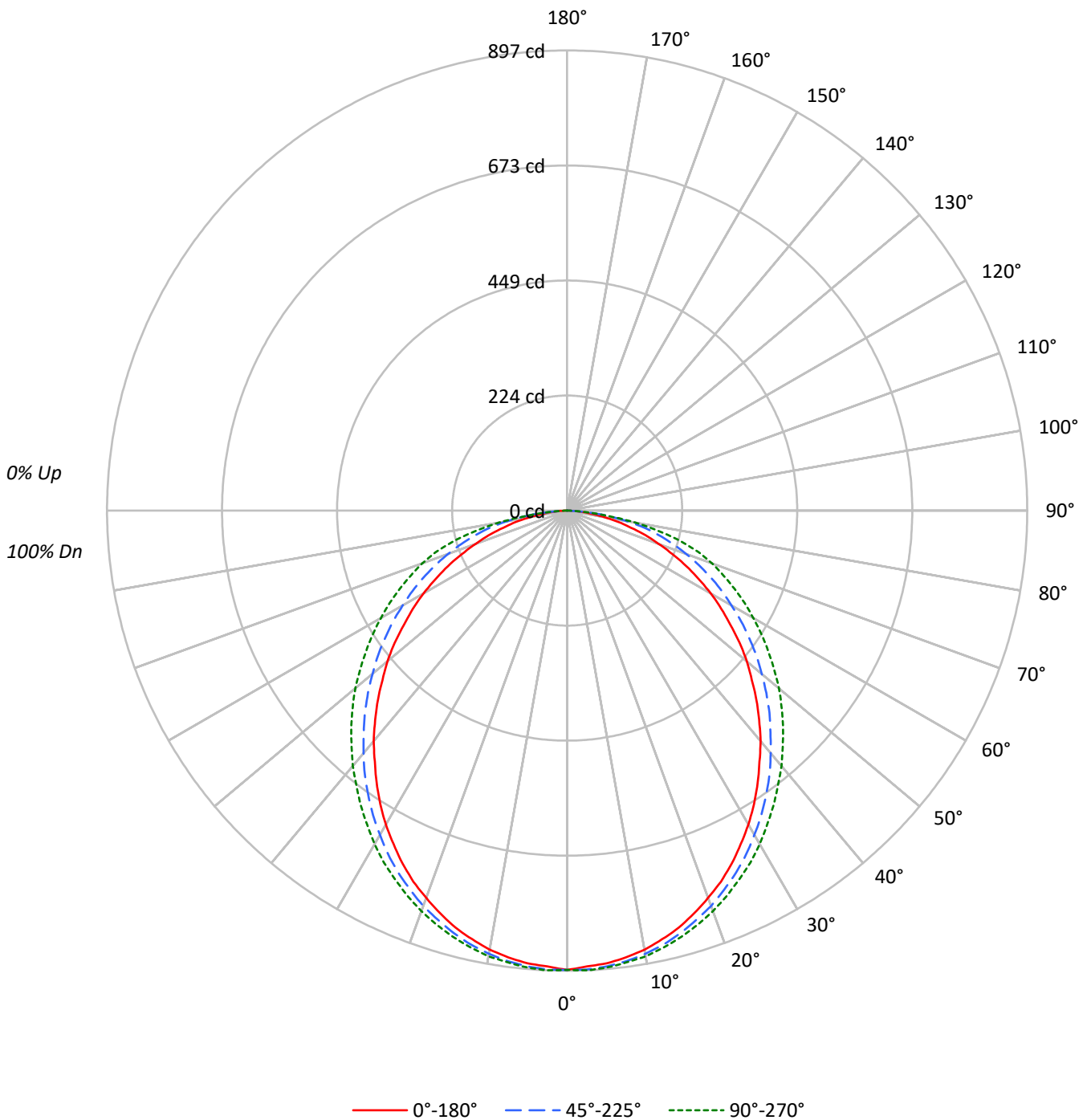
Input Watts (W): 16.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	85	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°	2409	2409	2409
5°	2393	2409	2415
10°	2375	2397	2411
15°	2345	2376	2396
20°	2301	2349	2379
25°	2254	2313	2355
30°	2196	2268	2333
35°	2127	2222	2304
40°	2061	2168	2283
45°	1985	2122	2265
50°	1914	2074	2256
55°	1823	2033	2246
60°	1741	1992	2255
65°	1635	1969	2288
70°	1493	1944	2362
75°	1340	1930	2364
80°	1128	1822	2100
85°	849	1235	1142



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	3.4
10°-20°	240.2	9.7
20°-30°	358.1	14.5
30°-40°	422.5	17.1
40°-50°	430.5	17.5
50°-60°	388.2	15.7
60°-70°	304.9	12.4
70°-80°	190.6	7.7
80°-90°	47.0	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°	682.8	27.7
0°-40°	1105.3	44.8
0°-60°	1924.0	78.0
0°-90°	2466.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2466.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	886	888	892	894	894	84
15°	842	845	853	859	860	237
25°	759	763	779	790	793	349
35°	648	657	676	695	701	405
45°	522	531	558	584	595	402
55°	389	401	433	467	479	349
65°	257	270	309	344	359	253
75°	129	147	186	217	227	138
85°	28	35	40	39	37	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	895.3	895.3	895.3	895.3	895.3
2.5°	889.4	891.2	895.3	897.1	897.1
5°	885.8	887.6	891.8	893.5	894.1
7.5°	878.6	881.0	885.8	888.2	888.2
10°	869.1	872.1	877.4	881.0	882.2
12.5°	855.9	859.5	866.7	870.9	872.1
15°	841.6	844.6	853.0	858.9	860.1
17.5°	823.1	827.9	836.8	844.6	846.4
20°	803.4	808.8	820.1	829.1	830.9
22.5°	783.1	787.3	799.8	810.6	813.0
25°	759.2	763.4	778.9	790.3	793.3
27.5°	733.0	740.1	755.7	768.8	773.6
30°	706.7	713.9	730.0	745.5	750.9
32.5°	678.1	685.8	704.3	720.4	725.8
35°	647.6	656.6	676.3	694.8	701.3
37.5°	616.0	626.1	648.2	667.9	675.1
40°	586.7	593.9	617.2	639.9	650.0
42.5°	553.9	563.5	586.7	612.4	622.0
45°	521.7	530.6	557.5	584.4	595.1
47.5°	488.3	499.6	526.5	556.3	567.0
50°	457.2	466.8	495.4	527.1	539.0
52.5°	423.8	433.9	465.0	497.8	508.6
55°	388.6	401.1	433.3	466.8	478.7
57.5°	356.3	368.3	402.3	436.9	449.5
60°	323.5	335.5	370.1	405.3	419.0
62.5°	288.9	302.6	340.2	374.3	389.8
65°	256.7	270.4	309.2	343.8	359.3
67.5°	222.6	238.8	277.6	314.0	329.5
70°	189.8	208.9	247.1	282.9	300.2
72.5°	160.6	176.1	216.1	253.7	268.0
75°	128.9	146.8	185.6	217.3	227.4
77.5°	102.1	117.6	154.6	175.5	182.1
80°	72.8	90.1	117.6	130.1	135.5
82.5°	48.3	62.7	80.0	82.4	81.2
85°	27.5	35.2	40.0	39.4	37.0
87.5°	10.7	11.9	9.0	5.4	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)