

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: P474805

Luminaire Tested: **22CZ2-44VHE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474805
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44VHE-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

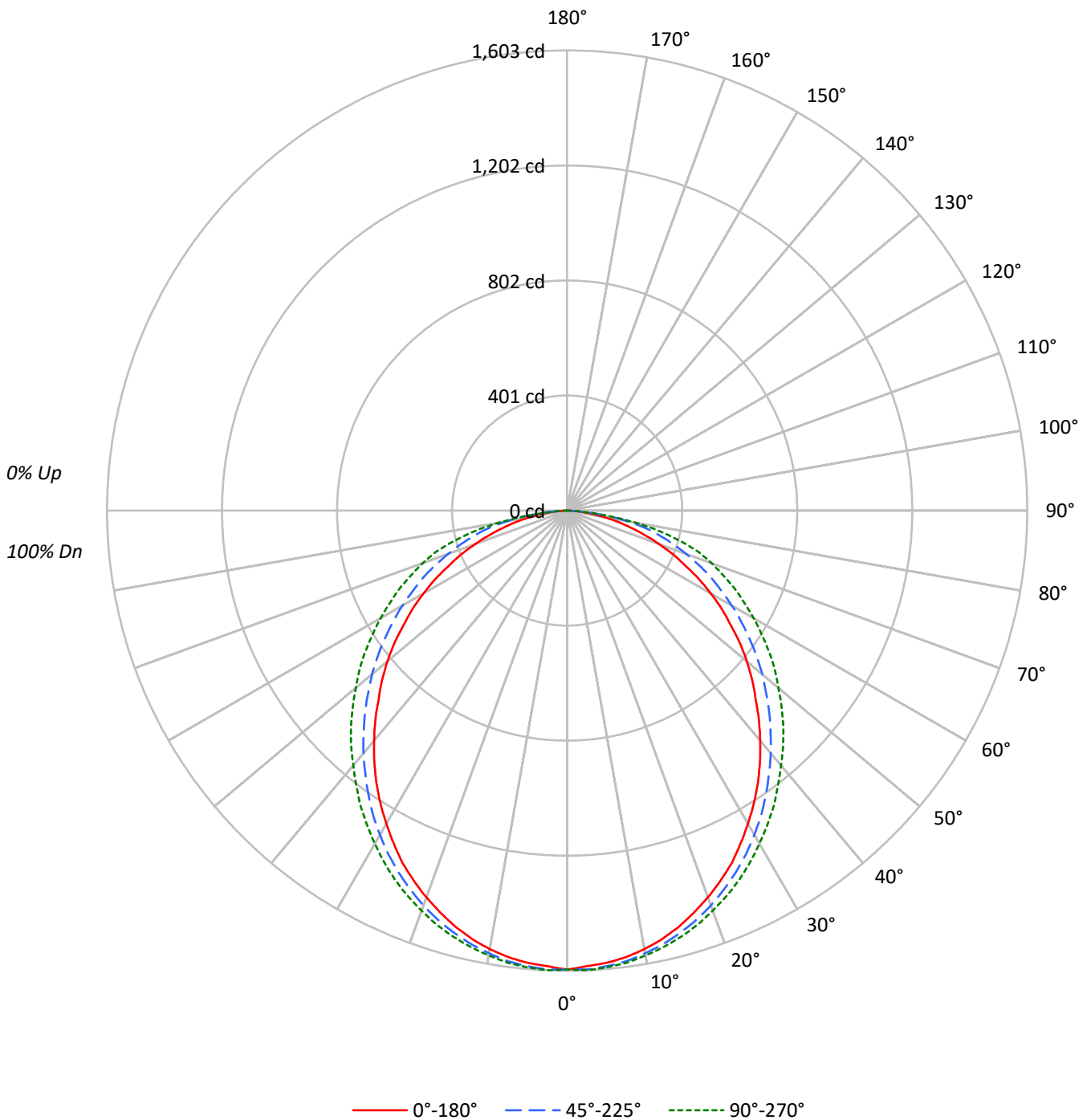
Lumens per Lamp: N/A
Luminaire Lumens: 4408.8 lumens
Efficiency: N/A
Efficacy: 146.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 30.2
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	87	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	73	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	31	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4303	4303	4303
5°	4271	4304	4314
10°	4239	4280	4300
15°	4182	4242	4280
20°	4106	4192	4248
25°	4025	4128	4213
30°	3914	4053	4163
35°	3805	3967	4123
40°	3675	3879	4072
45°	3535	3790	4053
50°	3421	3713	4021
55°	3261	3633	4031
60°	3114	3570	4042
65°	2895	3524	4106
70°	2676	3474	4208
75°	2392	3458	4234
80°	2007	3278	3696
85°	1553	2245	2100



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.1	3.4
10°-20°	428.8	9.7
20°-30°	639.4	14.5
30°-40°	754.8	17.1
40°-50°	769.3	17.4
50°-60°	693.7	15.7
60°-70°	545.3	12.4
70°-80°	341.4	7.7
80°-90°	85.1	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°	1219.2	27.7
0°-40°	1974.0	44.8
0°-60°	3437.0	78.0
0°-90°	4408.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4408.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1599	1599	1599	1599	1599	
5°	1581	1585	1593	1597	1597	150
15°	1501	1508	1522	1534	1536	423
25°	1356	1366	1390	1412	1419	623
35°	1158	1173	1208	1241	1255	724
45°	929	949	996	1044	1065	719
55°	695	716	774	834	859	624
65°	455	483	554	615	645	453
75°	230	265	333	392	407	244
85°	50	64	73	73	68	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1598.9	1598.9	1598.9	1598.9	1598.9
2.5°	1588.6	1592.3	1599.8	1602.6	1602.6
5°	1581.2	1584.9	1593.3	1597.0	1597.0
7.5°	1569.1	1572.8	1583.0	1587.7	1588.6
10°	1551.3	1556.0	1566.3	1573.7	1573.7
12.5°	1529.0	1533.6	1546.7	1556.0	1556.9
15°	1501.0	1507.6	1522.5	1533.6	1536.4
17.5°	1468.4	1478.7	1495.4	1509.4	1512.2
20°	1433.9	1444.2	1463.8	1479.6	1483.3
22.5°	1395.7	1405.1	1428.4	1447.9	1452.6
25°	1355.7	1365.9	1390.2	1411.6	1419.0
27.5°	1308.2	1320.3	1349.2	1373.4	1380.8
30°	1259.7	1274.6	1304.4	1331.5	1339.8
32.5°	1210.3	1224.3	1257.9	1286.7	1297.9
35°	1158.2	1173.1	1207.5	1241.1	1255.1
37.5°	1103.2	1118.1	1155.4	1193.6	1206.6
40°	1046.3	1064.0	1104.1	1145.1	1159.1
42.5°	988.6	1007.2	1049.1	1094.8	1113.4
45°	928.9	949.4	996.0	1044.5	1065.0
47.5°	874.9	891.7	940.1	993.2	1012.8
50°	817.1	833.0	887.0	940.1	960.6
52.5°	758.4	773.3	831.1	887.0	912.2
55°	695.1	716.5	774.3	833.9	859.1
57.5°	639.2	658.7	718.4	778.9	803.2
60°	578.6	599.1	663.4	724.9	751.0
62.5°	518.0	540.4	605.6	671.8	696.0
65°	454.7	482.6	553.5	614.9	644.8
67.5°	400.6	427.7	497.5	561.8	587.9
70°	340.1	371.8	441.6	506.9	534.8
72.5°	283.2	314.9	386.7	451.9	479.8
75°	230.1	264.6	332.6	392.3	407.2
77.5°	178.9	211.5	279.5	314.0	329.8
80°	129.5	161.2	211.5	234.8	238.5
82.5°	87.6	114.6	143.5	150.0	146.3
85°	50.3	64.3	72.7	72.7	68.0
87.5°	20.5	20.5	17.7	11.2	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)