

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: P475258

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475258
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-44-SQR-UNV-L835-CD1-U
Description: 2'X2' TROFFER LED MODULE, SQUARE LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

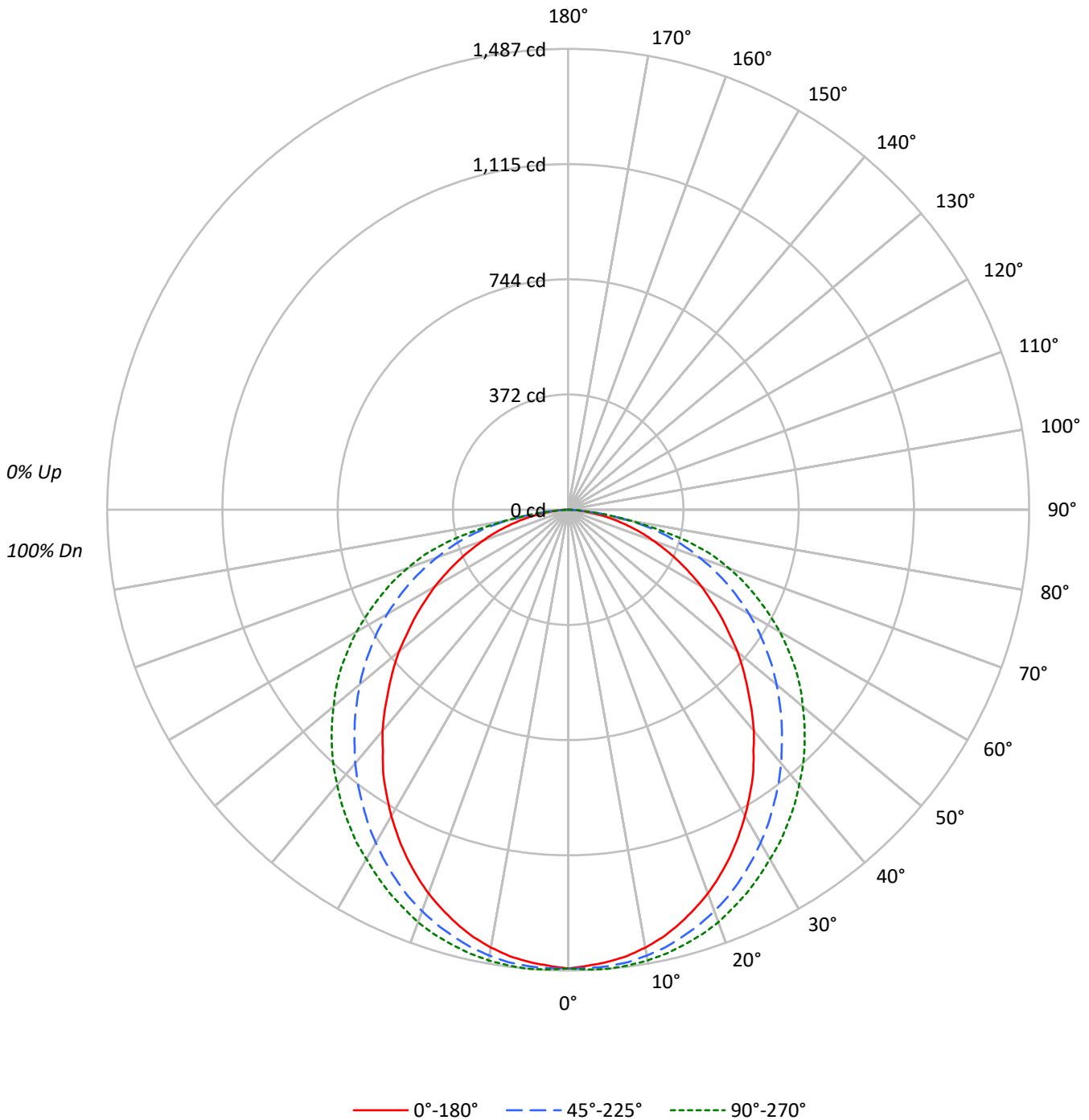
Lumens per Lamp: N/A
Luminaire Lumens: 4239.1 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 33.2
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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43					43			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37					37			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29					29			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26					26			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3985	3985	3985
5°	3957	3994	4017
10°	3920	3991	4035
15°	3857	3974	4047
20°	3774	3947	4056
25°	3668	3907	4050
30°	3545	3857	4045
35°	3417	3800	4058
40°	3272	3753	4071
45°	3116	3706	4104
50°	2982	3672	4135
55°	2822	3643	4201
60°	2674	3628	4245
65°	2498	3599	4278
70°	2294	3545	4337
75°	2072	3451	4183
80°	1777	3058	3150
85°	1430	1800	1430



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.4	3.3
10°-20°	401.4	9.5
20°-30°	602.8	14.2
30°-40°	719.0	17.0
40°-50°	743.4	17.5
50°-60°	683.4	16.1
60°-70°	544.1	12.8
70°-80°	332.4	7.8
80°-90°	72.2	1.7
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°	1144.6	27.0
0°-40°	1863.6	44.0
0°-60°	3290.3	77.6
0°-90°	4239.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4239.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1481	1481	1481	1481	1481	
5°	1465	1469	1479	1485	1487	139
15°	1384	1400	1426	1447	1453	390
25°	1235	1265	1316	1352	1364	568
35°	1040	1084	1157	1217	1235	649
45°	819	877	974	1052	1078	633
55°	602	668	776	865	895	538
65°	392	459	565	644	672	389
75°	199	258	332	390	402	212
85°	46	56	58	50	46	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1480.7	1480.7	1480.7	1480.7	1480.7
2.5°	1472.7	1474.7	1480.7	1485.0	1485.0
5°	1464.7	1468.7	1478.7	1485.0	1487.0
7.5°	1452.7	1458.7	1472.7	1480.7	1482.9
10°	1434.6	1442.7	1460.7	1472.7	1476.7
12.5°	1412.4	1424.4	1446.7	1462.7	1466.7
15°	1384.3	1400.4	1426.4	1446.7	1452.7
17.5°	1352.0	1372.1	1404.4	1428.6	1436.6
20°	1317.8	1338.0	1378.3	1406.4	1416.4
22.5°	1277.7	1303.7	1350.0	1382.3	1390.3
25°	1235.4	1265.4	1315.8	1352.0	1364.1
27.5°	1189.1	1225.4	1279.7	1324.0	1334.0
30°	1140.8	1179.1	1241.4	1289.7	1301.7
32.5°	1090.4	1134.8	1201.1	1255.4	1271.7
35°	1040.1	1084.4	1156.8	1217.3	1235.4
37.5°	981.8	1034.1	1114.7	1177.1	1199.1
40°	931.5	981.8	1068.4	1136.8	1159.0
42.5°	875.2	929.5	1020.1	1094.5	1120.7
45°	818.8	877.2	973.8	1052.4	1078.4
47.5°	766.5	824.8	925.5	1008.1	1034.1
50°	712.2	772.5	877.2	961.8	987.8
52.5°	653.9	720.2	828.9	913.5	943.7
55°	601.5	667.9	776.5	865.1	895.4
57.5°	547.2	615.6	728.4	812.8	841.1
60°	496.9	563.3	674.1	756.5	788.8
62.5°	442.6	510.9	619.6	700.2	730.5
65°	392.3	458.8	565.3	643.8	671.9
67.5°	342.0	408.5	508.9	583.5	615.6
70°	291.6	358.2	450.6	523.2	551.2
72.5°	247.6	305.9	394.3	460.8	486.9
75°	199.3	257.6	331.9	390.3	402.3
77.5°	155.0	207.3	269.6	295.7	299.9
80°	114.7	155.0	197.3	203.3	203.3
82.5°	76.4	106.6	122.7	124.7	122.7
85°	46.3	56.3	58.3	50.3	46.3
87.5°	16.0	16.0	10.0	6.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)