

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: P474566

Luminaire Tested: **24CZ2-55-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474566
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55-SQR-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

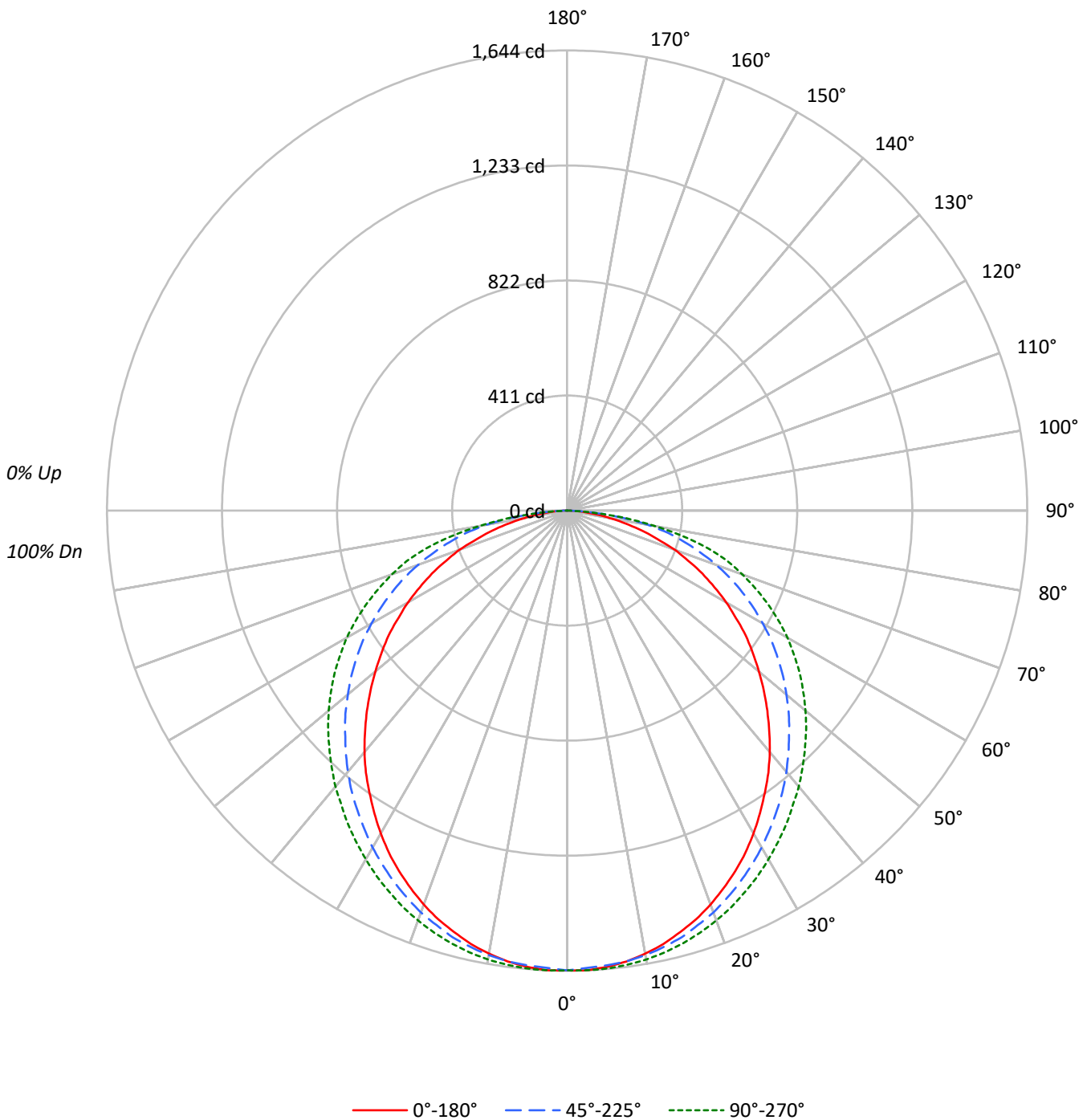
Lumens per Lamp: N/A
Luminaire Lumens: 5000.2 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43
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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4420	4420	4420
5°	4419	4406	4437
10°	4392	4407	4451
15°	4344	4398	4458
20°	4289	4376	4463
25°	4219	4345	4464
30°	4138	4319	4470
35°	4044	4293	4487
40°	3957	4279	4523
45°	3849	4268	4572
50°	3746	4281	4655
55°	3658	4310	4760
60°	3534	4342	4893
65°	3393	4395	5041
70°	3218	4456	5242
75°	2882	4519	5415
80°	2427	4531	4914
85°	1800	3427	3230



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.6	3.1
10°-20°	446.1	8.9
20°-30°	675.3	13.5
30°-40°	816.9	16.3
40°-50°	862.3	17.2
50°-60°	813.1	16.3
60°-70°	670.4	13.4
70°-80°	439.8	8.8
80°-90°	120.9	2.4
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°	1277.0	25.5
0°-40°	2093.8	41.9
0°-60°	3769.2	75.4
0°-90°	5000.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5000.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1642	1642	1642	1642	1642	
5°	1636	1636	1631	1642	1642	155
15°	1559	1568	1578	1597	1600	440
25°	1421	1439	1464	1494	1503	654
35°	1231	1263	1307	1352	1366	771
45°	1011	1057	1122	1182	1202	780
55°	780	835	919	987	1014	695
65°	533	597	690	764	792	526
75°	277	348	435	503	521	293
85°	58	101	111	108	105	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1642.4	1642.4	1642.4	1642.4	1642.4
2.5°	1644.0	1642.4	1635.2	1644.8	1644.0
5°	1636.0	1636.0	1631.2	1642.4	1642.4
7.5°	1624.8	1625.6	1624.0	1636.8	1636.8
10°	1607.3	1610.5	1612.9	1627.2	1628.8
12.5°	1586.5	1592.1	1596.9	1614.5	1616.1
15°	1559.3	1568.1	1578.5	1596.9	1600.1
17.5°	1531.4	1541.8	1552.9	1576.9	1580.9
20°	1497.8	1509.8	1528.2	1552.2	1558.5
22.5°	1460.3	1477.1	1496.2	1525.0	1533.0
25°	1421.1	1438.7	1463.5	1493.8	1503.4
27.5°	1378.8	1399.6	1427.5	1462.7	1473.1
30°	1331.7	1355.6	1390.0	1427.5	1438.7
32.5°	1282.1	1310.1	1348.4	1390.0	1402.8
35°	1231.0	1263.0	1306.9	1351.6	1366.0
37.5°	1180.7	1212.6	1264.6	1311.7	1325.3
40°	1126.4	1161.5	1218.2	1268.6	1287.7
42.5°	1068.9	1110.4	1170.3	1226.2	1244.6
45°	1011.3	1056.9	1121.6	1181.5	1201.5
47.5°	953.0	1003.3	1074.4	1135.2	1158.3
50°	894.7	948.2	1022.5	1088.0	1112.0
52.5°	835.6	891.5	972.2	1041.7	1063.3
55°	779.7	834.8	918.7	987.4	1014.5
57.5°	715.0	777.3	865.9	935.4	961.8
60°	656.6	717.4	806.8	880.3	909.1
62.5°	593.5	655.8	750.1	823.6	851.6
65°	532.8	596.7	690.2	763.7	791.7
67.5°	467.3	534.4	630.3	701.4	728.5
70°	409.0	472.1	566.4	639.1	666.2
72.5°	337.9	409.8	500.1	572.0	601.5
75°	277.2	348.3	434.6	503.3	520.8
77.5°	213.3	284.4	369.9	414.6	426.6
80°	156.6	223.7	292.4	316.3	317.1
82.5°	105.4	164.6	203.7	215.7	214.1
85°	58.3	100.7	111.0	107.8	104.6
87.5°	24.0	33.6	27.2	19.2	15.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)