

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: P474165

Luminaire Tested: **24CZ2-50-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474165
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-50-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

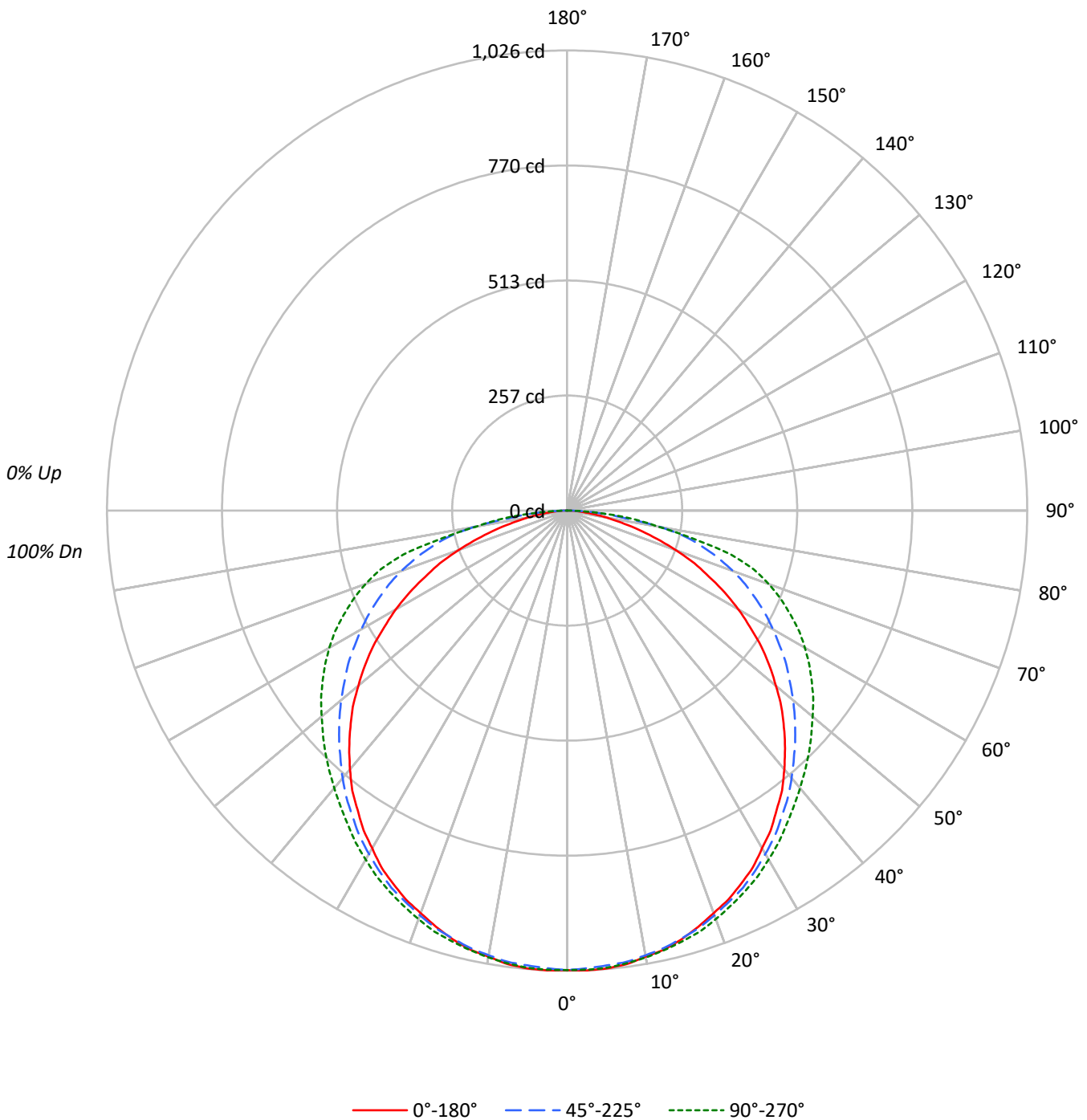
Lumens per Lamp: N/A
Luminaire Lumens: 3258.0 lumens
Efficiency: N/A
Efficacy: 81.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 39.8
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



TEST NUMBER: P474165
CATALOG NUMBER: 24CZ2-50-RDP-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474165

CATALOG NUMBER: 24CZ2-50-RDP-UNV-L830-CD1-U

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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1379	1379	1379
5°	1384	1375	1382
10°	1380	1376	1382
15°	1378	1375	1384
20°	1368	1374	1388
25°	1363	1377	1391
30°	1351	1373	1396
35°	1338	1370	1401
40°	1323	1368	1419
45°	1301	1369	1451
50°	1272	1377	1495
55°	1240	1399	1562
60°	1187	1426	1648
65°	1111	1476	1749
70°	1011	1545	1882
75°	857	1630	1966
80°	676	1640	1590
85°	499	1247	1397



TEST NUMBER: P474165

CATALOG NUMBER: 24CZ2-50-RDP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.2	3.0
10°-20°	279.7	8.6
20°-30°	427.7	13.1
30°-40°	522.9	16.0
40°-50°	557.3	17.1
50°-60°	532.8	16.4
60°-70°	451.4	13.9
70°-80°	303.4	9.3
80°-90°	85.6	2.6
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°	804.6	24.7
0°-40°	1327.5	40.7
0°-60°	2417.7	74.2
0°-90°	3258.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3258.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1025	1025	1025	1025	1025	
5°	1025	1023	1018	1023	1023	97
15°	989	989	987	996	994	279
25°	918	921	928	936	937	423
35°	814	821	834	850	853	510
45°	684	695	719	750	763	527
55°	528	548	596	643	666	471
65°	349	385	464	525	549	347
75°	165	225	314	367	378	176
85°	32	66	81	87	90	40
90°	0	0	0	0	0	



TEST NUMBER: P474165

CATALOG NUMBER: 24CZ2-50-RDP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1024.6	1024.6	1024.6	1024.6	1024.6
2.5°	1026.2	1026.2	1021.4	1024.6	1024.6
5°	1024.6	1023.0	1018.1	1023.0	1023.0
7.5°	1019.8	1018.1	1014.9	1019.8	1018.1
10°	1010.1	1010.1	1006.8	1011.7	1011.7
12.5°	1002.0	1000.3	998.7	1005.2	1003.6
15°	989.0	989.0	987.4	995.5	993.9
17.5°	972.9	974.5	976.1	982.6	984.2
20°	955.1	958.3	959.9	969.6	969.6
22.5°	938.9	940.5	943.8	953.5	953.5
25°	917.9	921.1	927.6	935.7	937.3
27.5°	896.9	898.5	906.6	917.9	919.5
30°	869.4	874.2	883.9	896.9	898.5
32.5°	845.1	850.0	861.3	874.2	877.5
35°	814.4	820.9	833.8	850.0	853.2
37.5°	786.9	791.8	807.9	825.7	830.6
40°	753.1	762.7	778.8	799.9	807.9
42.5°	719.2	728.9	748.3	775.6	785.3
45°	683.6	694.9	719.2	749.9	762.7
47.5°	648.0	661.0	688.5	724.0	738.6
50°	607.6	623.8	657.7	698.2	714.3
52.5°	568.8	588.2	625.4	670.7	691.7
55°	528.4	547.8	596.3	643.2	665.8
57.5°	483.1	509.0	562.3	615.7	640.0
60°	441.2	465.3	530.0	588.2	612.5
62.5°	396.0	428.3	497.7	559.1	583.4
65°	349.1	384.7	463.7	525.2	549.4
67.5°	307.0	345.8	429.9	491.2	515.5
70°	256.9	305.4	392.7	454.0	478.3
72.5°	210.0	263.4	353.9	413.8	436.4
75°	164.8	224.6	313.5	366.9	378.2
77.5°	122.9	185.8	271.5	294.1	286.0
80°	87.3	148.8	211.6	200.3	205.2
82.5°	56.6	113.2	131.0	148.8	153.4
85°	32.3	66.3	80.8	87.3	90.5
87.5°	14.6	24.3	32.3	32.3	30.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)