

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: P474166

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474166
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55-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

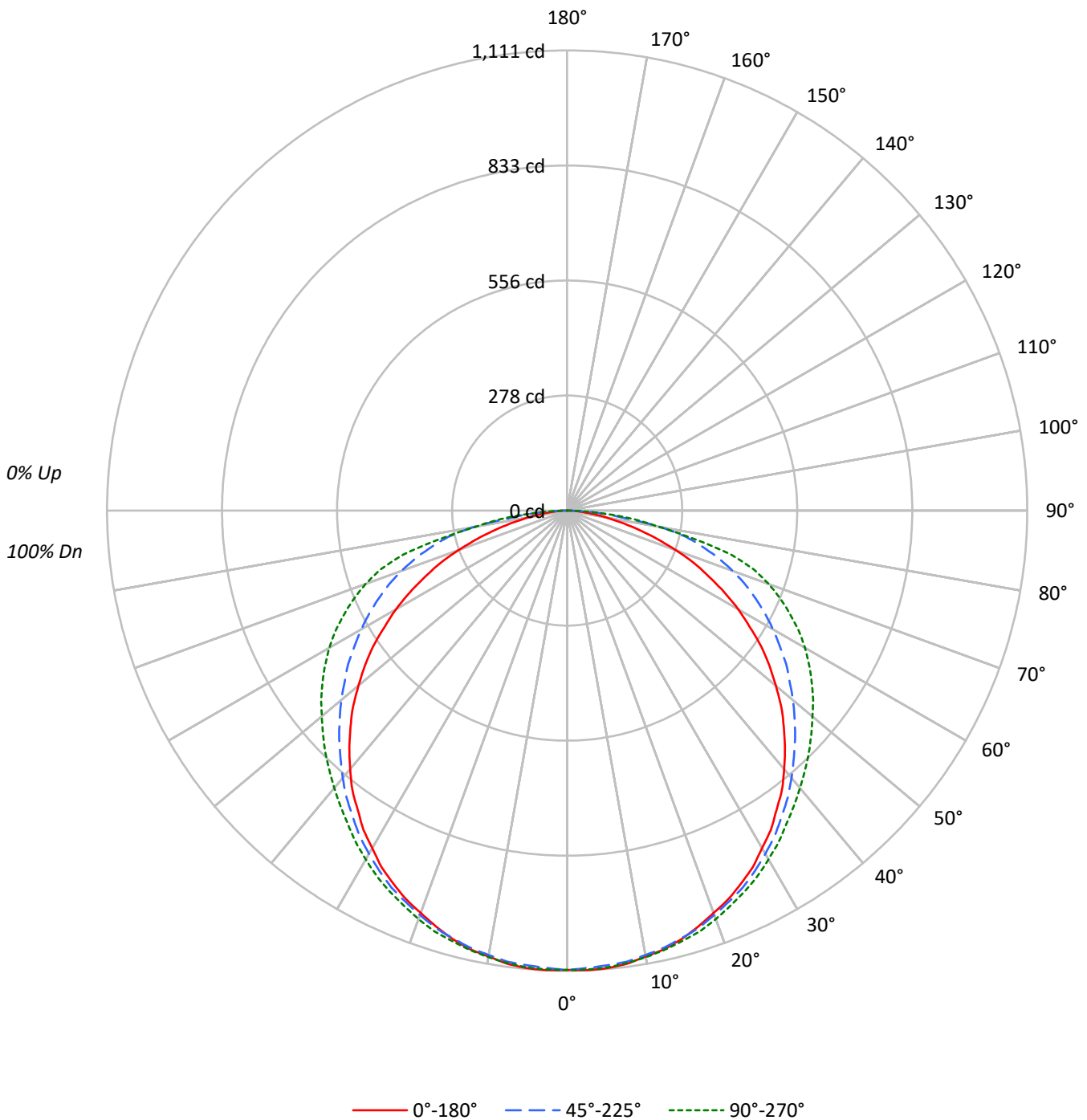
Lumens per Lamp: N/A
Luminaire Lumens: 3526.4 lumens
Efficiency: N/A
Efficacy: 82.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P474166
CATALOG NUMBER: 24CZ2-55-RDP-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P474166

CATALOG NUMBER: 24CZ2-55-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°	1492	1492	1492
5°	1498	1488	1495
10°	1494	1489	1496
15°	1491	1489	1498
20°	1480	1488	1503
25°	1475	1491	1506
30°	1462	1486	1511
35°	1448	1482	1517
40°	1432	1481	1536
45°	1408	1481	1571
50°	1377	1490	1618
55°	1342	1514	1691
60°	1285	1544	1784
65°	1203	1598	1893
70°	1094	1672	2037
75°	927	1764	2128
80°	732	1775	1721
85°	540	1351	1513



TEST NUMBER: P474166

CATALOG NUMBER: 24CZ2-55-RDP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.2	3.0
10°-20°	302.8	8.6
20°-30°	463.0	13.1
30°-40°	565.9	16.0
40°-50°	603.2	17.1
50°-60°	576.7	16.4
60°-70°	488.6	13.9
70°-80°	328.3	9.3
80°-90°	92.7	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°	870.9	24.7
0°-40°	1436.8	40.7
0°-60°	2616.8	74.2
0°-90°	3526.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3526.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1109	1109	1109	1109	1109	
5°	1109	1107	1102	1107	1107	105
15°	1070	1070	1069	1078	1076	302
25°	994	997	1004	1013	1014	458
35°	882	888	902	920	924	552
45°	740	752	778	812	826	571
55°	572	593	645	696	721	509
65°	378	416	502	568	595	375
75°	178	243	339	397	409	191
85°	35	72	88	94	98	43
90°	0	0	0	0	0	



TEST NUMBER: P474166

CATALOG NUMBER: 24CZ2-55-RDP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1109.0	1109.0	1109.0	1109.0	1109.0
2.5°	1110.7	1110.7	1105.5	1109.0	1109.0
5°	1109.0	1107.2	1102.0	1107.2	1107.2
7.5°	1103.7	1102.0	1098.5	1103.7	1102.0
10°	1093.2	1093.2	1089.7	1095.0	1095.0
12.5°	1084.5	1082.7	1081.0	1088.0	1086.2
15°	1070.5	1070.5	1068.7	1077.5	1075.7
17.5°	1053.0	1054.7	1056.5	1063.5	1065.2
20°	1033.7	1037.2	1039.0	1049.5	1049.5
22.5°	1016.2	1018.0	1021.5	1032.0	1032.0
25°	993.5	997.0	1004.0	1012.7	1014.5
27.5°	970.7	972.5	981.2	993.5	995.2
30°	941.0	946.2	956.7	970.7	972.5
32.5°	914.7	920.0	932.2	946.2	949.7
35°	881.5	888.5	902.5	920.0	923.5
37.5°	851.7	857.0	874.5	893.7	899.0
40°	815.2	825.5	843.0	865.7	874.5
42.5°	778.4	788.9	809.9	839.5	850.0
45°	739.9	752.2	778.4	811.7	825.5
47.5°	701.4	715.4	745.2	783.7	799.4
50°	657.7	675.2	711.9	755.7	773.2
52.5°	615.7	636.7	676.9	725.9	748.7
55°	571.9	592.9	645.4	696.2	720.7
57.5°	522.9	550.9	608.7	666.4	692.7
60°	477.6	503.7	573.7	636.7	662.9
62.5°	428.6	463.6	538.7	605.2	631.4
65°	377.8	416.3	501.9	568.4	594.7
67.5°	332.3	374.3	465.3	531.7	557.9
70°	278.1	330.6	425.1	491.4	517.7
72.5°	227.3	285.1	383.1	447.8	472.3
75°	178.3	243.1	339.3	397.1	409.3
77.5°	133.0	201.1	293.8	318.3	309.6
80°	94.5	161.0	229.1	216.8	222.1
82.5°	61.3	122.5	141.8	161.0	166.1
85°	35.0	71.8	87.5	94.5	98.0
87.5°	15.8	26.3	35.0	35.0	33.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)