

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: P474215

Luminaire Tested: **24CZ2-50-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474215  
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-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

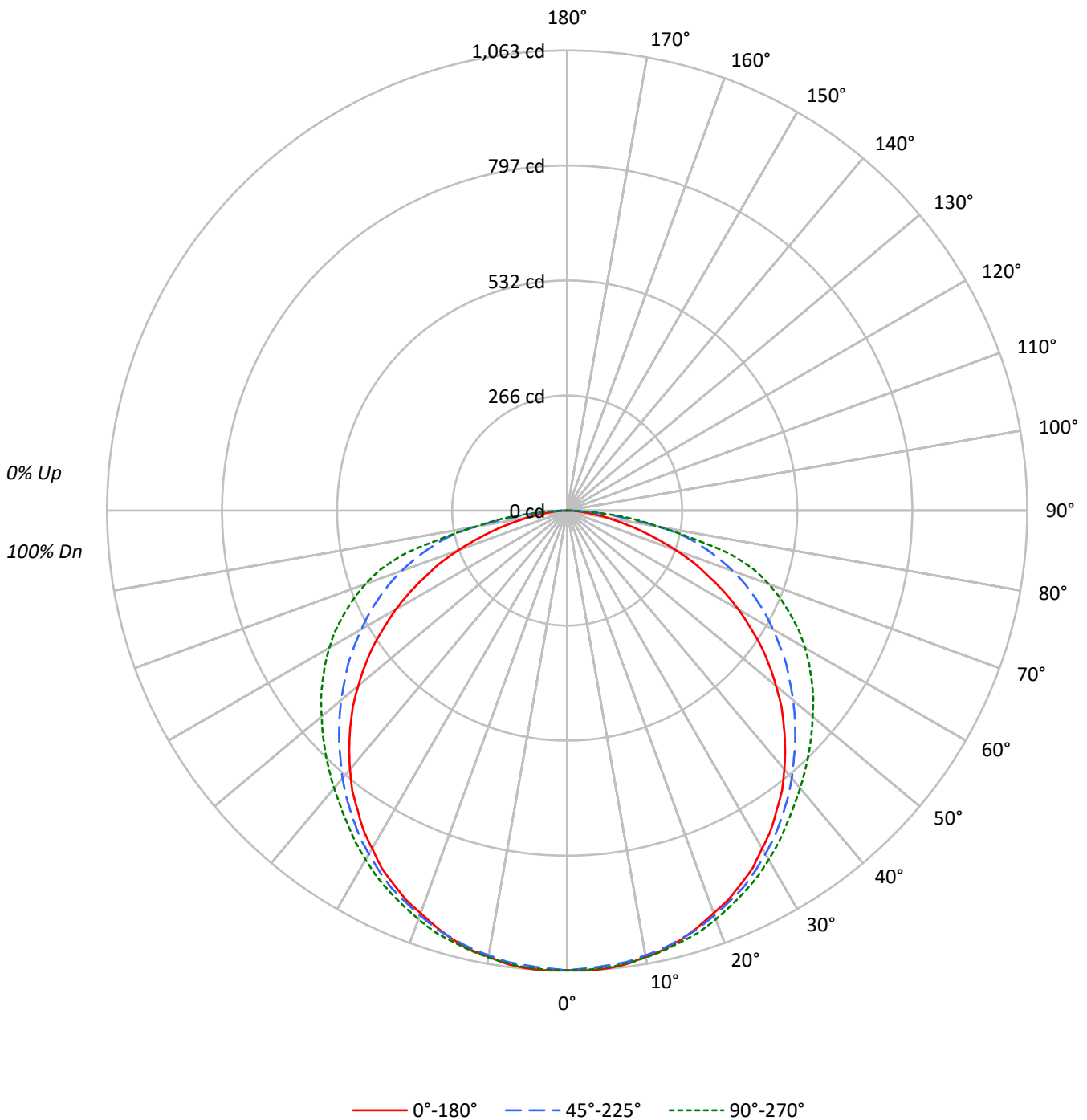
Lumens per Lamp: N/A  
Luminaire Lumens: 3376.1 lumens  
Efficiency: N/A  
Efficacy: 84.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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



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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	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°	1429	1429	1429
5°	1434	1425	1432
10°	1430	1425	1432
15°	1428	1425	1435
20°	1417	1424	1439
25°	1412	1427	1442
30°	1400	1423	1447
35°	1386	1419	1452
40°	1371	1418	1470
45°	1348	1418	1504
50°	1318	1427	1549
55°	1285	1449	1619
60°	1230	1478	1708
65°	1152	1530	1812
70°	1047	1601	1950
75°	887	1689	2037
80°	701	1699	1647
85°	517	1294	1448



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.7	3.0
10°-20°	289.9	8.6
20°-30°	443.2	13.1
30°-40°	541.8	16.0
40°-50°	577.5	17.1
50°-60°	552.2	16.4
60°-70°	467.7	13.9
70°-80°	314.4	9.3
80°-90°	88.7	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°	833.8	24.7
0°-40°	1375.7	40.7
0°-60°	2505.3	74.2
0°-90°	3376.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3376.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1062	1062	1062	1062	1062	
5°	1062	1060	1055	1060	1060	101
15°	1025	1025	1023	1032	1030	289
25°	951	954	961	970	971	438
35°	844	851	864	881	884	529
45°	708	720	745	777	790	546
55°	548	568	618	666	690	488
65°	362	399	480	544	569	359
75°	171	233	325	380	392	183
85°	34	69	84	90	94	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1061.8	1061.8	1061.8	1061.8	1061.8
2.5°	1063.4	1063.4	1058.4	1061.8	1061.8
5°	1061.8	1060.1	1055.1	1060.1	1060.1
7.5°	1056.7	1055.1	1051.7	1056.7	1055.1
10°	1046.7	1046.7	1043.3	1048.4	1048.4
12.5°	1038.3	1036.6	1035.0	1041.7	1040.0
15°	1024.9	1024.9	1023.2	1031.6	1029.9
17.5°	1008.1	1009.8	1011.5	1018.2	1019.9
20°	989.7	993.1	994.7	1004.8	1004.8
22.5°	973.0	974.6	978.0	988.0	988.0
25°	951.2	954.5	961.2	969.6	971.3
27.5°	929.4	931.1	939.5	951.2	952.9
30°	900.9	905.9	916.0	929.4	931.1
32.5°	875.8	880.8	892.5	905.9	909.3
35°	843.9	850.7	864.1	880.8	884.2
37.5°	815.5	820.5	837.2	855.7	860.7
40°	780.4	790.3	807.1	828.9	837.2
42.5°	745.3	755.3	775.4	803.7	813.8
45°	708.4	720.1	745.3	777.1	790.3
47.5°	671.5	684.9	713.4	750.3	765.4
50°	629.7	646.4	681.6	723.5	740.2
52.5°	589.4	609.5	648.1	695.0	716.8
55°	547.6	567.7	617.9	666.5	690.0
57.5°	500.6	527.4	582.7	638.0	663.2
60°	457.2	482.2	549.2	609.5	634.7
62.5°	410.3	443.8	515.7	579.4	604.5
65°	361.7	398.6	480.5	544.2	569.3
67.5°	318.2	358.4	445.5	509.0	534.1
70°	266.2	316.5	407.0	470.5	495.6
72.5°	217.6	272.9	366.8	428.8	452.2
75°	170.7	232.7	324.9	380.2	391.9
77.5°	127.3	192.5	281.3	304.8	296.4
80°	90.5	154.1	219.3	207.6	212.6
82.5°	58.6	117.3	135.7	154.1	159.0
85°	33.5	68.7	83.8	90.5	93.8
87.5°	15.1	25.1	33.5	33.5	31.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)