

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: P276805

Luminaire Tested: **24CZ2-50-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276805  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50-RDP-UNV-L83050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3373.0 lumens  
Efficiency: N/A  
Efficacy: 81.0 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

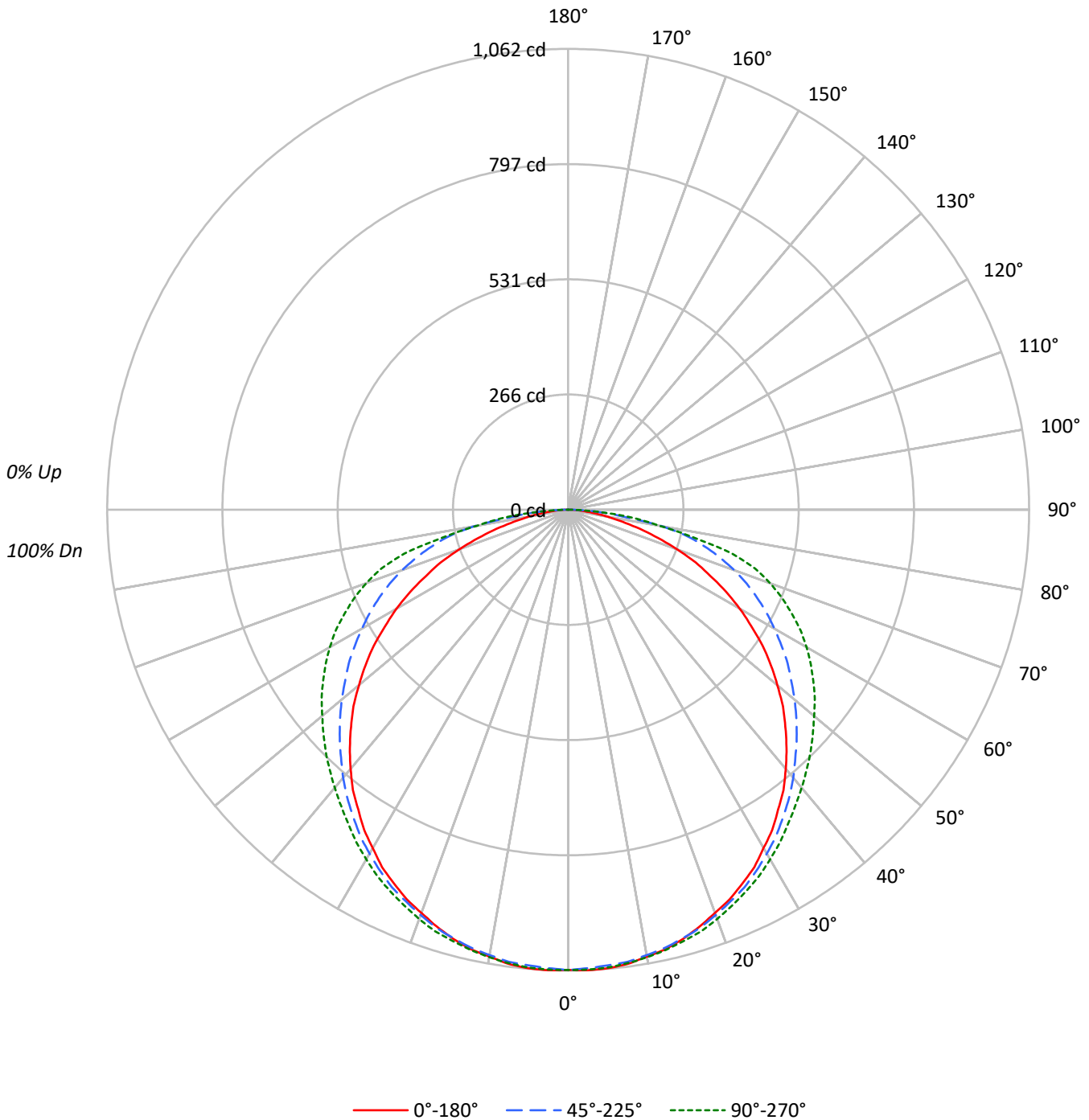
Input Watts (W): 41.656839  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276805

CATALOG NUMBER: 24CZ2-50-RDP-UNV-L83050-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P276805

CATALOG NUMBER: 24CZ2-50-RDP-UNV-L83050-W2A1-U-4500K

**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°	1427	1427	1427
5°	1433	1424	1430
10°	1429	1424	1431
15°	1426	1424	1433
20°	1416	1423	1437
25°	1411	1426	1441
30°	1398	1422	1445
35°	1385	1418	1451
40°	1369	1416	1469
45°	1347	1417	1503
50°	1317	1425	1548
55°	1283	1448	1617
60°	1229	1477	1706
65°	1151	1529	1811
70°	1046	1600	1948
75°	887	1687	2035
80°	700	1698	1647
85°	517	1292	1447



TEST NUMBER: P276805

CATALOG NUMBER: 24CZ2-50-RDP-UNV-L83050-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.6	3.0
10°-20°	289.6	8.6
20°-30°	442.8	13.1
30°-40°	541.3	16.0
40°-50°	577.0	17.1
50°-60°	551.7	16.4
60°-70°	467.3	13.9
70°-80°	314.1	9.3
80°-90°	88.6	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°	833.0	24.7
0°-40°	1374.4	40.7
0°-60°	2503.0	74.2
0°-90°	3373.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3373.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1061	1061	1061	1061	1061	
5°	1061	1059	1054	1059	1059	101
15°	1024	1024	1022	1031	1029	289
25°	950	954	960	969	970	438
35°	843	850	863	880	883	528
45°	708	719	744	776	790	546
55°	547	567	617	666	689	487
65°	361	398	480	544	569	359
75°	171	233	325	380	392	183
85°	34	69	84	90	94	41
90°	0	0	0	0	0	



TEST NUMBER: P276805

CATALOG NUMBER: 24CZ2-50-RDP-UNV-L83050-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1060.7	1060.7	1060.7	1060.7	1060.7
2.5°	1062.4	1062.4	1057.4	1060.7	1060.7
5°	1060.7	1059.0	1054.0	1059.0	1059.0
7.5°	1055.7	1054.0	1050.7	1055.7	1054.0
10°	1045.7	1045.7	1042.3	1047.3	1047.3
12.5°	1037.3	1035.6	1033.9	1040.6	1039.0
15°	1023.9	1023.9	1022.2	1030.6	1028.9
17.5°	1007.2	1008.8	1010.5	1017.2	1018.9
20°	988.8	992.1	993.8	1003.8	1003.8
22.5°	972.0	973.7	977.1	987.1	987.1
25°	950.3	953.6	960.3	968.7	970.4
27.5°	928.5	930.2	938.6	950.3	952.0
30°	900.1	905.1	915.2	928.5	930.2
32.5°	875.0	880.0	891.7	905.1	908.5
35°	843.2	849.9	863.3	880.0	883.4
37.5°	814.8	819.8	836.5	854.9	859.9
40°	779.6	789.7	806.4	828.2	836.5
42.5°	744.5	754.5	774.6	803.1	813.1
45°	707.7	719.4	744.5	776.3	789.7
47.5°	670.9	684.3	712.7	749.5	764.6
50°	629.1	645.8	680.9	722.8	739.5
52.5°	588.9	609.0	647.5	694.3	716.1
55°	547.1	567.2	617.4	665.9	689.3
57.5°	500.2	527.0	582.2	637.4	662.5
60°	456.7	481.8	548.8	609.0	634.1
62.5°	409.9	443.4	515.3	578.9	604.0
65°	361.4	398.2	480.2	543.7	568.8
67.5°	317.9	358.0	445.0	508.6	533.7
70°	266.0	316.2	406.6	470.1	495.2
72.5°	217.5	272.7	366.4	428.3	451.7
75°	170.7	232.6	324.6	379.8	391.5
77.5°	127.2	192.4	281.1	304.5	296.1
80°	90.3	153.9	219.2	207.5	212.5
82.5°	58.6	117.1	135.5	153.9	158.9
85°	33.5	68.6	83.7	90.3	93.7
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)