

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: P391254

Luminaire Tested: **24CZ2-30VHE-RDP-UNV-L950-CD1-SDWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P391254  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30VHE-RDP-UNV-L950-CD1-SDWPD1-U  
Description: 2x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1791.5 lumens  
Efficiency: N/A  
Efficacy: 87.8 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

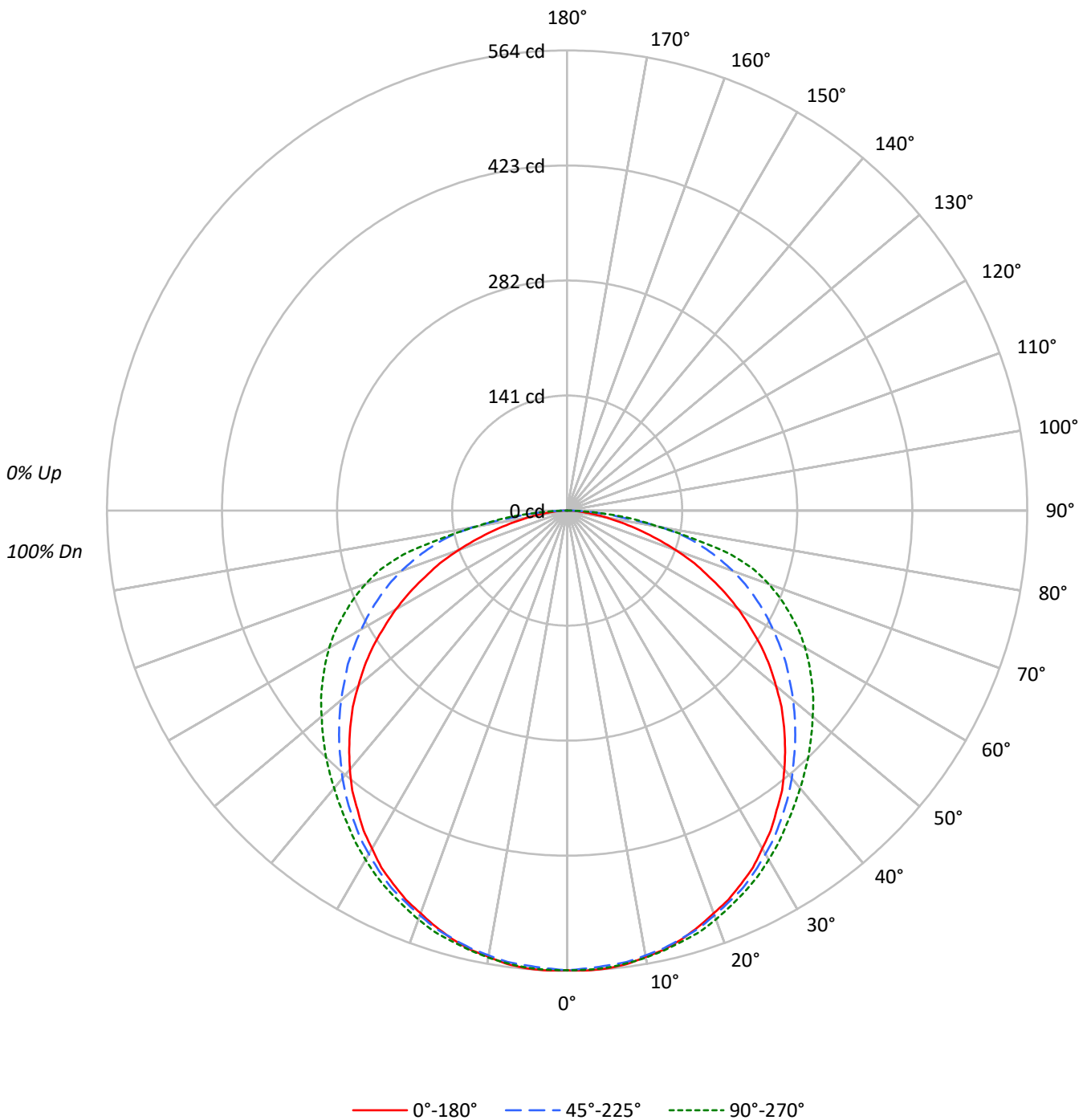
Input Watts (W): 20.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P391254

CATALOG NUMBER: 24CZ2-30VHE-RDP-UNV-L950-CD1-SDWPD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P391254

CATALOG NUMBER: 24CZ2-30VHE-RDP-UNV-L950-CD1-SDWPD1-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°	758	758	758
5°	761	756	760
10°	759	756	760
15°	757	756	761
20°	752	756	763
25°	749	757	765
30°	743	755	768
35°	736	753	771
40°	727	752	780
45°	715	752	798
50°	699	757	822
55°	682	769	859
60°	653	784	906
65°	611	812	962
70°	556	849	1035
75°	471	896	1081
80°	372	902	875
85°	275	685	769



TEST NUMBER: P391254

CATALOG NUMBER: 24CZ2-30VHE-RDP-UNV-L950-CD1-SDWPD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.4	3.0
10°-20°	153.8	8.6
20°-30°	235.2	13.1
30°-40°	287.5	16.0
40°-50°	306.4	17.1
50°-60°	293.0	16.4
60°-70°	248.2	13.9
70°-80°	166.8	9.3
80°-90°	47.1	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°	442.4	24.7
0°-40°	730.0	40.7
0°-60°	1329.4	74.2
0°-90°	1791.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1791.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	563	562	560	562	562	54
15°	544	544	543	547	546	153
25°	505	506	510	514	515	233
35°	448	451	458	467	469	281
45°	376	382	395	412	419	290
55°	291	301	328	354	366	259
65°	192	212	255	289	302	191
75°	91	124	172	202	208	97
85°	18	36	44	48	50	22
90°	0	0	0	0	0	



TEST NUMBER: P391254

CATALOG NUMBER: 24CZ2-30VHE-RDP-UNV-L950-CD1-SDWPD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	563.4	563.4	563.4	563.4	563.4
2.5°	564.3	564.3	561.6	563.4	563.4
5°	563.4	562.5	559.8	562.5	562.5
7.5°	560.7	559.8	558.0	560.7	559.8
10°	555.4	555.4	553.6	556.3	556.3
12.5°	550.9	550.0	549.2	552.7	551.8
15°	543.8	543.8	542.9	547.4	546.5
17.5°	534.9	535.8	536.7	540.3	541.2
20°	525.2	526.9	527.8	533.2	533.2
22.5°	516.3	517.2	518.9	524.3	524.3
25°	504.7	506.5	510.1	514.5	515.4
27.5°	493.2	494.1	498.5	504.7	505.6
30°	478.1	480.7	486.1	493.2	494.1
32.5°	464.7	467.4	473.6	480.7	482.5
35°	447.9	451.4	458.5	467.4	469.2
37.5°	432.8	435.4	444.3	454.1	456.7
40°	414.1	419.4	428.3	439.9	444.3
42.5°	395.4	400.8	411.4	426.5	431.9
45°	375.9	382.1	395.4	412.3	419.4
47.5°	356.3	363.4	378.5	398.1	406.1
50°	334.1	343.0	361.7	383.9	392.8
52.5°	312.8	323.5	343.9	368.8	380.3
55°	290.6	301.2	327.9	353.7	366.1
57.5°	265.7	279.9	309.2	338.6	351.9
60°	242.6	255.9	291.5	323.5	336.8
62.5°	217.7	235.5	273.7	307.5	320.8
65°	191.9	211.5	255.0	288.8	302.1
67.5°	168.8	190.2	236.4	270.1	283.5
70°	141.3	167.9	215.9	249.7	263.0
72.5°	115.5	144.8	194.6	227.5	239.9
75°	90.6	123.5	172.4	201.7	207.9
77.5°	67.5	102.2	149.3	161.7	157.3
80°	48.0	81.8	116.4	110.2	112.9
82.5°	31.1	62.2	72.0	81.8	84.4
85°	17.8	36.4	44.4	48.0	49.8
87.5°	8.0	13.3	17.8	17.8	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)