

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: P391351

Luminaire Tested: **24CZ2-40VHE-RDP-UNV-L950-CD1-SWPD1-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: P391351
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: 24CZ2-40VHE-RDP-UNV-L950-CD1-SWPD1-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: 2434.3 lumens
Efficiency: N/A
Efficacy: 92.9 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

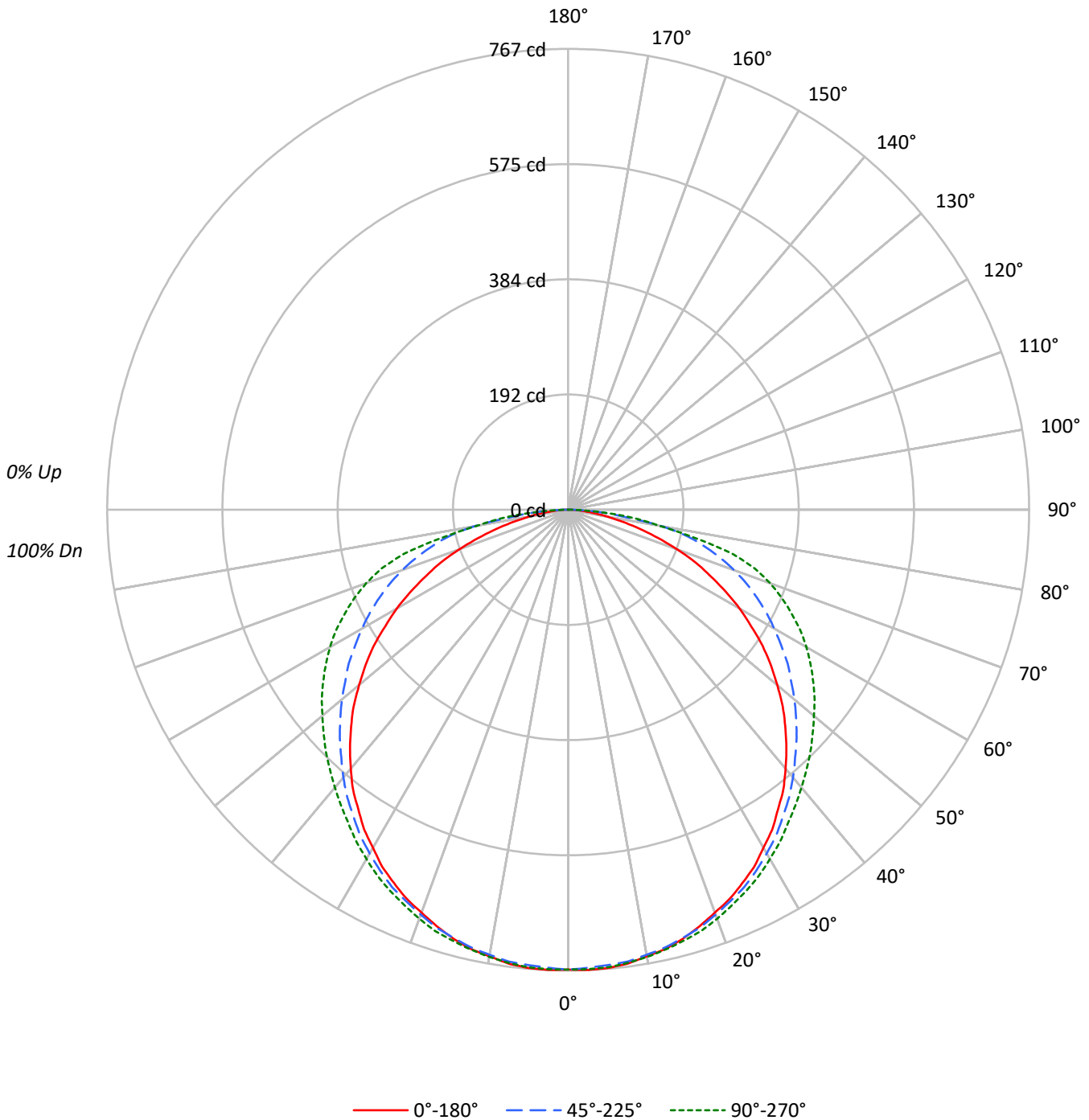
Input Watts (W): 26.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P391351

CATALOG NUMBER: 24CZ2-40VHE-RDP-UNV-L950-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P391351

CATALOG NUMBER: 24CZ2-40VHE-RDP-UNV-L950-CD1-SWPD1-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°	1030	1030	1030
5°	1034	1027	1032
10°	1031	1028	1033
15°	1029	1028	1034
20°	1022	1027	1037
25°	1018	1029	1040
30°	1009	1026	1043
35°	1000	1023	1047
40°	988	1022	1060
45°	972	1022	1084
50°	950	1029	1117
55°	926	1045	1167
60°	887	1066	1231
65°	830	1103	1307
70°	755	1154	1406
75°	640	1218	1469
80°	505	1226	1188
85°	372	932	1044



TEST NUMBER: P391351

CATALOG NUMBER: 24CZ2-40VHE-RDP-UNV-L950-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.6	3.0
10°-20°	209.0	8.6
20°-30°	319.6	13.1
30°-40°	390.7	16.0
40°-50°	416.4	17.1
50°-60°	398.1	16.4
60°-70°	337.3	13.9
70°-80°	226.7	9.3
80°-90°	63.9	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°	601.2	24.7
0°-40°	991.9	40.7
0°-60°	1806.4	74.2
0°-90°	2434.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2434.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	766	766	766	766	766	
5°	766	764	761	764	764	73
15°	739	739	738	744	743	208
25°	686	688	693	699	700	316
35°	609	613	623	635	638	381
45°	511	519	537	560	570	394
55°	395	409	446	481	498	352
65°	261	287	346	392	410	259
75°	123	168	234	274	282	132
85°	24	50	60	65	68	30
90°	0	0	0	0	0	



TEST NUMBER: P391351

CATALOG NUMBER: 24CZ2-40VHE-RDP-UNV-L950-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	765.5	765.5	765.5	765.5	765.5
2.5°	766.7	766.7	763.1	765.5	765.5
5°	765.5	764.3	760.7	764.3	764.3
7.5°	761.9	760.7	758.3	761.9	760.7
10°	754.7	754.7	752.2	755.9	755.9
12.5°	748.6	747.4	746.2	751.0	749.8
15°	739.0	739.0	737.7	743.8	742.6
17.5°	726.9	728.1	729.3	734.1	735.3
20°	713.6	716.0	717.2	724.5	724.5
22.5°	701.5	702.7	705.1	712.4	712.4
25°	685.8	688.2	693.1	699.1	700.3
27.5°	670.1	671.3	677.4	685.8	687.0
30°	649.6	653.2	660.5	670.1	671.3
32.5°	631.5	635.1	643.6	653.2	655.6
35°	608.6	613.4	623.0	635.1	637.5
37.5°	588.0	591.6	603.7	617.0	620.6
40°	562.7	569.9	582.0	597.7	603.7
42.5°	537.3	544.6	559.0	579.6	586.8
45°	510.7	519.2	537.3	560.3	569.9
47.5°	484.2	493.8	514.4	540.9	551.8
50°	454.0	466.1	491.4	521.6	533.7
52.5°	425.0	439.5	467.3	501.1	516.8
55°	394.8	409.3	445.5	480.6	497.5
57.5°	361.0	380.3	420.2	460.0	478.1
60°	329.6	347.7	396.0	439.5	457.6
62.5°	295.8	320.0	371.9	417.8	435.9
65°	260.8	287.4	346.5	392.4	410.5
67.5°	229.4	258.4	321.2	367.1	385.2
70°	192.0	228.2	293.4	339.3	357.4
72.5°	157.0	196.8	264.4	309.1	326.0
75°	123.2	167.8	234.2	274.1	282.5
77.5°	91.8	138.9	202.9	219.8	213.7
80°	65.2	111.1	158.2	149.7	153.3
82.5°	42.3	84.5	97.8	111.1	114.7
85°	24.1	49.5	60.4	65.2	67.6
87.5°	10.9	18.1	24.1	24.1	22.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)