

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: P391303

Luminaire Tested: **24CZ2-35VHE-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: P391303
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: 24CZ2-35VHE-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: 2123.5 lumens
Efficiency: N/A
Efficacy: 93.1 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

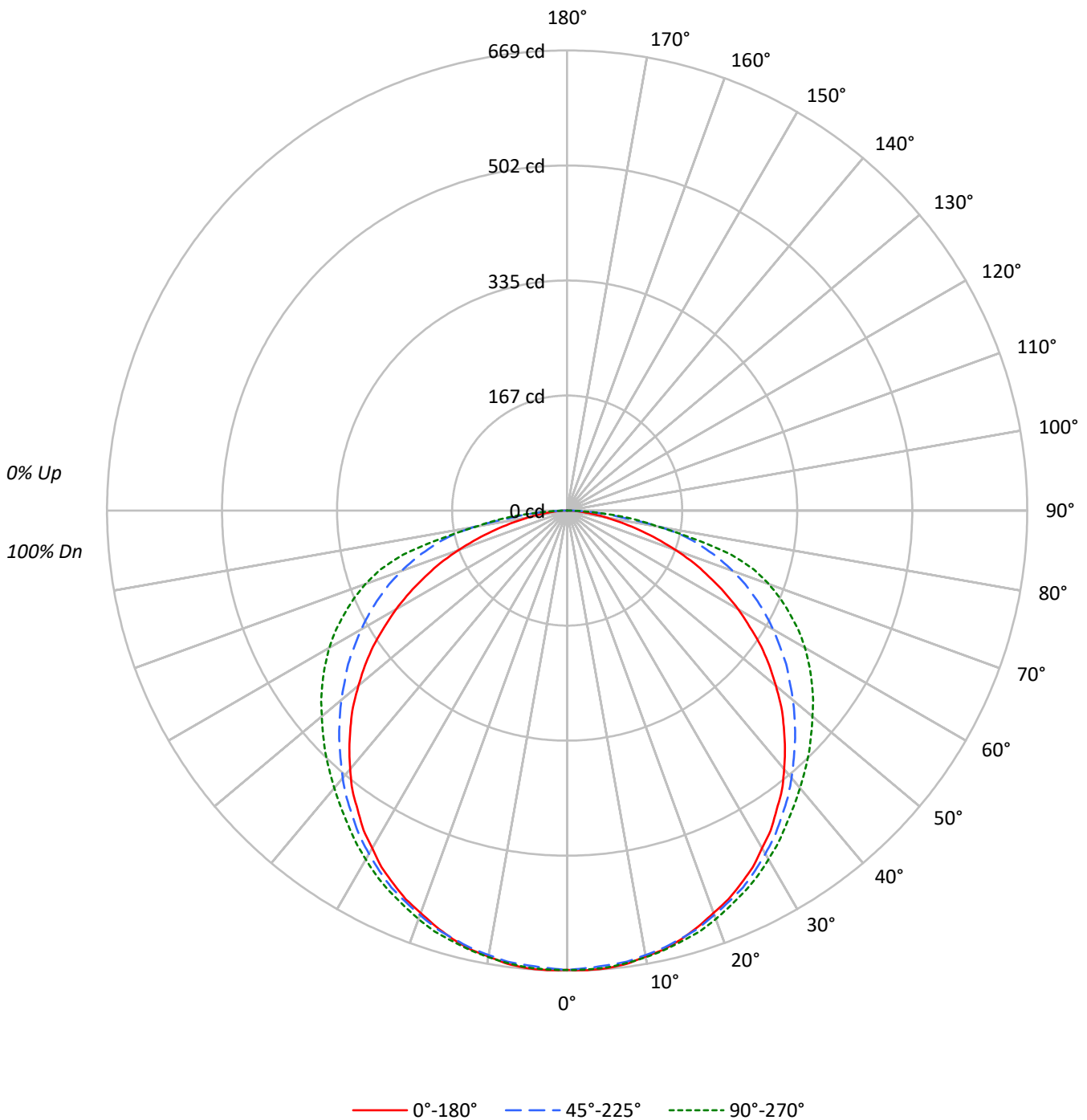
Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	899	899	899
5°	902	896	900
10°	899	897	901
15°	898	897	902
20°	891	896	905
25°	888	898	907
30°	880	895	910
35°	872	893	913
40°	862	892	925
45°	848	892	946
50°	829	897	975
55°	808	912	1018
60°	774	930	1074
65°	724	962	1140
70°	659	1007	1227
75°	558	1062	1281
80°	441	1069	1037
85°	326	814	911



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	3.0
10°-20°	182.3	8.6
20°-30°	278.8	13.1
30°-40°	340.8	16.0
40°-50°	363.2	17.1
50°-60°	347.3	16.4
60°-70°	294.2	13.9
70°-80°	197.7	9.3
80°-90°	55.8	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°	524.4	24.7
0°-40°	865.2	40.7
0°-60°	1575.8	74.2
0°-90°	2123.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2123.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	668	668	668	668	668	
5°	668	667	664	667	667	63
15°	645	645	644	649	648	182
25°	598	600	605	610	611	276
35°	531	535	544	554	556	333
45°	446	453	469	489	497	344
55°	344	357	389	419	434	307
65°	228	251	302	342	358	226
75°	107	146	204	239	246	115
85°	21	43	53	57	59	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	667.8	667.8	667.8	667.8	667.8
2.5°	668.8	668.8	665.7	667.8	667.8
5°	667.8	666.7	663.6	666.7	666.7
7.5°	664.6	663.6	661.5	664.6	663.6
10°	658.3	658.3	656.2	659.4	659.4
12.5°	653.0	652.0	650.9	655.1	654.1
15°	644.6	644.6	643.6	648.8	647.8
17.5°	634.1	635.1	636.2	640.4	641.4
20°	622.5	624.6	625.6	632.0	632.0
22.5°	612.0	613.0	615.1	621.4	621.4
25°	598.3	600.4	604.6	609.8	610.9
27.5°	584.6	585.6	590.9	598.3	599.3
30°	566.7	569.8	576.1	584.6	585.6
32.5°	550.9	554.0	561.4	569.8	571.9
35°	530.9	535.1	543.5	554.0	556.1
37.5°	512.9	516.1	526.6	538.2	541.4
40°	490.8	497.1	507.7	521.4	526.6
42.5°	468.7	475.0	487.7	505.6	511.9
45°	445.5	452.9	468.7	488.7	497.1
47.5°	422.4	430.8	448.7	471.9	481.3
50°	396.0	406.6	428.7	455.0	465.6
52.5°	370.8	383.4	407.6	437.1	450.8
55°	344.4	357.1	388.7	419.2	434.0
57.5°	314.9	331.8	366.5	401.3	417.1
60°	287.5	303.3	345.5	383.4	399.2
62.5°	258.1	279.1	324.4	364.4	380.2
65°	227.5	250.7	302.3	342.3	358.1
67.5°	200.1	225.4	280.2	320.2	336.0
70°	167.5	199.1	255.9	296.0	311.8
72.5°	136.9	171.7	230.7	269.6	284.4
75°	107.4	146.4	204.3	239.1	246.5
77.5°	80.0	121.1	177.0	191.7	186.4
80°	56.9	96.9	138.0	130.6	133.8
82.5°	36.9	73.7	85.3	96.9	100.1
85°	21.1	43.2	52.7	56.9	59.0
87.5°	9.5	15.8	21.1	21.1	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)