

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: P387777

Luminaire Tested: **22CZ2-24VHE-SQR-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: P387777
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24VHE-SQR-UNV-L950-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2124.9 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

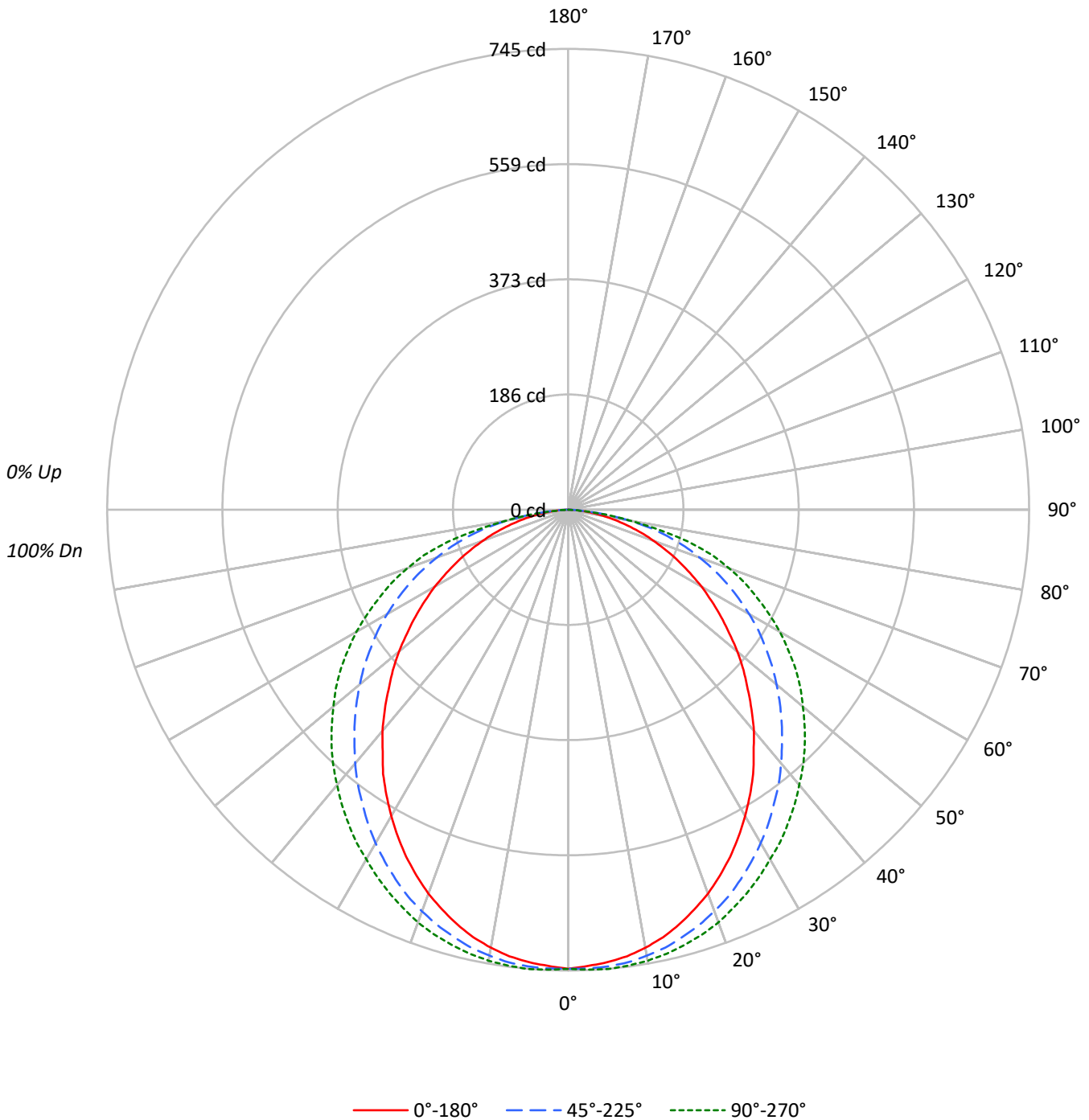
Input Watts (W): 17.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1998	1998	1998
5°	1983	2002	2013
10°	1965	2001	2023
15°	1933	1992	2029
20°	1892	1978	2033
25°	1839	1958	2030
30°	1777	1934	2027
35°	1713	1905	2034
40°	1640	1881	2041
45°	1562	1858	2057
50°	1495	1841	2073
55°	1415	1826	2106
60°	1341	1819	2127
65°	1252	1805	2145
70°	1150	1777	2174
75°	1038	1730	2097
80°	891	1531	1579
85°	716	902	716



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.4	3.3
10°-20°	201.2	9.5
20°-30°	302.2	14.2
30°-40°	360.4	17.0
40°-50°	372.6	17.5
50°-60°	342.6	16.1
60°-70°	272.7	12.8
70°-80°	166.6	7.8
80°-90°	36.2	1.7
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°	573.7	27.0
0°-40°	934.1	44.0
0°-60°	1649.3	77.6
0°-90°	2124.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2124.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	742	742	742	742	742	
5°	734	736	741	744	745	70
15°	694	702	715	725	728	195
25°	619	634	660	678	684	285
35°	521	544	580	610	619	325
45°	410	440	488	528	541	317
55°	302	335	389	434	449	270
65°	197	230	283	323	337	195
75°	100	129	166	196	202	106
85°	23	28	29	25	23	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	742.3	742.3	742.3	742.3	742.3
2.5°	738.2	739.3	742.3	744.3	744.3
5°	734.2	736.2	741.3	744.3	745.3
7.5°	728.2	731.2	738.2	742.3	743.3
10°	719.1	723.1	732.2	738.2	740.3
12.5°	708.0	714.0	725.1	733.2	735.2
15°	693.9	701.9	715.0	725.1	728.2
17.5°	677.7	687.8	704.0	716.1	720.1
20°	660.6	670.7	690.8	705.0	710.0
22.5°	640.4	653.5	676.7	692.9	696.9
25°	619.2	634.4	659.6	677.7	683.8
27.5°	596.0	614.2	641.4	663.6	668.7
30°	571.8	591.0	622.3	646.5	652.5
32.5°	546.6	568.8	602.1	629.3	637.4
35°	521.4	543.6	579.9	610.2	619.2
37.5°	492.2	518.4	558.7	590.0	601.1
40°	466.9	492.2	535.5	569.8	580.9
42.5°	438.7	465.9	511.3	548.6	561.8
45°	410.5	439.7	488.1	527.5	540.6
47.5°	384.3	413.5	463.9	505.3	518.4
50°	357.0	387.3	439.7	482.1	495.2
52.5°	327.8	361.1	415.5	457.9	473.0
55°	301.6	334.8	389.3	433.7	448.8
57.5°	274.3	308.6	365.1	407.4	421.6
60°	249.1	282.4	337.9	379.2	395.3
62.5°	221.9	256.2	310.6	351.0	366.1
65°	196.7	229.9	283.4	322.7	336.8
67.5°	171.5	204.7	255.2	292.5	308.6
70°	146.2	179.5	225.9	262.2	276.3
72.5°	124.0	153.3	197.7	231.0	244.1
75°	99.8	129.1	166.4	195.7	201.7
77.5°	77.7	103.9	135.1	148.3	150.3
80°	57.5	77.7	98.8	101.9	101.9
82.5°	38.3	53.5	61.5	62.5	61.5
85°	23.2	28.2	29.2	25.2	23.2
87.5°	8.1	8.1	5.0	3.0	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)