

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: P388232

Luminaire Tested: **22CZ2-24VHE-UNV-L950-CD1-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: P388232
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-24VHE-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

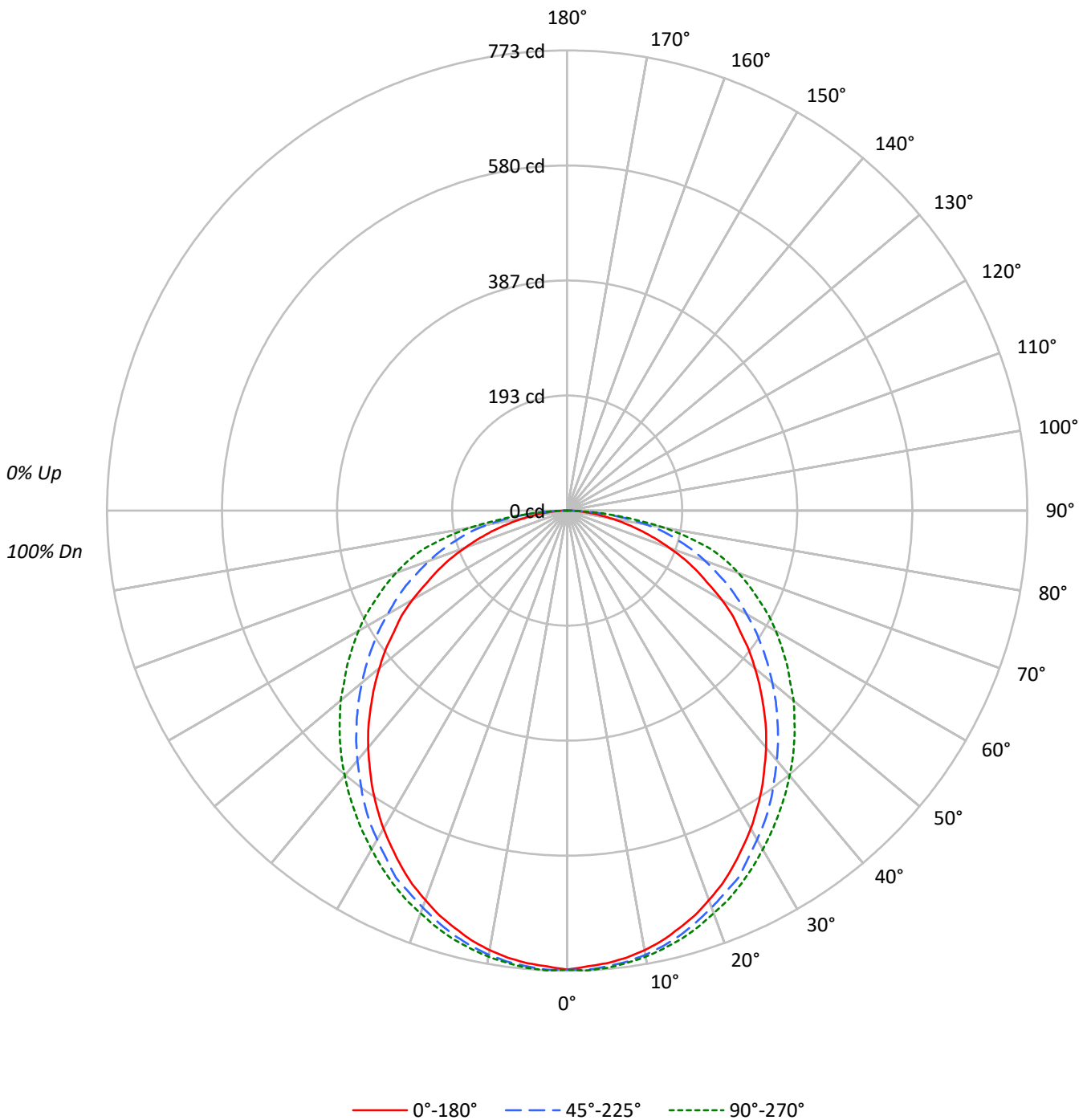
Lumens per Lamp: N/A
Luminaire Lumens: 2267.7 lumens
Efficiency: N/A
Efficacy: 129.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2075	2075	2075
5°	2062	2077	2083
10°	2049	2070	2079
15°	2024	2055	2074
20°	1994	2032	2061
25°	1958	2021	2054
30°	1917	1983	2042
35°	1873	1958	2038
40°	1827	1925	2042
45°	1775	1902	2055
50°	1724	1883	2079
55°	1665	1874	2115
60°	1616	1873	2180
65°	1535	1904	2259
70°	1431	1940	2405
75°	1311	2007	2599
80°	1141	2092	2559
85°	1000	1862	2032



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.9	3.2
10°-20°	207.7	9.2
20°-30°	311.8	13.7
30°-40°	372.6	16.4
40°-50°	387.4	17.1
50°-60°	359.1	15.8
60°-70°	294.5	13.0
70°-80°	199.1	8.8
80°-90°	62.6	2.8
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°	592.4	26.1
0°-40°	965.0	42.6
0°-60°	1711.5	75.5
0°-90°	2267.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2267.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	771	771	771	771	771	
5°	763	764	769	770	771	72
15°	726	730	738	742	744	205
25°	660	665	681	688	692	304
35°	570	578	596	614	620	356
45°	466	475	500	529	540	360
55°	355	366	400	435	451	319
65°	241	254	299	338	355	238
75°	126	147	193	232	250	134
85°	32	45	60	67	66	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	771.1	771.1	771.1	771.1	771.1
2.5°	766.6	768.8	772.2	773.3	773.3
5°	763.2	764.4	768.8	769.9	771.1
7.5°	757.7	759.9	764.4	765.5	766.6
10°	749.9	752.1	757.7	759.9	761.0
12.5°	739.8	742.0	748.7	752.1	753.2
15°	726.4	729.8	737.6	742.0	744.3
17.5°	713.0	716.4	724.2	730.9	733.1
20°	696.3	704.1	709.7	718.6	719.7
22.5°	679.6	684.0	694.1	703.0	707.5
25°	659.5	665.1	680.7	688.5	691.8
27.5°	638.3	646.1	658.4	670.6	675.1
30°	617.1	622.7	638.3	652.8	657.2
32.5°	593.6	601.4	618.2	632.7	639.4
35°	570.2	578.0	595.9	613.7	620.4
37.5°	544.5	553.5	571.3	592.5	601.4
40°	520.0	526.7	547.9	573.6	581.4
42.5°	494.3	502.1	524.5	552.4	561.3
45°	466.4	475.4	499.9	528.9	540.1
47.5°	439.6	448.6	475.4	504.4	517.8
50°	411.8	422.9	449.7	483.2	496.6
52.5°	385.0	395.0	425.1	459.7	472.0
55°	354.8	366.0	399.5	435.2	450.8
57.5°	330.3	338.1	374.9	411.8	427.4
60°	300.2	310.2	348.1	387.2	405.1
62.5°	267.8	284.5	323.6	363.8	381.6
65°	241.0	254.4	299.1	338.1	354.8
67.5°	213.1	227.6	271.2	312.4	331.4
70°	181.9	200.9	246.6	287.9	305.7
72.5°	154.0	174.1	220.9	261.1	280.1
75°	126.1	147.3	193.0	232.1	250.0
77.5°	99.3	122.7	167.4	197.5	208.7
80°	73.6	96.0	135.0	156.2	165.1
82.5°	51.3	70.3	99.3	110.5	112.7
85°	32.4	44.6	60.3	67.0	65.8
87.5°	14.5	17.9	22.3	24.5	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)