

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: P230538

Luminaire Tested: **22CZ-LD5-24-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-24-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2179.0 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

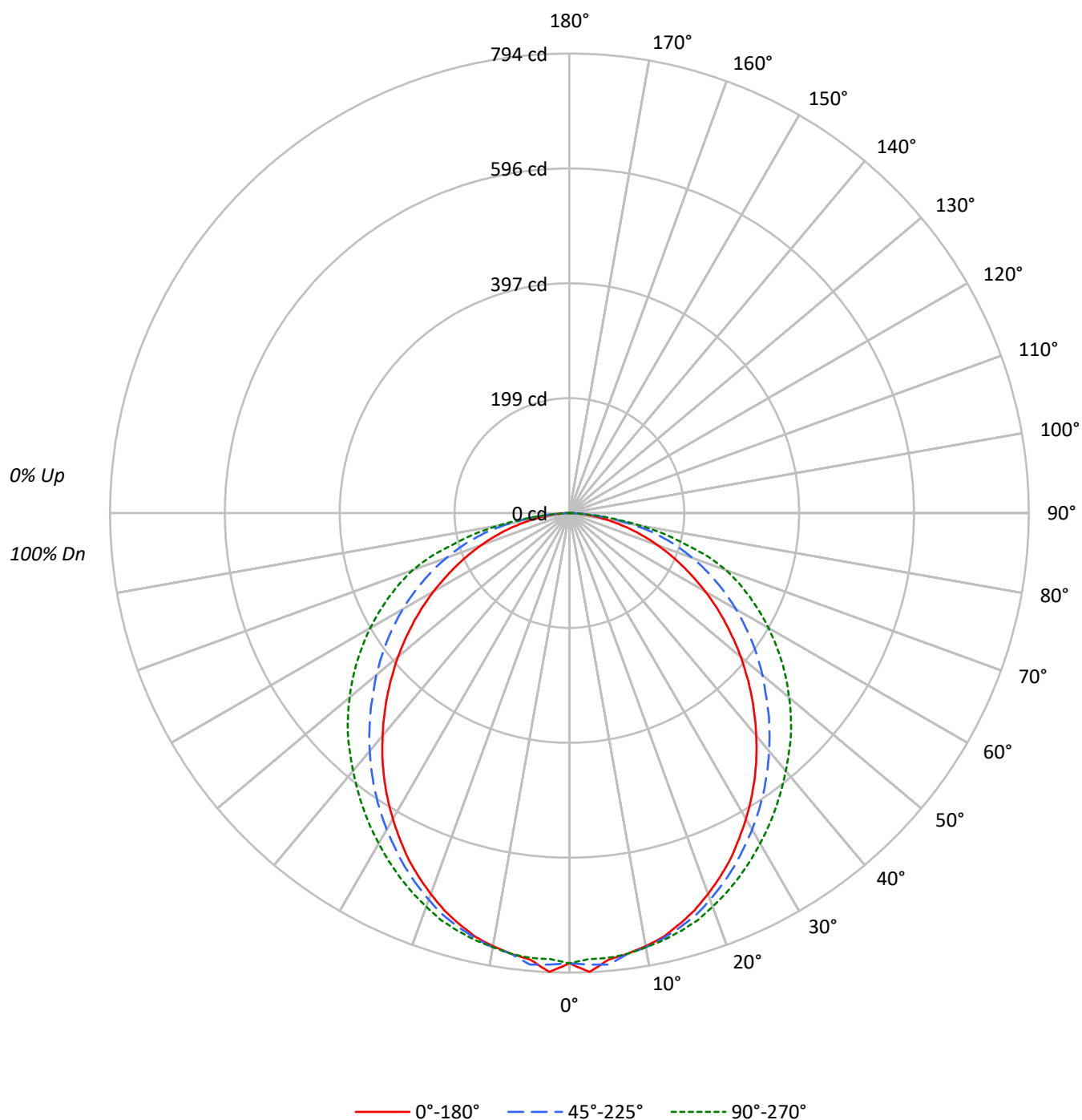
Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	104	99	95	106	101	97	94		97	94	91		93	90	88		89	87	85
2	98	90	83	77	96	88	82	76		84	79	74		81	77	73		78	74	71
3	90	79	70	64	87	77	69	63		74	68	62		71	66	61		69	64	60
4	82	70	61	54	80	68	60	54		66	59	53		64	57	52		61	56	51
5	75	62	53	46	73	61	53	46		59	51	46		57	50	45		55	49	45
6	70	56	47	41	68	55	47	40		53	46	40		52	45	40		50	44	39
7	65	51	42	36	63	50	42	36		48	41	35		47	40	35		46	40	35
8	60	46	38	32	58	46	38	32		44	37	32		43	36	31		42	36	31
9	56	43	34	29	55	42	34	29		41	34	29		40	33	28		39	33	28
10	53	39	31	26	51	39	31	26		38	31	26		37	30	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2093	2093	2093
5°	2092	2115	2084
10°	2076	2082	2082
15°	2049	2064	2081
20°	2006	2036	2072
25°	1957	2001	2061
30°	1896	1962	2048
35°	1834	1925	2043
40°	1764	1887	2043
45°	1694	1851	2061
50°	1619	1823	2076
55°	1541	1804	2103
60°	1460	1791	2139
65°	1370	1781	2193
70°	1275	1776	2268
75°	1157	1774	2148
80°	1001	1643	1905
85°	852	1244	1210



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.8	3.4
10°-20°	209.0	9.6
20°-30°	310.8	14.3
30°-40°	367.6	16.9
40°-50°	377.9	17.3
50°-60°	345.3	15.8
60°-70°	276.2	12.7
70°-80°	173.3	8.0
80°-90°	45.2	2.1
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°	593.6	27.2
0°-40°	961.2	44.1
0°-60°	1684.3	77.3
0°-90°	2179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	778	778	778	778	778	
5°	775	775	783	778	771	74
15°	735	736	741	745	747	207
25°	659	663	674	686	694	303
35°	558	566	586	608	622	349
45°	445	457	486	522	542	343
55°	328	344	385	427	448	294
65°	215	234	280	322	344	213
75°	111	132	171	196	207	118
85°	28	35	40	39	39	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	777.8	777.8	777.8	777.8	777.8
2.5°	793.7	790.5	780.9	774.6	771.4
5°	774.6	774.6	783.1	777.8	771.4
7.5°	768.2	768.2	768.2	784.1	768.2
10°	759.7	760.8	761.9	768.2	761.9
12.5°	750.2	750.2	752.3	754.4	755.5
15°	735.4	736.4	740.7	744.9	747.0
17.5°	719.5	722.7	728.0	733.3	737.5
20°	700.4	704.6	711.0	719.5	723.7
22.5°	680.3	684.5	693.0	702.5	709.9
25°	659.1	663.3	673.9	685.6	694.0
27.5°	634.7	640.0	652.7	668.6	677.1
30°	610.3	616.7	631.5	649.5	659.1
32.5°	584.9	592.3	609.3	629.4	641.1
35°	558.4	565.8	586.0	608.2	622.0
37.5°	530.9	539.3	561.6	587.0	601.9
40°	502.3	511.8	537.2	564.8	581.7
42.5°	473.6	484.2	511.8	544.6	561.6
45°	445.0	456.7	486.4	522.4	541.5
47.5°	415.4	429.1	459.9	500.1	519.2
50°	386.8	400.5	435.5	476.8	495.9
52.5°	357.1	373.0	410.1	452.5	472.6
55°	328.5	344.4	384.6	427.0	448.2
57.5°	299.9	315.8	358.2	401.6	422.8
60°	271.3	288.2	332.7	375.1	397.4
62.5°	242.7	260.7	306.2	349.7	370.9
65°	215.1	234.2	279.7	322.1	344.4
67.5°	188.6	208.7	253.2	294.6	316.8
70°	162.1	182.3	225.7	266.0	288.2
72.5°	136.7	156.8	199.2	235.2	252.2
75°	111.3	132.5	170.6	196.0	206.6
77.5°	86.9	108.1	140.9	157.9	169.5
80°	64.6	82.7	106.0	118.7	122.9
82.5°	44.5	59.3	74.2	77.4	79.5
85°	27.6	35.0	40.3	39.2	39.2
87.5°	12.7	13.8	11.7	8.5	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)