

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: P259411

Luminaire Tested: **22CZ-LD5-24-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259411
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25712)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-24-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1934.0 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.24 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

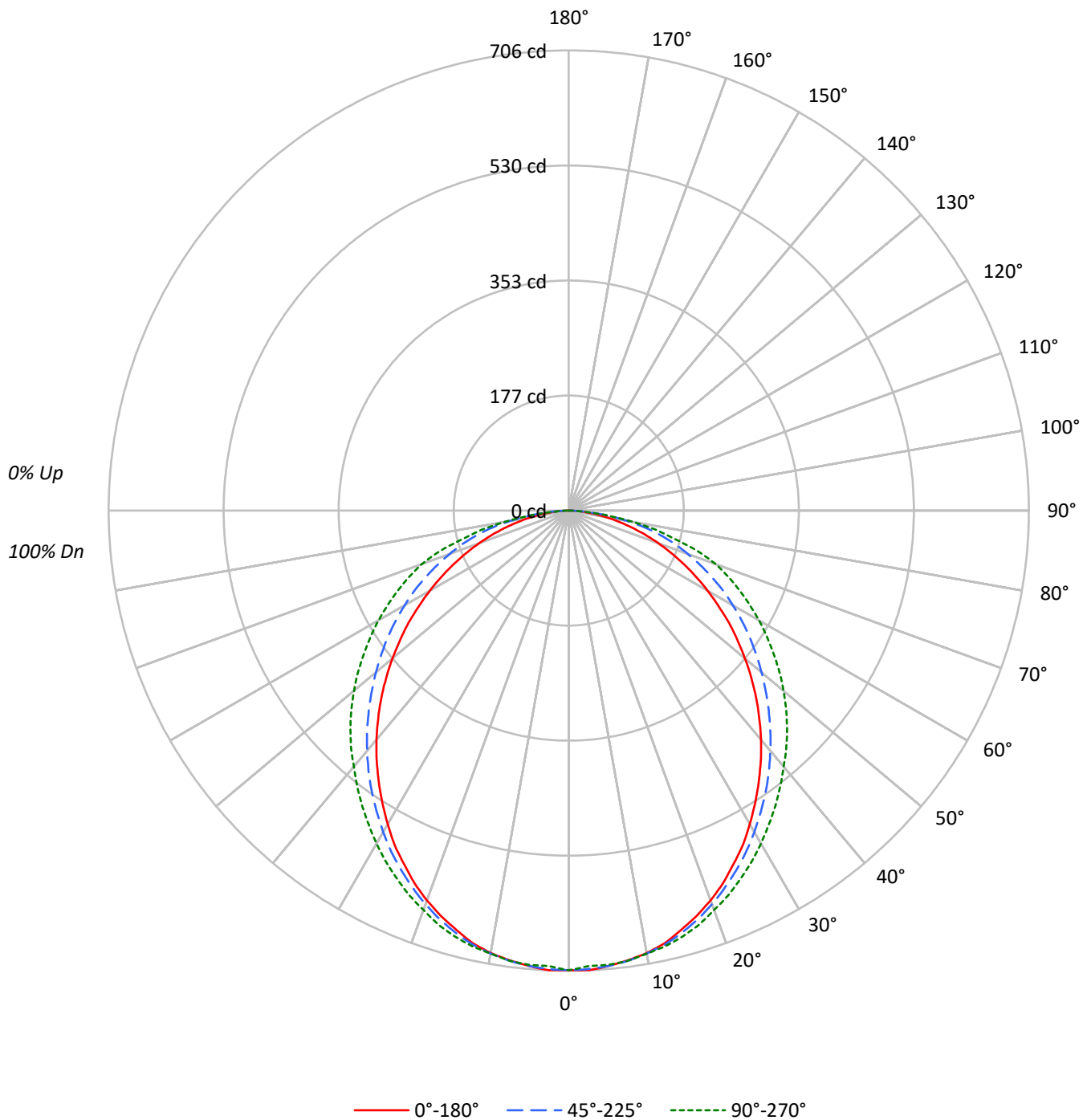
Input Watts (W): 17.981271
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P259411

CATALOG NUMBER: 22CZ-LD5-24-S-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P259411

CATALOG NUMBER: 22CZ-LD5-24-S-UNV-L93050-W2A1-U-3000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	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	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	77	85	79	75	81	77	73	78	75	71	69		
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	64	60	58		
4	82	70	61	54	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43		
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38		
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30		
9	56	43	35	29	55	42	34	29	41	34	29	40	34	29	39	33	29	27		
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1897	1897	1897
5°	1894	1894	1890
10°	1884	1886	1886
15°	1855	1869	1884
20°	1822	1841	1867
25°	1776	1806	1851
30°	1726	1769	1833
35°	1669	1730	1816
40°	1612	1690	1801
45°	1549	1651	1803
50°	1478	1618	1801
55°	1407	1591	1800
60°	1325	1565	1815
65°	1242	1544	1840
70°	1147	1527	1886
75°	1033	1516	1748
80°	907	1410	1526
85°	747	1062	948



TEST NUMBER: P259411

CATALOG NUMBER: 22CZ-LD5-24-S-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.6	3.4
10°-20°	189.1	9.8
20°-30°	280.9	14.5
30°-40°	330.7	17.1
40°-50°	337.1	17.4
50°-60°	304.0	15.7
60°-70°	239.5	12.4
70°-80°	147.7	7.6
80°-90°	38.3	2.0
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°	536.6	27.7
0°-40°	867.3	44.8
0°-60°	1508.5	78.0
0°-90°	1934.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1934.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	705	705	705	705	705	
5°	701	702	701	700	700	67
15°	666	669	671	674	676	188
25°	598	602	608	619	623	276
35°	508	514	527	543	553	318
45°	407	413	434	460	474	314
55°	300	310	339	370	384	268
65°	195	209	242	273	289	193
75°	99	116	146	163	168	106
85°	24	31	34	32	31	28
90°	0	0	0	0	0	



TEST NUMBER: P259411

CATALOG NUMBER: 22CZ-LD5-24-S-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	705.1	705.1	705.1	705.1	705.1
2.5°	706.0	706.0	704.1	702.3	699.5
5°	701.3	702.3	701.3	700.4	699.5
7.5°	695.8	696.7	696.7	696.7	696.7
10°	689.3	690.2	690.2	690.2	690.2
12.5°	680.0	680.9	681.8	682.8	684.6
15°	666.0	668.8	670.7	674.4	676.3
17.5°	652.1	654.9	657.7	662.3	666.0
20°	636.3	638.2	642.8	648.4	652.1
22.5°	618.7	621.5	626.1	633.5	639.1
25°	598.2	601.9	608.4	618.7	623.3
27.5°	578.7	581.5	589.9	601.0	607.5
30°	555.5	559.2	569.4	583.4	589.9
32.5°	532.3	536.9	548.1	563.9	571.3
35°	508.1	513.7	526.7	543.4	552.7
37.5°	484.0	489.5	504.4	523.0	533.2
40°	458.9	464.5	481.2	501.6	512.8
42.5°	432.9	439.4	458.0	481.2	494.2
45°	406.9	413.4	433.8	459.8	473.8
47.5°	379.9	387.4	409.7	438.5	452.4
50°	353.0	361.4	386.4	416.2	430.1
52.5°	326.1	335.3	362.3	392.9	407.8
55°	300.0	310.3	339.1	369.7	383.6
57.5°	272.2	284.3	314.9	344.6	360.4
60°	246.2	259.2	290.8	320.5	337.2
62.5°	220.2	234.1	267.5	297.3	313.0
65°	195.1	209.0	242.5	273.1	288.9
67.5°	170.0	185.8	218.3	249.0	264.7
70°	145.8	162.6	194.1	223.9	239.7
72.5°	122.6	139.3	170.9	198.8	208.1
75°	99.4	116.1	145.8	162.6	168.1
77.5°	78.0	93.8	119.8	130.1	137.5
80°	58.5	72.5	91.0	97.5	98.5
82.5°	39.9	52.0	63.2	64.1	63.2
85°	24.2	30.7	34.4	32.5	30.7
87.5°	11.1	12.1	11.1	7.4	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)