

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: P259410

Luminaire Tested: **22CZ-LD5-20-S-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259410
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-LD5-20-S-UNV-L93050-W2A1-U-5000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2058.0 lumens
Efficiency: N/A
Efficacy: 127.2 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

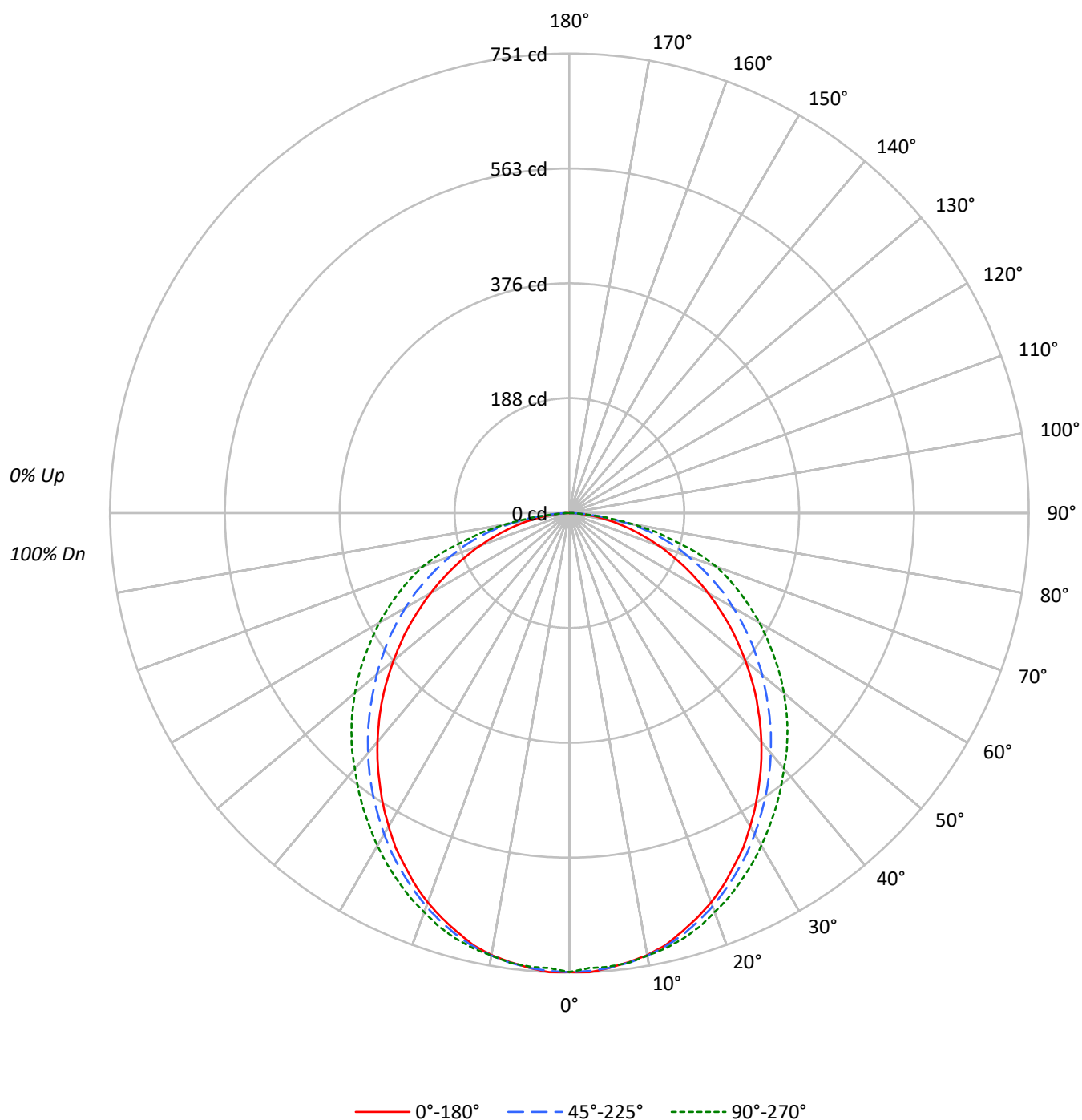
Input Watts (W): 16.183302
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P259410

CATALOG NUMBER: 22CZ-LD5-20-S-UNV-L93050-W2A1-U-5000K

Luminous Intensity Polar Plot





TEST NUMBER: P259410

CATALOG NUMBER: 22CZ-LD5-20-S-UNV-L93050-W2A1-U-5000K

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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	99	95	106	101	97	94		97	94	91		93	91	88		90	87	85
2	99	90	83	77	96	88	82	77		85	79	75		81	77	73		78	75	71
3	90	79	71	64	87	78	70	64		75	68	63		72	66	62		69	64	60
4	82	70	61	54	80	69	61	54		66	59	53		64	58	53		62	56	52
5	76	63	54	47	74	62	53	47		59	52	46		57	51	46		56	50	45
6	70	56	47	41	68	56	47	41		54	46	40		52	45	40		50	44	40
7	65	51	42	36	63	50	42	36		49	41	36		47	41	36		46	40	35
8	60	47	38	32	59	46	38	32		45	37	32		43	37	32		42	36	32
9	56	43	35	29	55	42	34	29		41	34	29		40	34	29		39	33	29
10	53	40	32	26	52	39	32	26		38	31	26		37	31	26		36	30	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2019	2019	2019
5°	2016	2016	2011
10°	2004	2007	2007
15°	1974	1988	2005
20°	1939	1959	1987
25°	1890	1923	1969
30°	1837	1883	1950
35°	1776	1841	1932
40°	1715	1799	1917
45°	1648	1757	1918
50°	1572	1721	1916
55°	1498	1693	1915
60°	1410	1665	1931
65°	1322	1643	1957
70°	1221	1626	2006
75°	1100	1614	1860
80°	965	1502	1624
85°	794	1130	1007



TEST NUMBER: P259410

CATALOG NUMBER: 22CZ-LD5-20-S-UNV-L93050-W2A1-U-5000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	3.4
10°-20°	201.3	9.8
20°-30°	298.9	14.5
30°-40°	351.9	17.1
40°-50°	358.7	17.4
50°-60°	323.5	15.7
60°-70°	254.8	12.4
70°-80°	157.2	7.6
80°-90°	40.8	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°	571.0	27.7
0°-40°	922.9	44.8
0°-60°	1605.1	78.0
0°-90°	2058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2058.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	750	750	750	750	750	
5°	746	747	746	745	744	71
15°	709	712	714	718	720	200
25°	637	640	648	658	663	293
35°	541	547	560	578	588	338
45°	433	440	462	489	504	334
55°	319	330	361	393	408	285
65°	208	222	258	291	307	206
75°	106	124	155	173	179	113
85°	26	33	37	35	33	30
90°	0	0	0	0	0	



TEST NUMBER: P259410

CATALOG NUMBER: 22CZ-LD5-20-S-UNV-L93050-W2A1-U-5000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	750.3	750.3	750.3	750.3	750.3
2.5°	751.3	751.3	749.3	747.3	744.3
5°	746.3	747.3	746.3	745.3	744.3
7.5°	740.4	741.4	741.4	741.4	741.4
10°	733.5	734.4	734.4	734.4	734.4
12.5°	723.6	724.6	725.6	726.5	728.5
15°	708.7	711.7	713.7	717.6	719.6
17.5°	693.9	696.9	699.8	704.8	708.7
20°	677.1	679.1	684.0	690.0	693.9
22.5°	658.3	661.3	666.2	674.1	680.1
25°	636.6	640.5	647.5	658.3	663.3
27.5°	615.8	618.8	627.7	639.6	646.5
30°	591.1	595.1	605.9	620.8	627.7
32.5°	566.4	571.3	583.2	600.0	607.9
35°	540.7	546.6	560.5	578.3	588.2
37.5°	515.0	520.9	536.7	556.5	567.4
40°	488.3	494.2	512.0	533.8	545.6
42.5°	460.6	467.6	487.3	512.0	525.9
45°	433.0	439.9	461.6	489.3	504.1
47.5°	404.3	412.2	435.9	466.6	481.4
50°	375.6	384.5	411.2	442.8	457.7
52.5°	347.0	356.8	385.5	418.1	433.9
55°	319.3	330.2	360.8	393.4	408.2
57.5°	289.6	302.5	335.1	366.7	383.5
60°	261.9	275.8	309.4	341.0	358.8
62.5°	234.3	249.1	284.7	316.3	333.1
65°	207.6	222.4	258.0	290.6	307.4
67.5°	180.9	197.7	232.3	264.9	281.7
70°	155.2	173.0	206.6	238.2	255.0
72.5°	130.5	148.3	181.9	211.5	221.4
75°	105.8	123.6	155.2	173.0	178.9
77.5°	83.0	99.8	127.5	138.4	146.3
80°	62.3	77.1	96.9	103.8	104.8
82.5°	42.5	55.4	67.2	68.2	67.2
85°	25.7	32.6	36.6	34.6	32.6
87.5°	11.9	12.9	11.9	7.9	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)