

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: P259408

Luminaire Tested: **22CZ-LD5-20-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259408
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-4000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2023.0 lumens
Efficiency: N/A
Efficacy: 127.0 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

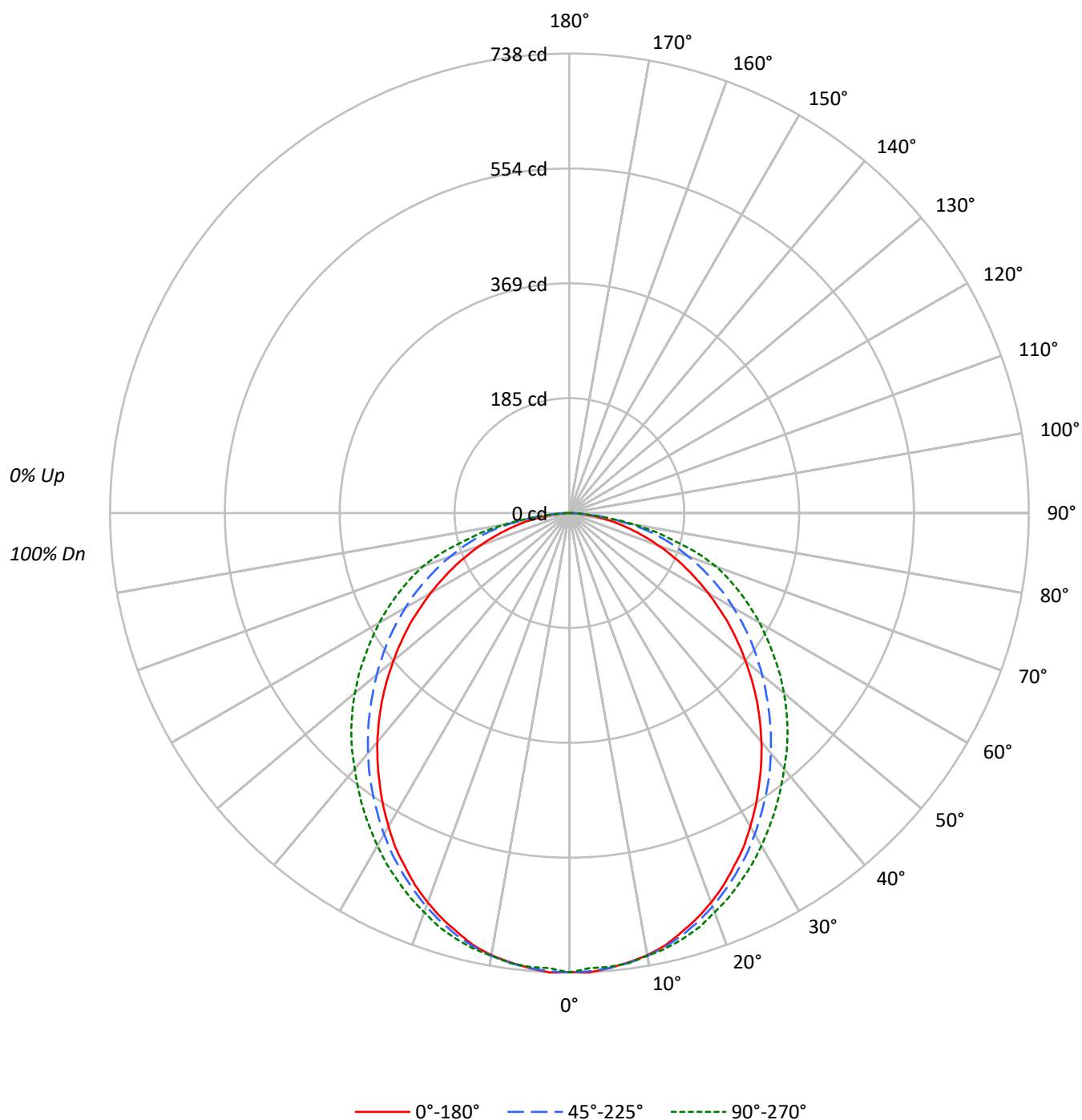
Input Watts (W): 15.934806
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	1985	1985	1985
5°	1982	1982	1977
10°	1970	1973	1973
15°	1941	1955	1971
20°	1906	1926	1953
25°	1858	1890	1936
30°	1806	1851	1917
35°	1746	1810	1899
40°	1686	1768	1884
45°	1620	1727	1886
50°	1546	1692	1883
55°	1473	1664	1883
60°	1386	1637	1898
65°	1300	1615	1924
70°	1201	1598	1972
75°	1081	1587	1829
80°	948	1475	1596
85°	781	1112	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.6	3.4
10°-20°	197.8	9.8
20°-30°	293.8	14.5
30°-40°	345.9	17.1
40°-50°	352.6	17.4
50°-60°	318.0	15.7
60°-70°	250.5	12.4
70°-80°	154.5	7.6
80°-90°	40.1	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°	561.3	27.7
0°-40°	907.2	44.8
0°-60°	1577.8	78.0
0°-90°	2023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2023.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	734	735	734	733	732	70
15°	697	700	702	705	707	196
25°	626	630	636	647	652	288
35°	532	537	551	568	578	333
45°	426	432	454	481	496	328
55°	314	324	355	387	401	280
65°	204	219	254	286	302	202
75°	104	122	153	170	176	111
85°	25	32	36	34	32	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	737.5	737.5	737.5	737.5	737.5
2.5°	738.5	738.5	736.5	734.6	731.7
5°	733.6	734.6	733.6	732.6	731.7
7.5°	727.8	728.8	728.8	728.8	728.8
10°	721.0	722.0	722.0	722.0	722.0
12.5°	711.3	712.2	713.2	714.2	716.1
15°	696.7	699.6	701.6	705.4	707.4
17.5°	682.1	685.0	687.9	692.8	696.7
20°	665.6	667.5	672.4	678.2	682.1
22.5°	647.1	650.1	654.9	662.7	668.5
25°	625.8	629.6	636.4	647.1	652.0
27.5°	605.4	608.3	617.0	628.7	635.5
30°	581.1	584.9	595.6	610.2	617.0
32.5°	556.8	561.6	573.3	589.8	597.6
35°	531.5	537.3	550.9	568.4	578.1
37.5°	506.2	512.1	527.6	547.1	557.7
40°	480.0	485.8	503.3	524.7	536.4
42.5°	452.8	459.6	479.0	503.3	516.9
45°	425.6	432.4	453.8	481.0	495.6
47.5°	397.4	405.2	428.5	458.6	473.2
50°	369.2	378.0	404.2	435.3	449.9
52.5°	341.1	350.8	379.0	411.0	426.6
55°	313.9	324.5	354.7	386.7	401.3
57.5°	284.7	297.3	329.4	360.5	377.0
60°	257.5	271.1	304.1	335.2	352.7
62.5°	230.3	244.9	279.8	310.9	327.5
65°	204.1	218.6	253.6	285.7	302.2
67.5°	177.8	194.3	228.3	260.4	276.9
70°	152.6	170.0	203.1	234.2	250.7
72.5°	128.3	145.8	178.8	207.9	217.7
75°	104.0	121.5	152.6	170.0	175.9
77.5°	81.6	98.1	125.3	136.0	143.8
80°	61.2	75.8	95.2	102.0	103.0
82.5°	41.8	54.4	66.1	67.0	66.1
85°	25.3	32.1	36.0	34.0	32.1
87.5°	11.7	12.6	11.7	7.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)