

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: P259412

Luminaire Tested: **22CZ-LD5-24-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259412
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-3500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2113.0 lumens
Efficiency: N/A
Efficacy: 118.0 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

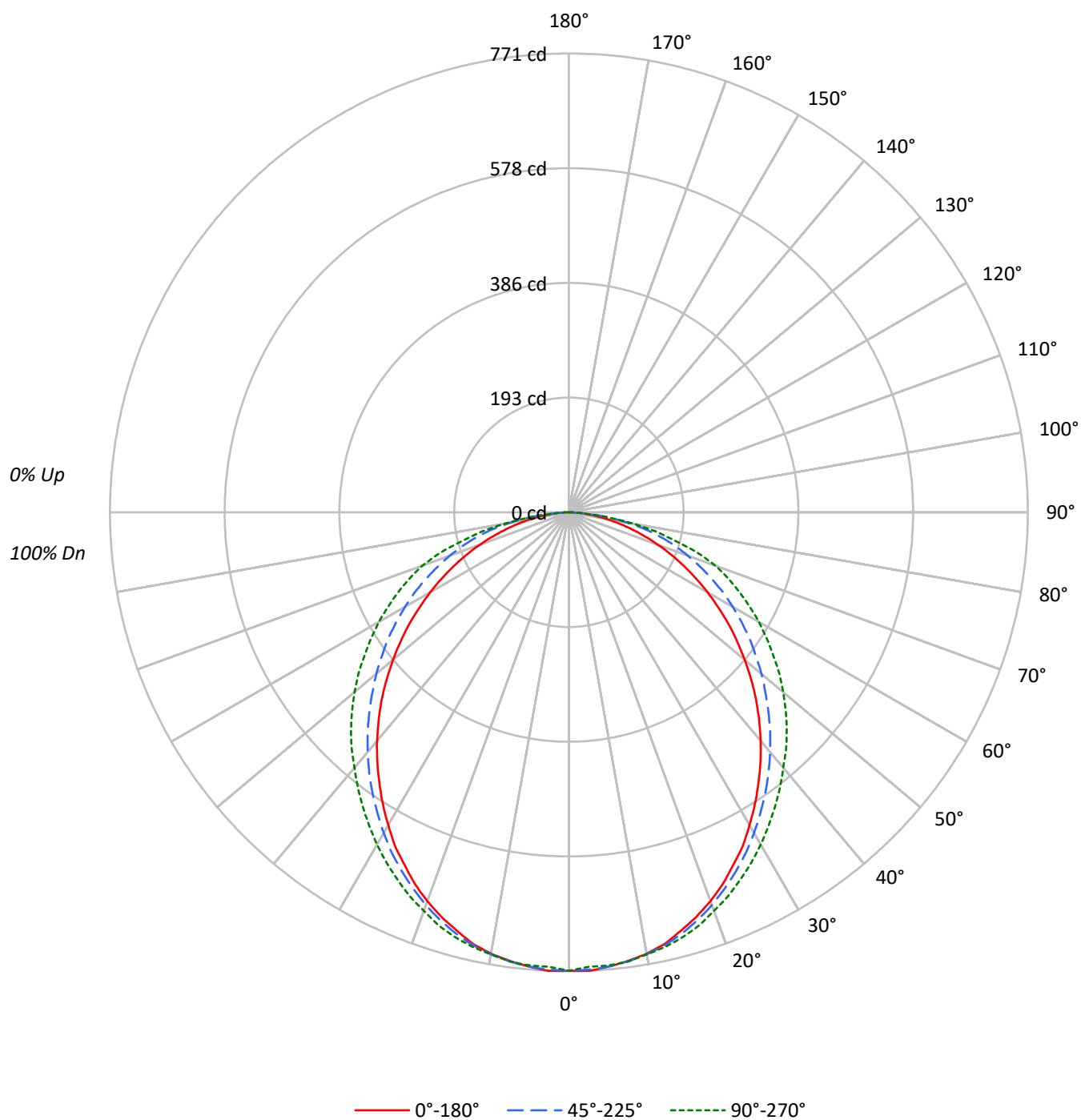
Input Watts (W): 17.910963
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2073	2073	2073
5°	2070	2070	2064
10°	2058	2061	2061
15°	2027	2042	2059
20°	1991	2011	2040
25°	1941	1974	2022
30°	1886	1933	2003
35°	1824	1891	1984
40°	1761	1847	1968
45°	1692	1804	1970
50°	1615	1768	1967
55°	1538	1738	1967
60°	1448	1710	1983
65°	1357	1687	2010
70°	1253	1669	2060
75°	1129	1656	1910
80°	990	1542	1667
85°	815	1161	1034



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.7	3.4
10°-20°	206.6	9.8
20°-30°	306.9	14.5
30°-40°	361.3	17.1
40°-50°	368.3	17.4
50°-60°	332.2	15.7
60°-70°	261.7	12.4
70°-80°	161.4	7.6
80°-90°	41.9	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°	586.3	27.7
0°-40°	947.6	44.8
0°-60°	1648.1	78.0
0°-90°	2113.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2113.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	766	767	766	765	764	73
15°	728	731	733	737	739	205
25°	654	658	665	676	681	301
35°	555	561	576	594	604	347
45°	444	452	474	502	518	343
55°	328	339	370	404	419	293
65°	213	228	265	298	316	211
75°	109	127	159	178	184	116
85°	26	34	38	36	34	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	770.3	770.3	770.3	770.3	770.3
2.5°	771.3	771.3	769.3	767.3	764.2
5°	766.3	767.3	766.3	765.2	764.2
7.5°	760.2	761.2	761.2	761.2	761.2
10°	753.1	754.1	754.1	754.1	754.1
12.5°	742.9	743.9	744.9	746.0	748.0
15°	727.7	730.7	732.8	736.8	738.9
17.5°	712.5	715.5	718.6	723.6	727.7
20°	695.2	697.2	702.3	708.4	712.5
22.5°	675.9	679.0	684.0	692.2	698.3
25°	653.6	657.7	664.8	675.9	681.0
27.5°	632.3	635.3	644.5	656.6	663.7
30°	606.9	611.0	622.1	637.4	644.5
32.5°	581.5	586.6	598.8	616.0	624.2
35°	555.2	561.2	575.5	593.7	603.9
37.5°	528.8	534.9	551.1	571.4	582.6
40°	501.4	507.5	525.7	548.0	560.2
42.5°	472.9	480.1	500.3	525.7	539.9
45°	444.5	451.6	474.0	502.4	517.6
47.5°	415.1	423.2	447.6	479.0	494.3
50°	385.7	394.8	422.2	454.7	469.9
52.5°	356.2	366.4	395.8	429.3	445.5
55°	327.8	339.0	370.4	403.9	419.2
57.5°	297.4	310.6	344.1	376.5	393.8
60°	269.0	283.2	317.7	350.1	368.4
62.5°	240.5	255.8	292.3	324.8	342.0
65°	213.1	228.4	264.9	298.4	315.6
67.5°	185.7	203.0	238.5	272.0	289.2
70°	159.3	177.6	212.1	244.6	261.8
72.5°	134.0	152.2	186.7	217.2	227.3
75°	108.6	126.9	159.3	177.6	183.7
77.5°	85.3	102.5	130.9	142.1	150.2
80°	63.9	79.2	99.5	106.6	107.6
82.5°	43.6	56.8	69.0	70.0	69.0
85°	26.4	33.5	37.6	35.5	33.5
87.5°	12.2	13.2	12.2	8.1	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)