

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: P259414

Luminaire Tested: **22CZ-LD5-24-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259414
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-4500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2322.0 lumens
Efficiency: N/A
Efficacy: 126.8 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

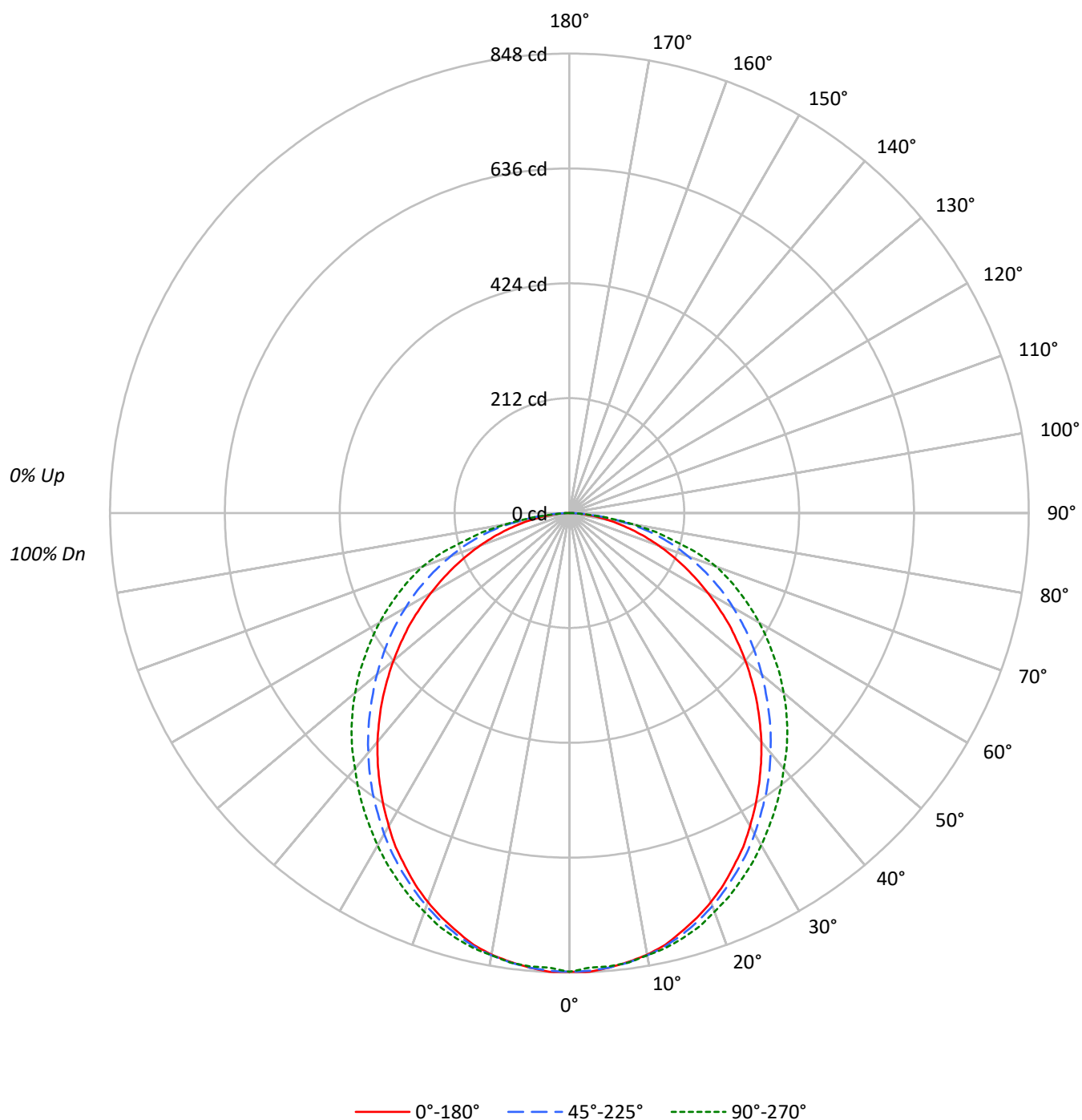
Input Watts (W): 18.315234
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2278	2278	2278
5°	2274	2274	2269
10°	2261	2264	2264
15°	2228	2243	2262
20°	2188	2210	2242
25°	2132	2169	2222
30°	2072	2124	2201
35°	2004	2077	2180
40°	1936	2029	2162
45°	1859	1982	2165
50°	1774	1942	2162
55°	1690	1910	2161
60°	1591	1879	2179
65°	1491	1854	2209
70°	1378	1834	2264
75°	1240	1821	2099
80°	1089	1694	1832
85°	895	1275	1136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.9	3.4
10°-20°	227.1	9.8
20°-30°	337.3	14.5
30°-40°	397.0	17.1
40°-50°	404.7	17.4
50°-60°	365.0	15.7
60°-70°	287.5	12.4
70°-80°	177.4	7.6
80°-90°	46.0	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°	644.3	27.7
0°-40°	1041.3	44.8
0°-60°	1811.1	78.0
0°-90°	2322.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	842	843	842	841	840	80
15°	800	803	805	810	812	225
25°	718	723	730	743	748	331
35°	610	617	632	652	664	382
45°	488	496	521	552	569	377
55°	360	372	407	444	461	321
65°	234	251	291	328	347	232
75°	119	139	175	195	202	127
85°	29	37	41	39	37	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	846.5	846.5	846.5	846.5	846.5
2.5°	847.6	847.6	845.4	843.2	839.8
5°	842.0	843.2	842.0	840.9	839.8
7.5°	835.4	836.5	836.5	836.5	836.5
10°	827.5	828.7	828.7	828.7	828.7
12.5°	816.4	817.5	818.6	819.7	822.0
15°	799.7	803.0	805.2	809.7	811.9
17.5°	782.9	786.3	789.6	795.2	799.7
20°	764.0	766.2	771.8	778.5	782.9
22.5°	742.8	746.1	751.7	760.6	767.3
25°	718.2	722.7	730.5	742.8	748.4
27.5°	694.8	698.2	708.2	721.6	729.4
30°	666.9	671.4	683.7	700.4	708.2
32.5°	639.1	644.6	658.0	677.0	685.9
35°	610.1	616.8	632.4	652.4	663.6
37.5°	581.1	587.8	605.6	627.9	640.2
40°	551.0	557.6	577.7	602.3	615.6
42.5°	519.7	527.5	549.8	577.7	593.3
45°	488.5	496.3	520.8	552.1	568.8
47.5°	456.2	465.1	491.8	526.4	543.1
50°	423.8	433.8	464.0	499.7	516.4
52.5°	391.5	402.6	435.0	471.8	489.6
55°	360.2	372.5	407.1	443.9	460.6
57.5°	326.8	341.3	378.1	413.8	432.7
60°	295.6	311.2	349.1	384.8	404.9
62.5°	264.3	281.1	321.2	356.9	375.9
65°	234.2	250.9	291.1	327.9	346.9
67.5°	204.1	223.1	262.1	298.9	317.9
70°	175.1	195.2	233.1	268.8	287.7
72.5°	147.2	167.3	205.2	238.7	249.8
75°	119.3	139.4	175.1	195.2	201.9
77.5°	93.7	112.6	143.9	156.1	165.1
80°	70.3	87.0	109.3	117.1	118.2
82.5°	48.0	62.5	75.8	77.0	75.8
85°	29.0	36.8	41.3	39.0	36.8
87.5°	13.4	14.5	13.4	8.9	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)