

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: P230604

Luminaire Tested: **22CZ-LD5-24SE-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230604
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-LD5-24SE-S-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2084.0 lumens
Efficiency: N/A
Efficacy: 98.8 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

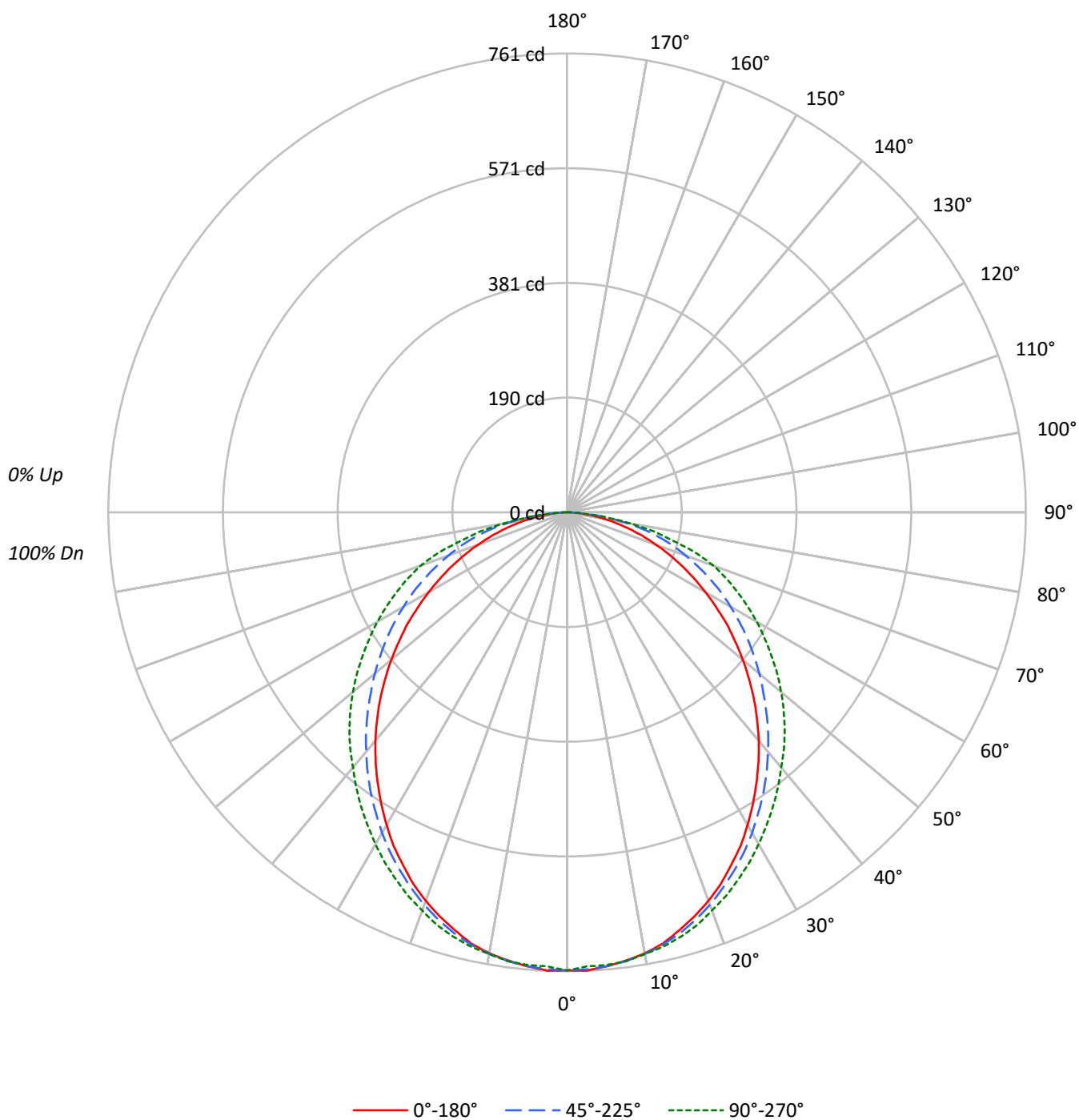
Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2044	2044	2044
5°	2041	2041	2036
10°	2029	2032	2032
15°	1999	2013	2030
20°	1964	1984	2012
25°	1914	1947	1994
30°	1860	1907	1975
35°	1799	1865	1957
40°	1737	1821	1941
45°	1668	1779	1943
50°	1593	1743	1940
55°	1517	1714	1939
60°	1428	1686	1956
65°	1338	1664	1982
70°	1237	1646	2032
75°	1114	1634	1884
80°	978	1520	1644
85°	803	1142	1019



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	3.4
10°-20°	203.8	9.8
20°-30°	302.7	14.5
30°-40°	356.3	17.1
40°-50°	363.3	17.4
50°-60°	327.6	15.7
60°-70°	258.1	12.4
70°-80°	159.2	7.6
80°-90°	41.3	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°	578.3	27.7
0°-40°	934.6	44.8
0°-60°	1625.4	78.0
0°-90°	2084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2084.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	756	757	756	755	754	72
15°	718	721	723	727	729	202
25°	645	649	656	667	672	297
35°	548	554	568	586	596	343
45°	438	445	468	496	510	338
55°	323	334	365	398	413	289
65°	210	225	261	294	311	208
75°	107	125	157	175	181	114
85°	26	33	37	35	33	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	759.7	759.7	759.7	759.7	759.7
2.5°	760.7	760.7	758.7	756.7	753.7
5°	755.7	756.7	755.7	754.7	753.7
7.5°	749.7	750.7	750.7	750.7	750.7
10°	742.7	743.7	743.7	743.7	743.7
12.5°	732.7	733.7	734.7	735.7	737.7
15°	717.7	720.7	722.7	726.7	728.7
17.5°	702.7	705.7	708.7	713.7	717.7
20°	685.7	687.7	692.7	698.7	702.7
22.5°	666.7	669.7	674.7	682.7	688.7
25°	644.6	648.6	655.6	666.7	671.7
27.5°	623.6	626.6	635.6	647.6	654.6
30°	598.6	602.6	613.6	628.6	635.6
32.5°	573.6	578.6	590.6	607.6	615.6
35°	547.5	553.5	567.6	585.6	595.6
37.5°	521.5	527.5	543.5	563.5	574.6
40°	494.5	500.5	518.5	540.5	552.5
42.5°	466.5	473.5	493.5	518.5	532.5
45°	438.4	445.4	467.5	495.5	510.5
47.5°	409.4	417.4	441.4	472.5	487.5
50°	380.4	389.4	416.4	448.4	463.5
52.5°	351.3	361.4	390.4	423.4	439.4
55°	323.3	334.3	365.4	398.4	413.4
57.5°	293.3	306.3	339.3	371.4	388.4
60°	265.3	279.3	313.3	345.3	363.4
62.5°	237.2	252.2	288.3	320.3	337.3
65°	210.2	225.2	261.3	294.3	311.3
67.5°	183.2	200.2	235.2	268.3	285.3
70°	157.2	175.2	209.2	241.2	258.3
72.5°	132.1	150.1	184.2	214.2	224.2
75°	107.1	125.1	157.2	175.2	181.2
77.5°	84.1	101.1	129.1	140.1	148.1
80°	63.1	78.1	98.1	105.1	106.1
82.5°	43.0	56.1	68.1	69.1	68.1
85°	26.0	33.0	37.0	35.0	33.0
87.5°	12.0	13.0	12.0	8.0	5.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)