

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: P230606

Luminaire Tested: **22CZ-LD5-24SE-S-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230606
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2220.0 lumens
Efficiency: N/A
Efficacy: 105.2 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

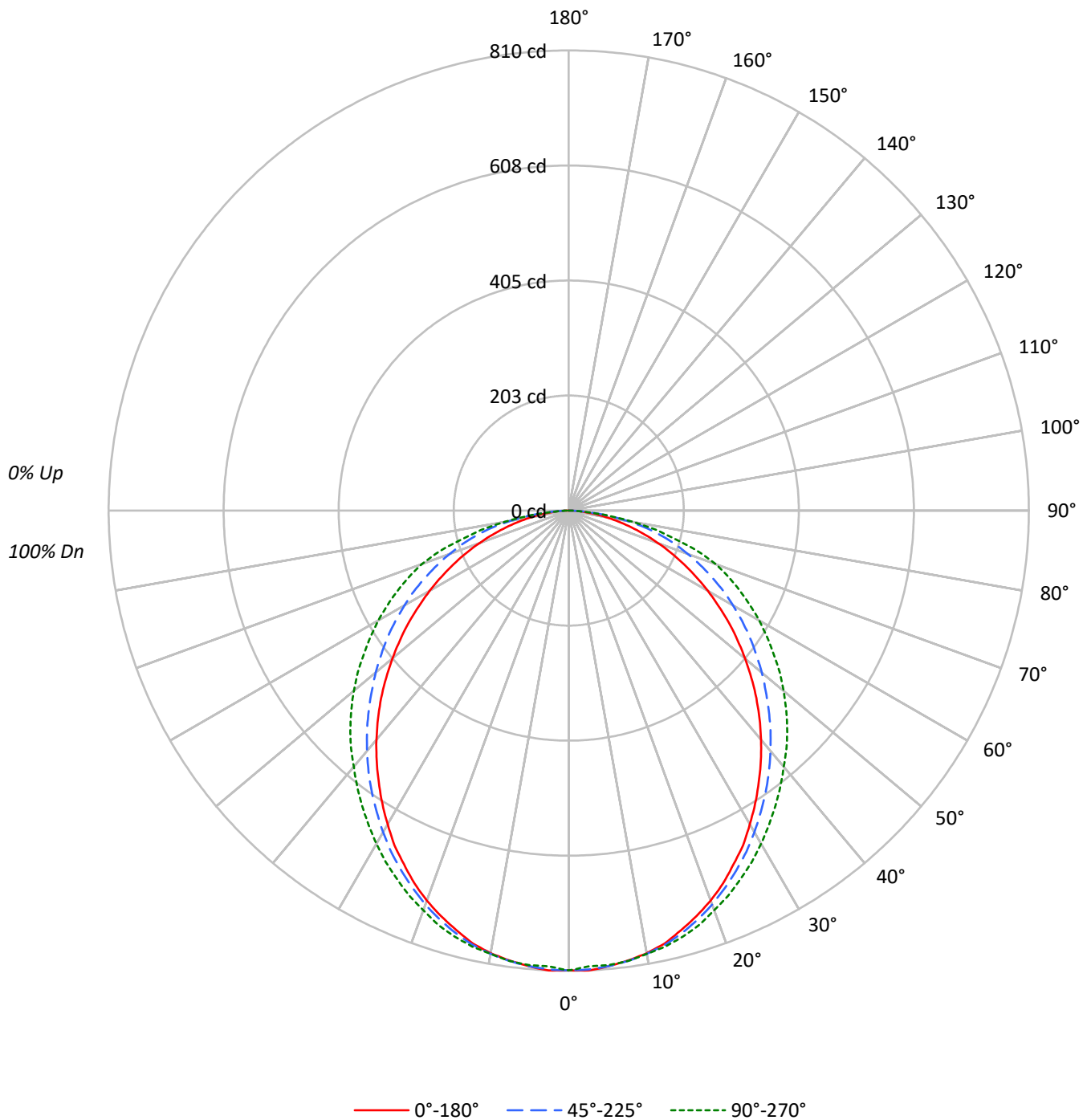
Input Watts (W): 21.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			0
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			100
1	109	104	99	95	106	101	97	94		97	94	91			93	91	88			83
2	99	90	83	77	96	88	82	77		85	79	75			81	77	73			69
3	90	79	71	64	87	78	70	64		75	68	63			72	66	62			58
4	82	70	61	54	80	69	61	54		66	59	53			64	58	53			50
5	76	63	54	47	74	62	53	47		59	52	46			57	51	46			43
6	70	56	47	41	68	56	47	41		54	46	40			52	45	40			38
7	65	51	42	36	63	50	42	36		49	41	36			47	41	36			33
8	60	47	38	32	59	46	38	32		45	37	32			43	37	32			30
9	56	43	35	29	55	42	34	29		41	34	29			40	34	29			27
10	53	40	32	26	52	39	32	26		38	31	26			37	31	26			24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2178	2178	2178
5°	2175	2175	2169
10°	2162	2165	2165
15°	2130	2145	2163
20°	2092	2113	2143
25°	2039	2074	2124
30°	1981	2031	2104
35°	1916	1986	2084
40°	1851	1940	2068
45°	1777	1895	2069
50°	1696	1857	2067
55°	1616	1826	2066
60°	1521	1796	2083
65°	1426	1772	2111
70°	1317	1754	2164
75°	1186	1740	2007
80°	1041	1619	1751
85°	855	1220	1087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.4	3.4
10°-20°	217.1	9.8
20°-30°	322.5	14.5
30°-40°	379.6	17.1
40°-50°	387.0	17.4
50°-60°	349.0	15.7
60°-70°	274.9	12.4
70°-80°	169.6	7.6
80°-90°	44.0	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°	616.0	27.7
0°-40°	995.6	44.8
0°-60°	1731.5	78.0
0°-90°	2220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	809	809	809	809	809	
5°	805	806	805	804	803	76
15°	764	768	770	774	776	216
25°	687	691	698	710	716	316
35°	583	590	605	624	634	365
45°	467	474	498	528	544	360
55°	344	356	389	424	440	307
65°	224	240	278	314	332	222
75°	114	133	167	187	193	122
85°	28	35	40	37	35	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.3	809.3	809.3	809.3	809.3
2.5°	810.4	810.4	808.3	806.1	802.9
5°	805.1	806.1	805.1	804.0	802.9
7.5°	798.7	799.7	799.7	799.7	799.7
10°	791.2	792.3	792.3	792.3	792.3
12.5°	780.5	781.6	782.7	783.7	785.9
15°	764.5	767.7	769.9	774.1	776.3
17.5°	748.5	751.7	754.9	760.3	764.5
20°	730.4	732.5	737.9	744.3	748.5
22.5°	710.2	713.4	718.7	727.2	733.6
25°	686.7	691.0	698.4	710.2	715.5
27.5°	664.3	667.5	677.1	689.9	697.4
30°	637.6	641.9	653.6	669.6	677.1
32.5°	611.0	616.3	629.1	647.2	655.8
35°	583.3	589.7	604.6	623.8	634.4
37.5°	555.5	561.9	579.0	600.3	612.1
40°	526.8	533.1	552.3	575.8	588.6
42.5°	496.9	504.4	525.7	552.3	567.3
45°	467.0	474.5	498.0	527.8	543.8
47.5°	436.1	444.6	470.2	503.3	519.3
50°	405.2	414.8	443.6	477.7	493.7
52.5°	374.3	384.9	415.9	451.0	468.1
55°	344.4	356.1	389.2	424.4	440.4
57.5°	312.4	326.3	361.5	395.6	413.7
60°	282.6	297.5	333.8	367.9	387.1
62.5°	252.7	268.7	307.1	341.2	359.3
65°	223.9	239.9	278.3	313.5	331.6
67.5°	195.1	213.3	250.6	285.8	303.9
70°	167.4	186.6	222.9	257.0	275.1
72.5°	140.8	159.9	196.2	228.2	238.9
75°	114.1	133.3	167.4	186.6	193.0
77.5°	89.6	107.7	137.6	149.3	157.8
80°	67.2	83.2	104.5	112.0	113.0
82.5°	45.9	59.7	72.5	73.6	72.5
85°	27.7	35.2	39.5	37.3	35.2
87.5°	12.8	13.9	12.8	8.5	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)