

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: P230582

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230582
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2223.0 lumens
Efficiency: N/A
Efficacy: 113.4 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

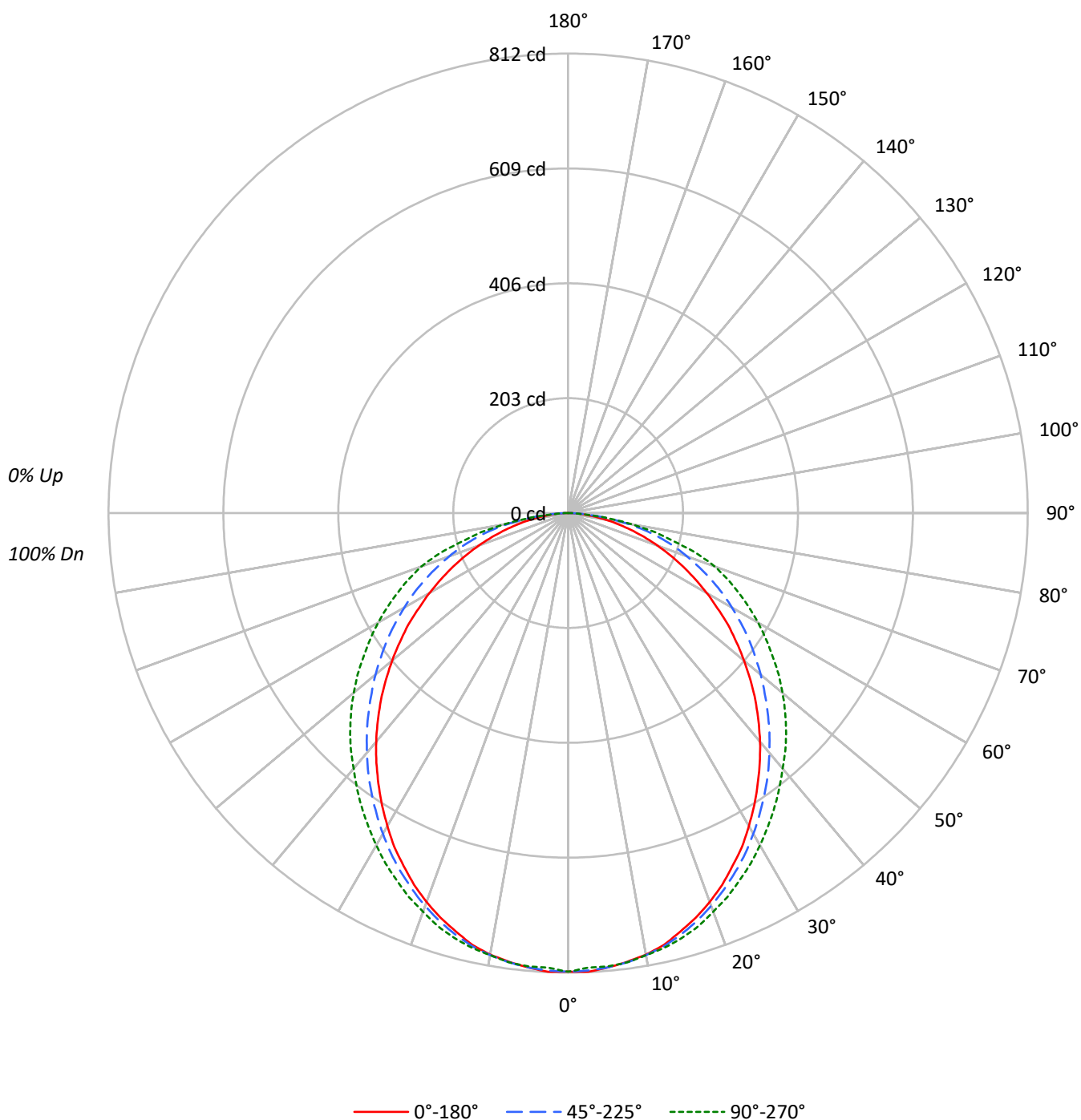
Input Watts (W): 19.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2181	2181	2181
5°	2177	2177	2172
10°	2165	2168	2168
15°	2133	2148	2165
20°	2094	2116	2147
25°	2042	2077	2127
30°	1984	2034	2107
35°	1919	1989	2087
40°	1853	1943	2070
45°	1780	1897	2072
50°	1698	1860	2070
55°	1618	1828	2069
60°	1523	1799	2086
65°	1428	1775	2115
70°	1319	1756	2168
75°	1187	1743	2010
80°	1043	1621	1754
85°	858	1220	1087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.5	3.4
10°-20°	217.4	9.8
20°-30°	322.9	14.5
30°-40°	380.1	17.1
40°-50°	387.5	17.4
50°-60°	349.5	15.7
60°-70°	275.3	12.4
70°-80°	169.8	7.6
80°-90°	44.1	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°	616.8	27.7
0°-40°	996.9	44.8
0°-60°	1733.9	78.0
0°-90°	2223.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2223.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	806	807	806	805	804	77
15°	766	769	771	775	777	216
25°	688	692	699	711	716	317
35°	584	590	605	625	635	365
45°	468	475	499	528	544	360
55°	345	357	390	425	441	308
65°	224	240	279	314	332	222
75°	114	134	168	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°	810.4	810.4	810.4	810.4	810.4
2.5°	811.5	811.5	809.3	807.2	804.0
5°	806.1	807.2	806.1	805.1	804.0
7.5°	799.7	800.8	800.8	800.8	800.8
10°	792.3	793.3	793.3	793.3	793.3
12.5°	781.6	782.7	783.7	784.8	786.9
15°	765.6	768.8	770.9	775.2	777.3
17.5°	749.6	752.8	756.0	761.3	765.6
20°	731.4	733.5	738.9	745.3	749.6
22.5°	711.1	714.3	719.7	728.2	734.6
25°	687.6	691.9	699.4	711.1	716.5
27.5°	665.2	668.4	678.0	690.8	698.3
30°	638.5	642.8	654.5	670.5	678.0
32.5°	611.8	617.2	630.0	648.1	656.7
35°	584.1	590.5	605.4	624.6	635.3
37.5°	556.3	562.7	579.8	601.1	612.9
40°	527.5	533.9	553.1	576.6	589.4
42.5°	497.6	505.0	526.4	553.1	568.0
45°	467.7	475.1	498.6	528.5	544.5
47.5°	436.7	445.2	470.9	504.0	520.0
50°	405.7	415.4	444.2	478.3	494.4
52.5°	374.8	385.5	416.4	451.7	468.7
55°	344.9	356.6	389.7	425.0	441.0
57.5°	312.8	326.7	362.0	396.1	414.3
60°	283.0	297.9	334.2	368.4	387.6
62.5°	253.1	269.1	307.5	341.7	359.8
65°	224.2	240.2	278.7	313.9	332.1
67.5°	195.4	213.5	250.9	286.2	304.3
70°	167.6	186.9	223.2	257.3	275.5
72.5°	140.9	160.2	196.5	228.5	239.2
75°	114.2	133.5	167.6	186.9	193.3
77.5°	89.7	107.8	137.7	149.5	158.0
80°	67.3	83.3	104.6	112.1	113.2
82.5°	45.9	59.8	72.6	73.7	72.6
85°	27.8	35.2	39.5	37.4	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)