

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: P230603

Luminaire Tested: **22CZ-LD5-20SE-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230603
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-LD5-20SE-S-UNV-L950-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SMOOTH LENS
Light Source: (56) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2026.0 lumens
Efficiency: N/A
Efficacy: 117.8 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

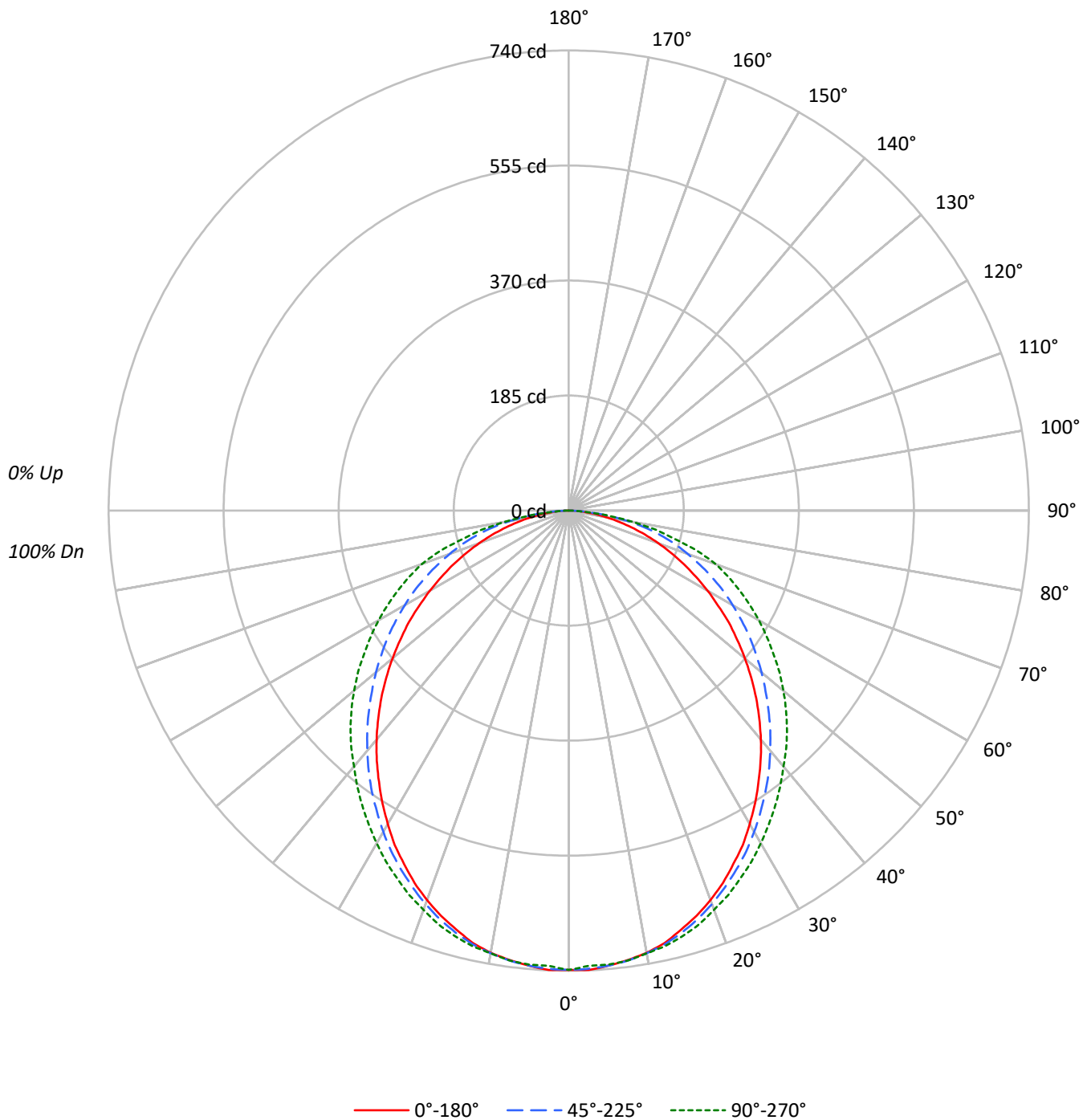
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
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°	1988	1988	1988
5°	1985	1985	1979
10°	1973	1976	1976
15°	1944	1957	1974
20°	1909	1928	1956
25°	1861	1893	1939
30°	1808	1853	1920
35°	1749	1813	1902
40°	1689	1771	1887
45°	1622	1729	1889
50°	1548	1695	1886
55°	1475	1666	1886
60°	1388	1639	1901
65°	1301	1617	1927
70°	1202	1600	1976
75°	1082	1589	1831
80°	950	1478	1599
85°	781	1112	991



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.7	3.4
10°-20°	198.1	9.8
20°-30°	294.3	14.5
30°-40°	346.4	17.1
40°-50°	353.1	17.4
50°-60°	318.5	15.7
60°-70°	250.9	12.4
70°-80°	154.7	7.6
80°-90°	40.2	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°	562.2	27.7
0°-40°	908.6	44.8
0°-60°	1580.2	78.0
0°-90°	2026.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2026.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	739	739	739	739	739	
5°	735	736	735	734	733	70
15°	698	701	703	706	708	197
25°	627	631	637	648	653	289
35°	532	538	552	569	579	333
45°	426	433	454	482	496	329
55°	314	325	355	387	402	280
65°	204	219	254	286	303	202
75°	104	122	153	170	176	111
85°	25	32	36	34	32	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	738.6	738.6	738.6	738.6	738.6
2.5°	739.6	739.6	737.6	735.7	732.8
5°	734.7	735.7	734.7	733.7	732.8
7.5°	728.9	729.8	729.8	729.8	729.8
10°	722.1	723.0	723.0	723.0	723.0
12.5°	712.3	713.3	714.3	715.2	717.2
15°	697.7	700.6	702.6	706.5	708.4
17.5°	683.1	686.0	689.0	693.8	697.7
20°	666.6	668.5	673.4	679.2	683.1
22.5°	648.1	651.0	655.9	663.7	669.5
25°	626.7	630.6	637.4	648.1	653.0
27.5°	606.3	609.2	617.9	629.6	636.4
30°	581.9	585.8	596.5	611.1	617.9
32.5°	557.6	562.5	574.1	590.7	598.5
35°	532.3	538.1	551.8	569.3	579.0
37.5°	507.0	512.8	528.4	547.9	558.6
40°	480.7	486.6	504.1	525.5	537.2
42.5°	453.5	460.3	479.7	504.1	517.7
45°	426.2	433.0	454.4	481.7	496.3
47.5°	398.0	405.8	429.1	459.3	473.9
50°	369.8	378.5	404.8	436.0	450.6
52.5°	341.6	351.3	379.5	411.6	427.2
55°	314.3	325.0	355.2	387.3	401.9
57.5°	285.1	297.8	329.9	361.0	377.6
60°	257.9	271.5	304.6	335.7	353.2
62.5°	230.6	245.2	280.3	311.4	327.9
65°	204.4	219.0	254.0	286.1	302.6
67.5°	178.1	194.6	228.7	260.8	277.3
70°	152.8	170.3	203.4	234.5	251.1
72.5°	128.5	146.0	179.1	208.2	218.0
75°	104.1	121.6	152.8	170.3	176.1
77.5°	81.7	98.3	125.5	136.2	144.0
80°	61.3	75.9	95.4	102.2	103.2
82.5°	41.8	54.5	66.2	67.1	66.2
85°	25.3	32.1	36.0	34.1	32.1
87.5°	11.7	12.7	11.7	7.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)