

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: P230865

Luminaire Tested: **22CZ-LD5-20SE-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230865
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25714)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-20SE-RDP-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RDP LENS
Light Source: (56) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1173.0 lumens
Efficiency: N/A
Efficacy: 68.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

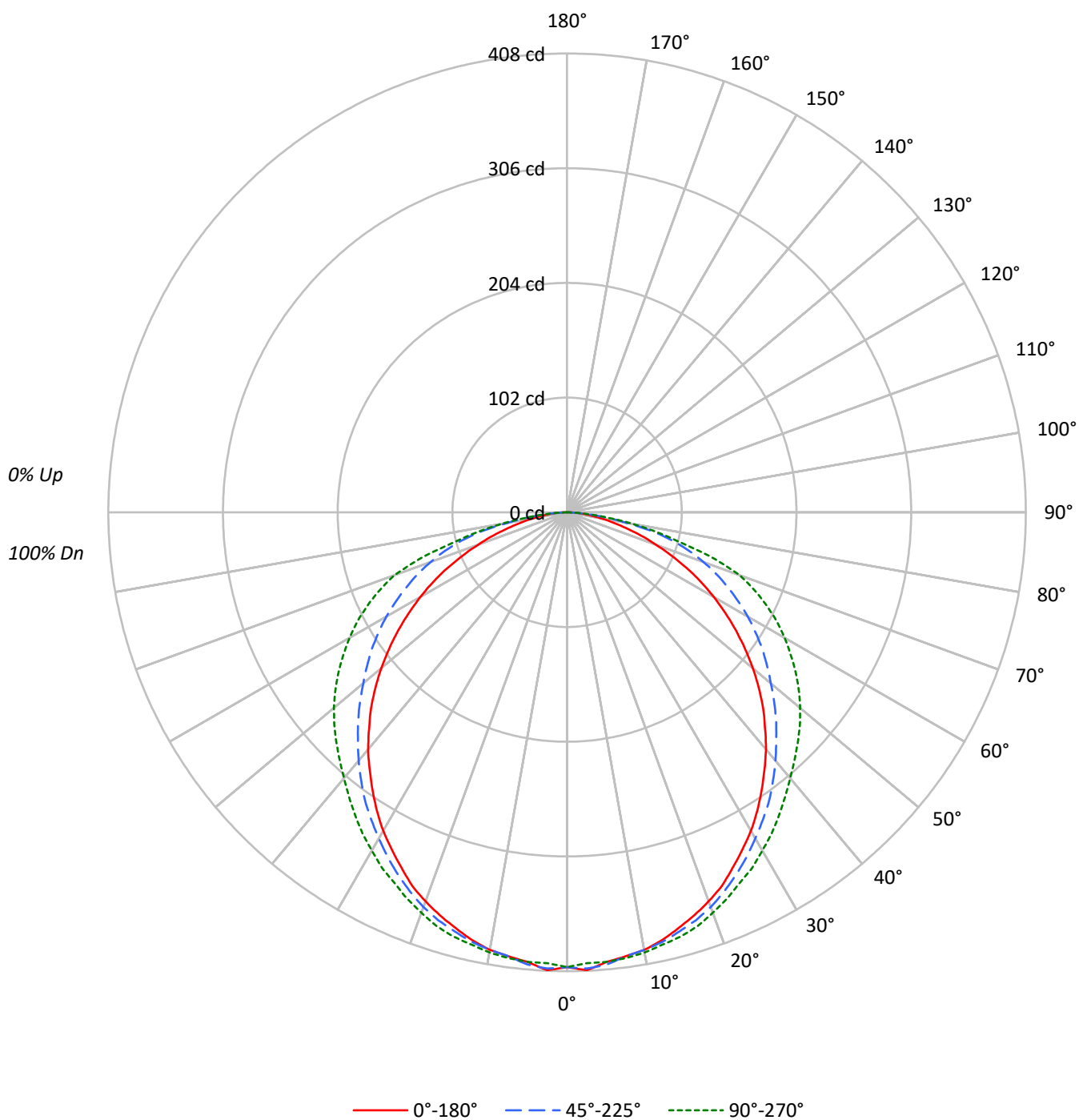
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	108	104	99	95	106	101	97	94		97	94	91		93	90	88		89	87	85
2	98	90	83	77	96	88	81	76		84	79	74		81	77	73		78	74	71
3	89	79	70	64	87	77	69	63		74	67	62		71	66	61		69	64	60
4	82	69	60	54	79	68	60	53		66	58	52		63	57	52		61	56	51
5	75	62	53	46	73	61	52	46		59	51	45		57	50	45		55	49	44
6	69	56	47	40	67	55	46	40		53	45	40		51	44	39		50	44	39
7	64	50	42	35	62	50	41	35		48	40	35		47	40	35		45	39	34
8	60	46	37	31	58	45	37	31		44	37	31		43	36	31		42	35	31
9	56	42	34	28	54	42	34	28		40	33	28		39	33	28		38	32	28
10	52	39	31	26	51	38	31	26		37	30	25		36	30	25		36	30	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1088	1088	1088
5°	1084	1090	1084
10°	1080	1080	1086
15°	1066	1075	1088
20°	1054	1070	1085
25°	1035	1056	1079
30°	1016	1040	1079
35°	991	1029	1079
40°	967	1013	1084
45°	939	1000	1104
50°	903	991	1133
55°	860	994	1164
60°	812	999	1203
65°	748	1004	1245
70°	663	1016	1284
75°	562	1013	1094
80°	468	815	911
85°	404	550	525



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.2	3.3
10°-20°	109.0	9.3
20°-30°	164.0	14.0
30°-40°	196.5	16.8
40°-50°	204.9	17.5
50°-60°	190.8	16.3
60°-70°	154.9	13.2
70°-80°	93.3	8.0
80°-90°	21.4	1.8
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°	311.2	26.5
0°-40°	507.6	43.3
0°-60°	903.3	77.0
0°-90°	1173.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1173.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	404	404	404	404	404	
5°	401	401	404	404	401	38
15°	383	384	386	388	390	108
25°	349	351	356	360	363	161
35°	302	305	313	322	329	189
45°	247	251	263	280	290	190
55°	183	191	212	235	248	164
65°	118	130	158	182	196	116
75°	54	72	97	104	105	58
85°	13	16	18	17	17	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	404.4	404.4	404.4	404.4	404.4
2.5°	407.5	406.7	406.0	403.6	401.3
5°	401.3	401.3	403.6	404.4	401.3
7.5°	398.2	398.2	398.2	401.3	399.8
10°	395.1	395.1	395.1	397.4	397.4
12.5°	389.7	390.5	391.3	392.0	393.6
15°	382.8	384.3	385.8	388.2	390.5
17.5°	375.8	377.3	380.4	382.8	385.8
20°	368.1	369.6	373.5	375.8	378.9
22.5°	359.6	360.3	365.0	368.1	371.9
25°	348.7	351.1	355.7	360.3	363.4
27.5°	337.9	340.2	345.6	351.8	356.5
30°	327.1	329.4	334.8	342.5	347.2
32.5°	314.7	317.8	324.0	333.3	338.7
35°	301.6	305.4	313.2	322.4	328.6
37.5°	288.4	292.3	300.8	312.4	318.6
40°	275.3	279.1	288.4	300.8	308.5
42.5°	260.6	265.2	275.3	290.0	299.2
45°	246.7	251.3	262.9	279.9	290.0
47.5°	231.2	236.6	249.8	269.1	280.7
50°	215.7	221.9	236.6	258.3	270.6
52.5°	199.5	206.5	224.2	246.7	259.8
55°	183.3	191.0	211.9	235.1	248.2
57.5°	167.0	175.5	198.7	222.7	235.8
60°	150.8	160.1	185.6	210.3	223.5
62.5°	134.5	144.6	171.7	196.4	210.3
65°	117.5	129.9	157.7	182.5	195.6
67.5°	100.5	115.2	143.8	167.8	180.2
70°	84.3	100.5	129.1	151.6	163.2
72.5°	68.8	85.8	113.7	133.0	137.6
75°	54.1	71.9	97.4	103.6	105.2
77.5°	41.8	58.0	77.3	78.9	82.7
80°	30.2	44.1	52.6	57.2	58.8
82.5°	20.9	30.2	34.8	35.6	36.3
85°	13.1	16.2	17.8	17.0	17.0
87.5°	7.0	6.2	5.4	3.9	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)