

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: P230840

Luminaire Tested: **22CZ-LD5-20-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230840
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-LD5-20-RDP-UNV-L930-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RDP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1138.0 lumens
Efficiency: N/A
Efficacy: 69.4 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

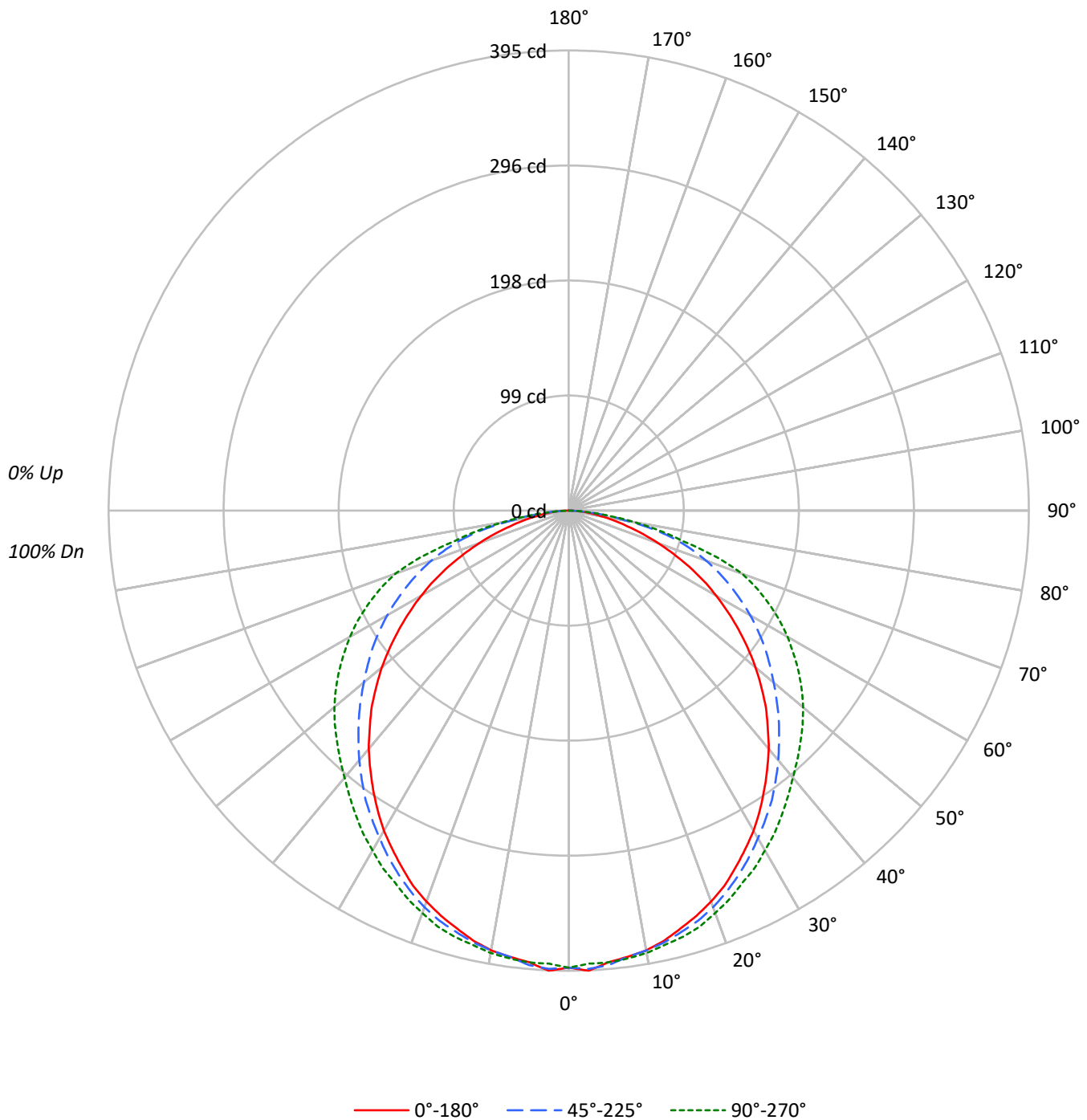
Input Watts (W): 16.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1056	1056	1056
5°	1052	1058	1052
10°	1047	1047	1054
15°	1034	1043	1055
20°	1023	1038	1053
25°	1004	1025	1047
30°	986	1009	1047
35°	961	998	1047
40°	938	983	1051
45°	911	971	1071
50°	876	961	1099
55°	834	964	1130
60°	787	969	1167
65°	726	974	1209
70°	644	986	1245
75°	546	983	1061
80°	454	790	883
85°	395	534	509



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.1	3.3
10°-20°	105.7	9.3
20°-30°	159.1	14.0
30°-40°	190.6	16.8
40°-50°	198.8	17.5
50°-60°	185.1	16.3
60°-70°	150.3	13.2
70°-80°	90.6	8.0
80°-90°	20.8	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°	301.9	26.5
0°-40°	492.5	43.3
0°-60°	876.4	77.0
0°-90°	1138.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1138.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	392	392	392	392	392	
5°	389	389	392	392	389	37
15°	371	373	374	377	379	105
25°	338	341	345	350	353	156
35°	293	296	304	313	319	183
45°	239	244	255	272	281	184
55°	178	185	206	228	241	159
65°	114	126	153	177	190	113
75°	52	70	94	100	102	57
85°	13	16	17	16	16	15
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	392.3	392.3	392.3	392.3	392.3
2.5°	395.3	394.6	393.8	391.6	389.3
5°	389.3	389.3	391.6	392.3	389.3
7.5°	386.3	386.3	386.3	389.3	387.8
10°	383.3	383.3	383.3	385.6	385.6
12.5°	378.1	378.8	379.6	380.3	381.8
15°	371.3	372.8	374.3	376.6	378.8
17.5°	364.6	366.1	369.1	371.3	374.3
20°	357.1	358.6	362.3	364.6	367.6
22.5°	348.8	349.6	354.1	357.1	360.8
25°	338.3	340.6	345.1	349.6	352.6
27.5°	327.8	330.1	335.3	341.3	345.8
30°	317.3	319.6	324.8	332.3	336.8
32.5°	305.3	308.3	314.3	323.3	328.6
35°	292.6	296.3	303.8	312.8	318.8
37.5°	279.8	283.6	291.8	303.1	309.1
40°	267.1	270.8	279.8	291.8	299.3
42.5°	252.8	257.3	267.1	281.3	290.3
45°	239.3	243.8	255.1	271.6	281.3
47.5°	224.3	229.6	242.3	261.1	272.3
50°	209.3	215.3	229.6	250.6	262.6
52.5°	193.5	200.3	217.5	239.3	252.1
55°	177.8	185.3	205.5	228.1	240.8
57.5°	162.0	170.3	192.8	216.0	228.8
60°	146.3	155.3	180.0	204.0	216.8
62.5°	130.5	140.3	166.5	190.5	204.0
65°	114.0	126.0	153.0	177.0	189.8
67.5°	97.5	111.8	139.5	162.8	174.8
70°	81.8	97.5	125.3	147.0	158.3
72.5°	66.8	83.3	110.3	129.0	133.5
75°	52.5	69.8	94.5	100.5	102.0
77.5°	40.5	56.3	75.0	76.5	80.3
80°	29.3	42.8	51.0	55.5	57.0
82.5°	20.3	29.3	33.8	34.5	35.3
85°	12.8	15.8	17.3	16.5	16.5
87.5°	6.8	6.0	5.3	3.8	3.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)