

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: P230866

Luminaire Tested: **22CZ-LD5-20SE-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230866
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-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH RDP LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1202.0 lumens
Efficiency: N/A
Efficacy: 69.9 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

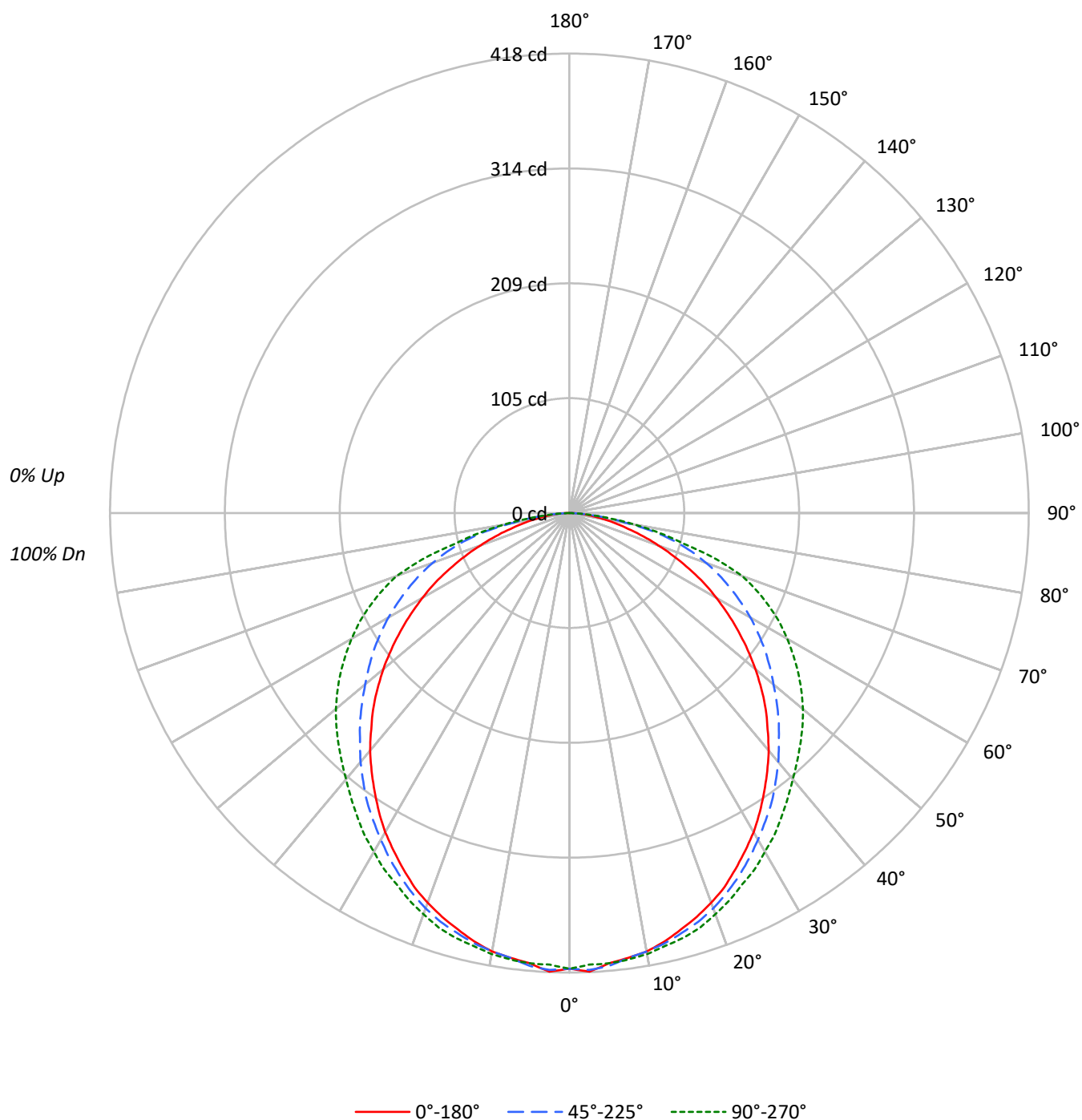
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83		
2	98	90	83	77	96	88	81	76	84	79	74	81	77	73	78	74	71	69		
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	57		
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49		
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42		
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37		
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32		
8	60	46	37	31	58	45	37	31	44	37	31	43	36	31	42	35	31	29		
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26		
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1115	1115	1115
5°	1111	1117	1111
10°	1106	1106	1113
15°	1093	1102	1115
20°	1080	1096	1112
25°	1061	1082	1106
30°	1042	1066	1106
35°	1015	1054	1106
40°	991	1038	1111
45°	962	1025	1131
50°	926	1015	1161
55°	881	1019	1193
60°	832	1024	1232
65°	767	1029	1277
70°	680	1041	1316
75°	577	1038	1121
80°	479	835	933
85°	417	562	537



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	3.3
10°-20°	111.7	9.3
20°-30°	168.0	14.0
30°-40°	201.4	16.8
40°-50°	210.0	17.5
50°-60°	195.5	16.3
60°-70°	158.7	13.2
70°-80°	95.7	8.0
80°-90°	21.9	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°	318.8	26.5
0°-40°	520.2	43.3
0°-60°	925.7	77.0
0°-90°	1202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1202.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	414	414	414	414	414	
5°	411	411	414	414	411	39
15°	392	394	395	398	400	111
25°	357	360	364	369	372	165
35°	309	313	321	330	337	193
45°	253	258	269	287	297	195
55°	188	196	217	241	254	168
65°	120	133	162	187	200	119
75°	56	74	100	106	108	60
85°	14	17	18	17	17	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	414.4	414.4	414.4	414.4	414.4
2.5°	417.6	416.8	416.0	413.6	411.2
5°	411.2	411.2	413.6	414.4	411.2
7.5°	408.1	408.1	408.1	411.2	409.7
10°	404.9	404.9	404.9	407.3	407.3
12.5°	399.3	400.1	400.9	401.7	403.3
15°	392.2	393.8	395.4	397.8	400.1
17.5°	385.1	386.7	389.8	392.2	395.4
20°	377.2	378.7	382.7	385.1	388.3
22.5°	368.4	369.2	374.0	377.2	381.1
25°	357.4	359.7	364.5	369.2	372.4
27.5°	346.3	348.6	354.2	360.5	365.3
30°	335.2	337.5	343.1	351.0	355.8
32.5°	322.5	325.7	332.0	341.5	347.1
35°	309.0	313.0	320.9	330.4	336.8
37.5°	295.6	299.5	308.2	320.1	326.5
40°	282.1	286.0	295.6	308.2	316.2
42.5°	267.0	271.8	282.1	297.1	306.6
45°	252.8	257.5	269.4	286.8	297.1
47.5°	236.9	242.5	255.9	275.7	287.6
50°	221.1	227.4	242.5	264.6	277.3
52.5°	204.4	211.6	229.8	252.8	266.2
55°	187.8	195.7	217.1	240.9	254.3
57.5°	171.1	179.9	203.6	228.2	241.7
60°	154.5	164.0	190.2	215.5	229.0
62.5°	137.9	148.2	175.9	201.3	215.5
65°	120.4	133.1	161.6	187.0	200.5
67.5°	103.0	118.1	147.4	171.9	184.6
70°	86.4	103.0	132.3	155.3	167.2
72.5°	70.5	88.0	116.5	136.3	141.0
75°	55.5	73.7	99.8	106.2	107.8
77.5°	42.8	59.4	79.2	80.8	84.8
80°	30.9	45.2	53.9	58.6	60.2
82.5°	21.4	30.9	35.7	36.4	37.2
85°	13.5	16.6	18.2	17.4	17.4
87.5°	7.1	6.3	5.5	4.0	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)