

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: P230822

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230822
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-20SE-SQP-UNV-L940-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (56) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1261.0 lumens
Efficiency: N/A
Efficacy: 73.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

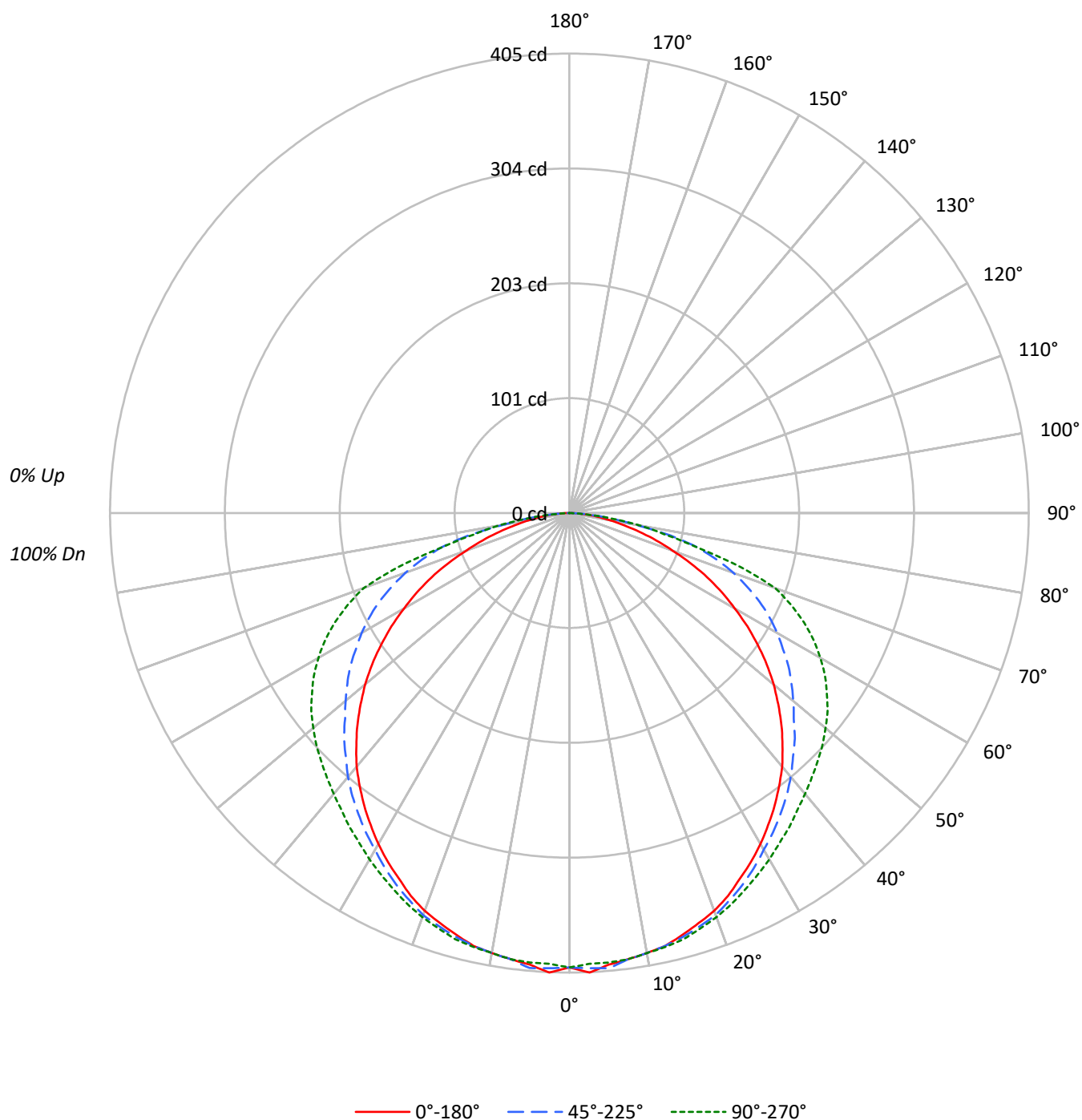
Input Watts (W): 17.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93		97	93	90		93	90	87		89	87	85
2	98	89	82	76	95	87	81	75		84	78	73		80	76	71		77	73	70
3	89	78	69	62	86	76	68	62		73	66	61		70	64	59		68	63	58
4	81	68	59	52	79	67	58	52		64	57	51		62	56	50		60	54	50
5	74	61	52	45	72	60	51	44		58	50	44		56	49	43		54	48	43
6	68	55	45	39	66	54	45	39		52	44	38		50	43	38		48	42	37
7	63	49	40	34	62	49	40	34		47	39	34		45	39	33		44	38	33
8	59	45	36	30	57	44	36	30		43	35	30		42	35	30		40	34	29
9	55	41	33	27	54	41	33	27		39	32	27		38	32	27		37	31	27
10	51	38	30	24	50	37	30	24		36	29	24		35	29	24		35	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1078	1078	1078
5°	1079	1087	1074
10°	1076	1076	1076
15°	1072	1078	1083
20°	1068	1080	1085
25°	1056	1073	1088
30°	1047	1065	1095
35°	1036	1065	1110
40°	1025	1066	1135
45°	1006	1070	1178
50°	984	1078	1234
55°	951	1107	1300
60°	906	1138	1376
65°	855	1179	1453
70°	762	1209	1518
75°	662	1211	1202
80°	561	896	972
85°	485	605	543



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.0	3.0
10°-20°	109.2	8.7
20°-30°	166.4	13.2
30°-40°	203.6	16.1
40°-50°	219.1	17.4
50°-60°	212.2	16.8
60°-70°	179.8	14.3
70°-80°	108.7	8.6
80°-90°	23.9	1.9
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°	313.7	24.9
0°-40°	517.3	41.0
0°-60°	948.7	75.2
0°-90°	1261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1261.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	400	400	400	400	400	
5°	400	400	402	400	398	38
15°	385	386	387	388	389	109
25°	356	357	361	364	366	164
35°	315	317	324	333	338	197
45°	264	269	281	299	310	204
55°	203	212	236	263	277	181
65°	134	149	185	214	228	132
75°	64	86	116	118	116	68
85°	16	19	20	19	18	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	400.5	400.5	400.5	400.5	400.5
2.5°	405.4	404.4	401.5	399.5	397.6
5°	399.5	399.5	402.5	400.5	397.6
7.5°	396.6	396.6	396.6	401.5	396.6
10°	393.7	394.7	393.7	397.6	393.7
12.5°	390.7	390.7	390.7	391.7	391.7
15°	384.9	385.8	386.8	387.8	388.8
17.5°	379.0	380.0	381.9	382.9	383.9
20°	373.1	374.1	377.0	377.0	379.0
22.5°	365.3	365.3	369.2	370.2	373.1
25°	355.5	357.4	361.4	364.3	366.3
27.5°	346.7	348.6	352.5	356.5	359.4
30°	336.9	338.8	342.7	348.6	352.5
32.5°	326.1	328.1	333.9	340.8	344.7
35°	315.3	317.3	324.1	333.0	337.9
37.5°	303.6	306.5	314.4	324.1	330.0
40°	291.8	294.8	303.6	314.4	323.2
42.5°	278.1	282.0	291.8	306.5	316.3
45°	264.4	269.3	281.1	298.7	309.5
47.5°	249.7	254.6	268.3	290.8	302.6
50°	235.0	240.9	257.6	282.0	294.8
52.5°	219.4	225.2	246.8	273.2	286.9
55°	202.7	211.5	236.0	263.4	277.1
57.5°	186.1	195.9	223.3	252.7	267.3
60°	168.4	180.2	211.5	240.9	255.6
62.5°	151.8	164.5	198.8	228.2	242.9
65°	134.2	148.9	185.1	214.5	228.2
67.5°	115.6	134.2	169.4	197.8	211.5
70°	96.9	118.5	153.7	180.2	192.9
72.5°	80.3	102.8	136.1	158.6	158.6
75°	63.7	86.2	116.5	118.5	115.6
77.5°	49.0	70.5	91.1	83.2	85.2
80°	36.2	53.9	57.8	60.7	62.7
82.5°	24.5	36.2	37.2	39.2	39.2
85°	15.7	18.6	19.6	18.6	17.6
87.5°	6.9	7.8	5.9	3.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)