

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: P230817

Luminaire Tested: **22CZ-LD5-44-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230817
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-LD5-44-SQP-UNV-L935-CD1-U
Description: CRUZE 2x2 LED TROFFER
WITH SQP LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2637.0 lumens
Efficiency: N/A
Efficacy: 63.1 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

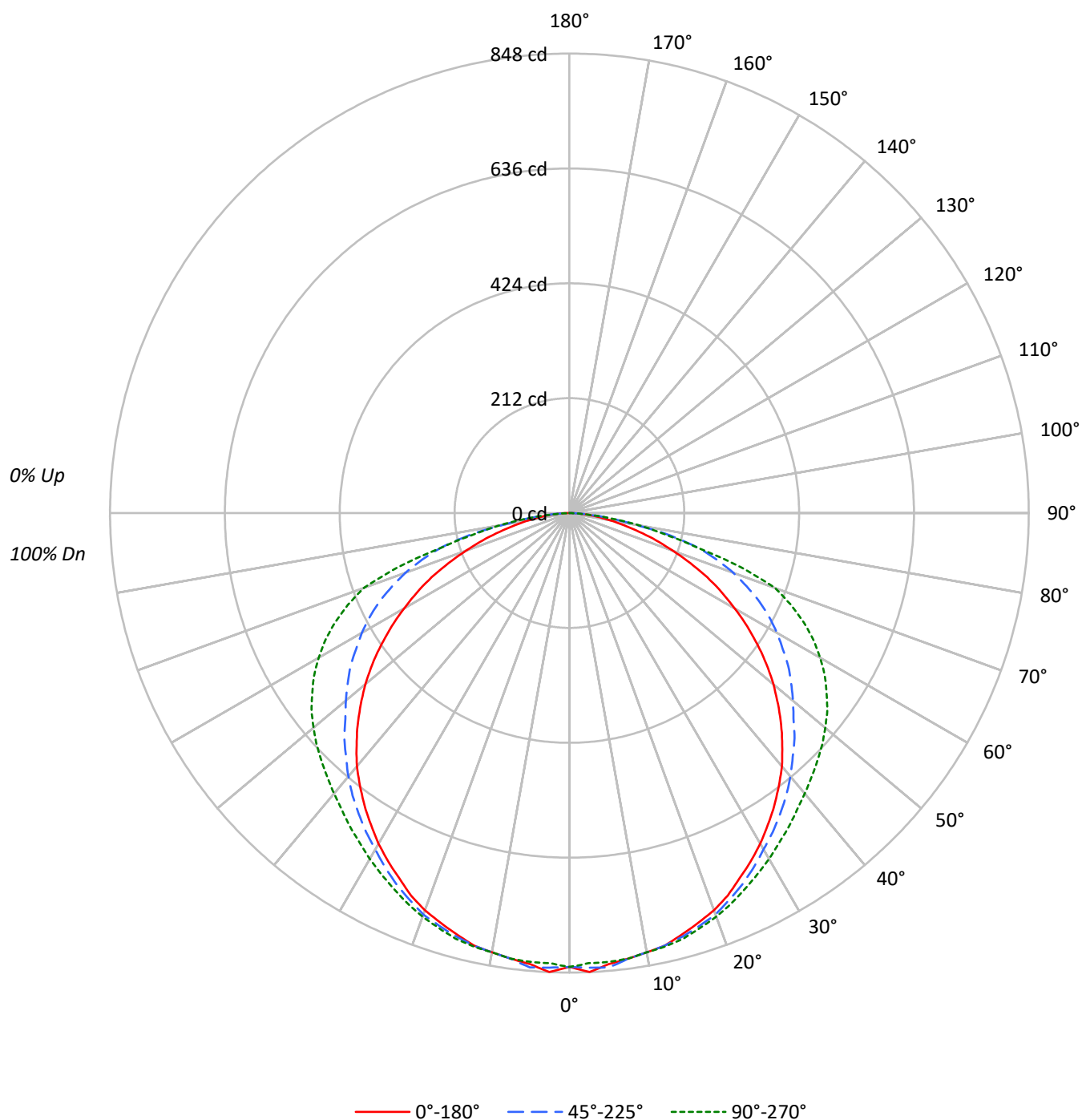
Input Watts (W): 41.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230817

CATALOG NUMBER: 22CZ-LD5-44-SQP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230817

CATALOG NUMBER: 22CZ-LD5-44-SQP-UNV-L935-CD1-U

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		0
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		41
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2254	2254	2254
5°	2257	2274	2246
10°	2249	2249	2249
15°	2242	2254	2265
20°	2234	2258	2269
25°	2207	2244	2274
30°	2189	2227	2291
35°	2166	2227	2321
40°	2144	2230	2374
45°	2104	2237	2463
50°	2058	2255	2581
55°	1989	2315	2719
60°	1896	2380	2877
65°	1787	2464	3039
70°	1595	2530	3174
75°	1384	2534	2512
80°	1175	1872	2032
85°	1013	1266	1139



TEST NUMBER: P230817

CATALOG NUMBER: 22CZ-LD5-44-SQP-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.5	3.0
10°-20°	228.4	8.7
20°-30°	348.0	13.2
30°-40°	425.8	16.1
40°-50°	458.2	17.4
50°-60°	443.8	16.8
60°-70°	376.0	14.3
70°-80°	227.3	8.6
80°-90°	49.9	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°	655.9	24.9
0°-40°	1081.8	41.0
0°-60°	1983.8	75.2
0°-90°	2637.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2637.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	838	838	838	838	838	
5°	836	836	842	838	831	79
15°	805	807	809	811	813	227
25°	743	748	756	762	766	343
35°	659	664	678	696	706	412
45°	553	563	588	625	647	426
55°	424	442	494	551	580	379
65°	281	311	387	448	477	276
75°	133	180	244	248	242	143
85°	33	39	41	39	37	37
90°	0	0	0	0	0	



TEST NUMBER: P230817

CATALOG NUMBER: 22CZ-LD5-44-SQP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	837.6	837.6	837.6	837.6	837.6
2.5°	847.8	845.8	839.6	835.5	831.4
5°	835.5	835.5	841.7	837.6	831.4
7.5°	829.4	829.4	829.4	839.6	829.4
10°	823.2	825.3	823.2	831.4	823.2
12.5°	817.1	817.1	817.1	819.2	819.2
15°	804.8	806.9	808.9	811.0	813.0
17.5°	792.5	794.6	798.7	800.7	802.8
20°	780.2	782.3	788.4	788.4	792.5
22.5°	763.9	763.9	772.0	774.1	780.2
25°	743.4	747.5	755.7	761.8	765.9
27.5°	724.9	729.0	737.2	745.4	751.6
30°	704.5	708.6	716.8	729.0	737.2
32.5°	681.9	686.0	698.3	712.7	720.9
35°	659.4	663.5	677.8	696.3	706.5
37.5°	634.8	641.0	657.4	677.8	690.1
40°	610.3	616.4	634.8	657.4	675.8
42.5°	581.6	589.8	610.3	641.0	661.5
45°	552.9	563.2	587.7	624.6	647.1
47.5°	522.2	532.4	561.1	608.2	632.8
50°	491.5	503.8	538.6	589.8	616.4
52.5°	458.7	471.0	516.1	571.4	600.0
55°	423.9	442.3	493.5	550.9	579.5
57.5°	389.1	409.6	466.9	528.4	559.1
60°	352.2	376.8	442.3	503.8	534.5
62.5°	317.4	344.0	415.7	477.2	507.9
65°	280.6	311.3	387.0	448.5	477.2
67.5°	241.6	280.6	354.3	413.7	442.3
70°	202.7	247.8	321.5	376.8	403.4
72.5°	167.9	215.0	284.7	331.8	331.8
75°	133.1	180.2	243.7	247.8	241.6
77.5°	102.4	147.4	190.5	174.1	178.2
80°	75.8	112.6	120.8	127.0	131.1
82.5°	51.2	75.8	77.8	81.9	81.9
85°	32.8	38.9	41.0	38.9	36.9
87.5°	14.3	16.4	12.3	8.2	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)