

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: P259042

Luminaire Tested: **14CZ-LD5-20-SQP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259042
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-20-SQP-UNV-L83050-W2A1-U-4000K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER
WITH SQP LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1428.0 lumens
Efficiency: N/A
Efficacy: 90.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

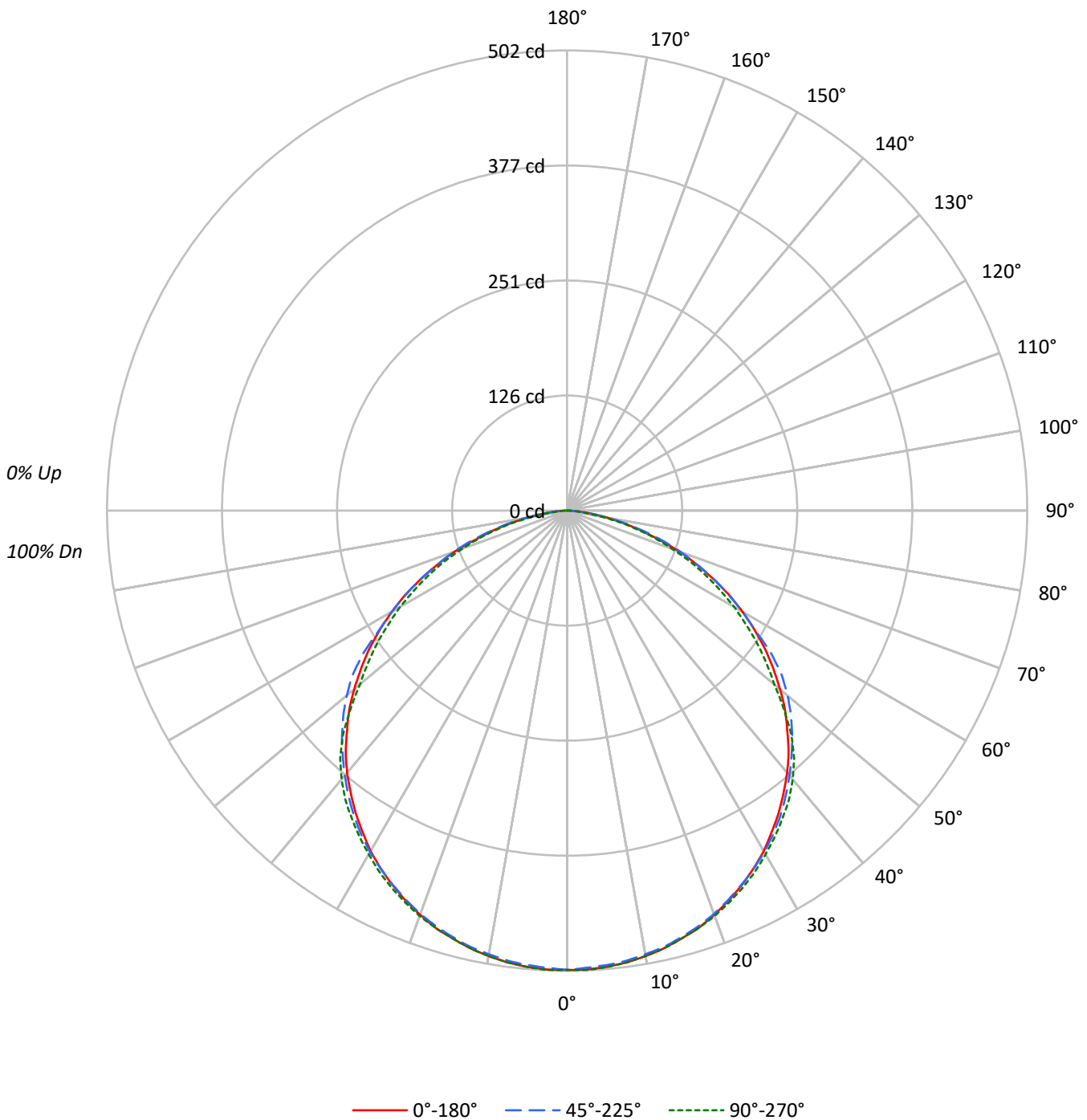
Input Watts (W): 15.717
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P259042

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L83050-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P259042

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L83050-W2A1-U-4000K

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	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	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1348	1348	1348
5°	1350	1344	1350
10°	1348	1343	1348
15°	1346	1342	1346
20°	1344	1341	1348
25°	1339	1337	1347
30°	1333	1336	1345
35°	1322	1333	1346
40°	1312	1325	1344
45°	1292	1322	1316
50°	1270	1314	1235
55°	1237	1273	1189
60°	1189	1187	1132
65°	1115	1121	1060
70°	1024	1035	959
75°	860	900	819
80°	682	697	576
85°	448	389	327



TEST NUMBER: P259042

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L83050-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.5	3.3
10°-20°	136.4	9.6
20°-30°	208.3	14.6
30°-40°	254.1	17.8
40°-50°	265.7	18.6
50°-60°	235.2	16.5
60°-70°	173.2	12.1
70°-80°	89.7	6.3
80°-90°	17.9	1.3
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°	392.1	27.5
0°-40°	646.2	45.3
0°-60°	1147.2	80.3
0°-90°	1428.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1428.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	501	501	501	501	501	
5°	500	500	498	500	500	47
15°	483	483	482	484	483	136
25°	451	451	450	453	454	208
35°	402	403	406	410	410	252
45°	340	342	347	350	346	262
55°	264	269	271	257	254	235
65°	175	186	176	169	166	173
75°	83	88	87	81	79	88
85°	14	16	13	11	11	19
90°	0	0	0	0	0	



TEST NUMBER: P259042

CATALOG NUMBER: 14CZ-LD5-20-SQP-UNV-L83050-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	501.1	501.1	501.1	501.1	501.1
2.5°	501.1	501.1	499.2	501.1	501.6
5°	499.7	499.7	497.7	499.7	499.7
7.5°	497.2	496.8	495.3	497.2	497.2
10°	493.4	493.4	491.4	493.9	493.4
12.5°	489.0	488.5	487.6	489.5	489.0
15°	483.2	483.2	481.8	483.7	483.2
17.5°	477.4	476.9	475.5	477.4	477.4
20°	469.2	468.7	468.2	470.2	470.6
22.5°	460.5	460.0	459.5	462.4	462.4
25°	450.8	450.8	450.3	453.2	453.7
27.5°	440.2	440.2	440.6	444.5	444.0
30°	429.0	429.0	430.0	432.9	432.9
32.5°	415.5	416.5	418.4	421.8	421.8
35°	402.4	403.4	405.8	409.7	409.7
37.5°	387.9	389.4	391.8	396.6	397.6
40°	373.4	374.4	377.3	382.6	382.6
42.5°	357.5	358.4	362.3	367.6	366.6
45°	339.6	342.5	347.3	350.2	345.8
47.5°	322.6	324.6	331.3	327.9	320.7
50°	303.3	307.1	313.9	301.8	295.1
52.5°	283.4	287.8	295.1	278.1	274.3
55°	263.6	268.9	271.4	257.3	253.5
57.5°	242.3	248.1	243.3	235.1	231.2
60°	221.0	227.8	220.6	212.8	210.4
62.5°	198.8	206.5	198.3	191.5	188.2
65°	175.1	185.7	176.1	169.3	166.4
67.5°	151.9	163.0	152.8	147.0	145.1
70°	130.1	136.4	131.6	125.8	121.9
72.5°	104.0	110.3	109.3	103.0	100.6
75°	82.7	88.5	86.6	81.3	78.8
77.5°	61.4	67.7	65.8	59.5	58.5
80°	44.0	48.4	45.0	39.2	37.2
82.5°	27.6	31.0	26.6	22.3	21.3
85°	14.5	15.5	12.6	11.1	10.6
87.5°	4.8	5.3	5.3	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)