

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: P259103

Luminaire Tested: **14CZ-LD5-20-SQP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259103  
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-L82765-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: 1357.0 lumens  
Efficiency: N/A  
Efficacy: 87.4 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

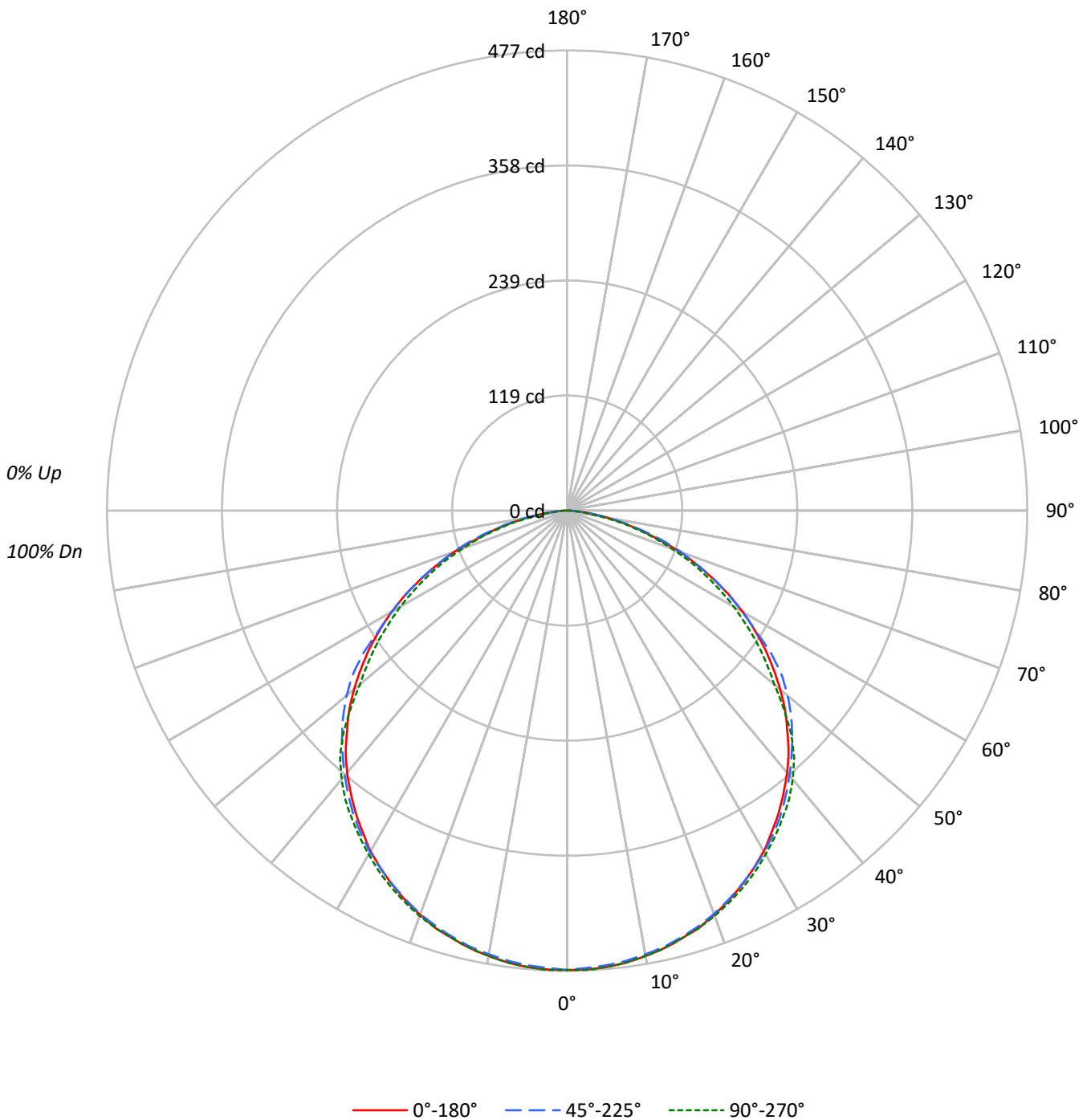
Input Watts (W): 15.531  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1281	1281	1281
5°	1283	1278	1283
10°	1281	1276	1281
15°	1279	1275	1279
20°	1277	1274	1281
25°	1272	1271	1280
30°	1267	1270	1278
35°	1256	1267	1279
40°	1246	1259	1277
45°	1228	1256	1251
50°	1207	1249	1174
55°	1175	1210	1130
60°	1131	1128	1076
65°	1060	1065	1007
70°	972	983	911
75°	817	856	779
80°	648	662	549
85°	426	371	312



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.1	3.3
10°-20°	129.6	9.6
20°-30°	197.9	14.6
30°-40°	241.5	17.8
40°-50°	252.5	18.6
50°-60°	223.6	16.5
60°-70°	164.6	12.1
70°-80°	85.2	6.3
80°-90°	17.0	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°	372.6	27.5
0°-40°	614.1	45.3
0°-60°	1090.2	80.3
0°-90°	1357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1357.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	475	475	473	475	475	45
15°	459	459	458	460	459	130
25°	428	428	428	431	431	197
35°	382	383	386	389	389	239
45°	323	325	330	333	329	249
55°	250	256	258	244	241	223
65°	166	176	167	161	158	165
75°	79	84	82	77	75	84
85°	14	15	12	11	10	18
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	476.2	476.2	476.2	476.2	476.2
2.5°	476.2	476.2	474.4	476.2	476.7
5°	474.8	474.8	473.0	474.8	474.8
7.5°	472.5	472.1	470.7	472.5	472.5
10°	468.8	468.8	467.0	469.3	468.8
12.5°	464.7	464.2	463.3	465.2	464.7
15°	459.2	459.2	457.8	459.6	459.2
17.5°	453.7	453.2	451.8	453.7	453.7
20°	445.9	445.4	444.9	446.8	447.2
22.5°	437.6	437.1	436.7	439.4	439.4
25°	428.4	428.4	427.9	430.7	431.1
27.5°	418.3	418.3	418.7	422.4	422.0
30°	407.7	407.7	408.6	411.4	411.4
32.5°	394.8	395.8	397.6	400.8	400.8
35°	382.4	383.3	385.6	389.3	389.3
37.5°	368.6	370.0	372.3	376.9	377.8
40°	354.8	355.8	358.5	363.6	363.6
42.5°	339.7	340.6	344.3	349.3	348.4
45°	322.7	325.4	330.0	332.8	328.6
47.5°	306.6	308.4	314.9	311.6	304.7
50°	288.2	291.9	298.3	286.8	280.4
52.5°	269.4	273.5	280.4	264.3	260.6
55°	250.5	255.6	257.9	244.5	240.9
57.5°	230.3	235.8	231.2	223.4	219.7
60°	210.1	216.5	209.6	202.2	199.9
62.5°	188.9	196.3	188.5	182.0	178.8
65°	166.4	176.5	167.3	160.9	158.1
67.5°	144.3	154.9	145.2	139.7	137.9
70°	123.6	129.6	125.0	119.5	115.8
72.5°	98.8	104.8	103.9	97.9	95.6
75°	78.6	84.1	82.3	77.2	74.9
77.5°	58.4	64.4	62.5	56.5	55.6
80°	41.8	46.0	42.7	37.2	35.4
82.5°	26.2	29.4	25.3	21.1	20.2
85°	13.8	14.7	12.0	10.6	10.1
87.5°	4.6	5.1	5.1	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)