

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: P258741

Luminaire Tested: **14CZ-LD5-25-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258741  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2303.0 lumens  
Efficiency: N/A  
Efficacy: 123.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

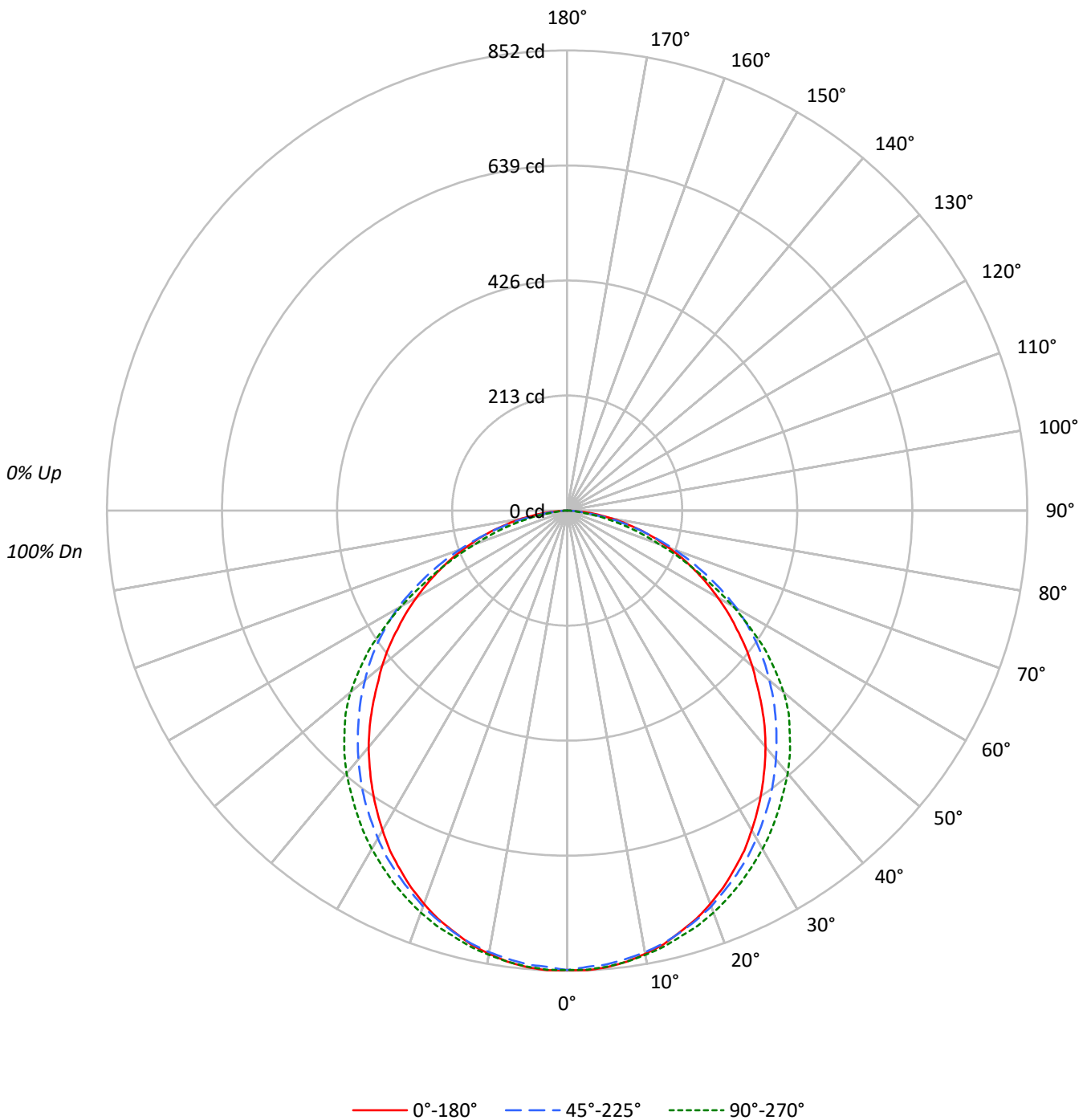
Input Watts (W): 18.693  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258741

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P258741

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L93050-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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2289	2289	2289
5°	2293	2279	2290
10°	2277	2269	2282
15°	2250	2253	2273
20°	2219	2233	2269
25°	2176	2206	2258
30°	2124	2178	2248
35°	2067	2147	2235
40°	2008	2113	2231
45°	1937	2077	2218
50°	1873	2045	2191
55°	1801	2013	2094
60°	1734	1955	1911
65°	1660	1829	1679
70°	1566	1663	1421
75°	1462	1440	1174
80°	1288	1113	859
85°	1013	537	475



TEST NUMBER: P258741

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.4	3.5
10°-20°	229.0	9.9
20°-30°	343.7	14.9
30°-40°	409.7	17.8
40°-50°	422.0	18.3
50°-60°	376.1	16.3
60°-70°	271.0	11.8
70°-80°	141.7	6.2
80°-90°	29.3	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°	653.1	28.4
0°-40°	1062.8	46.1
0°-60°	1860.9	80.8
0°-90°	2303.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2303.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	851	851	851	851	851	
5°	849	847	844	849	848	81
15°	808	809	809	817	816	228
25°	733	737	743	757	760	337
35°	629	637	654	675	680	393
45°	509	520	546	577	583	393
55°	384	396	429	448	446	344
65°	261	270	287	274	264	258
75°	141	148	138	120	113	149
85°	33	29	17	15	15	39
90°	0	0	0	0	0	



TEST NUMBER: P258741

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	850.7	850.7	850.7	850.7	850.7
2.5°	851.8	849.7	845.6	850.7	850.7
5°	848.7	846.6	843.5	848.7	847.7
7.5°	842.5	840.5	837.4	843.5	842.5
10°	833.3	832.3	830.2	836.4	835.3
12.5°	823.0	822.0	821.0	827.1	827.1
15°	807.6	808.7	808.7	816.9	815.8
17.5°	793.3	794.3	795.3	805.6	805.6
20°	774.8	775.8	779.9	791.2	792.2
22.5°	755.3	756.3	761.4	774.8	776.8
25°	732.7	736.8	743.0	757.3	760.4
27.5°	710.1	713.2	723.5	739.9	742.0
30°	683.5	689.6	700.9	719.4	723.5
32.5°	656.8	664.0	677.3	697.8	703.0
35°	629.1	637.3	653.7	675.2	680.4
37.5°	600.3	607.5	628.0	650.6	657.8
40°	571.6	578.8	601.4	627.0	635.2
42.5°	540.8	551.1	573.7	602.4	610.6
45°	509.0	520.3	545.9	576.7	582.9
47.5°	476.2	488.5	518.2	549.0	556.2
50°	447.4	458.7	488.5	518.2	523.4
52.5°	416.6	426.9	459.7	484.4	485.4
55°	383.8	396.1	429.0	448.5	446.4
57.5°	354.0	364.3	396.1	406.4	400.2
60°	322.2	331.5	363.3	364.3	355.1
62.5°	291.4	300.7	325.3	318.1	306.8
65°	260.7	269.9	287.3	274.0	263.7
67.5°	230.9	239.1	249.4	231.9	221.7
70°	199.1	210.4	211.4	190.9	180.6
72.5°	171.4	177.5	175.5	156.0	146.7
75°	140.6	147.8	138.5	120.1	112.9
77.5°	111.9	117.0	104.7	87.2	82.1
80°	83.1	86.2	71.8	58.5	55.4
82.5°	56.4	56.4	41.0	31.8	28.7
85°	32.8	28.7	17.4	15.4	15.4
87.5°	11.3	7.2	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)