

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: P258740

Luminaire Tested: **14CZ-LD5-25-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258740  
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-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2133.0 lumens  
Efficiency: N/A  
Efficacy: 114.7 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

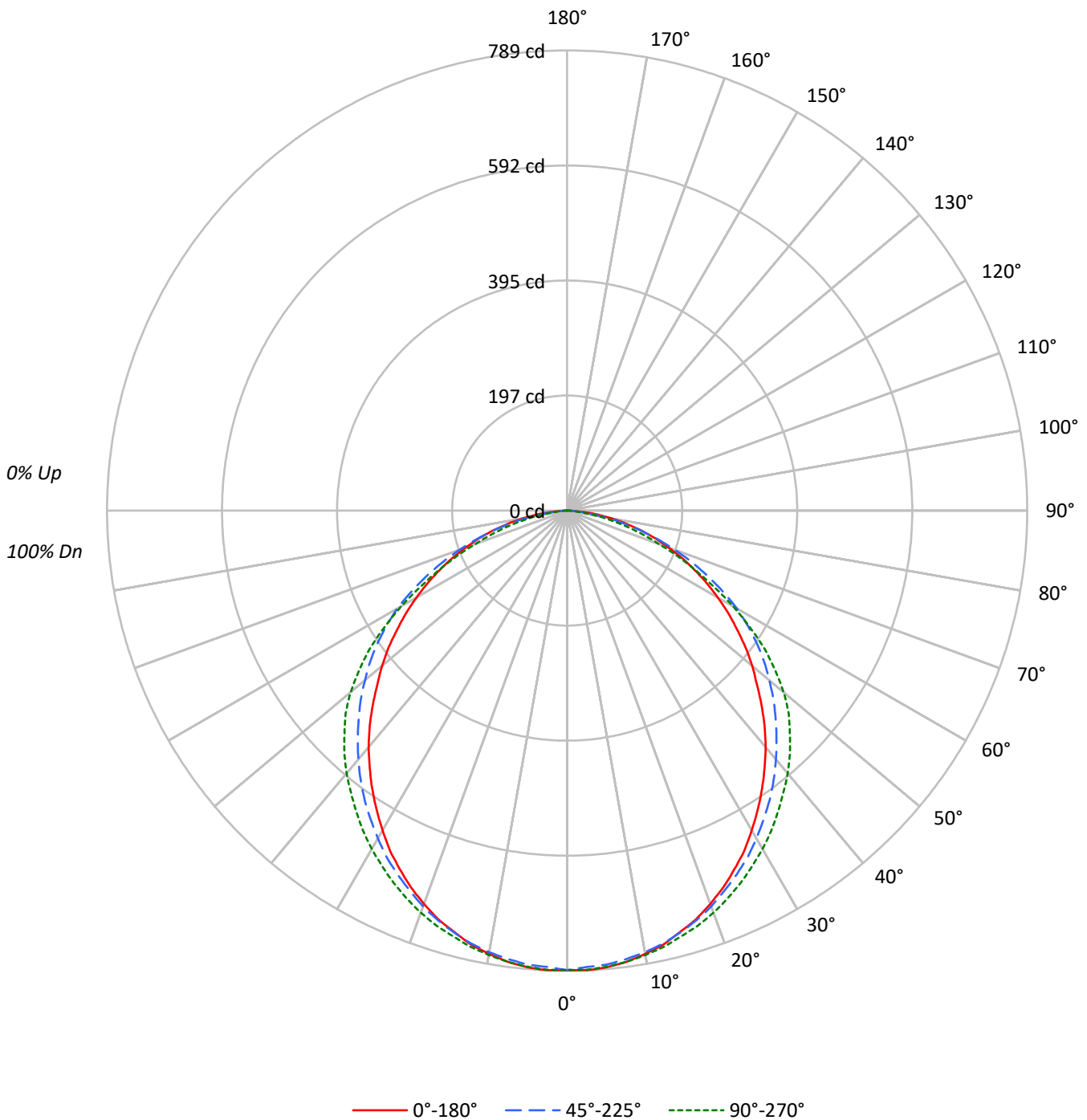
Input Watts (W): 18.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P258740

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P258740

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-3500K

**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	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					100			
1	109	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85					85			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60					60			
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

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

	0°	45°	90°
0°	2120	2120	2120
5°	2123	2110	2121
10°	2109	2101	2114
15°	2084	2087	2105
20°	2055	2068	2101
25°	2015	2043	2091
30°	1967	2017	2082
35°	1914	1989	2070
40°	1860	1957	2067
45°	1794	1924	2055
50°	1735	1894	2029
55°	1668	1864	1939
60°	1606	1811	1770
65°	1537	1694	1556
70°	1451	1541	1316
75°	1354	1334	1088
80°	1193	1031	795
85°	939	500	442



TEST NUMBER: P258740

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.4	3.5
10°-20°	212.1	9.9
20°-30°	318.3	14.9
30°-40°	379.5	17.8
40°-50°	390.9	18.3
50°-60°	348.4	16.3
60°-70°	251.0	11.8
70°-80°	131.3	6.2
80°-90°	27.2	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°	604.9	28.4
0°-40°	984.3	46.1
0°-60°	1723.6	80.8
0°-90°	2133.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2133.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	788	788	788	788	788	
5°	786	784	781	786	785	75
15°	748	749	749	757	756	211
25°	679	682	688	701	704	313
35°	583	590	605	625	630	364
45°	471	482	506	534	540	364
55°	356	367	397	415	413	319
65°	241	250	266	254	244	239
75°	130	137	128	111	105	138
85°	30	27	16	14	14	36
90°	0	0	0	0	0	



TEST NUMBER: P258740

CATALOG NUMBER: 14CZ-LD5-25-S-UNV-L93050-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	787.9	787.9	787.9	787.9	787.9
2.5°	788.9	787.0	783.2	787.9	787.9
5°	786.0	784.1	781.3	786.0	785.1
7.5°	780.3	778.4	775.6	781.3	780.3
10°	771.8	770.8	768.9	774.6	773.7
12.5°	762.3	761.3	760.4	766.1	766.1
15°	748.0	749.0	749.0	756.6	755.6
17.5°	734.7	735.7	736.6	746.1	746.1
20°	717.6	718.5	722.3	732.8	733.8
22.5°	699.5	700.5	705.2	717.6	719.5
25°	678.6	682.4	688.1	701.4	704.3
27.5°	657.7	660.6	670.1	685.3	687.2
30°	633.0	638.7	649.2	666.3	670.1
32.5°	608.3	614.9	627.3	646.3	651.1
35°	582.6	590.2	605.4	625.4	630.2
37.5°	556.0	562.7	581.7	602.6	609.2
40°	529.4	536.1	557.0	580.7	588.3
42.5°	500.9	510.4	531.3	557.9	565.5
45°	471.4	481.9	505.6	534.2	539.9
47.5°	441.0	452.4	480.0	508.5	515.1
50°	414.4	424.9	452.4	480.0	484.7
52.5°	385.9	395.4	425.8	448.6	449.6
55°	355.5	366.9	397.3	415.4	413.4
57.5°	327.9	337.4	366.9	376.4	370.7
60°	298.4	307.0	336.5	337.4	328.9
62.5°	269.9	278.5	301.3	294.6	284.2
65°	241.4	250.0	266.1	253.8	244.3
67.5°	213.9	221.5	231.0	214.8	205.3
70°	184.4	194.8	195.8	176.8	167.3
72.5°	158.7	164.4	162.5	144.5	135.9
75°	130.2	136.9	128.3	111.2	104.6
77.5°	103.6	108.4	96.9	80.8	76.0
80°	77.0	79.8	66.5	54.2	51.3
82.5°	52.3	52.3	38.0	29.5	26.6
85°	30.4	26.6	16.2	14.3	14.3
87.5°	10.5	6.7	6.7	6.7	6.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)