

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: P230890

Luminaire Tested: **14CZ-LD5-25-UNV-L940-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230890  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-25-UNV-L940-CD1-U  
Description: CRUZE 1x4 LED TROFFER  
WITH RIBBED LENS  
Light Source: (84) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2209.0 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

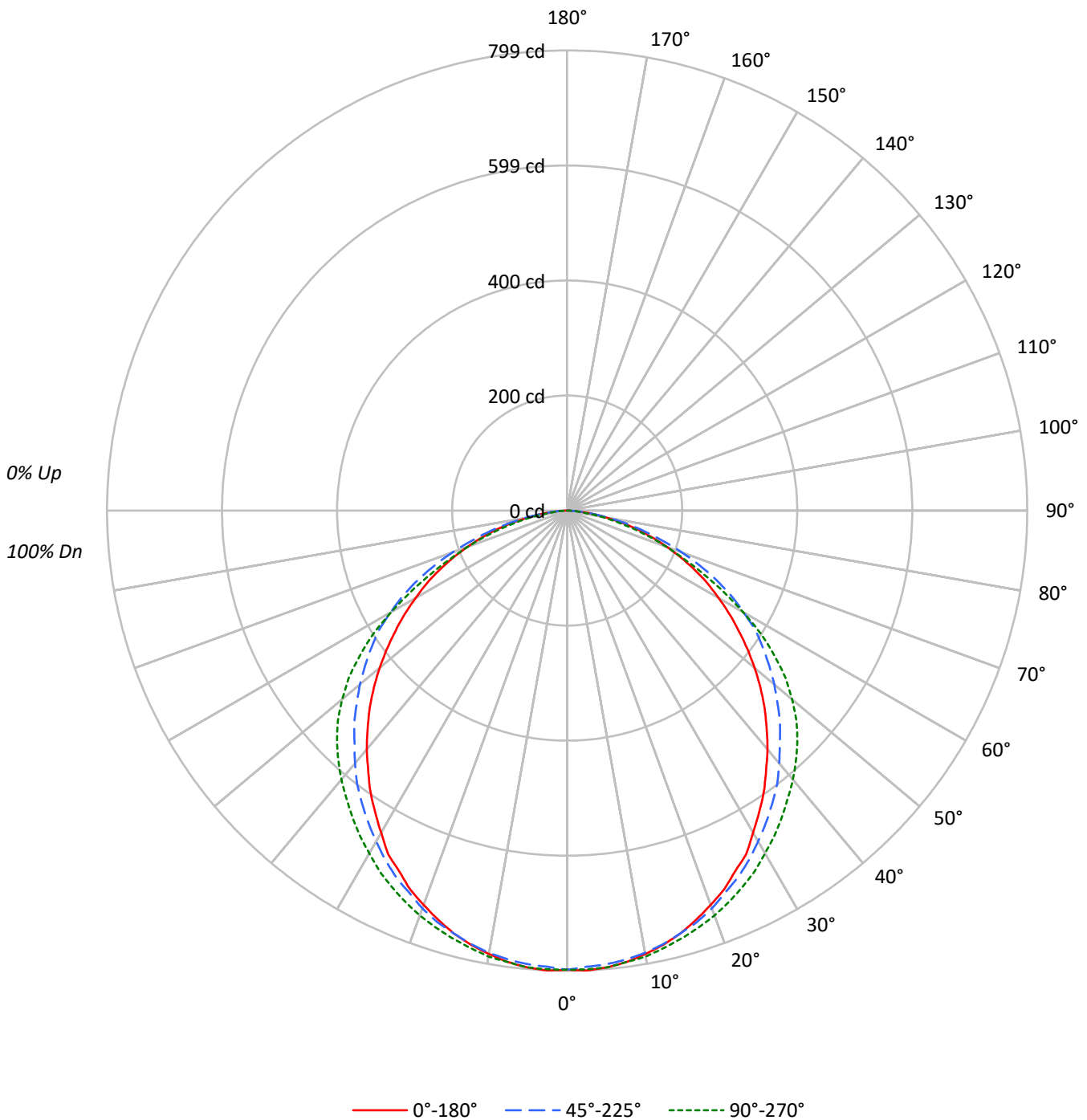
Input Watts (W): 20.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

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

	0°	45°	90°
0°	2145	2145	2145
5°	2150	2136	2150
10°	2137	2131	2149
15°	2118	2118	2142
20°	2086	2105	2143
25°	2050	2086	2140
30°	2007	2061	2135
35°	1957	2039	2136
40°	1901	2012	2142
45°	1844	1989	2151
50°	1778	1965	2134
55°	1706	1947	2064
60°	1635	1905	1899
65°	1560	1824	1664
70°	1448	1662	1440
75°	1313	1449	1188
80°	1046	1148	877
85°	741	639	503



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	75.4	3.4
10°-20°	215.5	9.8
20°-30°	324.9	14.7
30°-40°	389.4	17.6
40°-50°	404.1	18.3
50°-60°	364.5	16.5
60°-70°	265.9	12.0
70°-80°	139.5	6.3
80°-90°	29.7	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°	615.8	27.9
0°-40°	1005.2	45.5
0°-60°	1773.8	80.3
0°-90°	2209.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2209.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	796	794	791	796	796	76
15°	760	760	760	769	769	214
25°	690	694	702	718	721	319
35°	596	602	621	644	650	372
45°	485	494	523	554	565	374
55°	364	377	415	442	440	326
65°	245	259	286	276	261	242
75°	126	144	139	121	114	132
85°	24	29	21	17	16	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	797.2	797.2	797.2	797.2	797.2
2.5°	799.3	797.2	792.8	797.2	797.2
5°	796.1	793.9	790.6	796.1	796.1
7.5°	790.6	788.5	786.3	791.7	790.6
10°	781.9	780.8	779.7	786.3	786.3
12.5°	772.1	772.1	771.0	778.7	777.6
15°	760.1	760.1	760.1	768.9	768.9
17.5°	744.9	747.1	749.2	759.0	759.0
20°	728.6	730.7	735.1	747.1	748.2
22.5°	712.2	713.3	717.7	731.8	735.1
25°	690.4	693.7	702.4	717.7	720.9
27.5°	673.0	674.1	683.9	701.3	705.7
30°	645.8	653.4	663.2	682.8	687.2
32.5°	620.7	627.3	642.5	663.2	669.7
35°	595.7	602.2	620.7	643.6	650.1
37.5°	567.4	577.2	599.0	621.8	629.5
40°	541.2	550.0	572.8	601.1	609.9
42.5°	512.9	521.6	546.7	578.3	588.1
45°	484.6	494.4	522.7	554.3	565.2
47.5°	455.2	466.1	495.5	530.4	540.2
50°	424.7	436.7	469.4	505.3	509.7
52.5°	394.2	407.3	442.1	473.7	478.1
55°	363.7	376.8	414.9	442.1	440.0
57.5°	334.3	348.5	387.7	401.8	399.7
60°	303.8	319.1	353.9	360.5	352.8
62.5°	275.5	289.7	322.4	316.9	307.1
65°	245.0	259.2	286.4	275.5	261.4
67.5°	214.5	232.0	249.4	230.9	220.0
70°	184.0	203.6	211.3	192.8	183.0
72.5°	154.6	175.3	173.2	154.6	148.1
75°	126.3	143.8	139.4	120.9	114.3
77.5°	95.8	115.4	105.6	90.4	84.9
80°	67.5	84.9	74.1	61.0	56.6
82.5°	44.6	56.6	45.7	35.9	32.7
85°	24.0	29.4	20.7	17.4	16.3
87.5°	9.8	8.7	7.6	7.6	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)