

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: P230914

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230914
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-L940-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2253.0 lumens
Efficiency: N/A
Efficacy: 109.9 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

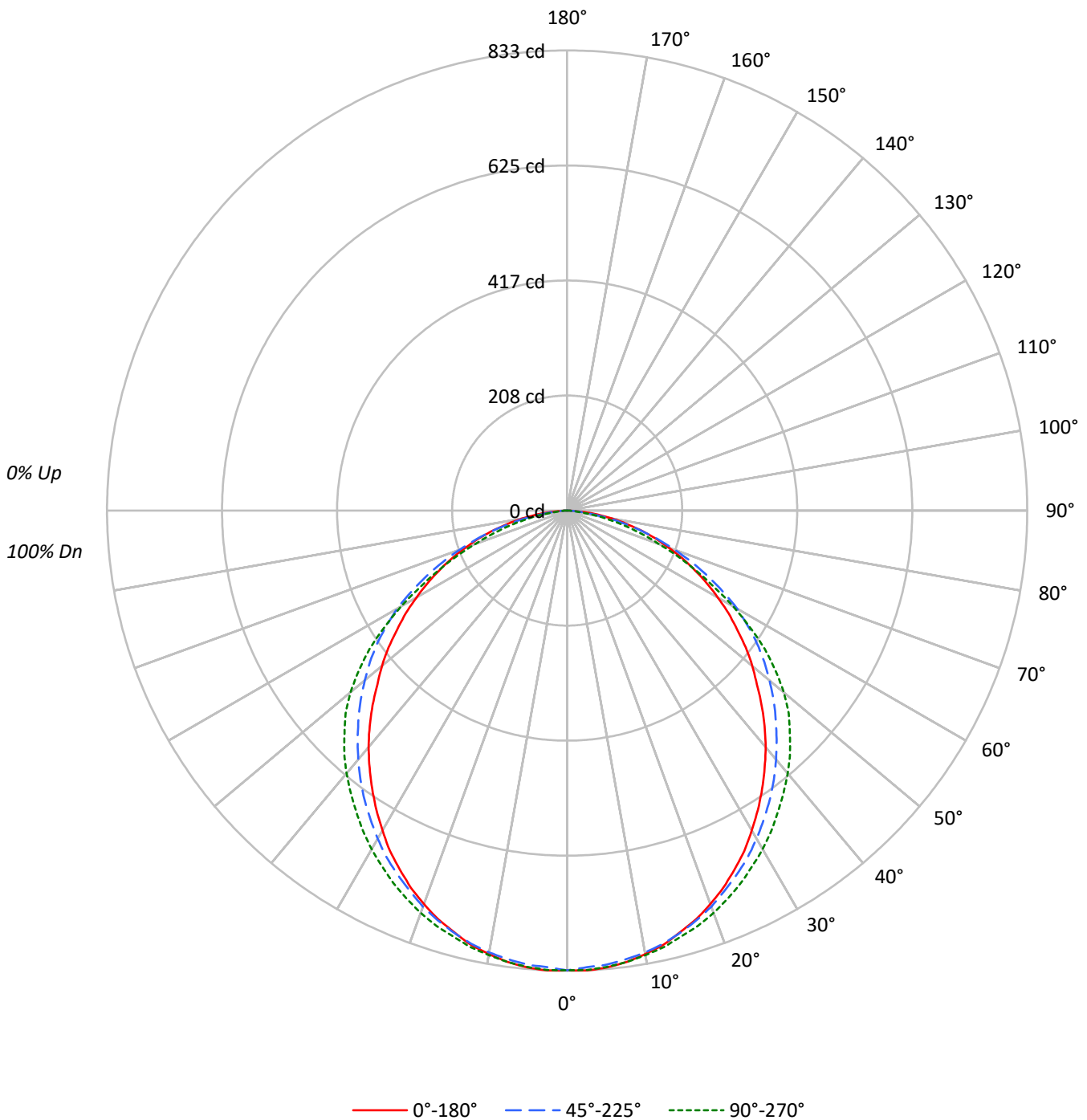
Input Watts (W): 20.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2240	2240	2240
5°	2243	2229	2240
10°	2228	2219	2233
15°	2201	2204	2223
20°	2171	2185	2219
25°	2128	2158	2209
30°	2078	2131	2199
35°	2022	2101	2187
40°	1964	2067	2183
45°	1895	2033	2170
50°	1832	2001	2143
55°	1762	1969	2049
60°	1696	1913	1870
65°	1624	1790	1643
70°	1533	1627	1390
75°	1430	1409	1148
80°	1260	1089	840
85°	991	528	466



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.6	3.5
10°-20°	224.0	9.9
20°-30°	336.2	14.9
30°-40°	400.8	17.8
40°-50°	412.9	18.3
50°-60°	368.0	16.3
60°-70°	265.1	11.8
70°-80°	138.7	6.2
80°-90°	28.7	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°	638.9	28.4
0°-40°	1039.7	46.1
0°-60°	1820.5	80.8
0°-90°	2253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2253.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	832	832	832	832	832	
5°	830	828	825	830	829	79
15°	790	791	791	799	798	223
25°	717	721	727	741	744	330
35°	615	623	640	661	666	385
45°	498	509	534	564	570	384
55°	376	388	420	439	437	337
65°	255	264	281	268	258	253
75°	138	145	136	118	110	146
85°	32	28	17	15	15	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	832.3	832.3	832.3	832.3	832.3
2.5°	833.3	831.3	827.2	832.3	832.3
5°	830.3	828.2	825.2	830.3	829.2
7.5°	824.2	822.2	819.2	825.2	824.2
10°	815.2	814.2	812.2	818.2	817.2
12.5°	805.2	804.1	803.1	809.2	809.2
15°	790.1	791.1	791.1	799.1	798.1
17.5°	776.0	777.0	778.0	788.1	788.1
20°	758.0	759.0	763.0	774.0	775.0
22.5°	738.9	739.9	744.9	758.0	760.0
25°	716.8	720.8	726.8	740.9	743.9
27.5°	694.7	697.7	707.8	723.8	725.8
30°	668.6	674.6	685.7	703.8	707.8
32.5°	642.5	649.5	662.6	682.7	687.7
35°	615.4	623.4	639.5	660.6	665.6
37.5°	587.3	594.3	614.4	636.5	643.5
40°	559.2	566.2	588.3	613.4	621.4
42.5°	529.1	539.1	561.2	589.3	597.3
45°	497.9	509.0	534.1	564.2	570.2
47.5°	465.8	477.9	507.0	537.1	544.1
50°	437.7	448.8	477.9	507.0	512.0
52.5°	407.6	417.6	449.8	473.9	474.9
55°	375.5	387.5	419.6	438.7	436.7
57.5°	346.4	356.4	387.5	397.6	391.5
60°	315.2	324.3	355.4	356.4	347.4
62.5°	285.1	294.2	318.2	311.2	300.2
65°	255.0	264.0	281.1	268.0	258.0
67.5°	225.9	233.9	244.0	226.9	216.8
70°	194.8	205.8	206.8	186.7	176.7
72.5°	167.7	173.7	171.7	152.6	143.6
75°	137.5	144.6	135.5	117.5	110.4
77.5°	109.4	114.4	102.4	85.3	80.3
80°	81.3	84.3	70.3	57.2	54.2
82.5°	55.2	55.2	40.2	31.1	28.1
85°	32.1	28.1	17.1	15.1	15.1
87.5°	11.0	7.0	7.0	7.0	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)