

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: P230912

Luminaire Tested: **14CZ-LD5-25-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230912
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-L930-CD1-U
Description: CRUZE 1x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2116.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

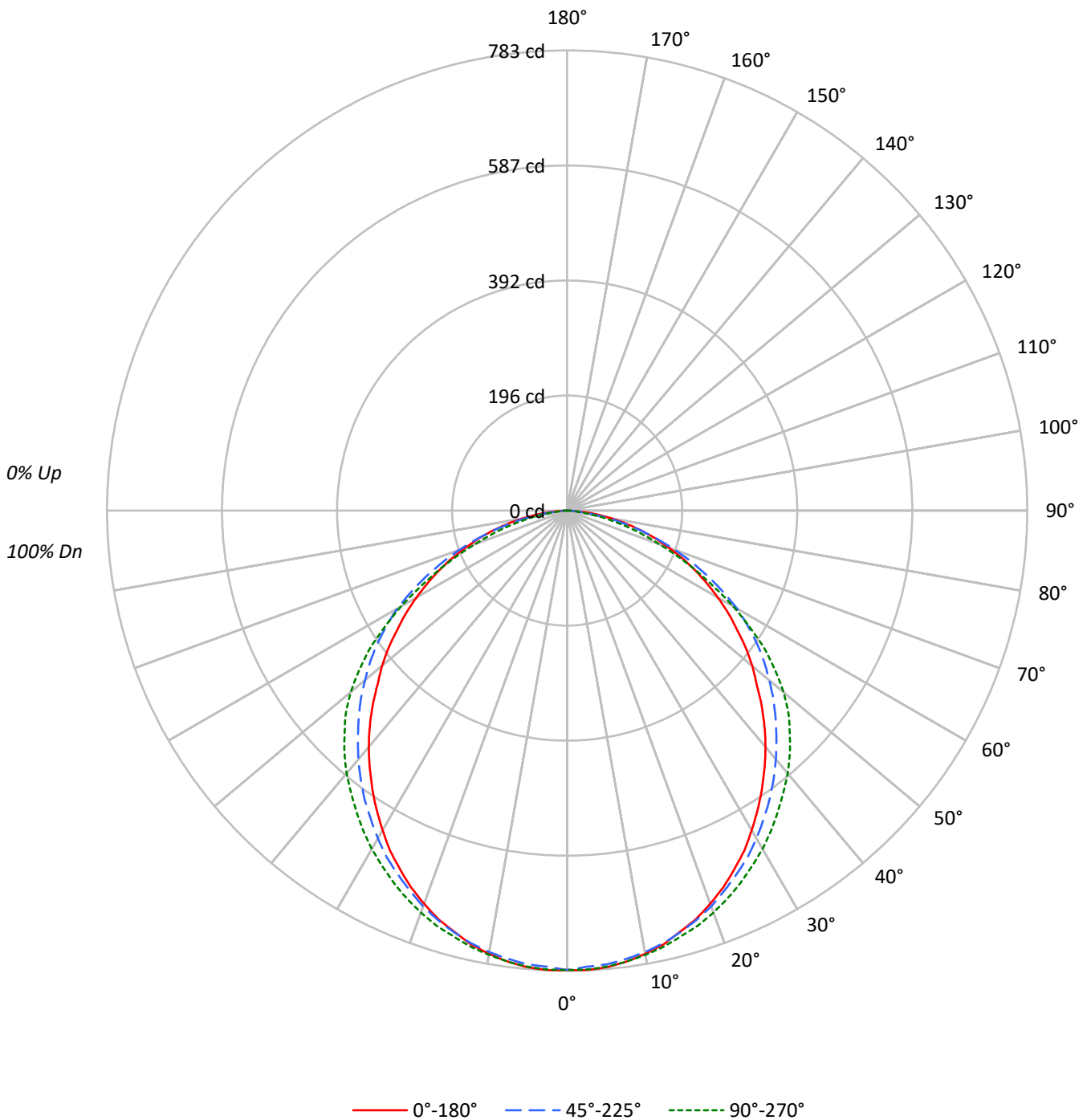
Input Watts (W): 20.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2104	2104	2104
5°	2106	2094	2104
10°	2092	2084	2097
15°	2067	2070	2088
20°	2039	2052	2084
25°	1999	2027	2075
30°	1951	2001	2065
35°	1899	1973	2054
40°	1845	1941	2050
45°	1780	1909	2038
50°	1721	1879	2013
55°	1654	1849	1924
60°	1594	1796	1756
65°	1525	1681	1543
70°	1439	1528	1305
75°	1343	1324	1078
80°	1184	1023	789
85°	932	494	435



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	3.5
10°-20°	210.4	9.9
20°-30°	315.8	14.9
30°-40°	376.5	17.8
40°-50°	387.8	18.3
50°-60°	345.6	16.3
60°-70°	249.0	11.8
70°-80°	130.2	6.2
80°-90°	26.9	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°	600.0	28.4
0°-40°	976.5	46.1
0°-60°	1709.8	80.8
0°-90°	2116.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2116.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	780	778	775	780	779	74
15°	742	743	743	750	750	209
25°	673	677	683	696	699	310
35°	578	586	601	620	625	361
45°	468	478	502	530	536	361
55°	353	364	394	412	410	316
65°	240	248	264	252	242	237
75°	129	136	127	110	104	137
85°	30	26	16	14	14	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	781.7	781.7	781.7	781.7	781.7
2.5°	782.6	780.7	776.9	781.7	781.7
5°	779.8	777.9	775.1	779.8	778.8
7.5°	774.1	772.2	769.4	775.1	774.1
10°	765.6	764.7	762.8	768.5	767.5
12.5°	756.2	755.3	754.3	760.0	760.0
15°	742.0	743.0	743.0	750.5	749.6
17.5°	728.8	729.8	730.7	740.2	740.2
20°	711.9	712.8	716.6	727.0	727.9
22.5°	694.0	694.9	699.6	711.9	713.8
25°	673.2	677.0	682.6	695.8	698.7
27.5°	652.5	655.3	664.7	679.8	681.7
30°	628.0	633.6	644.0	661.0	664.7
32.5°	603.4	610.0	622.3	641.2	645.9
35°	578.0	585.5	600.6	620.4	625.1
37.5°	551.6	558.2	577.0	597.8	604.4
40°	525.2	531.8	552.5	576.1	583.6
42.5°	496.9	506.3	527.1	553.5	561.0
45°	467.7	478.0	501.6	529.9	535.6
47.5°	437.5	448.8	476.2	504.4	511.0
50°	411.1	421.5	448.8	476.2	480.9
52.5°	382.8	392.2	422.4	445.0	446.0
55°	352.6	364.0	394.1	412.0	410.2
57.5°	325.3	334.7	364.0	373.4	367.7
60°	296.1	304.6	333.8	334.7	326.2
62.5°	267.8	276.3	298.9	292.3	281.9
65°	239.5	248.0	264.0	251.8	242.3
67.5°	212.1	219.7	229.1	213.1	203.7
70°	182.9	193.3	194.2	175.4	165.9
72.5°	157.5	163.1	161.2	143.3	134.8
75°	129.2	135.8	127.3	110.3	103.7
77.5°	102.8	107.5	96.2	80.1	75.4
80°	76.4	79.2	66.0	53.7	50.9
82.5°	51.9	51.9	37.7	29.2	26.4
85°	30.2	26.4	16.0	14.1	14.1
87.5°	10.4	6.6	6.6	6.6	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)