

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: P259091

Luminaire Tested: **14CZ-LD5-39-SQP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259091
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-LD5-39-SQP-UNV-L93050-W2A1-U-3500K
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2139.0 lumens
Efficiency: N/A
Efficacy: 67.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

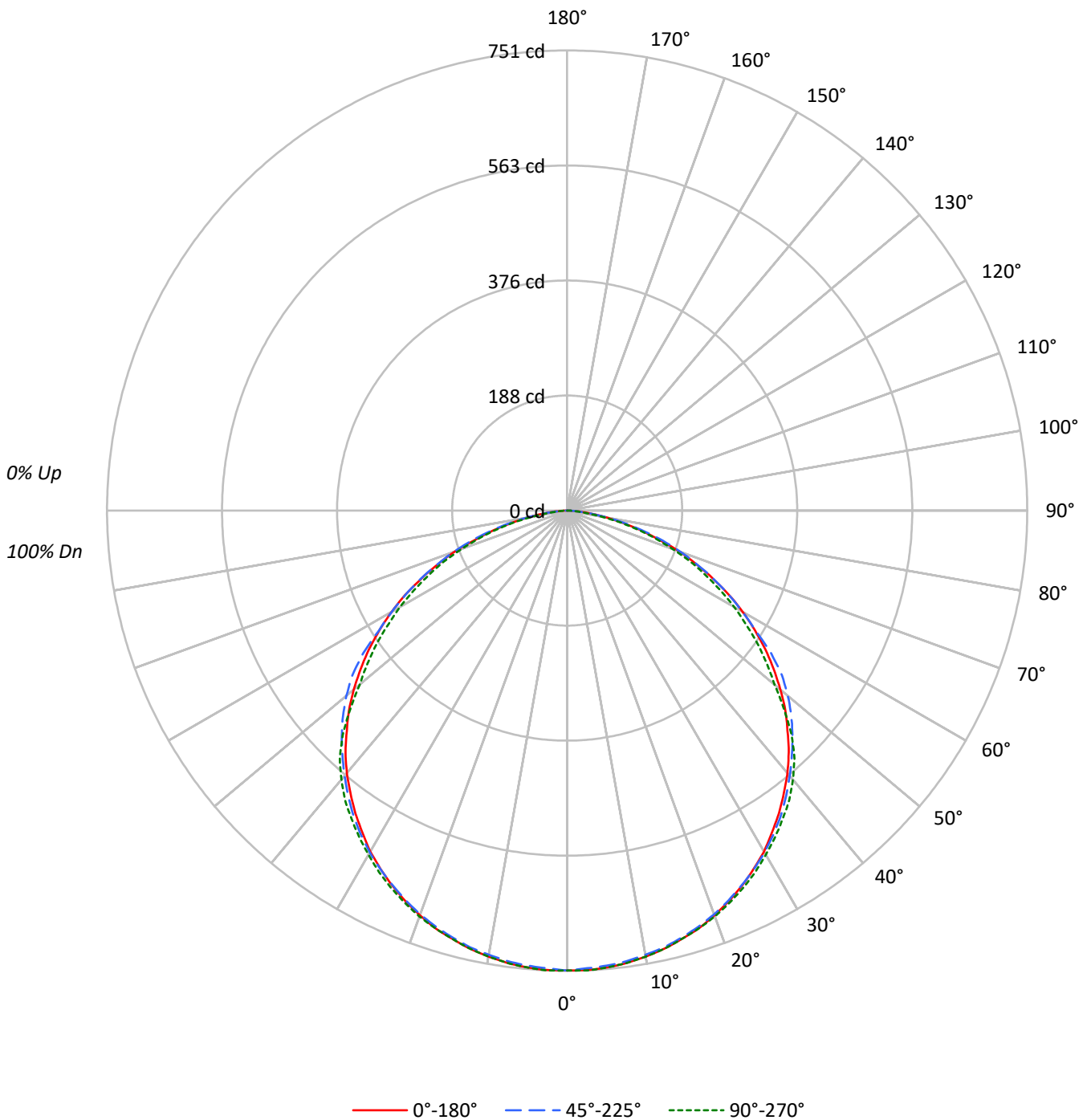
Input Watts (W): 31.527
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	65	88	78	71	65	75	69	64	73	67	63	70	65	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2020	2020	2020
5°	2022	2014	2022
10°	2019	2011	2019
15°	2016	2010	2016
20°	2013	2008	2019
25°	2005	2003	2018
30°	1997	2001	2015
35°	1980	1997	2016
40°	1965	1985	2013
45°	1936	1980	1971
50°	1902	1968	1850
55°	1853	1907	1781
60°	1782	1778	1696
65°	1670	1679	1587
70°	1533	1551	1437
75°	1288	1349	1228
80°	1021	1044	865
85°	670	580	491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.1	3.3
10°-20°	204.3	9.6
20°-30°	312.0	14.6
30°-40°	380.6	17.8
40°-50°	398.0	18.6
50°-60°	352.4	16.5
60°-70°	259.5	12.1
70°-80°	134.3	6.3
80°-90°	26.8	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°	587.4	27.5
0°-40°	968.0	45.3
0°-60°	1718.4	80.3
0°-90°	2139.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2139.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	751	751	751	751	751	
5°	748	748	746	748	748	71
15°	724	724	722	724	724	204
25°	675	675	674	679	680	311
35°	603	604	608	614	614	377
45°	509	513	520	525	518	393
55°	395	403	406	385	380	352
65°	262	278	264	254	249	260
75°	124	133	130	122	118	132
85°	22	23	19	17	16	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	750.6	750.6	750.6	750.6	750.6
2.5°	750.6	750.6	747.7	750.6	751.3
5°	748.4	748.4	745.5	748.4	748.4
7.5°	744.8	744.1	741.9	744.8	744.8
10°	739.0	739.0	736.1	739.7	739.0
12.5°	732.5	731.8	730.3	733.2	732.5
15°	723.8	723.8	721.6	724.5	723.8
17.5°	715.1	714.4	712.2	715.1	715.1
20°	702.8	702.1	701.3	704.2	705.0
22.5°	689.8	689.0	688.3	692.7	692.7
25°	675.3	675.3	674.5	678.9	679.6
27.5°	659.3	659.3	660.0	665.8	665.1
30°	642.7	642.7	644.1	648.5	648.5
32.5°	622.4	623.8	626.7	631.8	631.8
35°	602.8	604.3	607.9	613.7	613.7
37.5°	581.1	583.2	586.9	594.1	595.6
40°	559.3	560.8	565.1	573.1	573.1
42.5°	535.4	536.9	542.7	550.6	549.2
45°	508.6	513.0	520.2	524.6	518.0
47.5°	483.3	486.2	496.3	491.2	480.4
50°	454.3	460.1	470.2	452.1	442.0
52.5°	424.6	431.1	442.0	416.6	410.8
55°	394.9	402.8	406.5	385.4	379.7
57.5°	363.0	371.7	364.4	352.1	346.3
60°	331.1	341.3	330.4	318.8	315.2
62.5°	297.8	309.4	297.1	286.9	281.8
65°	262.3	278.2	263.7	253.6	249.2
67.5°	227.5	244.2	229.0	220.3	217.4
70°	194.9	204.3	197.1	188.4	182.6
72.5°	155.8	165.2	163.7	154.3	150.7
75°	123.9	132.6	129.7	121.7	118.1
77.5°	92.0	101.4	98.5	89.1	87.7
80°	65.9	72.5	67.4	58.7	55.8
82.5°	41.3	46.4	39.8	33.3	31.9
85°	21.7	23.2	18.8	16.7	15.9
87.5°	7.2	8.0	8.0	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)