

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: P387437

Luminaire Tested: **14CZ2-29-SQR-UNV-L935-CD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P387437
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1911-580-2)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-29-SQR-UNV-L935-CD1-U
Description: 1x4 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

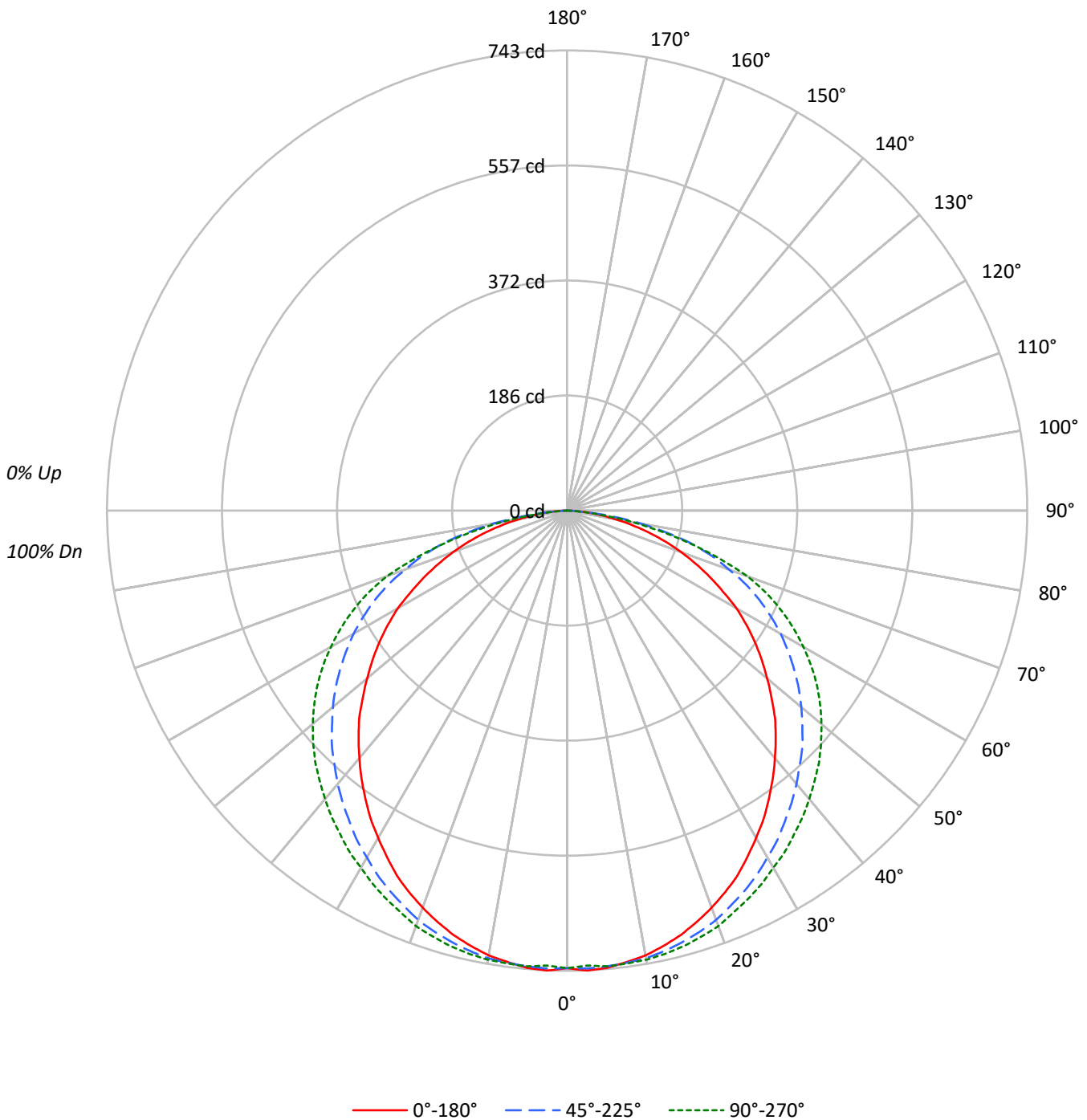
Lumens per Lamp: N/A
Luminaire Lumens: 2337.7 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 24.3
Input Voltage (V): NR
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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	68	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1988	1988	1988
5°	2002	1995	1995
10°	1993	2006	2012
15°	1976	2009	2028
20°	1954	2014	2045
25°	1931	2012	2053
30°	1896	2010	2069
35°	1866	2013	2098
40°	1833	2024	2136
45°	1807	2045	2188
50°	1766	2067	2244
55°	1736	2100	2311
60°	1700	2143	2371
65°	1621	2183	2430
70°	1539	2188	2429
75°	1409	2180	2144
80°	1206	1863	1661
85°	945	1056	618



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.2	3.0
10°-20°	202.8	8.7
20°-30°	310.1	13.3
30°-40°	380.2	16.3
40°-50°	408.8	17.5
50°-60°	392.9	16.8
60°-70°	327.1	14.0
70°-80°	200.8	8.6
80°-90°	44.7	1.9
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°	583.2	24.9
0°-40°	963.3	41.2
0°-60°	1765.1	75.5
0°-90°	2337.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2337.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	739	739	739	739	739	
5°	741	734	739	739	739	70
15°	709	707	721	726	728	200
25°	650	656	678	686	692	299
35°	568	582	613	629	639	355
45°	475	496	537	562	575	365
55°	370	402	448	478	492	331
65°	254	293	343	371	382	252
75°	136	177	210	208	206	143
85°	31	46	34	24	20	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	738.7	738.7	738.7	738.7	738.7
2.5°	743.4	736.4	739.9	738.7	735.2
5°	741.1	734.0	738.7	738.7	738.7
7.5°	735.2	729.3	736.4	737.6	737.6
10°	729.3	724.6	734.0	735.2	736.4
12.5°	719.9	716.3	728.1	730.5	732.8
15°	709.3	706.9	721.1	725.8	728.1
17.5°	696.3	697.5	712.8	718.7	721.1
20°	682.2	685.7	703.4	709.3	714.0
22.5°	666.9	671.6	690.4	697.5	702.2
25°	650.4	656.3	677.5	685.7	691.6
27.5°	630.3	639.8	663.3	673.9	679.8
30°	610.3	620.9	646.8	659.8	665.7
32.5°	590.3	602.1	631.5	644.5	653.9
35°	567.9	582.0	612.7	629.2	638.6
37.5°	545.5	562.0	595.0	613.8	624.4
40°	521.9	539.6	576.1	597.3	608.0
42.5°	498.4	518.4	556.1	579.7	591.5
45°	474.8	496.0	537.3	562.0	575.0
47.5°	447.7	473.6	514.9	543.2	556.1
50°	421.8	450.1	493.7	523.1	536.1
52.5°	395.9	425.3	471.3	501.9	514.9
55°	370.0	401.8	447.7	478.4	492.5
57.5°	342.9	375.8	423.0	454.8	467.7
60°	315.8	349.9	398.2	427.7	440.6
62.5°	283.9	324.0	371.1	400.6	412.4
65°	254.5	293.4	342.9	371.1	381.7
67.5°	225.0	265.1	313.4	339.3	348.7
70°	195.6	235.6	278.1	302.8	308.7
72.5°	166.1	206.2	246.2	260.4	258.0
75°	135.5	176.7	209.7	208.5	206.2
77.5°	106.0	146.1	166.1	157.9	154.3
80°	77.8	116.6	120.2	111.9	107.2
82.5°	53.0	83.7	75.4	66.0	61.3
85°	30.6	45.9	34.2	23.6	20.0
87.5°	13.0	11.8	3.5	3.5	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)