

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: P387392

Luminaire Tested: **14CZ2-20-SQR-UNV-L940-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: P387392
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: 14CZ2-20-SQR-UNV-L940-CD1-U
Description: 1x4 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

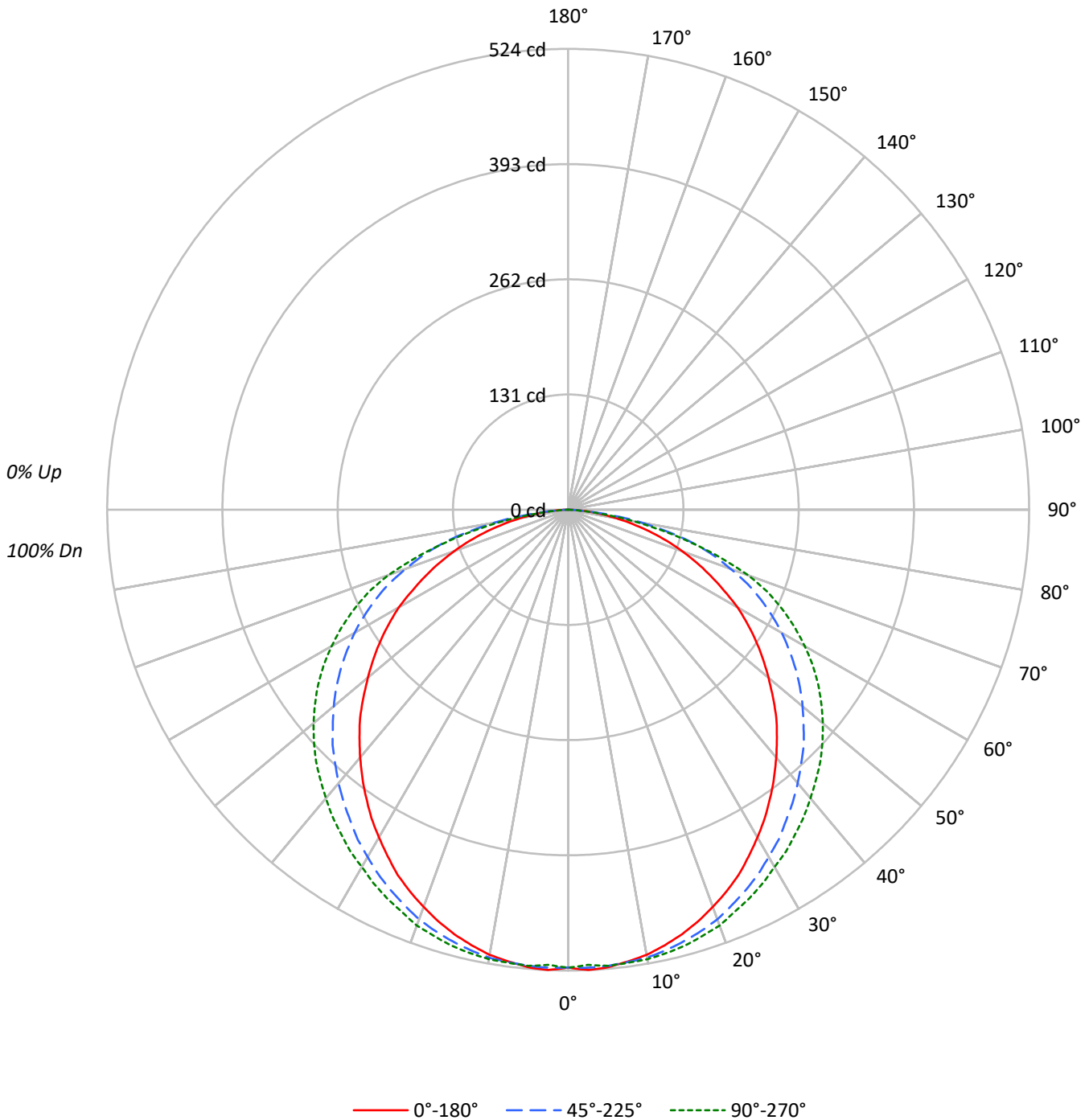
Lumens per Lamp: N/A
Luminaire Lumens: 1647.3 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.3
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°	1401	1401	1401
5°	1411	1406	1406
10°	1404	1413	1418
15°	1392	1416	1429
20°	1377	1420	1441
25°	1361	1417	1447
30°	1336	1416	1458
35°	1315	1418	1478
40°	1292	1426	1505
45°	1273	1441	1542
50°	1244	1456	1582
55°	1223	1480	1628
60°	1197	1510	1671
65°	1142	1538	1713
70°	1084	1541	1711
75°	993	1537	1511
80°	849	1313	1172
85°	667	744	435



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	3.0
10°-20°	142.9	8.7
20°-30°	218.5	13.3
30°-40°	267.9	16.3
40°-50°	288.1	17.5
50°-60°	276.9	16.8
60°-70°	230.5	14.0
70°-80°	141.5	8.6
80°-90°	31.5	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°	410.9	24.9
0°-40°	678.8	41.2
0°-60°	1243.8	75.5
0°-90°	1647.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1647.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	522	517	521	521	521	50
15°	500	498	508	511	513	141
25°	458	462	477	483	487	211
35°	400	410	432	443	450	250
45°	335	350	379	396	405	257
55°	261	283	316	337	347	233
65°	179	207	242	262	269	178
75°	96	124	148	147	145	101
85°	22	32	24	17	14	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.6	520.6	520.6	520.6	520.6
2.5°	523.9	518.9	521.4	520.6	518.1
5°	522.2	517.2	520.6	520.6	520.6
7.5°	518.1	513.9	518.9	519.7	519.7
10°	513.9	510.6	517.2	518.1	518.9
12.5°	507.3	504.8	513.1	514.7	516.4
15°	499.8	498.1	508.1	511.4	513.1
17.5°	490.7	491.5	502.3	506.4	508.1
20°	480.7	483.2	495.7	499.8	503.1
22.5°	469.9	473.2	486.5	491.5	494.8
25°	458.3	462.4	477.4	483.2	487.4
27.5°	444.2	450.8	467.4	474.9	479.0
30°	430.1	437.5	455.8	464.9	469.1
32.5°	416.0	424.3	445.0	454.1	460.8
35°	400.2	410.1	431.7	443.3	450.0
37.5°	384.4	396.0	419.3	432.6	440.0
40°	367.8	380.3	406.0	420.9	428.4
42.5°	351.2	365.3	391.9	408.5	416.8
45°	334.6	349.5	378.6	396.0	405.2
47.5°	315.5	333.8	362.8	382.7	391.9
50°	297.2	317.2	347.9	368.6	377.8
52.5°	279.0	299.7	332.1	353.7	362.8
55°	260.7	283.1	315.5	337.1	347.0
57.5°	241.6	264.8	298.1	320.5	329.6
60°	222.5	246.6	280.6	301.4	310.5
62.5°	200.1	228.3	261.5	282.3	290.6
65°	179.3	206.7	241.6	261.5	269.0
67.5°	158.6	186.8	220.8	239.1	245.8
70°	137.8	166.0	195.9	213.4	217.5
72.5°	117.1	145.3	173.5	183.5	181.8
75°	95.5	124.5	147.8	147.0	145.3
77.5°	74.7	102.9	117.1	111.3	108.8
80°	54.8	82.2	84.7	78.9	75.6
82.5°	37.4	58.9	53.1	46.5	43.2
85°	21.6	32.4	24.1	16.6	14.1
87.5°	9.1	8.3	2.5	2.5	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)