

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: P387395

Luminaire Tested: **14CZ2-20-SQR-UNV-L950-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: P387395
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-L950-CD1-U
Description: 1x4 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND SQUARE LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

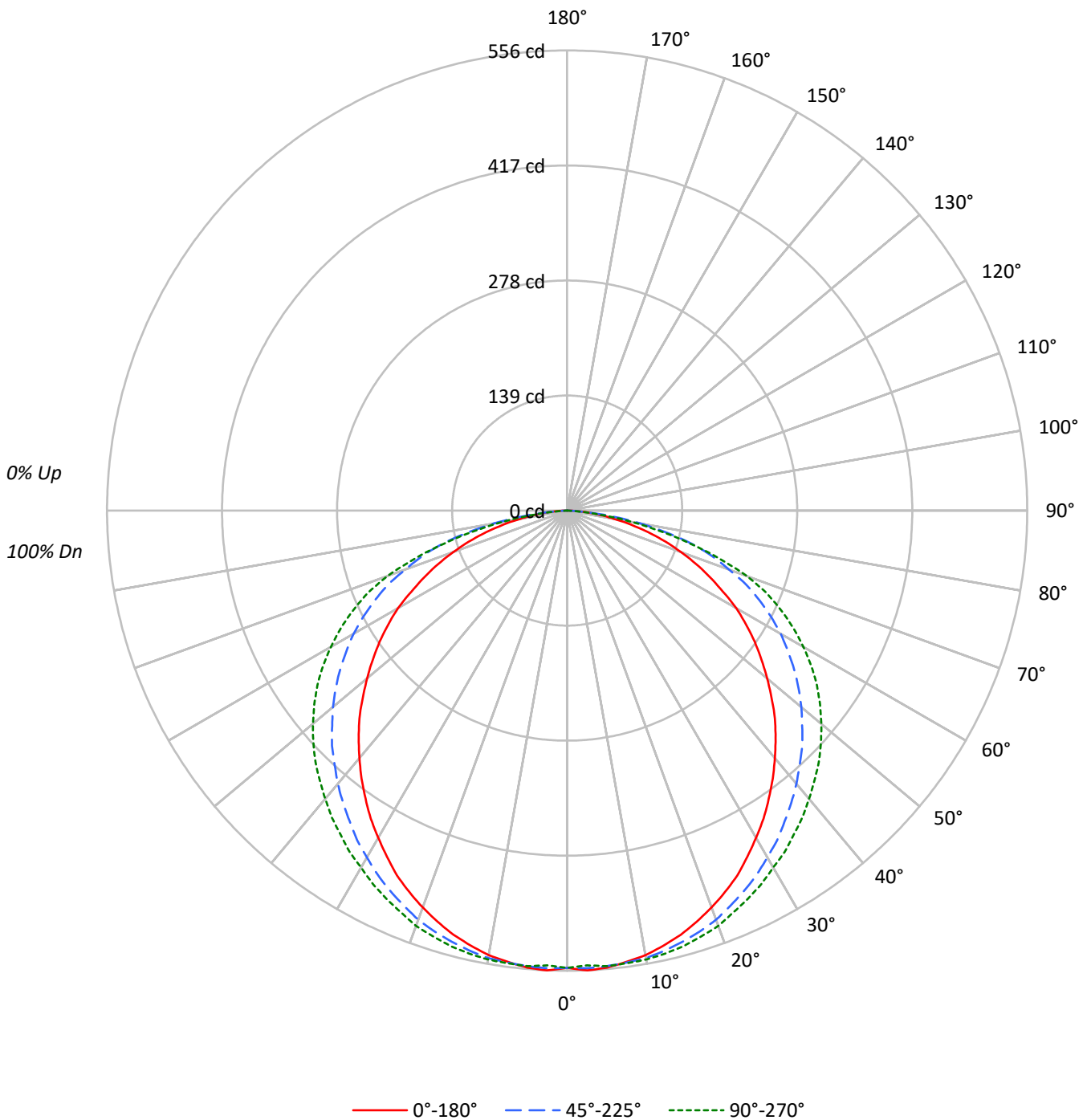
Lumens per Lamp: N/A
Luminaire Lumens: 1748.5 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.34 / 1.44
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	1487	1487	1487
5°	1497	1492	1492
10°	1491	1500	1505
15°	1478	1502	1517
20°	1461	1507	1529
25°	1444	1504	1536
30°	1418	1503	1547
35°	1396	1505	1569
40°	1371	1514	1597
45°	1351	1529	1636
50°	1321	1546	1679
55°	1298	1571	1728
60°	1271	1603	1774
65°	1212	1633	1818
70°	1151	1637	1817
75°	1053	1631	1603
80°	902	1393	1243
85°	707	790	463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.5	3.0
10°-20°	151.7	8.7
20°-30°	232.0	13.3
30°-40°	284.3	16.3
40°-50°	305.8	17.5
50°-60°	293.9	16.8
60°-70°	244.7	14.0
70°-80°	150.2	8.6
80°-90°	33.5	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°	436.2	24.9
0°-40°	720.5	41.2
0°-60°	1320.2	75.5
0°-90°	1748.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1748.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	552	552	552	552	552	
5°	554	549	552	552	552	53
15°	530	529	539	543	545	150
25°	486	491	507	513	517	224
35°	425	435	458	471	478	266
45°	355	371	402	420	430	273
55°	277	300	335	358	368	247
65°	190	219	256	278	286	189
75°	101	132	157	156	154	107
85°	23	34	26	18	15	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.5	552.5	552.5	552.5	552.5
2.5°	556.1	550.8	553.4	552.5	549.9
5°	554.3	549.0	552.5	552.5	552.5
7.5°	549.9	545.5	550.8	551.7	551.7
10°	545.5	542.0	549.0	549.9	550.8
12.5°	538.4	535.8	544.6	546.4	548.1
15°	530.5	528.7	539.3	542.8	544.6
17.5°	520.8	521.7	533.2	537.6	539.3
20°	510.2	512.9	526.1	530.5	534.0
22.5°	498.8	502.3	516.4	521.7	525.2
25°	486.4	490.9	506.7	512.9	517.3
27.5°	471.5	478.5	496.1	504.1	508.5
30°	456.5	464.4	483.8	493.5	497.9
32.5°	441.5	450.3	472.3	482.0	489.1
35°	424.8	435.3	458.2	470.6	477.6
37.5°	408.0	420.4	445.0	459.1	467.1
40°	390.4	403.6	430.9	446.8	454.7
42.5°	372.8	387.7	415.9	433.6	442.4
45°	355.1	371.0	401.8	420.4	430.0
47.5°	334.9	354.3	385.1	406.3	415.9
50°	315.5	336.6	369.2	391.3	401.0
52.5°	296.1	318.1	352.5	375.4	385.1
55°	276.7	300.5	334.9	357.8	368.4
57.5°	256.4	281.1	316.4	340.2	349.9
60°	236.2	261.7	297.9	319.9	329.6
62.5°	212.4	242.3	277.6	299.6	308.4
65°	190.3	219.4	256.4	277.6	285.5
67.5°	168.3	198.3	234.4	253.8	260.8
70°	146.3	176.2	208.0	226.5	230.9
72.5°	124.3	154.2	184.2	194.8	193.0
75°	101.3	132.2	156.9	156.0	154.2
77.5°	79.3	109.3	124.3	118.1	115.4
80°	58.2	87.2	89.9	83.7	80.2
82.5°	39.7	62.6	56.4	49.3	45.8
85°	22.9	34.4	25.6	17.6	15.0
87.5°	9.7	8.8	2.6	2.6	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)