

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: P387393

Luminaire Tested: **14CZ2-20-SQR-UNV-L950-CD1-SDWPD1-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: P387393
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-SDWPD1-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: 1706.0 lumens
Efficiency: N/A
Efficacy: 104.7 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

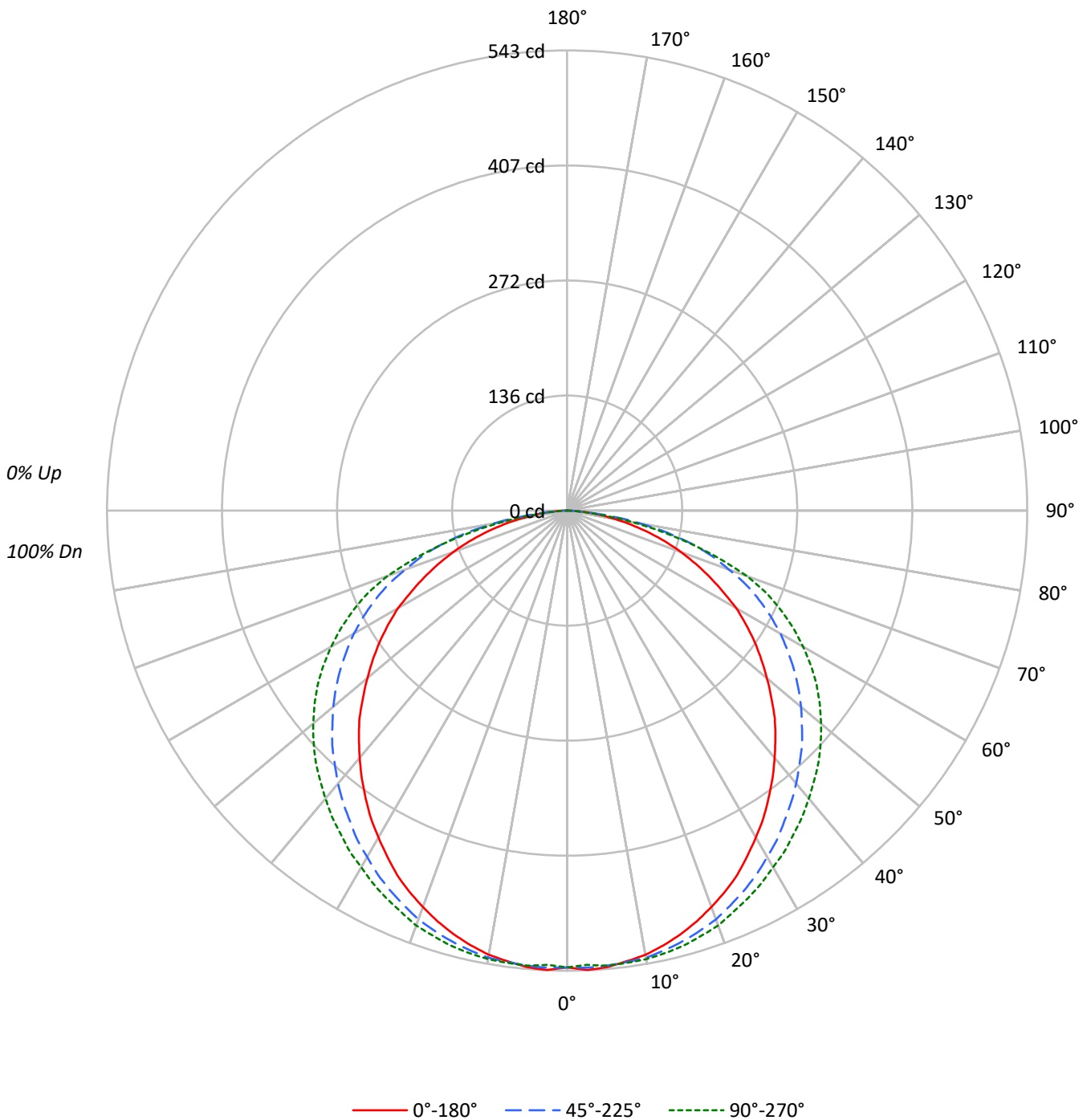
Input Watts (W): 16.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1451	1451	1451
5°	1461	1456	1456
10°	1454	1464	1468
15°	1442	1466	1480
20°	1426	1470	1492
25°	1409	1468	1499
30°	1384	1467	1510
35°	1361	1469	1531
40°	1338	1477	1559
45°	1319	1492	1597
50°	1289	1508	1638
55°	1267	1533	1686
60°	1240	1564	1731
65°	1182	1593	1774
70°	1123	1596	1773
75°	1028	1591	1565
80°	879	1359	1212
85°	692	769	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.2	3.0
10°-20°	148.0	8.7
20°-30°	226.3	13.3
30°-40°	277.4	16.3
40°-50°	298.4	17.5
50°-60°	286.7	16.8
60°-70°	238.7	14.0
70°-80°	146.5	8.6
80°-90°	32.6	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°	425.6	24.9
0°-40°	703.0	41.2
0°-60°	1288.1	75.5
0°-90°	1706.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1706.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	539	539	539	539	539	
5°	541	536	539	539	539	51
15°	518	516	526	530	531	146
25°	475	479	494	500	505	218
35°	414	425	447	459	466	259
45°	346	362	392	410	420	267
55°	270	293	327	349	359	241
65°	186	214	250	271	279	184
75°	99	129	153	152	150	105
85°	22	34	25	17	15	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	539.1	539.1	539.1	539.1	539.1
2.5°	542.6	537.4	540.0	539.1	536.5
5°	540.8	535.7	539.1	539.1	539.1
7.5°	536.5	532.2	537.4	538.3	538.3
10°	532.2	528.8	535.7	536.5	537.4
12.5°	525.4	522.8	531.4	533.1	534.8
15°	517.6	515.9	526.2	529.7	531.4
17.5°	508.2	509.0	520.2	524.5	526.2
20°	497.8	500.4	513.3	517.6	521.1
22.5°	486.7	490.1	503.9	509.0	512.5
25°	474.6	478.9	494.4	500.4	504.7
27.5°	460.0	466.9	484.1	491.8	496.1
30°	445.4	453.1	472.0	481.5	485.8
32.5°	430.8	439.4	460.9	470.3	477.2
35°	414.4	424.8	447.1	459.1	466.0
37.5°	398.1	410.1	434.2	448.0	455.7
40°	380.9	393.8	420.5	435.9	443.7
42.5°	363.7	378.3	405.8	423.0	431.6
45°	346.5	362.0	392.1	410.1	419.6
47.5°	326.7	345.6	375.7	396.4	405.8
50°	307.8	328.5	360.3	381.8	391.2
52.5°	288.9	310.4	343.9	366.3	375.7
55°	270.0	293.2	326.7	349.1	359.4
57.5°	250.2	274.3	308.7	331.9	341.4
60°	230.4	255.4	290.6	312.1	321.6
62.5°	207.2	236.5	270.8	292.3	300.9
65°	185.7	214.1	250.2	270.8	278.6
67.5°	164.2	193.5	228.7	247.6	254.5
70°	142.7	172.0	202.9	221.0	225.3
72.5°	121.2	150.5	179.7	190.0	188.3
75°	98.9	129.0	153.0	152.2	150.5
77.5°	77.4	106.6	121.2	115.2	112.6
80°	56.7	85.1	87.7	81.7	78.2
82.5°	38.7	61.0	55.0	48.2	44.7
85°	22.4	33.5	24.9	17.2	14.6
87.5°	9.5	8.6	2.6	2.6	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)