

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: P387656

Luminaire Tested: **22CZ2-20-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: P387656
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-542-6)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20-SQR-UNV-L940-CD1-U
Description: 2x2 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: 1723.6 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

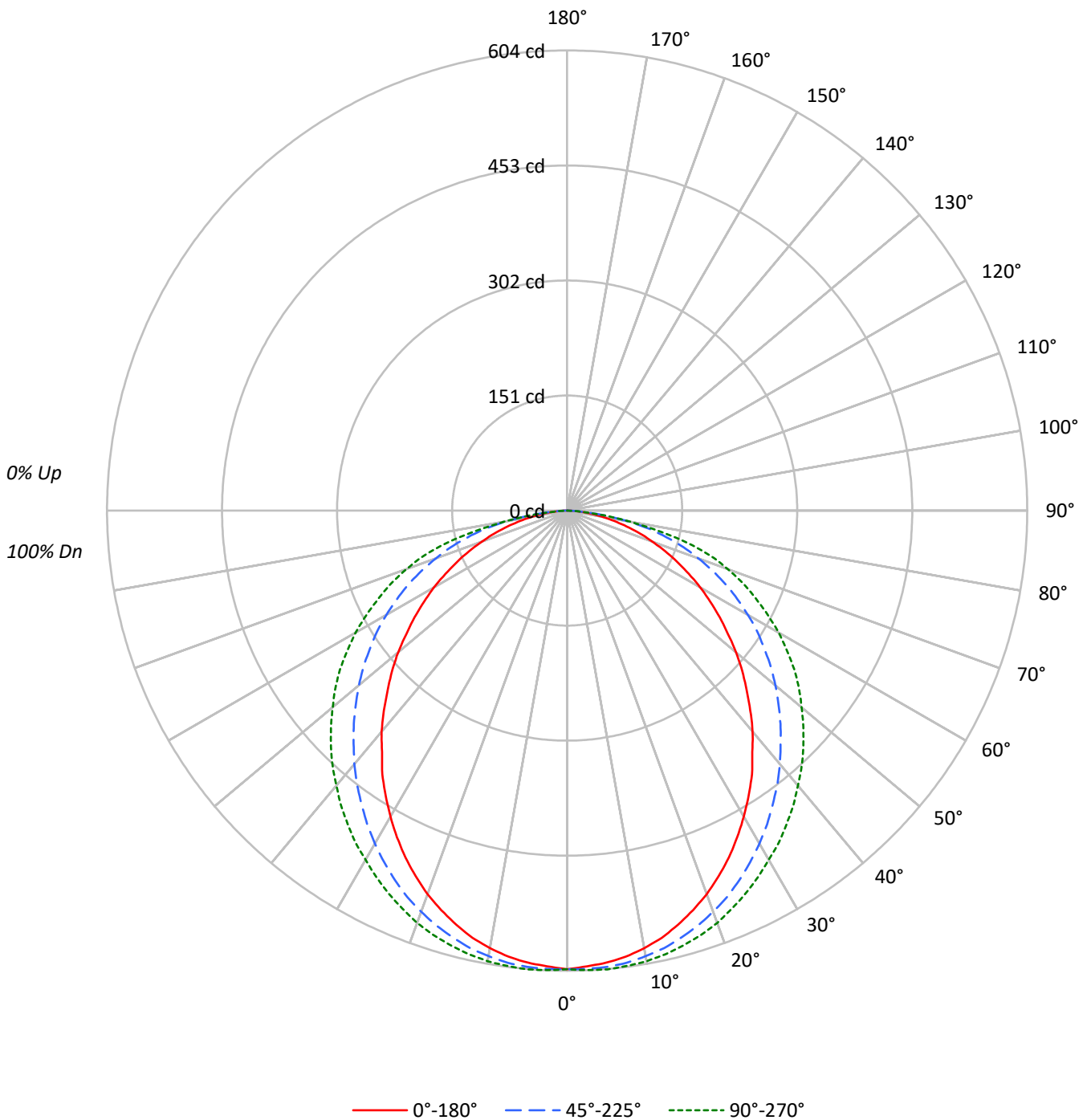
Input Watts (W): 17.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91		93	91	88		90	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62		72	66	61		69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53		64	57	52		61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46		57	50	45		55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40		52	45	40		50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35		47	40	35		46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32		43	36	31		42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28		40	33	28		39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1620	1620	1620
5°	1609	1624	1633
10°	1594	1623	1641
15°	1568	1616	1645
20°	1534	1605	1649
25°	1491	1589	1647
30°	1441	1568	1645
35°	1389	1545	1650
40°	1331	1526	1655
45°	1267	1507	1669
50°	1212	1493	1682
55°	1148	1482	1708
60°	1088	1475	1726
65°	1016	1464	1740
70°	933	1441	1763
75°	842	1404	1701
80°	722	1243	1280
85°	580	732	580



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.1	3.3
10°-20°	163.2	9.5
20°-30°	245.1	14.2
30°-40°	292.3	17.0
40°-50°	302.2	17.5
50°-60°	277.9	16.1
60°-70°	221.2	12.8
70°-80°	135.1	7.8
80°-90°	29.4	1.7
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°	465.4	27.0
0°-40°	757.7	44.0
0°-60°	1337.8	77.6
0°-90°	1723.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1723.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	602	602	602	602	602	
5°	596	597	601	604	604	56
15°	563	569	580	588	591	158
25°	502	515	535	550	555	231
35°	423	441	470	495	502	264
45°	333	357	396	428	438	257
55°	245	272	316	352	364	219
65°	160	186	230	262	273	158
75°	81	105	135	159	164	86
85°	19	23	24	20	19	22
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	602.1	602.1	602.1	602.1	602.1
2.5°	598.8	599.6	602.1	603.7	603.7
5°	595.6	597.2	601.3	603.7	604.5
7.5°	590.6	593.1	598.8	602.1	602.9
10°	583.3	586.6	593.9	598.8	600.5
12.5°	574.3	579.2	588.2	594.7	596.4
15°	562.8	569.4	580.0	588.2	590.6
17.5°	549.7	557.9	571.0	580.8	584.1
20°	535.8	544.0	560.4	571.8	575.9
22.5°	519.5	530.1	548.9	562.0	565.3
25°	502.3	514.6	535.0	549.7	554.6
27.5°	483.5	498.2	520.3	538.3	542.4
30°	463.8	479.4	504.7	524.4	529.3
32.5°	443.4	461.4	488.4	510.5	517.0
35°	422.9	440.9	470.4	494.9	502.3
37.5°	399.2	420.5	453.2	478.6	487.6
40°	378.8	399.2	434.4	462.2	471.2
42.5°	355.9	377.9	414.8	445.0	455.7
45°	333.0	356.7	395.9	427.8	438.5
47.5°	311.7	335.4	376.3	409.8	420.5
50°	289.6	314.1	356.7	391.0	401.7
52.5°	265.9	292.9	337.0	371.4	383.7
55°	244.6	271.6	315.8	351.8	364.0
57.5°	222.5	250.3	296.1	330.5	342.0
60°	202.1	229.1	274.1	307.6	320.7
62.5°	180.0	207.8	252.0	284.7	297.0
65°	159.5	186.5	229.9	261.8	273.2
67.5°	139.1	166.1	207.0	237.2	250.3
70°	118.6	145.6	183.2	212.7	224.1
72.5°	100.6	124.3	160.3	187.3	198.0
75°	81.0	104.7	135.0	158.7	163.6
77.5°	63.0	84.3	109.6	120.3	121.9
80°	46.6	63.0	80.2	82.6	82.6
82.5°	31.1	43.4	49.9	50.7	49.9
85°	18.8	22.9	23.7	20.5	18.8
87.5°	6.5	6.5	4.1	2.5	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)