

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: P389092

Luminaire Tested: **22CZ2-100VHE-S-UNV-L940-CD1-SWPD1-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: P389092
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-S-UNV-L940-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8960.0 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

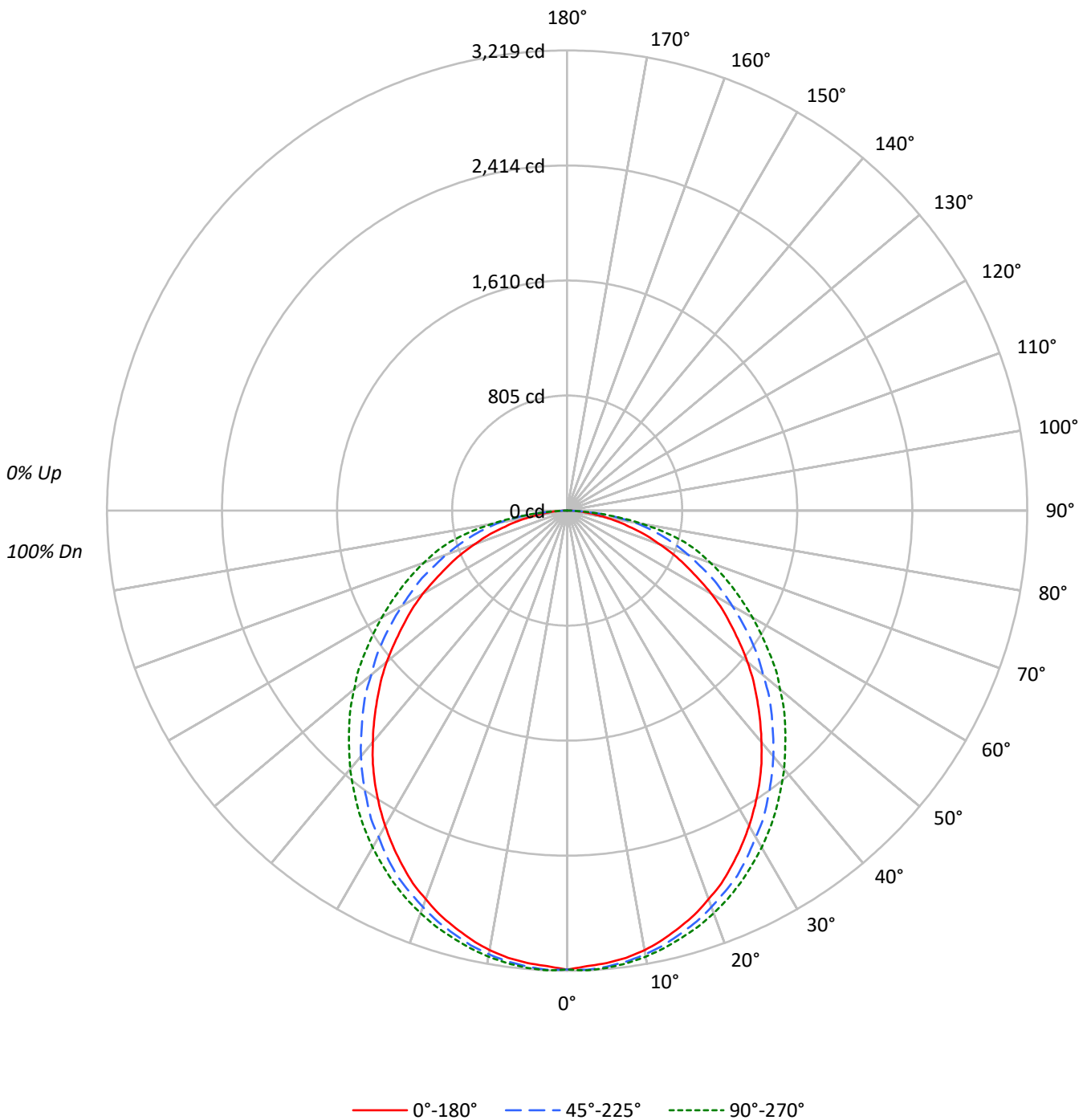
Input Watts (W): 77.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	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	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8640	8640	8640
5°	8582	8650	8673
10°	8533	8613	8659
15°	8420	8537	8618
20°	8284	8452	8584
25°	8118	8366	8527
30°	7911	8197	8456
35°	7691	8048	8377
40°	7431	7886	8297
45°	7159	7700	8209
50°	6895	7491	8138
55°	6571	7355	8081
60°	6278	7177	8055
65°	5856	7134	8145
70°	5394	7072	8387
75°	4868	7172	8823
80°	4210	7386	8292
85°	3486	6197	6197



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	303.6	3.4
10°-20°	864.1	9.6
20°-30°	1292.9	14.4
30°-40°	1531.1	17.1
40°-50°	1560.3	17.4
50°-60°	1398.5	15.6
60°-70°	1094.9	12.2
70°-80°	706.0	7.9
80°-90°	208.6	2.3
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°	2460.5	27.5
0°-40°	3991.6	44.5
0°-60°	6950.5	77.6
0°-90°	8960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8960.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3211	3211	3211	3211	3211	
5°	3177	3186	3202	3206	3211	302
15°	3022	3039	3064	3089	3094	852
25°	2734	2759	2818	2855	2872	1259
35°	2341	2370	2450	2525	2550	1463
45°	1881	1923	2023	2128	2157	1453
55°	1400	1446	1568	1676	1722	1256
65°	920	974	1120	1229	1279	914
75°	468	539	690	807	849	502
85°	113	155	201	201	201	132
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3210.6	3210.6	3210.6	3210.6	3210.6
2.5°	3189.7	3198.1	3214.8	3219.0	3219.0
5°	3177.2	3185.6	3202.3	3206.5	3210.6
7.5°	3156.3	3160.5	3181.4	3189.7	3193.9
10°	3122.9	3131.2	3152.1	3164.7	3168.8
12.5°	3076.9	3089.4	3114.5	3131.2	3135.4
15°	3022.5	3039.2	3064.3	3089.4	3093.6
17.5°	2964.0	2980.7	3014.2	3043.4	3051.8
20°	2892.9	2913.8	2951.5	2984.9	2997.4
22.5°	2821.9	2838.6	2884.6	2926.4	2938.9
25°	2734.1	2759.2	2817.7	2855.3	2872.0
27.5°	2642.1	2671.4	2729.9	2780.1	2796.8
30°	2545.9	2575.2	2637.9	2700.6	2721.5
32.5°	2445.6	2479.1	2554.3	2617.0	2637.9
35°	2341.1	2370.4	2449.8	2525.0	2550.1
37.5°	2232.4	2257.5	2349.5	2428.9	2454.0
40°	2115.3	2148.8	2244.9	2336.9	2362.0
42.5°	1998.3	2035.9	2132.1	2232.4	2257.5
45°	1881.2	1923.0	2023.4	2127.9	2157.2
47.5°	1768.4	1801.8	1914.7	2015.0	2056.8
50°	1647.1	1680.6	1789.3	1902.1	1943.9
52.5°	1521.7	1567.7	1684.8	1793.4	1843.6
55°	1400.5	1446.5	1567.7	1676.4	1722.4
57.5°	1287.6	1325.2	1450.6	1563.5	1609.5
60°	1166.4	1199.8	1333.6	1454.8	1496.6
62.5°	1036.8	1086.9	1224.9	1337.8	1387.9
65°	919.7	974.1	1120.4	1229.1	1279.2
67.5°	811.0	861.2	1003.3	1120.4	1174.7
70°	685.6	752.5	898.8	1015.9	1066.0
72.5°	585.3	643.8	794.3	911.4	965.7
75°	468.2	539.3	689.8	806.8	848.6
77.5°	372.1	443.1	585.3	677.2	698.1
80°	271.7	342.8	476.6	522.6	535.1
82.5°	183.9	250.8	342.8	355.3	359.5
85°	112.9	154.7	200.7	200.7	200.7
87.5°	54.3	62.7	71.1	66.9	66.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)