

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: P388205

Luminaire Tested: **22CZ2-20VHE-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: P388205
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-20VHE-UNV-L940-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

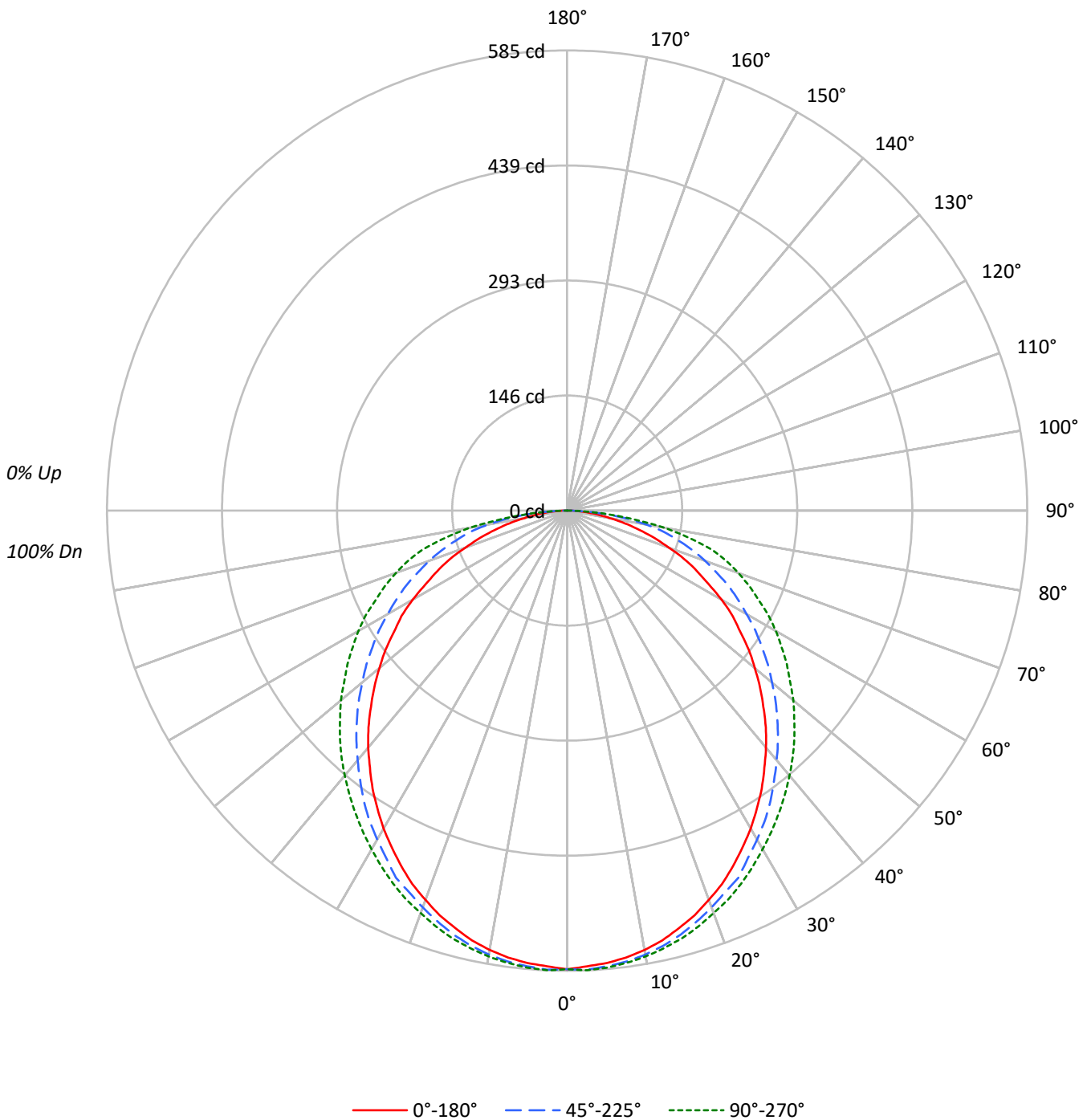
Lumens per Lamp: N/A
Luminaire Lumens: 1715.3 lumens
Efficiency: N/A
Efficacy: 120.8 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 14.2
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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1569	1569	1569
5°	1559	1571	1575
10°	1550	1566	1573
15°	1531	1554	1568
20°	1508	1537	1559
25°	1481	1529	1554
30°	1450	1500	1545
35°	1417	1481	1542
40°	1382	1456	1545
45°	1343	1439	1555
50°	1304	1424	1572
55°	1259	1418	1600
60°	1222	1417	1649
65°	1161	1440	1709
70°	1083	1467	1820
75°	992	1518	1966
80°	863	1582	1936
85°	756	1408	1538



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.2	3.2
10°-20°	157.1	9.2
20°-30°	235.8	13.7
30°-40°	281.8	16.4
40°-50°	293.0	17.1
50°-60°	271.6	15.8
60°-70°	222.8	13.0
70°-80°	150.6	8.8
80°-90°	47.3	2.8
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°	448.1	26.1
0°-40°	729.9	42.6
0°-60°	1294.6	75.5
0°-90°	1715.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1715.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	583	583	583	583	583	
5°	577	578	582	582	583	55
15°	550	552	558	561	563	155
25°	499	503	515	521	523	230
35°	431	437	451	464	469	270
45°	353	360	378	400	408	272
55°	268	277	302	329	341	241
65°	182	192	226	256	268	180
75°	95	111	146	176	189	101
85°	24	34	46	51	50	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	583.2	583.2	583.2	583.2	583.2
2.5°	579.9	581.5	584.1	584.9	584.9
5°	577.3	578.2	581.5	582.4	583.2
7.5°	573.1	574.8	578.2	579.0	579.9
10°	567.2	568.9	573.1	574.8	575.6
12.5°	559.6	561.3	566.4	568.9	569.7
15°	549.5	552.0	557.9	561.3	563.0
17.5°	539.3	541.9	547.8	552.8	554.5
20°	526.7	532.6	536.8	543.6	544.4
22.5°	514.0	517.4	525.0	531.7	535.1
25°	498.8	503.0	514.9	520.8	523.3
27.5°	482.8	488.7	498.0	507.3	510.6
30°	466.8	471.0	482.8	493.8	497.1
32.5°	449.0	454.9	467.6	478.6	483.6
35°	431.3	437.2	450.7	464.2	469.3
37.5°	411.9	418.6	432.1	448.2	454.9
40°	393.3	398.4	414.4	433.8	439.7
42.5°	373.9	379.8	396.7	417.8	424.6
45°	352.8	359.6	378.1	400.1	408.5
47.5°	332.6	339.3	359.6	381.5	391.6
50°	311.5	319.9	340.1	365.5	375.6
52.5°	291.2	298.8	321.6	347.7	357.0
55°	268.4	276.8	302.2	329.2	341.0
57.5°	249.8	255.7	283.6	311.5	323.3
60°	227.0	234.6	263.3	292.9	306.4
62.5°	202.6	215.2	244.8	275.2	288.7
65°	182.3	192.4	226.2	255.7	268.4
67.5°	161.2	172.2	205.1	236.3	250.7
70°	137.6	151.9	186.5	217.8	231.3
72.5°	116.5	131.7	167.1	197.5	211.9
75°	95.4	111.4	146.0	175.6	189.1
77.5°	75.1	92.8	126.6	149.4	157.8
80°	55.7	72.6	102.1	118.2	124.9
82.5°	38.8	53.2	75.1	83.6	85.2
85°	24.5	33.8	45.6	50.6	49.8
87.5°	11.0	13.5	16.9	18.6	17.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)