

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: P387824

Luminaire Tested: **22CZ2-29VHE-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: P387824
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: 22CZ2-29VHE-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: 2554.7 lumens
Efficiency: N/A
Efficacy: 117.7 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

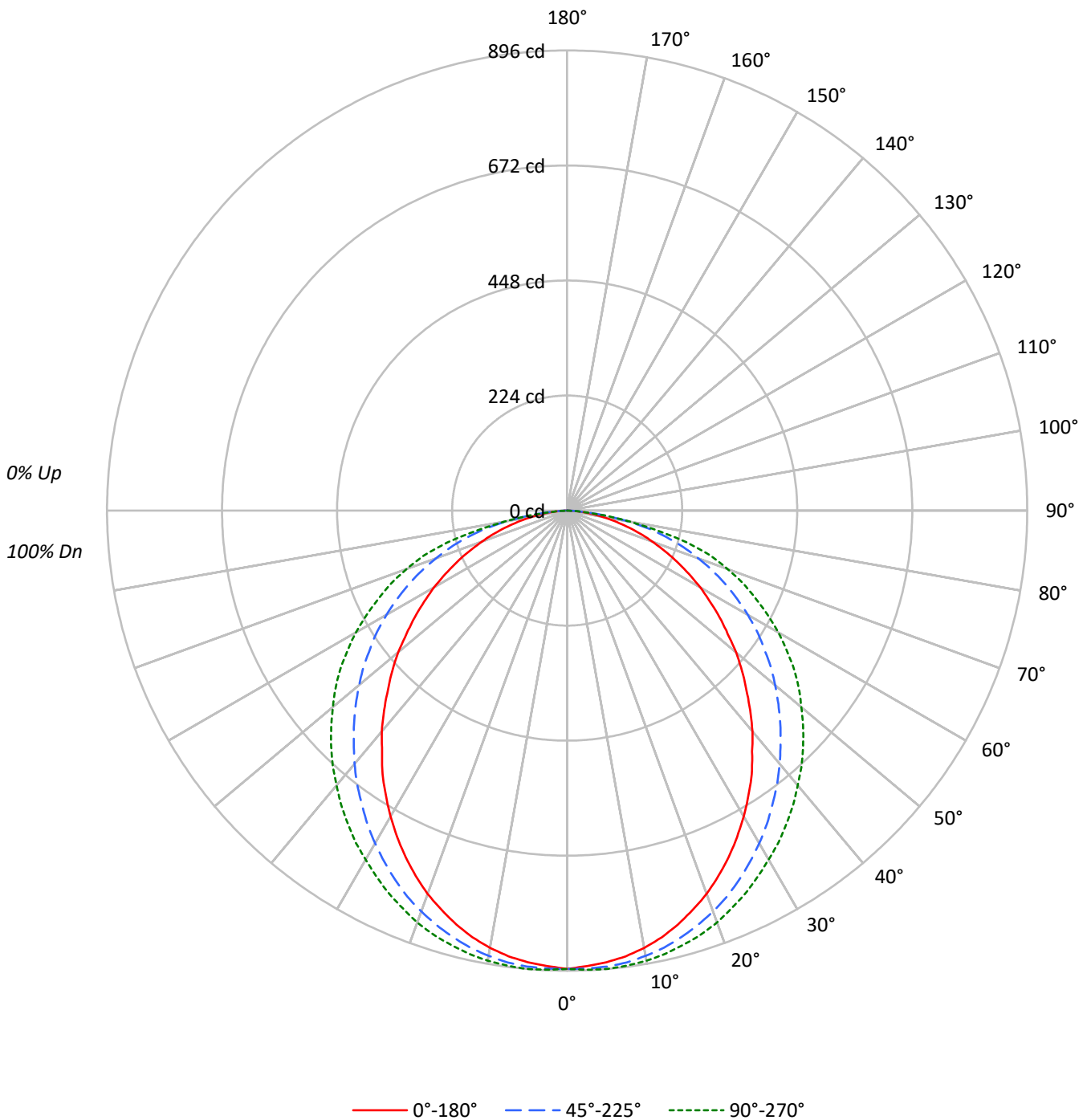
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2401	2401	2401
5°	2384	2407	2421
10°	2362	2405	2432
15°	2324	2395	2439
20°	2274	2379	2444
25°	2211	2355	2441
30°	2136	2325	2438
35°	2059	2290	2446
40°	1972	2262	2453
45°	1878	2234	2473
50°	1797	2213	2492
55°	1701	2196	2532
60°	1612	2186	2558
65°	1505	2169	2579
70°	1383	2137	2614
75°	1248	2080	2521
80°	1071	1841	1898
85°	861	1087	861



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	3.3
10°-20°	241.9	9.5
20°-30°	363.3	14.2
30°-40°	433.3	17.0
40°-50°	448.0	17.5
50°-60°	411.9	16.1
60°-70°	327.9	12.8
70°-80°	200.3	7.8
80°-90°	43.6	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°	689.8	27.0
0°-40°	1123.1	44.0
0°-60°	1983.0	77.6
0°-90°	2554.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2554.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	883	885	891	895	896	84
15°	834	844	860	872	875	235
25°	744	763	793	815	822	342
35°	627	654	697	734	744	391
45°	494	529	587	634	650	382
55°	362	403	468	521	540	324
65°	236	276	341	388	405	234
75°	120	155	200	235	242	128
85°	28	34	35	30	28	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	892.4	892.4	892.4	892.4	892.4
2.5°	887.6	888.8	892.4	894.8	894.8
5°	882.7	885.1	891.2	894.8	896.1
7.5°	875.4	879.1	887.6	892.4	893.6
10°	864.5	869.4	880.3	887.6	890.0
12.5°	851.2	858.5	871.8	881.5	883.9
15°	834.2	843.9	859.7	871.8	875.4
17.5°	814.8	826.9	846.3	860.9	865.7
20°	794.2	806.3	830.6	847.6	853.6
22.5°	770.0	785.7	813.6	833.0	837.9
25°	744.5	762.7	793.0	814.8	822.1
27.5°	716.6	738.4	771.2	797.8	803.9
30°	687.5	710.5	748.1	777.2	784.5
32.5°	657.2	683.9	723.9	756.6	766.3
35°	626.9	653.6	697.2	733.6	744.5
37.5°	591.7	623.2	671.7	709.3	722.7
40°	561.4	591.7	643.9	685.1	698.4
42.5°	527.4	560.2	614.8	659.6	675.4
45°	493.5	528.7	586.9	634.2	649.9
47.5°	462.0	497.1	557.8	607.5	623.2
50°	429.2	465.6	528.7	579.6	595.3
52.5°	394.1	434.1	499.6	550.5	568.7
55°	362.5	402.6	468.0	521.4	539.6
57.5°	329.8	371.0	438.9	489.9	506.8
60°	299.5	339.5	406.2	455.9	475.3
62.5°	266.8	308.0	373.5	422.0	440.1
65°	236.4	276.5	340.7	388.0	405.0
67.5°	206.1	246.1	306.8	351.6	371.0
70°	175.8	215.8	271.6	315.3	332.2
72.5°	149.1	184.3	237.7	277.7	293.4
75°	120.0	155.2	200.1	235.2	242.5
77.5°	93.4	124.9	162.5	178.2	180.7
80°	69.1	93.4	118.8	122.5	122.5
82.5°	46.1	64.3	74.0	75.2	74.0
85°	27.9	34.0	35.2	30.3	27.9
87.5°	9.7	9.7	6.1	3.6	1.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)