

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: P388250

Luminaire Tested: **22CZ2-29VHE-UNV-L935-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: P388250
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: 22CZ2-29VHE-UNV-L935-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

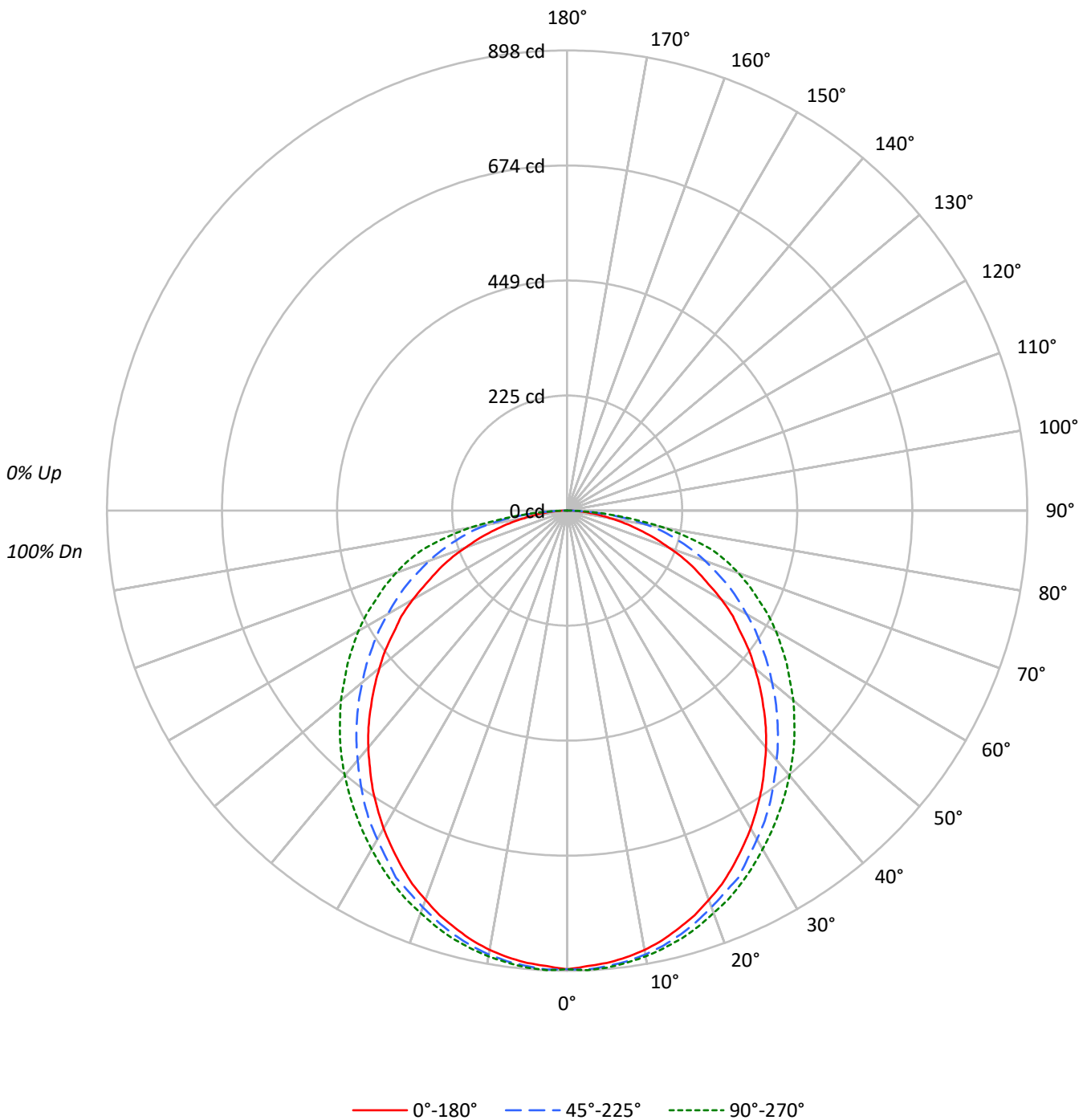
Lumens per Lamp: N/A
Luminaire Lumens: 2632.8 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P388250
CATALOG NUMBER: 22CZ2-29VHE-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388250

CATALOG NUMBER: 22CZ2-29VHE-UNV-L935-CD1-U

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°	2409	2409	2409
5°	2394	2411	2418
10°	2379	2404	2414
15°	2350	2386	2407
20°	2315	2359	2393
25°	2273	2347	2385
30°	2226	2302	2371
35°	2175	2273	2366
40°	2121	2235	2371
45°	2061	2209	2386
50°	2001	2186	2413
55°	1933	2176	2456
60°	1876	2175	2531
65°	1782	2211	2623
70°	1662	2253	2793
75°	1522	2330	3017
80°	1325	2430	2971
85°	1161	2161	2359



TEST NUMBER: P388250

CATALOG NUMBER: 22CZ2-29VHE-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.7	3.2
10°-20°	241.1	9.2
20°-30°	362.0	13.7
30°-40°	432.6	16.4
40°-50°	449.8	17.1
50°-60°	416.9	15.8
60°-70°	341.9	13.0
70°-80°	231.2	8.8
80°-90°	72.6	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°	687.8	26.1
0°-40°	1120.4	42.6
0°-60°	1987.1	75.5
0°-90°	2632.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2632.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	895	895	895	895	895	
5°	886	887	893	894	895	84
15°	843	847	856	862	864	238
25°	766	772	790	799	803	353
35°	662	671	692	712	720	414
45°	542	552	580	614	627	418
55°	412	425	464	505	523	370
65°	280	295	347	392	412	277
75°	146	171	224	270	290	155
85°	38	52	70	78	76	43
90°	0	0	0	0	0	



TEST NUMBER: P388250

CATALOG NUMBER: 22CZ2-29VHE-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	895.2	895.2	895.2	895.2	895.2
2.5°	890.0	892.6	896.5	897.8	897.8
5°	886.1	887.4	892.6	893.9	895.2
7.5°	879.7	882.2	887.4	888.7	890.0
10°	870.6	873.2	879.7	882.2	883.5
12.5°	858.9	861.5	869.3	873.2	874.5
15°	843.4	847.3	856.3	861.5	864.1
17.5°	827.8	831.7	840.8	848.6	851.2
20°	808.4	817.5	823.9	834.3	835.6
22.5°	789.0	794.2	805.8	816.2	821.4
25°	765.6	772.1	790.3	799.3	803.2
27.5°	741.0	750.1	764.4	778.6	783.8
30°	716.4	722.9	741.0	757.9	763.1
32.5°	689.2	698.3	717.7	734.6	742.3
35°	662.0	671.1	691.8	712.5	720.3
37.5°	632.2	642.6	663.3	687.9	698.3
40°	603.7	611.5	636.1	665.9	675.0
42.5°	573.9	583.0	608.9	641.3	651.6
45°	541.5	551.9	580.4	614.1	627.0
47.5°	510.4	520.8	551.9	585.6	601.1
50°	478.0	491.0	522.1	561.0	576.5
52.5°	447.0	458.6	493.6	533.8	548.0
55°	412.0	424.9	463.8	505.3	523.4
57.5°	383.5	392.5	435.3	478.0	496.2
60°	348.5	360.2	404.2	449.5	470.3
62.5°	310.9	330.4	375.7	422.3	443.1
65°	279.8	295.4	347.2	392.5	412.0
67.5°	247.4	264.3	314.8	362.7	384.8
70°	211.2	233.2	286.3	334.2	355.0
72.5°	178.8	202.1	256.5	303.2	325.2
75°	146.4	171.0	224.1	269.5	290.2
77.5°	115.3	142.5	194.3	229.3	242.3
80°	85.5	111.4	156.8	181.4	191.7
82.5°	59.6	81.6	115.3	128.3	130.8
85°	37.6	51.8	70.0	77.7	76.4
87.5°	16.8	20.7	25.9	28.5	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)