

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: P388247

Luminaire Tested: **22CZ2-29VHE-UNV-L930-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: P388247
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-L930-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

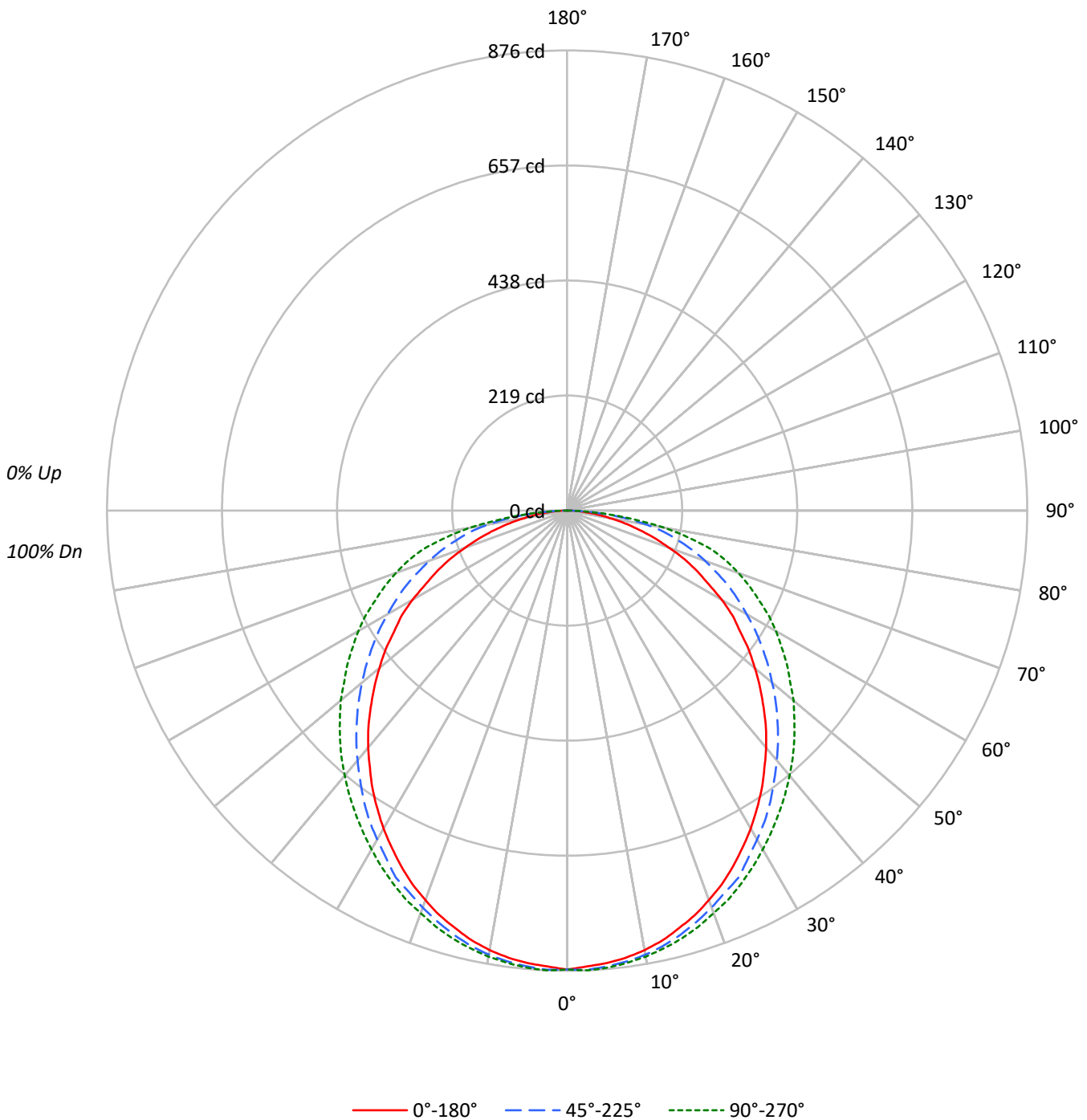
Lumens per Lamp: N/A
Luminaire Lumens: 2569.3 lumens
Efficiency: N/A
Efficacy: 118.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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: P388247
CATALOG NUMBER: 22CZ2-29VHE-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388247

CATALOG NUMBER: 22CZ2-29VHE-UNV-L930-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°	2351	2351	2351
5°	2336	2353	2360
10°	2322	2346	2356
15°	2293	2328	2349
20°	2259	2303	2335
25°	2219	2290	2327
30°	2172	2247	2314
35°	2122	2218	2309
40°	2069	2181	2314
45°	2011	2156	2329
50°	1953	2133	2355
55°	1886	2123	2396
60°	1830	2123	2470
65°	1739	2157	2560
70°	1622	2198	2725
75°	1486	2274	2944
80°	1292	2371	2899
85°	1133	2109	2303



TEST NUMBER: P388247

CATALOG NUMBER: 22CZ2-29VHE-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.6	3.2
10°-20°	235.3	9.2
20°-30°	353.3	13.7
30°-40°	422.1	16.4
40°-50°	438.9	17.1
50°-60°	406.8	15.8
60°-70°	333.7	13.0
70°-80°	225.6	8.8
80°-90°	70.9	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°	671.2	26.1
0°-40°	1093.3	42.6
0°-60°	1939.1	75.5
0°-90°	2569.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2569.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	874	874	874	874	874	
5°	865	866	871	872	874	82
15°	823	827	836	841	843	232
25°	747	754	771	780	784	344
35°	646	655	675	695	703	404
45°	528	539	566	599	612	408
55°	402	415	453	493	511	361
65°	273	288	339	383	402	270
75°	143	167	219	263	283	152
85°	37	51	68	76	75	42
90°	0	0	0	0	0	



TEST NUMBER: P388247

CATALOG NUMBER: 22CZ2-29VHE-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	873.6	873.6	873.6	873.6	873.6
2.5°	868.6	871.1	874.9	876.1	876.1
5°	864.8	866.0	871.1	872.3	873.6
7.5°	858.4	861.0	866.0	867.3	868.6
10°	849.6	852.1	858.4	861.0	862.2
12.5°	838.2	840.7	848.3	852.1	853.4
15°	823.0	826.8	835.7	840.7	843.3
17.5°	807.9	811.7	820.5	828.1	830.6
20°	788.9	797.8	804.1	814.2	815.5
22.5°	769.9	775.0	786.4	796.5	801.5
25°	747.2	753.5	771.2	780.1	783.8
27.5°	723.2	732.0	745.9	759.8	764.9
30°	699.1	705.5	723.2	739.6	744.7
32.5°	672.6	681.4	700.4	716.8	724.4
35°	646.0	654.9	675.1	695.3	702.9
37.5°	617.0	627.1	647.3	671.3	681.4
40°	589.1	596.7	620.8	649.8	658.7
42.5°	560.1	568.9	594.2	625.8	635.9
45°	528.5	538.6	566.4	599.3	611.9
47.5°	498.1	508.2	538.6	571.4	586.6
50°	466.5	479.2	509.5	547.4	562.6
52.5°	436.2	447.6	481.7	520.9	534.8
55°	402.0	414.7	452.6	493.1	510.8
57.5°	374.2	383.1	424.8	466.5	484.2
60°	340.1	351.5	394.5	438.7	458.9
62.5°	303.4	322.4	366.6	412.2	432.4
65°	273.1	288.3	338.8	383.1	402.0
67.5°	241.5	257.9	307.2	354.0	375.5
70°	206.1	227.6	279.4	326.2	346.4
72.5°	174.5	197.2	250.3	295.8	317.3
75°	142.9	166.9	218.7	263.0	283.2
77.5°	112.5	139.1	189.6	223.8	236.4
80°	83.4	108.7	153.0	177.0	187.1
82.5°	58.2	79.6	112.5	125.2	127.7
85°	36.7	50.6	68.3	75.9	74.6
87.5°	16.4	20.2	25.3	27.8	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)