

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: P388246

Luminaire Tested: **22CZ2-29VHE-UNV-L930-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: P388246
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-SWPD1-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: 2537.4 lumens
Efficiency: N/A
Efficacy: 116.9 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

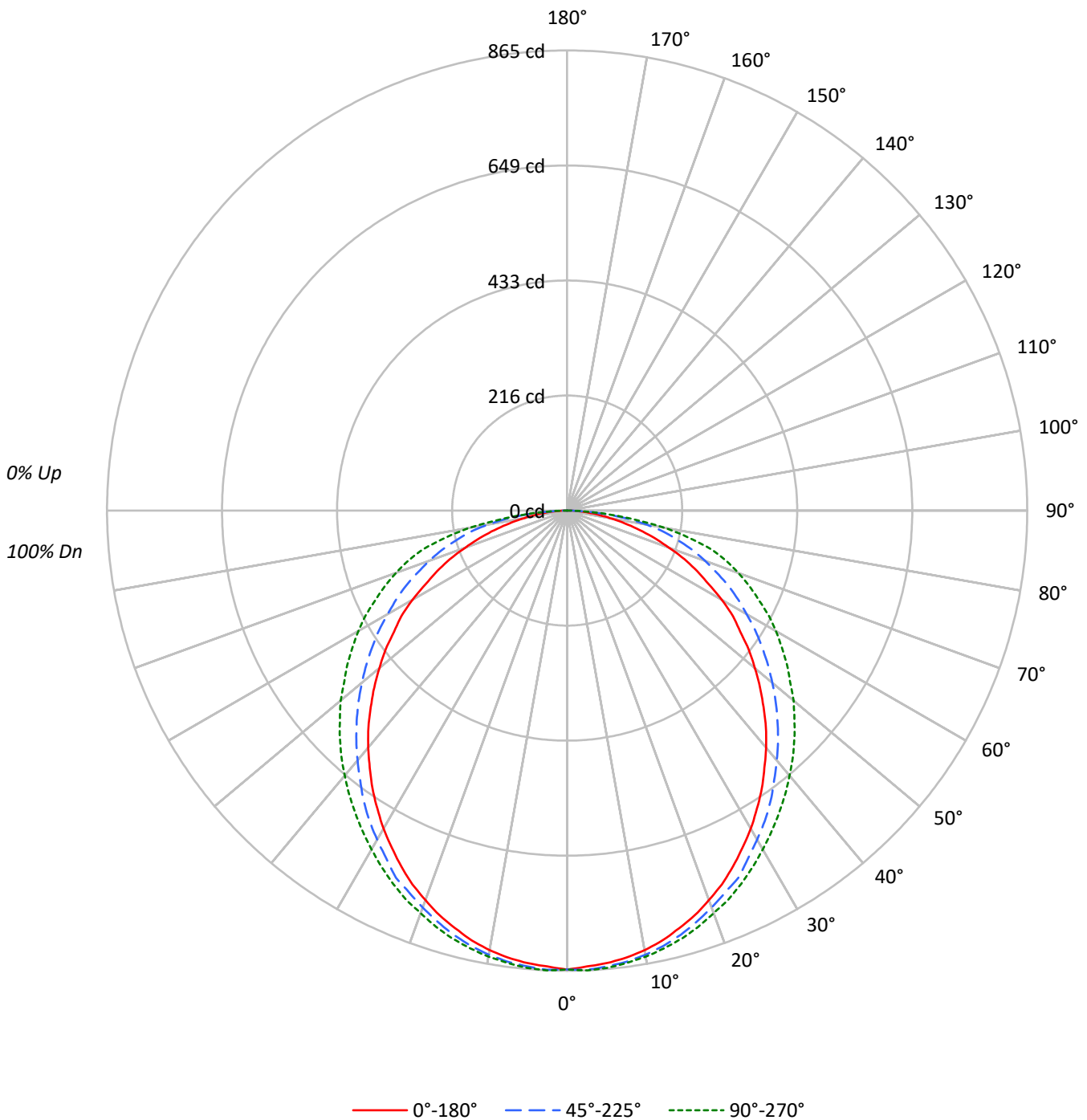
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388246

CATALOG NUMBER: 22CZ2-29VHE-UNV-L930-CD1-SWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388246

CATALOG NUMBER: 22CZ2-29VHE-UNV-L930-CD1-SWPD1-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°	2322	2322	2322
5°	2307	2324	2331
10°	2293	2317	2327
15°	2264	2299	2320
20°	2231	2274	2306
25°	2191	2261	2298
30°	2146	2219	2285
35°	2096	2190	2281
40°	2044	2153	2285
45°	1986	2129	2300
50°	1929	2107	2326
55°	1863	2097	2366
60°	1808	2097	2439
65°	1717	2131	2528
70°	1601	2171	2692
75°	1467	2246	2908
80°	1277	2342	2864
85°	1118	2081	2276



TEST NUMBER: P388246

CATALOG NUMBER: 22CZ2-29VHE-UNV-L930-CD1-SWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.6	3.2
10°-20°	232.4	9.2
20°-30°	348.9	13.7
30°-40°	416.9	16.4
40°-50°	433.5	17.1
50°-60°	401.8	15.8
60°-70°	329.6	13.0
70°-80°	222.8	8.8
80°-90°	70.0	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°	662.9	26.1
0°-40°	1079.8	42.6
0°-60°	1915.0	75.5
0°-90°	2537.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2537.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	863	863	863	863	863	
5°	854	855	860	862	863	81
15°	813	817	825	830	833	229
25°	738	744	762	770	774	340
35°	638	647	667	687	694	399
45°	522	532	559	592	604	403
55°	397	410	447	487	504	357
65°	270	285	335	378	397	267
75°	141	165	216	260	280	150
85°	36	50	67	75	74	41
90°	0	0	0	0	0	



TEST NUMBER: P388246

CATALOG NUMBER: 22CZ2-29VHE-UNV-L930-CD1-SWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	862.8	862.8	862.8	862.8	862.8
2.5°	857.8	860.3	864.0	865.3	865.3
5°	854.0	855.3	860.3	861.5	862.8
7.5°	847.8	850.3	855.3	856.5	857.8
10°	839.0	841.5	847.8	850.3	851.5
12.5°	827.8	830.3	837.8	841.5	842.8
15°	812.8	816.6	825.3	830.3	832.8
17.5°	797.8	801.6	810.3	817.8	820.3
20°	779.1	787.8	794.1	804.1	805.3
22.5°	760.4	765.4	776.6	786.6	791.6
25°	737.9	744.1	761.6	770.4	774.1
27.5°	714.2	722.9	736.7	750.4	755.4
30°	690.5	696.7	714.2	730.4	735.4
32.5°	664.2	673.0	691.7	707.9	715.4
35°	638.0	646.8	666.7	686.7	694.2
37.5°	609.3	619.3	639.3	663.0	673.0
40°	581.8	589.3	613.0	641.8	650.5
42.5°	553.1	561.9	586.8	618.0	628.0
45°	521.9	531.9	559.4	591.8	604.3
47.5°	491.9	501.9	531.9	564.4	579.3
50°	460.7	473.2	503.2	540.6	555.6
52.5°	430.8	442.0	475.7	514.4	528.1
55°	397.0	409.5	447.0	486.9	504.4
57.5°	369.6	378.3	419.5	460.7	478.2
60°	335.9	347.1	389.6	433.3	453.2
62.5°	299.7	318.4	362.1	407.0	427.0
65°	269.7	284.7	334.6	378.3	397.0
67.5°	238.5	254.7	303.4	349.6	370.8
70°	203.5	224.7	275.9	322.1	342.1
72.5°	172.3	194.8	247.2	292.2	313.4
75°	141.1	164.8	216.0	259.7	279.7
77.5°	111.1	137.3	187.3	221.0	233.5
80°	82.4	107.4	151.1	174.8	184.8
82.5°	57.4	78.7	111.1	123.6	126.1
85°	36.2	49.9	67.4	74.9	73.7
87.5°	16.2	20.0	25.0	27.5	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)