

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: P390238

Luminaire Tested: **22CZ2-29VHE-RDP-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: P390238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-24)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-29VHE-RDP-UNV-L930-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1706.6 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

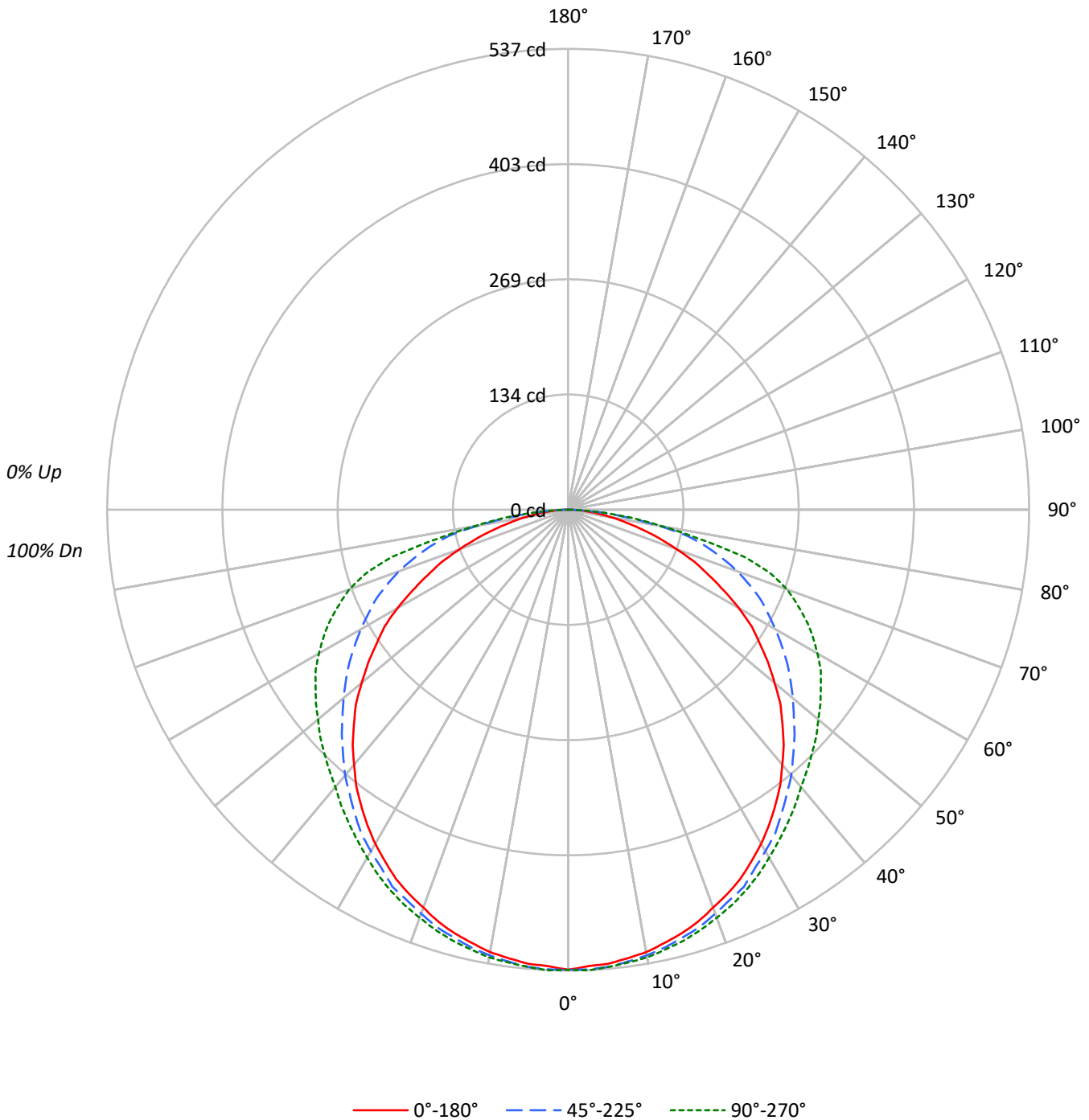
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	98	94	105	100	96	92	96	92	89	92	89	86	88	86	84	82
2	97	88	81	75	95	86	80	74	83	77	72	80	75	71	76	72	69	67
3	88	77	68	61	86	75	67	61	72	65	60	70	64	59	67	62	58	55
4	80	68	59	51	78	66	58	51	64	56	50	61	55	50	59	54	49	47
5	74	60	51	44	72	59	50	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35
7	63	49	40	33	61	48	39	33	47	39	33	45	38	33	44	37	33	31
8	59	45	36	30	57	44	35	30	43	35	29	41	34	29	40	34	29	27
9	55	41	32	27	53	40	32	27	39	32	26	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1443	1443	1443
5°	1435	1445	1445
10°	1430	1441	1448
15°	1424	1438	1448
20°	1413	1434	1449
25°	1409	1439	1454
30°	1396	1428	1455
35°	1382	1423	1464
40°	1363	1420	1482
45°	1343	1419	1529
50°	1314	1430	1593
55°	1278	1460	1685
60°	1236	1500	1804
65°	1151	1575	1950
70°	1057	1650	2134
75°	926	1736	2206
80°	798	1654	1731
85°	698	1201	1318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	3.0
10°-20°	145.6	8.5
20°-30°	222.1	13.0
30°-40°	271.2	15.9
40°-50°	290.0	17.0
50°-60°	279.9	16.4
60°-70°	241.0	14.1
70°-80°	163.0	9.6
80°-90°	43.0	2.5
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°	418.4	24.5
0°-40°	689.7	40.4
0°-60°	1259.6	73.8
0°-90°	1706.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1706.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	536	536	536	536	536	
5°	531	532	535	535	535	50
15°	511	512	516	518	520	144
25°	475	477	485	487	490	218
35°	421	424	433	442	446	263
45°	353	359	373	392	402	272
55°	272	281	311	343	359	244
65°	181	198	247	286	306	180
75°	89	118	167	201	212	96
85°	23	31	39	40	43	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	536.1	536.1	536.1	536.1	536.1
2.5°	532.3	533.6	536.1	536.1	537.3
5°	531.1	532.3	534.8	534.8	534.8
7.5°	527.3	528.5	531.1	532.3	532.3
10°	523.5	524.8	527.3	528.5	529.8
12.5°	517.2	518.5	522.3	524.8	524.8
15°	511.0	512.2	516.0	518.5	519.8
17.5°	503.4	505.9	509.7	512.2	513.5
20°	493.4	495.9	500.9	504.7	505.9
22.5°	484.6	487.1	492.1	495.9	498.4
25°	474.6	477.1	484.6	487.1	489.6
27.5°	462.0	464.5	470.8	475.8	479.6
30°	449.4	452.0	459.5	465.8	468.3
32.5°	435.6	439.4	448.2	453.2	457.0
35°	420.6	424.3	433.1	441.9	445.7
37.5°	405.5	409.3	418.1	429.4	434.4
40°	387.9	393.0	404.3	419.3	421.8
42.5°	371.6	377.9	387.9	405.5	411.8
45°	352.8	359.1	372.9	391.7	401.7
47.5°	335.2	341.5	356.5	379.1	391.7
50°	313.9	322.6	341.5	367.8	380.4
52.5°	293.8	301.3	326.4	355.3	370.4
55°	272.4	281.2	311.3	342.7	359.1
57.5°	253.6	261.1	295.0	330.2	349.0
60°	229.7	239.8	278.7	316.4	335.2
62.5°	204.6	219.7	262.4	301.3	321.4
65°	180.8	198.4	247.3	286.2	306.3
67.5°	159.4	178.3	228.5	269.9	288.8
70°	134.3	158.2	209.7	249.8	271.2
72.5°	111.7	138.1	188.3	228.5	247.3
75°	89.1	118.0	167.0	200.9	212.2
77.5°	69.0	96.7	143.1	153.2	154.4
80°	51.5	76.6	106.7	108.0	111.7
82.5°	35.2	54.0	69.0	75.3	76.6
85°	22.6	31.4	38.9	40.2	42.7
87.5°	10.0	11.3	13.8	12.6	12.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)