

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: P390622

Luminaire Tested: **22CZ2-70VHE-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: P390622
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: 22CZ2-70VHE-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: 3845.5 lumens
Efficiency: N/A
Efficacy: 76.5 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

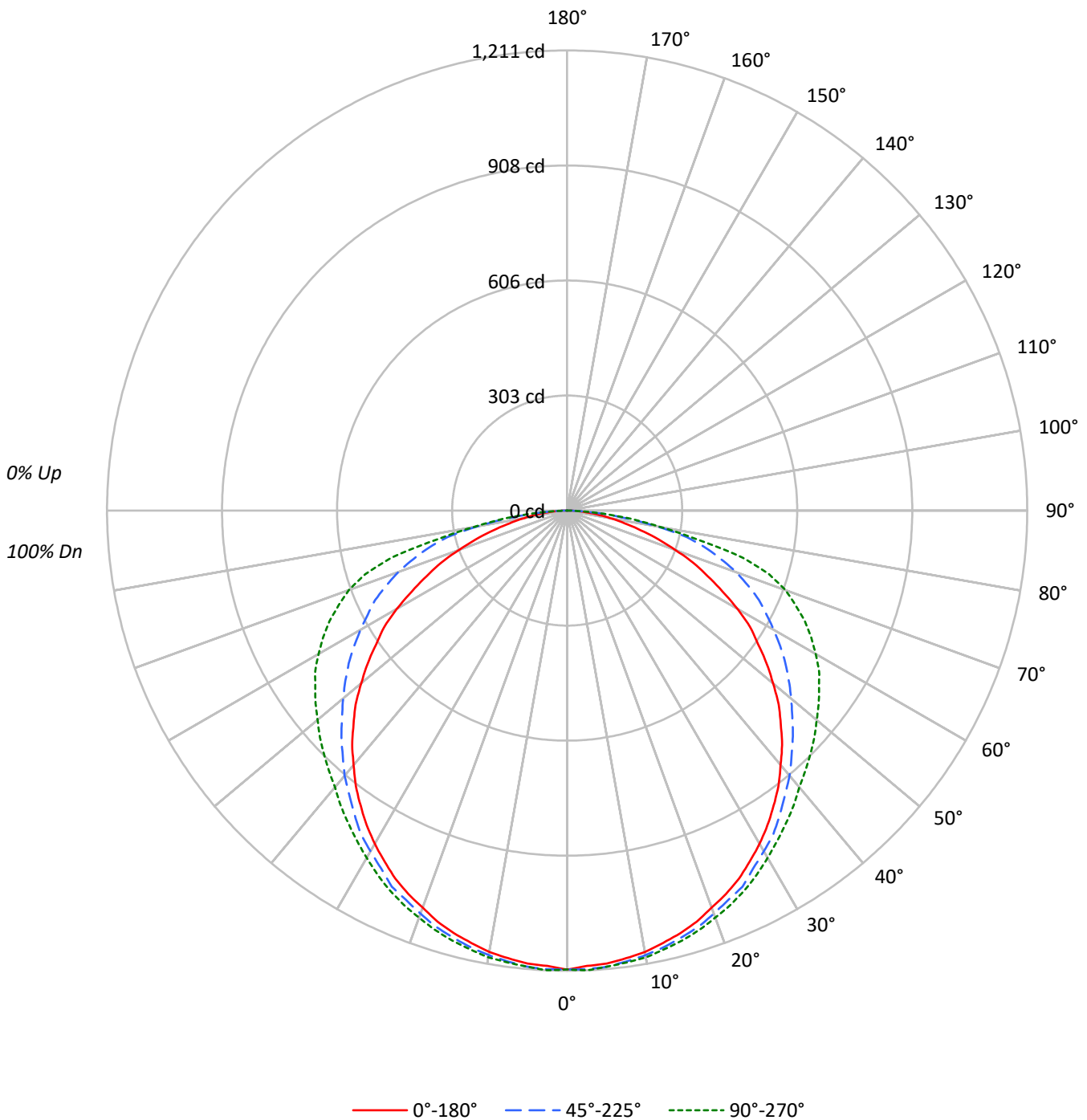
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3250	3250	3250
5°	3232	3255	3255
10°	3223	3246	3262
15°	3208	3239	3263
20°	3184	3232	3265
25°	3175	3242	3276
30°	3147	3217	3279
35°	3113	3206	3299
40°	3071	3200	3339
45°	3025	3197	3445
50°	2961	3221	3589
55°	2880	3292	3796
60°	2786	3380	4065
65°	2594	3549	4395
70°	2382	3717	4807
75°	2089	3911	4971
80°	1798	3727	3902
85°	1572	2708	2970



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	3.0
10°-20°	328.1	8.5
20°-30°	500.5	13.0
30°-40°	611.2	15.9
40°-50°	653.5	17.0
50°-60°	630.7	16.4
60°-70°	543.0	14.1
70°-80°	367.4	9.6
80°-90°	96.9	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°	942.9	24.5
0°-40°	1554.0	40.4
0°-60°	2838.2	73.8
0°-90°	3845.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3845.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1208	1208	1208	1208	1208	
5°	1197	1200	1205	1205	1205	114
15°	1151	1154	1163	1168	1171	325
25°	1069	1075	1092	1098	1103	492
35°	948	956	976	996	1004	593
45°	795	809	840	883	905	614
55°	614	634	702	772	809	550
65°	407	447	557	645	690	405
75°	201	266	376	453	478	216
85°	51	71	88	90	96	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1207.9	1207.9	1207.9	1207.9	1207.9
2.5°	1199.5	1202.3	1207.9	1207.9	1210.8
5°	1196.6	1199.5	1205.1	1205.1	1205.1
7.5°	1188.1	1191.0	1196.6	1199.5	1199.5
10°	1179.6	1182.5	1188.1	1191.0	1193.8
12.5°	1165.5	1168.3	1176.8	1182.5	1182.5
15°	1151.4	1154.2	1162.7	1168.3	1171.2
17.5°	1134.4	1140.0	1148.5	1154.2	1157.0
20°	1111.8	1117.4	1128.7	1137.2	1140.0
22.5°	1092.0	1097.6	1108.9	1117.4	1123.1
25°	1069.3	1075.0	1092.0	1097.6	1103.3
27.5°	1041.0	1046.7	1060.8	1072.2	1080.6
30°	1012.7	1018.4	1035.4	1049.5	1055.2
32.5°	981.6	990.1	1009.9	1021.2	1029.7
35°	947.7	956.2	976.0	995.8	1004.3
37.5°	913.7	922.2	942.0	967.5	978.8
40°	874.1	885.4	910.9	944.9	950.5
42.5°	837.4	851.5	874.1	913.7	927.9
45°	794.9	809.1	840.2	882.6	905.2
47.5°	755.3	769.5	803.4	854.3	882.6
50°	707.2	727.0	769.5	828.9	857.2
52.5°	662.0	678.9	735.5	800.6	834.5
55°	613.9	633.7	701.6	772.3	809.1
57.5°	571.4	588.4	664.8	744.0	786.4
60°	517.7	540.3	628.0	712.9	755.3
62.5°	461.1	495.1	591.2	678.9	724.2
65°	407.4	447.0	557.3	645.0	690.3
67.5°	359.3	401.7	514.9	608.2	650.6
70°	302.7	356.4	472.4	563.0	611.0
72.5°	251.8	311.2	424.3	514.9	557.3
75°	200.9	265.9	376.2	452.6	478.1
77.5°	155.6	217.8	322.5	345.1	348.0
80°	116.0	172.6	240.5	243.3	251.8
82.5°	79.2	121.6	155.6	169.7	172.6
85°	50.9	70.7	87.7	90.5	96.2
87.5°	22.6	25.5	31.1	28.3	28.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)