

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: P390623

Luminaire Tested: **22CZ2-70VHE-RDP-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: P390623
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-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: 3893.8 lumens
Efficiency: N/A
Efficacy: 77.4 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

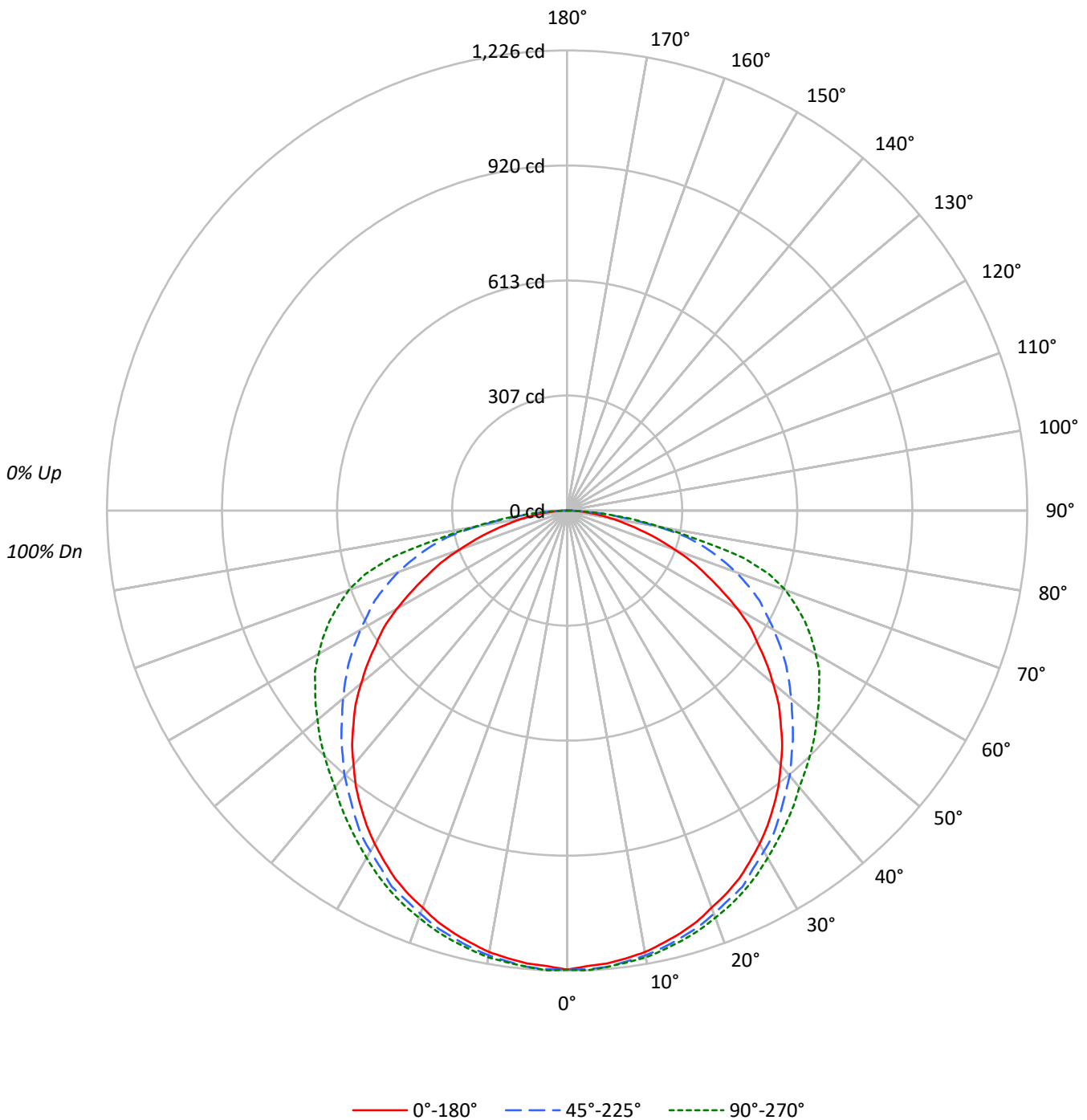
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3291	3291	3291
5°	3273	3296	3296
10°	3264	3287	3303
15°	3248	3280	3304
20°	3224	3273	3306
25°	3215	3283	3317
30°	3187	3258	3320
35°	3152	3246	3341
40°	3109	3240	3381
45°	3063	3237	3488
50°	2998	3262	3633
55°	2916	3333	3843
60°	2821	3422	4116
65°	2627	3593	4450
70°	2412	3764	4868
75°	2115	3961	5033
80°	1819	3773	3950
85°	1593	2742	3007



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.7	3.0
10°-20°	332.2	8.5
20°-30°	506.8	13.0
30°-40°	618.8	15.9
40°-50°	661.7	17.0
50°-60°	638.7	16.4
60°-70°	549.8	14.1
70°-80°	372.0	9.6
80°-90°	98.1	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°	954.7	24.5
0°-40°	1573.6	40.4
0°-60°	2873.9	73.8
0°-90°	3893.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3893.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1212	1214	1220	1220	1220	115
15°	1166	1169	1177	1183	1186	329
25°	1083	1088	1106	1111	1117	498
35°	960	968	988	1008	1017	600
45°	805	819	851	894	917	621
55°	622	642	710	782	819	557
65°	412	453	564	653	699	410
75°	203	269	381	458	484	218
85°	52	72	89	92	97	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1223.1	1223.1	1223.1	1223.1	1223.1
2.5°	1214.5	1217.4	1223.1	1223.1	1226.0
5°	1211.7	1214.5	1220.2	1220.2	1220.2
7.5°	1203.1	1205.9	1211.7	1214.5	1214.5
10°	1194.5	1197.3	1203.1	1205.9	1208.8
12.5°	1180.1	1183.0	1191.6	1197.3	1197.3
15°	1165.8	1168.7	1177.3	1183.0	1185.9
17.5°	1148.6	1154.4	1163.0	1168.7	1171.6
20°	1125.7	1131.4	1142.9	1151.5	1154.4
22.5°	1105.7	1111.4	1122.9	1131.4	1137.2
25°	1082.8	1088.5	1105.7	1111.4	1117.1
27.5°	1054.1	1059.8	1074.2	1085.6	1094.2
30°	1025.5	1031.2	1048.4	1062.7	1068.4
32.5°	994.0	1002.5	1022.6	1034.1	1042.7
35°	959.6	968.2	988.2	1008.3	1016.9
37.5°	925.2	933.8	953.9	979.6	991.1
40°	885.1	896.6	922.3	956.7	962.4
42.5°	847.9	862.2	885.1	925.2	939.5
45°	804.9	819.2	850.7	893.7	916.6
47.5°	764.8	779.1	813.5	865.1	893.7
50°	716.1	736.2	779.1	839.3	867.9
52.5°	670.3	687.5	744.8	810.6	845.0
55°	621.6	641.6	710.4	782.0	819.2
57.5°	578.6	595.8	673.1	753.3	796.3
60°	524.2	547.1	635.9	721.8	764.8
62.5°	466.9	501.3	598.7	687.5	733.3
65°	412.5	452.6	564.3	653.1	698.9
67.5°	363.8	406.7	521.3	615.9	658.8
70°	306.5	360.9	478.4	570.0	618.7
72.5°	254.9	315.1	429.7	521.3	564.3
75°	203.4	269.3	381.0	458.3	484.1
77.5°	157.5	220.6	326.5	349.5	352.3
80°	117.4	174.7	243.5	246.3	254.9
82.5°	80.2	123.2	157.5	171.9	174.7
85°	51.6	71.6	88.8	91.7	97.4
87.5°	22.9	25.8	31.5	28.6	28.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)