

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: P390625

Luminaire Tested: **22CZ2-70VHE-RDP-UNV-L935-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: P390625
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-L935-CD1-SWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3940.6 lumens
Efficiency: N/A
Efficacy: 78.3 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

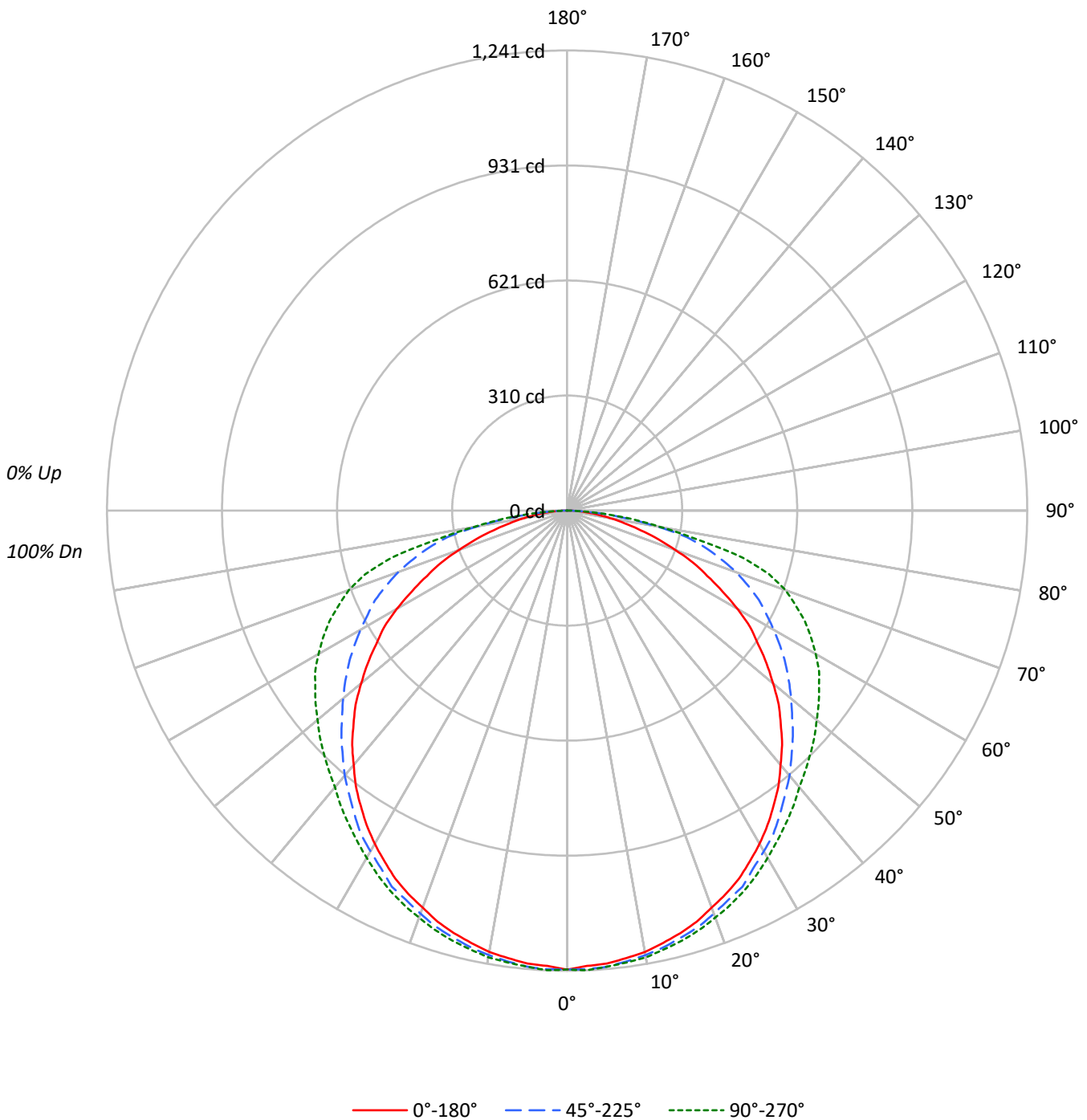
Input Watts (W): 50.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3331	3331	3331
5°	3312	3336	3336
10°	3303	3327	3343
15°	3287	3319	3343
20°	3263	3312	3345
25°	3254	3322	3357
30°	3225	3297	3360
35°	3190	3285	3381
40°	3146	3279	3421
45°	3100	3277	3530
50°	3034	3301	3677
55°	2951	3373	3890
60°	2855	3463	4166
65°	2658	3636	4504
70°	2441	3809	4927
75°	2140	4008	5094
80°	1843	3818	3998
85°	1612	2776	3044



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	3.0
10°-20°	336.2	8.5
20°-30°	512.9	13.0
30°-40°	626.3	15.9
40°-50°	669.6	17.0
50°-60°	646.3	16.4
60°-70°	556.4	14.1
70°-80°	376.4	9.6
80°-90°	99.3	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°	966.2	24.5
0°-40°	1592.5	40.4
0°-60°	2908.4	73.8
0°-90°	3940.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3940.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1238	1238	1238	1238	1238	
5°	1226	1229	1235	1235	1235	116
15°	1180	1183	1191	1197	1200	333
25°	1096	1102	1119	1125	1131	504
35°	971	980	1000	1020	1029	608
45°	815	829	861	904	928	629
55°	629	649	719	791	829	564
65°	417	458	571	661	707	415
75°	206	272	386	464	490	221
85°	52	72	90	93	99	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1237.8	1237.8	1237.8	1237.8	1237.8
2.5°	1229.1	1232.0	1237.8	1237.8	1240.7
5°	1226.2	1229.1	1234.9	1234.9	1234.9
7.5°	1217.5	1220.4	1226.2	1229.1	1229.1
10°	1208.8	1211.7	1217.5	1220.4	1223.3
12.5°	1194.3	1197.2	1205.9	1211.7	1211.7
15°	1179.8	1182.7	1191.4	1197.2	1200.1
17.5°	1162.4	1168.2	1176.9	1182.7	1185.6
20°	1139.3	1145.0	1156.6	1165.3	1168.2
22.5°	1119.0	1124.8	1136.4	1145.0	1150.8
25°	1095.8	1101.6	1119.0	1124.8	1130.6
27.5°	1066.8	1072.6	1087.1	1098.7	1107.4
30°	1037.8	1043.6	1061.0	1075.5	1081.3
32.5°	1005.9	1014.6	1034.9	1046.5	1055.2
35°	971.1	979.8	1000.1	1020.4	1029.1
37.5°	936.3	945.0	965.3	991.4	1003.0
40°	895.7	907.3	933.4	968.2	974.0
42.5°	858.1	872.6	895.7	936.3	950.8
45°	814.6	829.1	861.0	904.4	927.6
47.5°	774.0	788.5	823.3	875.5	904.4
50°	724.7	745.0	788.5	849.4	878.4
52.5°	678.3	695.7	753.7	820.4	855.2
55°	629.1	649.3	718.9	791.4	829.1
57.5°	585.6	603.0	681.2	762.4	805.9
60°	530.5	553.7	643.5	730.5	774.0
62.5°	472.5	507.3	605.9	695.7	742.1
65°	417.4	458.0	571.1	660.9	707.3
67.5°	368.2	411.6	527.6	623.3	666.7
70°	310.2	365.3	484.1	576.9	626.2
72.5°	258.0	318.9	434.8	527.6	571.1
75°	205.8	272.5	385.5	463.8	489.9
77.5°	159.4	223.2	330.5	353.7	356.6
80°	118.9	176.8	246.4	249.3	258.0
82.5°	81.2	124.7	159.4	173.9	176.8
85°	52.2	72.5	89.9	92.8	98.6
87.5°	23.2	26.1	31.9	29.0	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)