

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: P390152

Luminaire Tested: **22CZ2-20VHE-RDP-UNV-L950-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: P390152
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: 22CZ2-20VHE-RDP-UNV-L950-CD1-U
Description: 2x2 CRUZE LED TROFFER WITH 5000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1224.5 lumens
Efficiency: N/A
Efficacy: 86.2 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

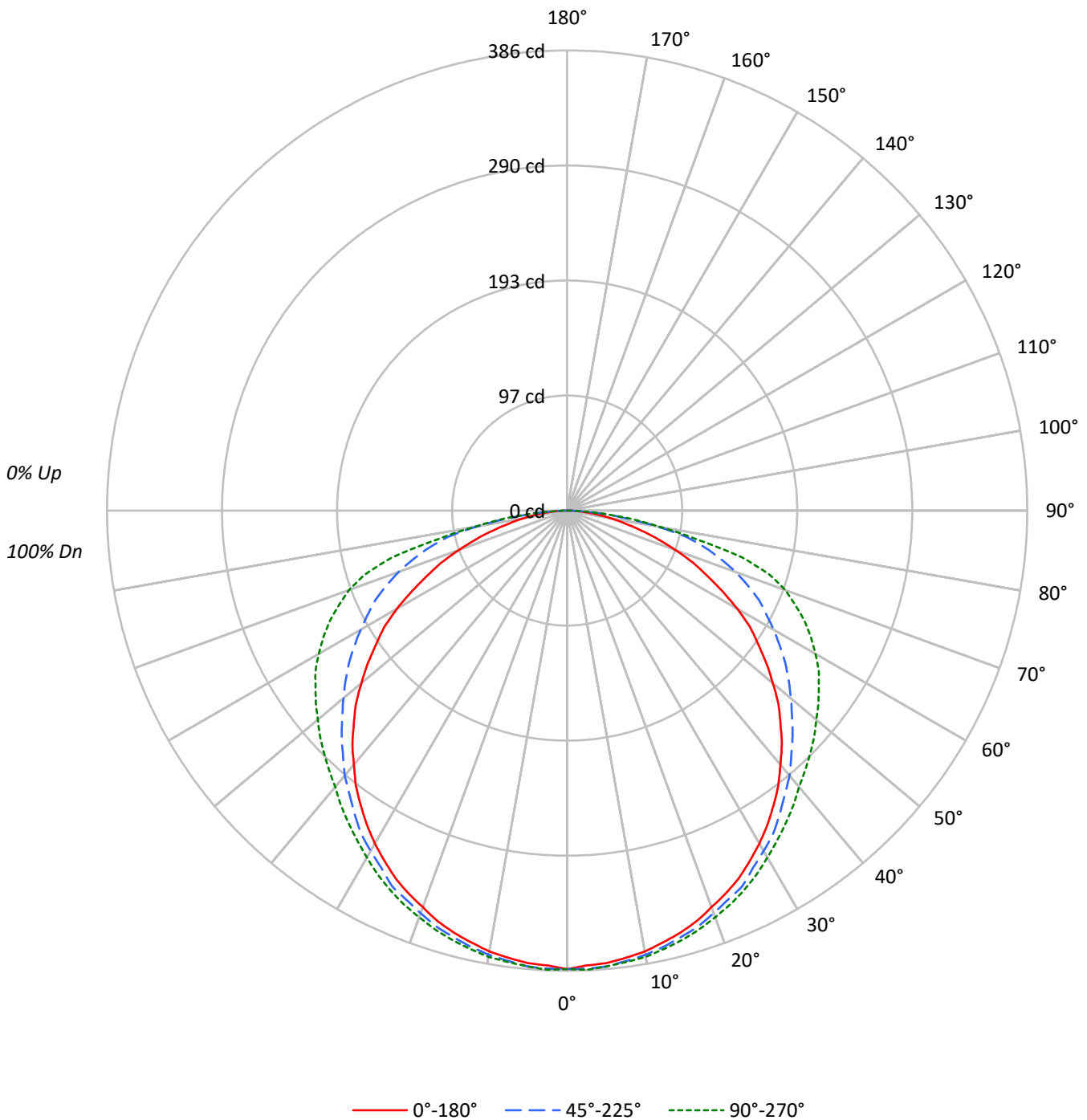
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1035	1035	1035
5°	1029	1036	1036
10°	1026	1034	1039
15°	1021	1031	1039
20°	1014	1029	1040
25°	1011	1032	1043
30°	1002	1024	1044
35°	991	1021	1051
40°	978	1019	1063
45°	963	1018	1097
50°	943	1026	1142
55°	917	1048	1209
60°	887	1076	1294
65°	826	1130	1400
70°	758	1183	1531
75°	665	1246	1582
80°	572	1187	1243
85°	500	861	945



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.4	3.0
10°-20°	104.5	8.5
20°-30°	159.4	13.0
30°-40°	194.6	15.9
40°-50°	208.1	17.0
50°-60°	200.8	16.4
60°-70°	172.9	14.1
70°-80°	117.0	9.6
80°-90°	30.8	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°	300.2	24.5
0°-40°	494.8	40.4
0°-60°	903.8	73.8
0°-90°	1224.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1224.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	385	385	385	385	385	
5°	381	382	384	384	384	36
15°	367	368	370	372	373	103
25°	340	342	348	350	351	157
35°	302	304	311	317	320	189
45°	253	258	268	281	288	195
55°	196	202	223	246	258	175
65°	130	142	178	205	220	129
75°	64	85	120	144	152	69
85°	16	22	28	29	31	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	384.6	384.6	384.6	384.6	384.6
2.5°	381.9	382.8	384.6	384.6	385.5
5°	381.0	381.9	383.7	383.7	383.7
7.5°	378.3	379.2	381.0	381.9	381.9
10°	375.6	376.5	378.3	379.2	380.1
12.5°	371.1	372.0	374.7	376.5	376.5
15°	366.6	367.5	370.2	372.0	372.9
17.5°	361.2	363.0	365.7	367.5	368.4
20°	354.0	355.8	359.4	362.1	363.0
22.5°	347.7	349.5	353.1	355.8	357.6
25°	340.5	342.3	347.7	349.5	351.3
27.5°	331.5	333.3	337.8	341.4	344.1
30°	322.5	324.3	329.7	334.2	336.0
32.5°	312.6	315.3	321.6	325.2	327.9
35°	301.8	304.5	310.8	317.1	319.8
37.5°	291.0	293.7	300.0	308.1	311.7
40°	278.3	281.9	290.1	300.9	302.7
42.5°	266.6	271.1	278.3	291.0	295.5
45°	253.1	257.6	267.5	281.0	288.3
47.5°	240.5	245.0	255.8	272.0	281.0
50°	225.2	231.5	245.0	263.9	272.9
52.5°	210.8	216.2	234.2	254.9	265.7
55°	195.5	201.8	223.4	245.9	257.6
57.5°	182.0	187.4	211.7	236.9	250.4
60°	164.8	172.1	200.0	227.0	240.5
62.5°	146.8	157.6	188.3	216.2	230.6
65°	129.7	142.3	177.5	205.4	219.8
67.5°	114.4	127.9	163.9	193.7	207.2
70°	96.4	113.5	150.4	179.3	194.6
72.5°	80.2	99.1	135.1	163.9	177.5
75°	64.0	84.7	119.8	144.1	152.2
77.5°	49.5	69.4	102.7	109.9	110.8
80°	36.9	54.9	76.6	77.5	80.2
82.5°	25.2	38.7	49.5	54.0	54.9
85°	16.2	22.5	27.9	28.8	30.6
87.5°	7.2	8.1	9.9	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)