

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: P390145

Luminaire Tested: **22CZ2-20VHE-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: P390145
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-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: 1127.7 lumens
Efficiency: N/A
Efficacy: 79.4 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

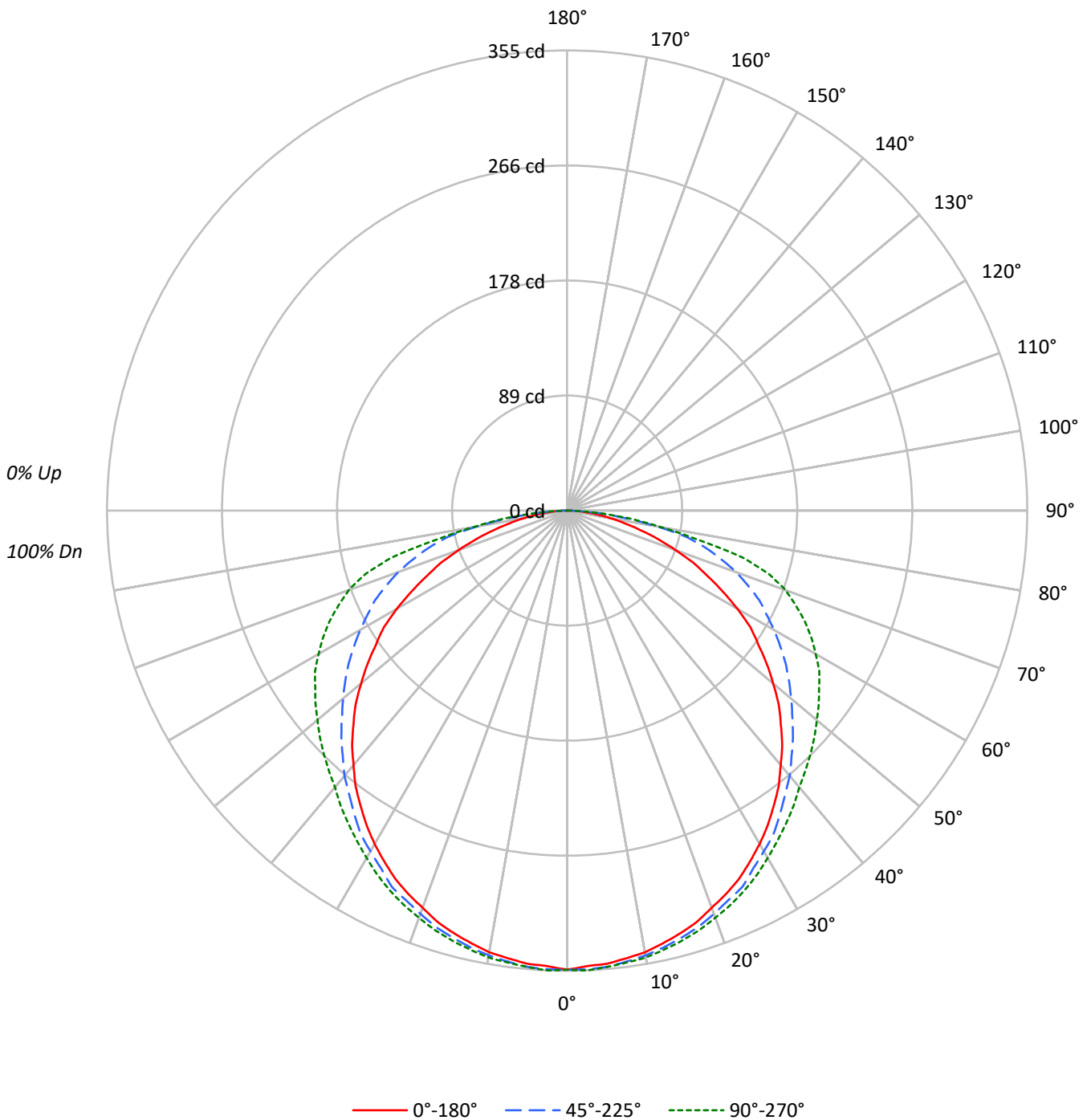
Input Watts (W): 14.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	953	953	953
5°	948	955	955
10°	945	952	957
15°	941	950	957
20°	934	948	957
25°	931	951	961
30°	923	943	961
35°	913	940	967
40°	900	938	979
45°	887	938	1010
50°	868	944	1052
55°	844	965	1113
60°	817	991	1192
65°	761	1040	1289
70°	699	1090	1410
75°	612	1147	1458
80°	527	1093	1144
85°	460	794	871



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.5	3.0
10°-20°	96.2	8.5
20°-30°	146.8	13.0
30°-40°	179.2	15.9
40°-50°	191.6	17.0
50°-60°	185.0	16.4
60°-70°	159.2	14.1
70°-80°	107.7	9.6
80°-90°	28.4	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°	276.5	24.5
0°-40°	455.7	40.4
0°-60°	832.3	73.8
0°-90°	1127.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1127.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	354	354	354	354	354	
5°	351	352	353	353	353	33
15°	338	338	341	343	343	95
25°	314	315	320	322	324	144
35°	278	280	286	292	294	174
45°	233	237	246	259	266	180
55°	180	186	206	226	237	161
65°	120	131	163	189	202	119
75°	59	78	110	133	140	63
85°	15	21	26	26	28	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	354.2	354.2	354.2	354.2	354.2
2.5°	351.7	352.6	354.2	354.2	355.1
5°	350.9	351.7	353.4	353.4	353.4
7.5°	348.4	349.3	350.9	351.7	351.7
10°	345.9	346.8	348.4	349.3	350.1
12.5°	341.8	342.6	345.1	346.8	346.8
15°	337.6	338.5	341.0	342.6	343.4
17.5°	332.7	334.3	336.8	338.5	339.3
20°	326.0	327.7	331.0	333.5	334.3
22.5°	320.2	321.9	325.2	327.7	329.3
25°	313.6	315.2	320.2	321.9	323.5
27.5°	305.3	306.9	311.1	314.4	316.9
30°	297.0	298.6	303.6	307.8	309.4
32.5°	287.9	290.4	296.2	299.5	302.0
35°	277.9	280.4	286.2	292.0	294.5
37.5°	268.0	270.4	276.2	283.7	287.0
40°	256.3	259.7	267.1	277.1	278.7
42.5°	245.6	249.7	256.3	268.0	272.1
45°	233.1	237.3	246.4	258.8	265.5
47.5°	221.5	225.6	235.6	250.5	258.8
50°	207.4	213.2	225.6	243.1	251.4
52.5°	194.1	199.1	215.7	234.8	244.7
55°	180.0	185.8	205.7	226.5	237.3
57.5°	167.6	172.6	195.0	218.2	230.6
60°	151.8	158.4	184.2	209.1	221.5
62.5°	135.2	145.2	173.4	199.1	212.4
65°	119.5	131.1	163.4	189.1	202.4
67.5°	105.4	117.8	151.0	178.4	190.8
70°	88.8	104.5	138.5	165.1	179.2
72.5°	73.8	91.3	124.4	151.0	163.4
75°	58.9	78.0	110.3	132.7	140.2
77.5°	45.6	63.9	94.6	101.2	102.0
80°	34.0	50.6	70.5	71.3	73.8
82.5°	23.2	35.7	45.6	49.8	50.6
85°	14.9	20.7	25.7	26.5	28.2
87.5°	6.6	7.5	9.1	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)