

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: P390243

Luminaire Tested: **22CZ2-29VHE-RDP-UNV-L940-CD1-SDWPD1-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: P390243
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: 22CZ2-29VHE-RDP-UNV-L940-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 4000K, 90 LEDS, AND RDP LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1745.6 lumens
Efficiency: N/A
Efficacy: 80.4 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

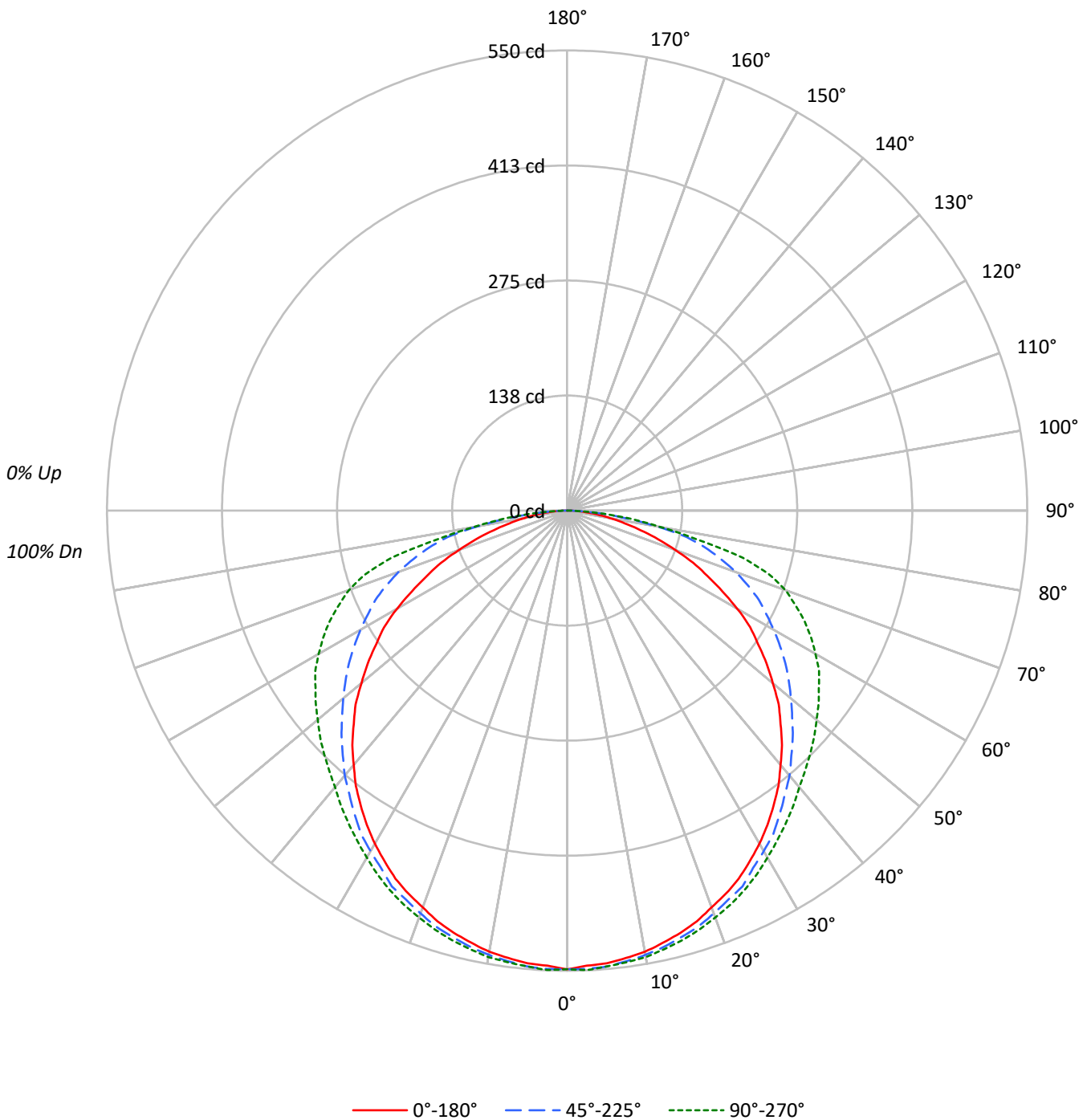
Input Watts (W): 21.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1475	1475	1475
5°	1467	1478	1478
10°	1463	1474	1481
15°	1456	1470	1481
20°	1445	1467	1482
25°	1441	1472	1487
30°	1428	1460	1488
35°	1413	1455	1498
40°	1394	1453	1516
45°	1373	1451	1564
50°	1344	1462	1629
55°	1308	1494	1723
60°	1265	1534	1845
65°	1177	1611	1995
70°	1081	1687	2183
75°	948	1776	2256
80°	815	1692	1771
85°	713	1229	1349



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.9	3.0
10°-20°	148.9	8.5
20°-30°	227.2	13.0
30°-40°	277.4	15.9
40°-50°	296.6	17.0
50°-60°	286.3	16.4
60°-70°	246.5	14.1
70°-80°	166.8	9.6
80°-90°	44.0	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°	428.0	24.5
0°-40°	705.4	40.4
0°-60°	1288.4	73.8
0°-90°	1745.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1745.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	548	548	548	548	548	
5°	543	544	547	547	547	52
15°	523	524	528	530	532	147
25°	485	488	496	498	501	223
35°	430	434	443	452	456	269
45°	361	367	381	401	411	279
55°	279	288	318	351	367	250
65°	185	203	253	293	313	184
75°	91	121	171	206	217	98
85°	23	32	40	41	44	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	548.3	548.3	548.3	548.3	548.3
2.5°	544.5	545.8	548.3	548.3	549.6
5°	543.2	544.5	547.0	547.0	547.0
7.5°	539.3	540.6	543.2	544.5	544.5
10°	535.5	536.8	539.3	540.6	541.9
12.5°	529.1	530.3	534.2	536.8	536.8
15°	522.6	523.9	527.8	530.3	531.6
17.5°	514.9	517.5	521.4	523.9	525.2
20°	504.7	507.2	512.4	516.2	517.5
22.5°	495.7	498.2	503.4	507.2	509.8
25°	485.4	488.0	495.7	498.2	500.8
27.5°	472.6	475.1	481.5	486.7	490.5
30°	459.7	462.3	470.0	476.4	479.0
32.5°	445.6	449.4	458.4	463.6	467.4
35°	430.2	434.0	443.0	452.0	455.9
37.5°	414.8	418.6	427.6	439.2	444.3
40°	396.8	401.9	413.5	428.9	431.5
42.5°	380.1	386.5	396.8	414.8	421.2
45°	360.8	367.3	381.4	400.6	410.9
47.5°	342.9	349.3	364.7	387.8	400.6
50°	321.0	330.0	349.3	376.2	389.1
52.5°	300.5	308.2	333.9	363.4	378.8
55°	278.7	287.6	318.5	350.6	367.3
57.5°	259.4	267.1	301.8	337.7	357.0
60°	235.0	245.3	285.1	323.6	342.9
62.5°	209.3	224.7	268.4	308.2	328.7
65°	184.9	202.9	253.0	292.8	313.3
67.5°	163.1	182.3	233.7	276.1	295.3
70°	137.4	161.8	214.4	255.5	277.4
72.5°	114.3	141.3	192.6	233.7	253.0
75°	91.2	120.7	170.8	205.5	217.0
77.5°	70.6	98.9	146.4	156.7	157.9
80°	52.6	78.3	109.2	110.4	114.3
82.5°	36.0	55.2	70.6	77.0	78.3
85°	23.1	32.1	39.8	41.1	43.7
87.5°	10.3	11.6	14.1	12.8	12.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)