

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: P389280

Luminaire Tested: **22CZ2-50VHE-S-UNV-L935-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: P389280
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 2/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-50VHE-S-UNV-L935-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND SMOOTH LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4416.2 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

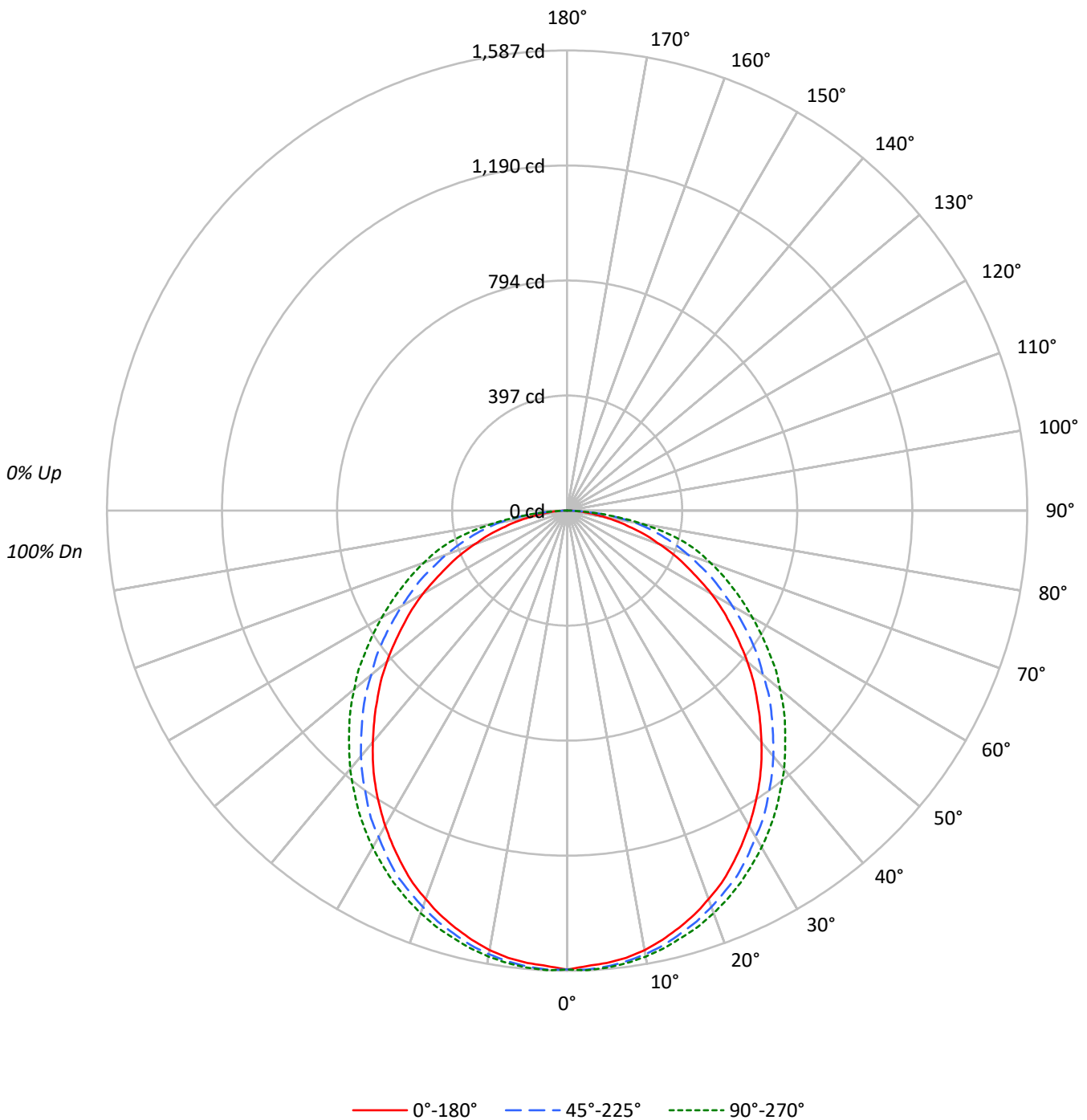
Input Watts (W): 36.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4258	4258	4258
5°	4230	4263	4275
10°	4206	4245	4268
15°	4150	4208	4248
20°	4083	4166	4231
25°	4001	4124	4203
30°	3899	4040	4168
35°	3791	3967	4129
40°	3662	3887	4090
45°	3529	3795	4046
50°	3399	3692	4011
55°	3239	3625	3983
60°	3094	3538	3970
65°	2886	3516	4015
70°	2659	3485	4134
75°	2400	3535	4349
80°	2075	3640	4086
85°	1717	3054	3054



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	149.6	3.4
10°-20°	425.9	9.6
20°-30°	637.2	14.4
30°-40°	754.6	17.1
40°-50°	769.1	17.4
50°-60°	689.3	15.6
60°-70°	539.7	12.2
70°-80°	348.0	7.9
80°-90°	102.8	2.3
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°	1212.7	27.5
0°-40°	1967.4	44.5
0°-60°	3425.8	77.6
0°-90°	4416.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4416.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1582	1582	1582	1582	1582	
5°	1566	1570	1578	1580	1582	149
15°	1490	1498	1510	1523	1525	420
25°	1348	1360	1389	1407	1416	620
35°	1154	1168	1208	1244	1257	721
45°	927	948	997	1049	1063	716
55°	690	713	773	826	849	619
65°	453	480	552	606	630	450
75°	231	266	340	398	418	247
85°	56	76	99	99	99	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1582.5	1582.5	1582.5	1582.5	1582.5
2.5°	1572.2	1576.3	1584.5	1586.6	1586.6
5°	1566.0	1570.1	1578.3	1580.4	1582.5
7.5°	1555.7	1557.7	1568.0	1572.2	1574.2
10°	1539.2	1543.3	1553.6	1559.8	1561.9
12.5°	1516.5	1522.7	1535.1	1543.3	1545.4
15°	1489.7	1498.0	1510.3	1522.7	1524.8
17.5°	1460.9	1469.1	1485.6	1500.0	1504.2
20°	1425.9	1436.2	1454.7	1471.2	1477.4
22.5°	1390.8	1399.1	1421.7	1442.3	1448.5
25°	1347.6	1359.9	1388.8	1407.3	1415.6
27.5°	1302.2	1316.7	1345.5	1370.2	1378.5
30°	1254.8	1269.3	1300.2	1331.1	1341.4
32.5°	1205.4	1221.9	1259.0	1289.9	1300.2
35°	1153.9	1168.3	1207.5	1244.5	1256.9
37.5°	1100.3	1112.7	1158.0	1197.1	1209.5
40°	1042.6	1059.1	1106.5	1151.8	1164.2
42.5°	984.9	1003.5	1050.9	1100.3	1112.7
45°	927.2	947.8	997.3	1048.8	1063.2
47.5°	871.6	888.1	943.7	993.2	1013.8
50°	811.8	828.3	881.9	937.5	958.1
52.5°	750.0	772.7	830.4	884.0	908.7
55°	690.3	712.9	772.7	826.3	848.9
57.5°	634.6	653.2	715.0	770.6	793.3
60°	574.9	591.4	657.3	717.1	737.7
62.5°	511.0	535.7	603.7	659.4	684.1
65°	453.3	480.1	552.2	605.8	630.5
67.5°	399.7	424.5	494.5	552.2	579.0
70°	337.9	370.9	443.0	500.7	525.4
72.5°	288.5	317.3	391.5	449.2	476.0
75°	230.8	265.8	340.0	397.7	418.3
77.5°	183.4	218.4	288.5	333.8	344.1
80°	133.9	169.0	234.9	257.6	263.7
82.5°	90.7	123.6	169.0	175.1	177.2
85°	55.6	76.2	98.9	98.9	98.9
87.5°	26.8	30.9	35.0	33.0	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)