

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: P259235

Luminaire Tested: **22CZ-LD5-44-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259235
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25706)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-LD5-44-UNV-L83050-W2A1-U-4000K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4639.0 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

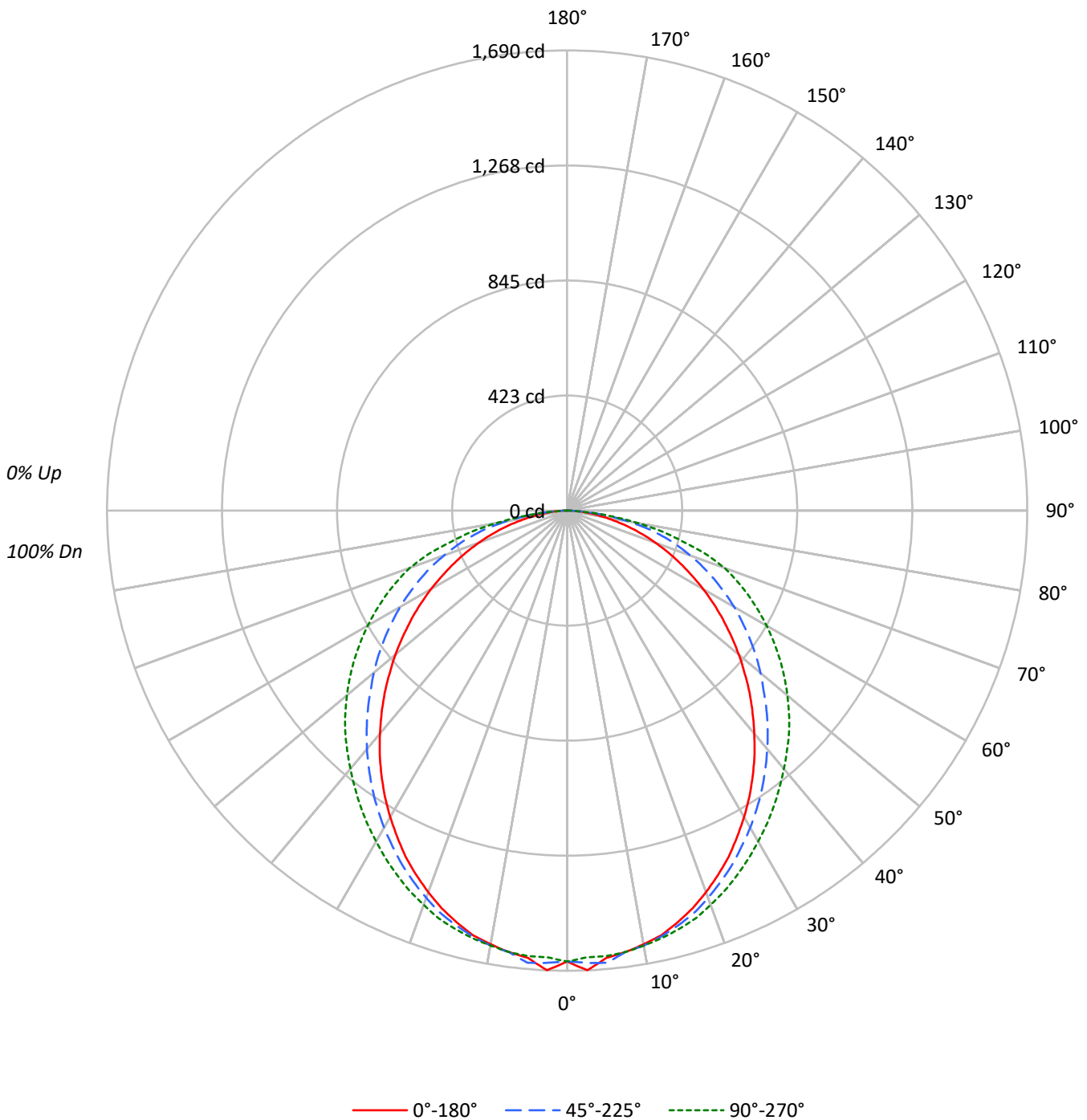
Input Watts (W): 35.433
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	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	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	48	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4456	4456	4456
5°	4454	4503	4436
10°	4420	4432	4432
15°	4362	4393	4431
20°	4270	4335	4412
25°	4166	4260	4387
30°	4038	4178	4360
35°	3905	4098	4350
40°	3756	4018	4351
45°	3606	3940	4387
50°	3447	3882	4420
55°	3281	3842	4477
60°	3108	3812	4553
65°	2916	3792	4669
70°	2715	3781	4828
75°	2463	3776	4574
80°	2132	3496	4055
85°	1812	2646	2578



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.1	3.4
10°-20°	444.8	9.6
20°-30°	661.8	14.3
30°-40°	782.7	16.9
40°-50°	804.4	17.3
50°-60°	735.1	15.8
60°-70°	588.0	12.7
70°-80°	369.0	8.0
80°-90°	96.1	2.1
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°	1263.7	27.2
0°-40°	2046.3	44.1
0°-60°	3585.8	77.3
0°-90°	4639.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4639.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1656	1656	1656	1656	1656	
5°	1649	1649	1667	1656	1642	157
15°	1566	1568	1577	1586	1590	441
25°	1403	1412	1435	1460	1478	645
35°	1189	1205	1248	1295	1324	743
45°	948	972	1035	1112	1153	731
55°	699	733	819	909	954	626
65°	458	498	596	686	733	454
75°	237	282	363	417	440	252
85°	59	74	86	84	84	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1655.8	1655.8	1655.8	1655.8	1655.8
2.5°	1689.7	1682.9	1662.6	1649.0	1642.3
5°	1649.0	1649.0	1667.1	1655.8	1642.3
7.5°	1635.5	1635.5	1635.5	1669.4	1635.5
10°	1617.5	1619.7	1622.0	1635.5	1622.0
12.5°	1597.2	1597.2	1601.7	1606.2	1608.4
15°	1565.6	1567.8	1576.9	1585.9	1590.4
17.5°	1531.7	1538.5	1549.8	1561.1	1570.1
20°	1491.1	1500.2	1513.7	1531.7	1540.8
22.5°	1448.3	1457.3	1475.3	1495.6	1511.4
25°	1403.2	1412.2	1434.7	1459.6	1477.6
27.5°	1351.3	1362.6	1389.6	1423.5	1441.5
30°	1299.4	1312.9	1344.5	1382.9	1403.2
32.5°	1245.2	1261.0	1297.1	1340.0	1364.8
35°	1188.8	1204.6	1247.5	1294.9	1324.2
37.5°	1130.2	1148.2	1195.6	1249.8	1281.3
40°	1069.3	1089.6	1143.7	1202.4	1238.5
42.5°	1008.4	1030.9	1089.6	1159.5	1195.6
45°	947.5	972.3	1035.4	1112.1	1152.8
47.5°	884.3	913.6	979.1	1064.8	1105.4
50°	823.4	852.7	927.2	1015.1	1055.8
52.5°	760.2	794.1	873.0	963.3	1006.1
55°	699.3	733.2	818.9	909.1	954.2
57.5°	638.4	672.3	762.5	855.0	900.1
60°	577.5	613.6	708.3	798.6	846.0
62.5°	516.6	554.9	651.9	744.4	789.6
65°	457.9	498.5	595.6	685.8	733.2
67.5°	401.5	444.4	539.2	627.1	674.5
70°	345.1	388.0	480.5	566.2	613.6
72.5°	291.0	333.9	424.1	500.8	536.9
75°	236.9	282.0	363.2	417.3	439.9
77.5°	185.0	230.1	300.0	336.1	360.9
80°	137.6	176.0	225.6	252.7	261.7
82.5°	94.7	126.3	157.9	164.7	169.2
85°	58.7	74.4	85.7	83.5	83.5
87.5°	27.1	29.3	24.8	18.0	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)