

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: P259236

Luminaire Tested: **22CZ-LD5-44-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P259236
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-4500K
Description: CRUZE 2x2 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4683.0 lumens
Efficiency: N/A
Efficacy: 129.1 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

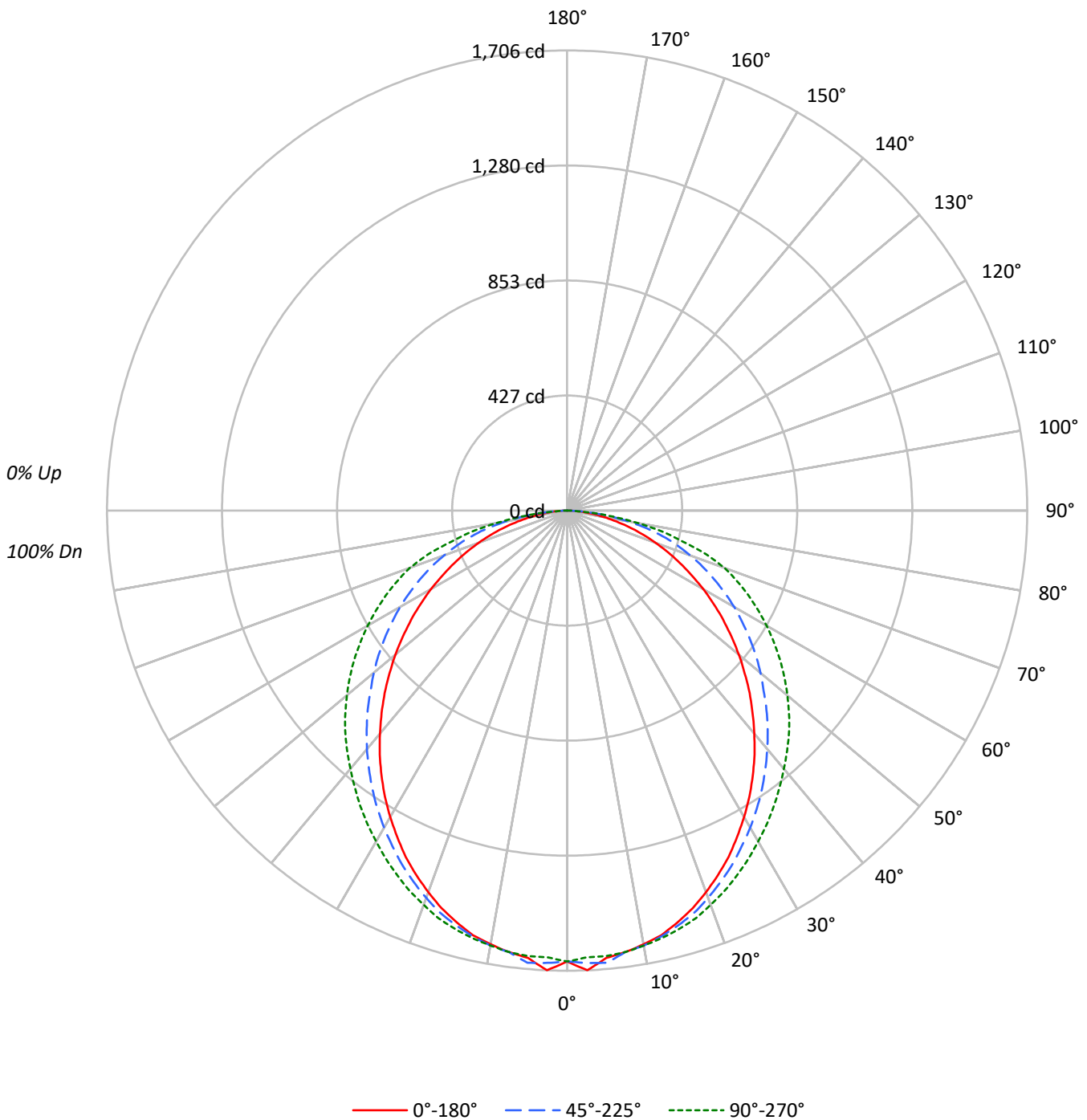
Input Watts (W): 36.27
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4498	4498	4498
5°	4497	4546	4478
10°	4462	4474	4474
15°	4403	4435	4473
20°	4311	4376	4454
25°	4206	4300	4429
30°	4076	4218	4401
35°	3942	4137	4391
40°	3792	4056	4392
45°	3640	3978	4429
50°	3480	3918	4462
55°	3312	3879	4519
60°	3138	3849	4596
65°	2944	3828	4713
70°	2741	3817	4873
75°	2486	3812	4617
80°	2152	3529	4094
85°	1828	2671	2603



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.5	3.4
10°-20°	449.1	9.6
20°-30°	668.0	14.3
30°-40°	790.1	16.9
40°-50°	812.1	17.3
50°-60°	742.0	15.8
60°-70°	593.6	12.7
70°-80°	372.5	8.0
80°-90°	97.0	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°	1275.6	27.2
0°-40°	2065.7	44.1
0°-60°	3619.8	77.3
0°-90°	4683.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4683.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1665	1665	1683	1672	1658	158
15°	1580	1583	1592	1601	1606	445
25°	1416	1426	1448	1473	1492	651
35°	1200	1216	1259	1307	1337	750
45°	956	982	1045	1123	1164	737
55°	706	740	827	918	963	632
65°	462	503	601	692	740	459
75°	239	285	367	421	444	254
85°	59	75	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°	1671.5	1671.5	1671.5	1671.5	1671.5
2.5°	1705.7	1698.8	1678.4	1664.7	1657.9
5°	1664.7	1664.7	1682.9	1671.5	1657.9
7.5°	1651.0	1651.0	1651.0	1685.2	1651.0
10°	1632.8	1635.1	1637.4	1651.0	1637.4
12.5°	1612.3	1612.3	1616.9	1621.4	1623.7
15°	1580.4	1582.7	1591.8	1600.9	1605.5
17.5°	1546.3	1553.1	1564.5	1575.9	1585.0
20°	1505.3	1514.4	1528.1	1546.3	1555.4
22.5°	1462.0	1471.1	1489.3	1509.8	1525.8
25°	1416.5	1425.6	1448.3	1473.4	1491.6
27.5°	1364.1	1375.5	1402.8	1437.0	1455.2
30°	1311.7	1325.4	1357.3	1396.0	1416.5
32.5°	1257.1	1273.0	1309.4	1352.7	1377.8
35°	1200.1	1216.1	1259.3	1307.2	1336.8
37.5°	1140.9	1159.1	1207.0	1261.6	1293.5
40°	1079.4	1099.9	1154.6	1213.8	1250.2
42.5°	1017.9	1040.7	1099.9	1170.5	1207.0
45°	956.5	981.5	1045.3	1122.7	1163.7
47.5°	892.7	922.3	988.3	1074.9	1115.9
50°	831.2	860.8	936.0	1024.8	1065.8
52.5°	767.4	801.6	881.3	972.4	1015.7
55°	706.0	740.1	826.7	917.7	963.3
57.5°	644.5	678.6	769.7	863.1	908.6
60°	583.0	619.4	715.1	806.2	854.0
62.5°	521.5	560.2	658.1	751.5	797.0
65°	462.3	503.3	601.2	692.3	740.1
67.5°	405.4	448.6	544.3	633.1	680.9
70°	348.4	391.7	485.1	571.6	619.4
72.5°	293.8	337.0	428.1	505.6	542.0
75°	239.1	284.7	366.6	421.3	444.1
77.5°	186.7	232.3	302.9	339.3	364.4
80°	138.9	177.6	227.7	255.1	264.2
82.5°	95.6	127.5	159.4	166.2	170.8
85°	59.2	75.2	86.5	84.3	84.3
87.5°	27.3	29.6	25.1	18.2	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)