

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: P261043

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261043
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-50SE-S-UNV-L83050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5102.0 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

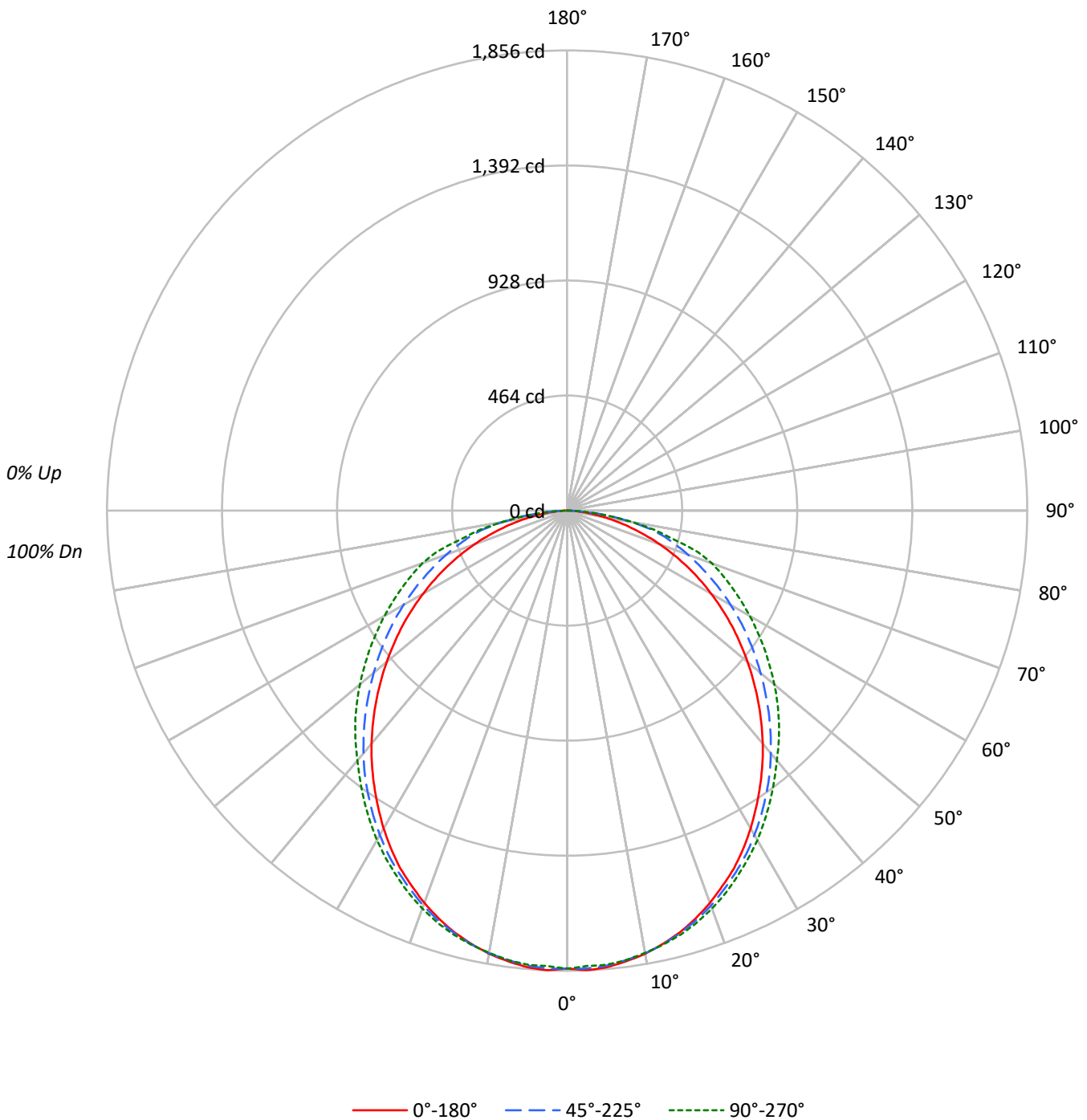
Input Watts (W): 39.711
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P261043

CATALOG NUMBER: 24CZ-LD5-50SE-S-UNV-L83050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P261043

CATALOG NUMBER: 24CZ-LD5-50SE-S-UNV-L83050-W2A1-U-3500K

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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2485	2485	2485
5°	2497	2488	2483
10°	2479	2477	2475
15°	2452	2457	2466
20°	2411	2428	2445
25°	2364	2389	2414
30°	2300	2347	2384
35°	2228	2298	2345
40°	2156	2245	2311
45°	2074	2187	2300
50°	1990	2132	2285
55°	1904	2087	2278
60°	1805	2051	2289
65°	1697	2027	2335
70°	1563	2037	2444
75°	1385	2109	2277
80°	1158	1999	2052
85°	865	1599	1468



TEST NUMBER: P261043

CATALOG NUMBER: 24CZ-LD5-50SE-S-UNV-L83050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.6	3.4
10°-20°	496.6	9.7
20°-30°	740.1	14.5
30°-40°	871.2	17.1
40°-50°	885.4	17.4
50°-60°	796.0	15.6
60°-70°	628.9	12.3
70°-80°	399.0	7.8
80°-90°	110.1	2.2
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°	1411.4	27.7
0°-40°	2282.7	44.7
0°-60°	3964.1	77.7
0°-90°	5102.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5102.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1847	1847	1847	1847	1847	
5°	1849	1833	1842	1838	1838	175
15°	1760	1752	1764	1769	1771	496
25°	1592	1591	1609	1620	1626	732
35°	1356	1365	1399	1414	1428	849
45°	1090	1105	1149	1183	1209	841
55°	812	832	890	947	971	725
65°	533	560	637	706	733	528
75°	266	312	406	441	438	284
85°	56	97	104	95	95	69
90°	0	0	0	0	0	



TEST NUMBER: P261043

CATALOG NUMBER: 24CZ-LD5-50SE-S-UNV-L83050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1847.0	1847.0	1847.0	1847.0	1847.0
2.5°	1855.5	1841.9	1848.7	1845.3	1838.5
5°	1848.7	1833.4	1841.9	1838.5	1838.5
7.5°	1833.4	1821.6	1828.3	1826.6	1828.3
10°	1814.8	1802.9	1813.1	1813.1	1811.4
12.5°	1789.3	1779.1	1791.0	1791.0	1792.7
15°	1760.4	1752.0	1763.8	1768.9	1770.6
17.5°	1724.8	1716.3	1731.6	1736.7	1741.8
20°	1684.0	1680.7	1695.9	1701.0	1707.8
22.5°	1638.2	1638.2	1653.5	1660.3	1670.5
25°	1592.4	1590.7	1609.4	1619.5	1626.3
27.5°	1538.0	1539.7	1563.5	1573.7	1582.2
30°	1480.3	1483.7	1510.9	1522.8	1534.7
32.5°	1419.2	1426.0	1456.6	1470.1	1482.0
35°	1356.4	1364.9	1398.8	1414.1	1427.7
37.5°	1293.6	1305.5	1341.1	1356.4	1371.7
40°	1227.4	1237.6	1278.3	1297.0	1315.7
42.5°	1159.5	1173.1	1213.8	1241.0	1263.0
45°	1089.9	1105.2	1149.3	1183.2	1208.7
47.5°	1020.3	1040.6	1083.1	1128.9	1151.0
50°	950.7	971.0	1018.6	1069.5	1091.6
52.5°	879.4	899.7	954.1	1006.7	1030.5
55°	811.5	831.8	889.6	947.3	971.0
57.5°	740.2	762.2	826.7	886.2	909.9
60°	670.6	692.6	762.2	825.0	850.5
62.5°	602.7	626.4	699.4	765.6	791.1
65°	533.1	560.2	636.6	706.2	733.4
67.5°	465.1	495.7	575.5	648.5	677.4
70°	397.2	432.9	517.8	592.5	621.3
72.5°	331.0	370.1	460.1	534.8	550.0
75°	266.5	312.4	405.7	441.4	438.0
77.5°	205.4	256.3	344.6	351.4	361.6
80°	149.4	205.4	258.0	271.6	264.8
82.5°	98.5	154.5	185.0	178.3	176.6
85°	56.0	96.8	103.6	95.1	95.1
87.5°	23.8	39.0	34.0	25.5	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)