

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: P260831

Luminaire Tested: **24CZ-LD5-50SE-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260831
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-50SE-UNV-L82765-W2A1-U-4000K
Description: CRUZE 2x4 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: 4993.0 lumens
Efficiency: N/A
Efficacy: 124.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

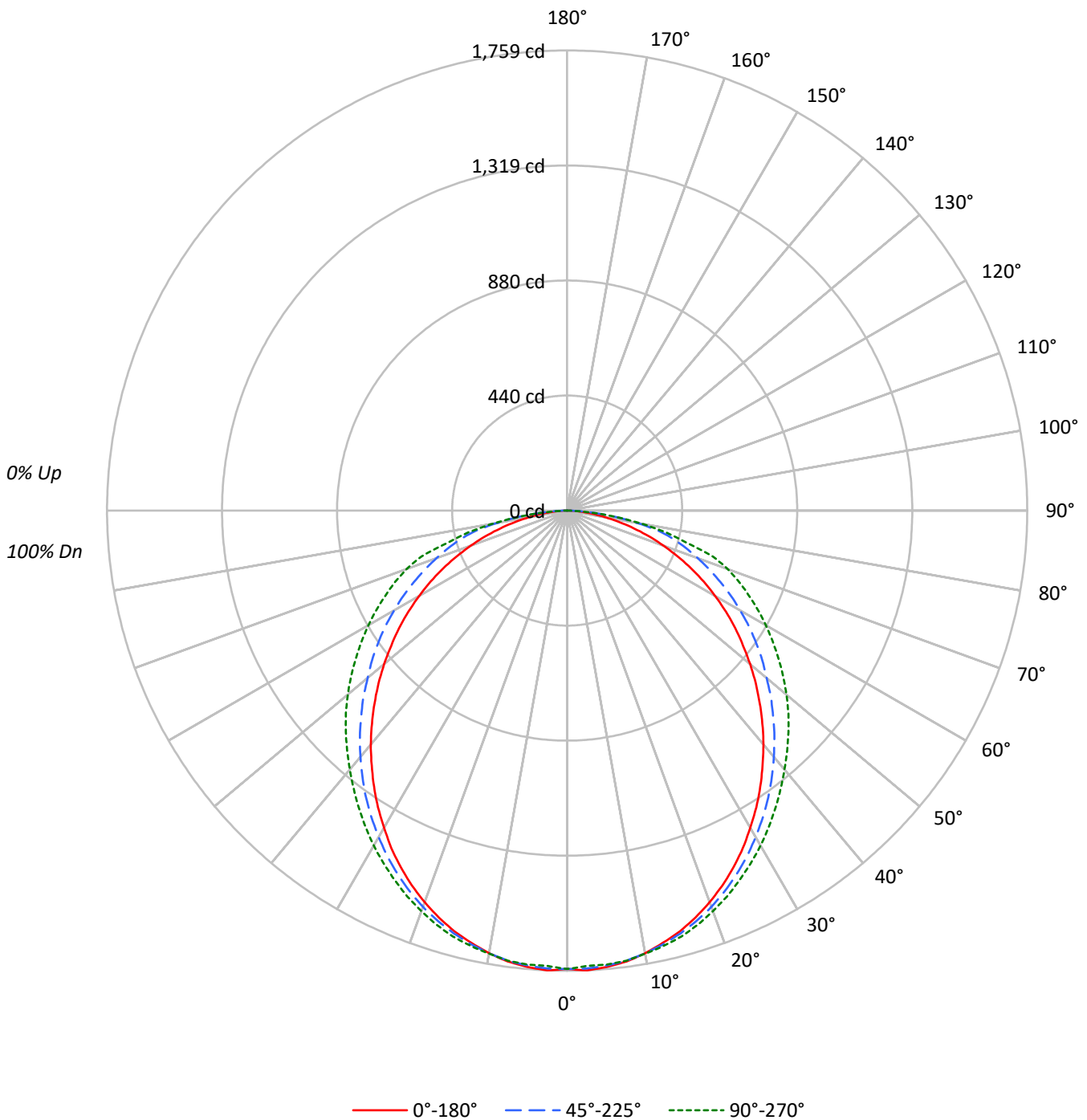
Input Watts (W): 40.176
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P260831

CATALOG NUMBER: 24CZ-LD5-50SE-UNV-L82765-W2A1-U-4000K

Luminous Intensity Polar Plot





TEST NUMBER: P260831

CATALOG NUMBER: 24CZ-LD5-50SE-UNV-L82765-W2A1-U-4000K

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	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83					83			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68					68			
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57					57			
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32					32			
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2358	2358	2358
5°	2364	2357	2353
10°	2347	2347	2350
15°	2319	2331	2348
20°	2281	2308	2333
25°	2233	2277	2315
30°	2175	2239	2298
35°	2114	2201	2280
40°	2051	2159	2270
45°	1981	2118	2277
50°	1911	2083	2290
55°	1841	2069	2314
60°	1757	2056	2360
65°	1665	2057	2438
70°	1540	2092	2569
75°	1378	2186	2444
80°	1152	2093	2239
85°	871	1610	1531



TEST NUMBER: P260831

CATALOG NUMBER: 24CZ-LD5-50SE-UNV-L82765-W2A1-U-4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.6	3.3
10°-20°	471.3	9.4
20°-30°	704.5	14.1
30°-40°	835.8	16.7
40°-50°	860.3	17.2
50°-60°	789.2	15.8
60°-70°	638.1	12.8
70°-80°	414.1	8.3
80°-90°	114.2	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°	1341.4	26.9
0°-40°	2177.2	43.6
0°-60°	3826.6	76.6
0°-90°	4993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4993.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1752	1752	1752	1752	1752	
5°	1751	1739	1745	1744	1742	166
15°	1665	1658	1674	1680	1686	469
25°	1504	1506	1534	1547	1559	692
35°	1287	1298	1340	1369	1388	805
45°	1041	1058	1113	1166	1197	803
55°	785	809	882	954	986	701
65°	523	554	646	732	766	517
75°	265	315	420	470	470	282
85°	56	96	104	101	99	69
90°	0	0	0	0	0	



TEST NUMBER: P260831

CATALOG NUMBER: 24CZ-LD5-50SE-UNV-L82765-W2A1-U-4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1752.3	1752.3	1752.3	1752.3	1752.3
2.5°	1759.1	1745.4	1752.3	1750.6	1742.0
5°	1750.6	1738.6	1745.4	1743.7	1742.0
7.5°	1738.6	1726.6	1735.2	1733.5	1735.2
10°	1718.1	1707.8	1718.1	1719.8	1719.8
12.5°	1692.4	1683.9	1697.6	1701.0	1704.4
15°	1665.1	1658.3	1673.6	1680.5	1685.6
17.5°	1630.9	1625.8	1644.6	1653.1	1660.0
20°	1593.3	1591.6	1612.1	1620.6	1629.2
22.5°	1550.6	1550.6	1574.5	1584.7	1596.7
25°	1504.4	1506.1	1533.5	1547.1	1559.1
27.5°	1454.8	1456.5	1489.0	1506.1	1519.8
30°	1400.1	1407.0	1441.1	1463.4	1478.8
32.5°	1345.4	1354.0	1391.6	1417.2	1434.3
35°	1287.3	1297.5	1340.3	1369.3	1388.2
37.5°	1227.5	1239.4	1285.6	1318.1	1340.3
40°	1167.6	1181.3	1229.2	1266.8	1292.4
42.5°	1104.4	1119.8	1172.7	1217.2	1244.5
45°	1041.1	1058.2	1112.9	1165.9	1196.7
47.5°	977.9	998.4	1056.5	1114.6	1147.1
50°	912.9	933.4	995.0	1061.6	1094.1
52.5°	847.9	871.9	940.2	1008.6	1041.1
55°	784.7	808.6	882.1	953.9	986.4
57.5°	719.7	743.7	824.0	899.2	931.7
60°	653.0	680.4	764.2	841.1	877.0
62.5°	588.1	617.1	706.0	788.1	822.3
65°	523.1	553.9	646.2	731.7	765.9
67.5°	456.4	492.3	588.1	675.3	711.2
70°	391.5	430.8	531.7	618.9	653.0
72.5°	328.2	371.0	475.3	564.1	584.7
75°	265.0	314.6	420.5	470.1	470.1
77.5°	205.1	259.9	359.0	377.8	388.1
80°	148.7	208.6	270.1	292.3	288.9
82.5°	99.2	159.0	193.2	193.2	188.0
85°	56.4	95.7	104.3	100.9	99.2
87.5°	23.9	35.9	32.5	25.6	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)