

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: P260648

Luminaire Tested: **24CZ-LD5-50-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260648
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-LD5-50-UNV-L93050-W2A1-U-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4272.1 lumens
Efficiency: N/A
Efficacy: 117.4 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

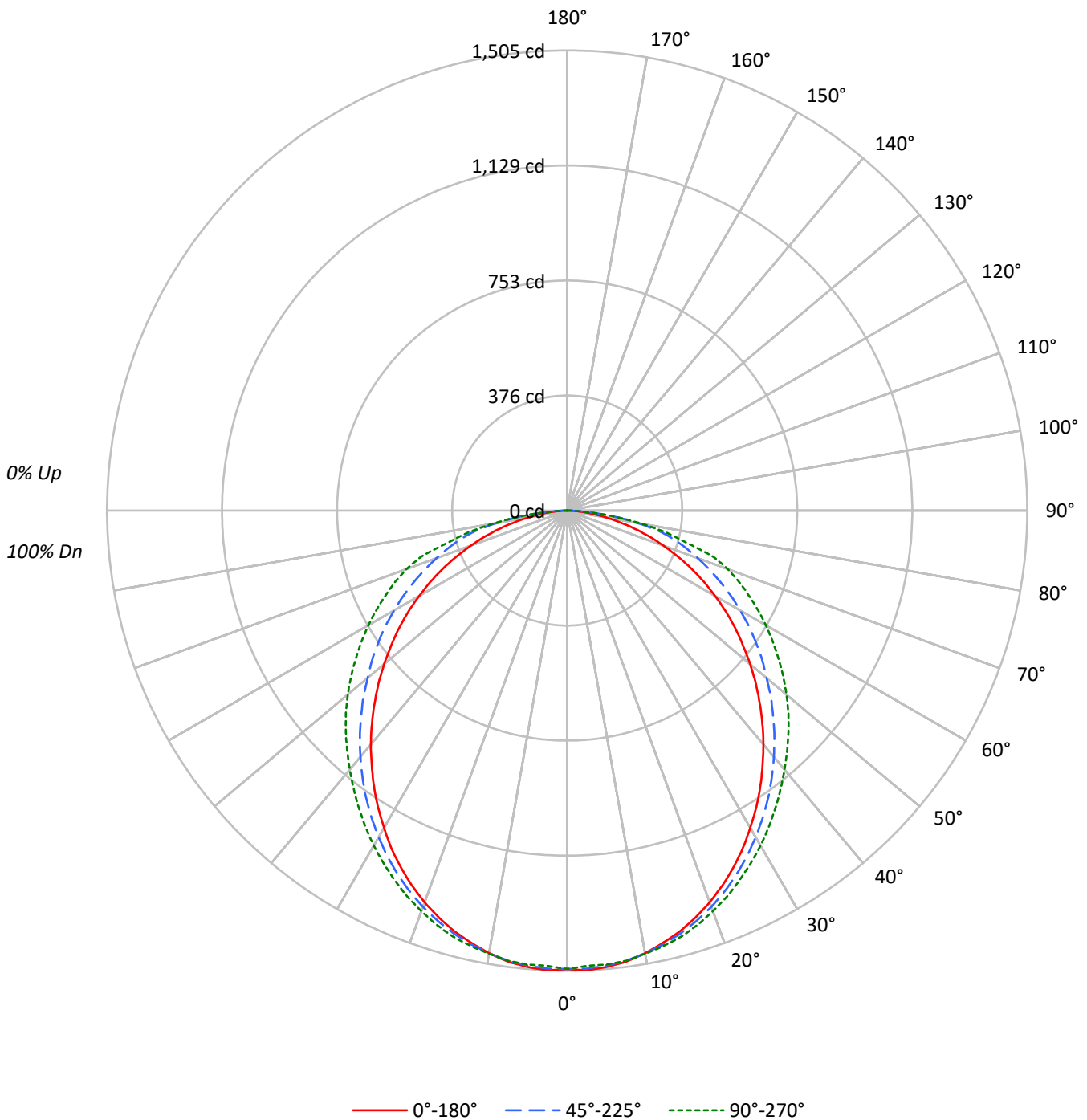
Input Watts (W): 36.390528
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P260648

CATALOG NUMBER: 24CZ-LD5-50-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P260648

CATALOG NUMBER: 24CZ-LD5-50-UNV-L93050-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	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	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2017	2017	2017
5°	2023	2017	2013
10°	2008	2008	2010
15°	1985	1995	2009
20°	1952	1975	1996
25°	1911	1948	1980
30°	1861	1916	1966
35°	1809	1884	1951
40°	1755	1847	1942
45°	1695	1812	1948
50°	1635	1782	1959
55°	1575	1771	1980
60°	1504	1759	2019
65°	1425	1760	2086
70°	1318	1790	2198
75°	1179	1870	2091
80°	986	1791	1915
85°	746	1377	1309



TEST NUMBER: P260648

CATALOG NUMBER: 24CZ-LD5-50-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	141.7	3.3
10°-20°	403.2	9.4
20°-30°	602.8	14.1
30°-40°	715.1	16.7
40°-50°	736.0	17.2
50°-60°	675.2	15.8
60°-70°	546.0	12.8
70°-80°	354.3	8.3
80°-90°	97.7	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°	1147.7	26.9
0°-40°	1862.9	43.6
0°-60°	3274.1	76.6
0°-90°	4272.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4272.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1499	1499	1499	1499	1499	
5°	1498	1488	1493	1492	1490	142
15°	1425	1419	1432	1438	1442	401
25°	1287	1289	1312	1324	1334	592
35°	1101	1110	1147	1172	1188	689
45°	891	905	952	998	1024	687
55°	671	692	755	816	844	600
65°	448	474	553	626	655	442
75°	227	269	360	402	402	241
85°	48	82	89	86	85	59
90°	0	0	0	0	0	



TEST NUMBER: P260648

CATALOG NUMBER: 24CZ-LD5-50-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1499.3	1499.3	1499.3	1499.3	1499.3
2.5°	1505.1	1493.4	1499.3	1497.8	1490.5
5°	1497.8	1487.6	1493.4	1492.0	1490.5
7.5°	1487.6	1477.3	1484.7	1483.2	1484.7
10°	1470.0	1461.3	1470.0	1471.5	1471.5
12.5°	1448.1	1440.8	1452.5	1455.4	1458.3
15°	1424.7	1418.8	1432.0	1437.9	1442.2
17.5°	1395.4	1391.0	1407.1	1414.4	1420.3
20°	1363.3	1361.8	1379.3	1386.7	1394.0
22.5°	1326.7	1326.7	1347.2	1355.9	1366.2
25°	1287.2	1288.7	1312.1	1323.8	1334.0
27.5°	1244.8	1246.2	1274.0	1288.7	1300.4
30°	1198.0	1203.8	1233.1	1252.1	1265.3
32.5°	1151.2	1158.5	1190.7	1212.6	1227.2
35°	1101.4	1110.2	1146.8	1171.6	1187.7
37.5°	1050.2	1060.5	1100.0	1127.8	1146.8
40°	999.0	1010.7	1051.7	1083.9	1105.8
42.5°	944.9	958.1	1003.4	1041.5	1064.9
45°	890.8	905.4	952.2	997.6	1023.9
47.5°	836.7	854.2	904.0	953.7	981.5
50°	781.1	798.6	851.3	908.3	936.1
52.5°	725.5	746.0	804.5	863.0	890.8
55°	671.4	691.9	754.8	816.2	844.0
57.5°	615.8	636.3	705.0	769.4	797.2
60°	558.8	582.2	653.8	719.7	750.4
62.5°	503.2	528.0	604.1	674.3	703.6
65°	447.6	473.9	552.9	626.0	655.3
67.5°	390.5	421.3	503.2	577.8	608.5
70°	335.0	368.6	454.9	529.5	558.8
72.5°	280.8	317.4	406.6	482.7	500.2
75°	226.7	269.1	359.8	402.2	402.2
77.5°	175.5	222.3	307.2	323.3	332.0
80°	127.3	178.5	231.1	250.1	247.2
82.5°	84.8	136.0	165.3	165.3	160.9
85°	48.3	81.9	89.2	86.3	84.8
87.5°	20.5	30.7	27.8	21.9	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)