

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: P230519

Luminaire Tested: **24CZ-LD5-50SE-RDP-UNV-L950-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230519  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50SE-RDP-UNV-L950-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3214.8 lumens  
Efficiency: N/A  
Efficacy: 69.0 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

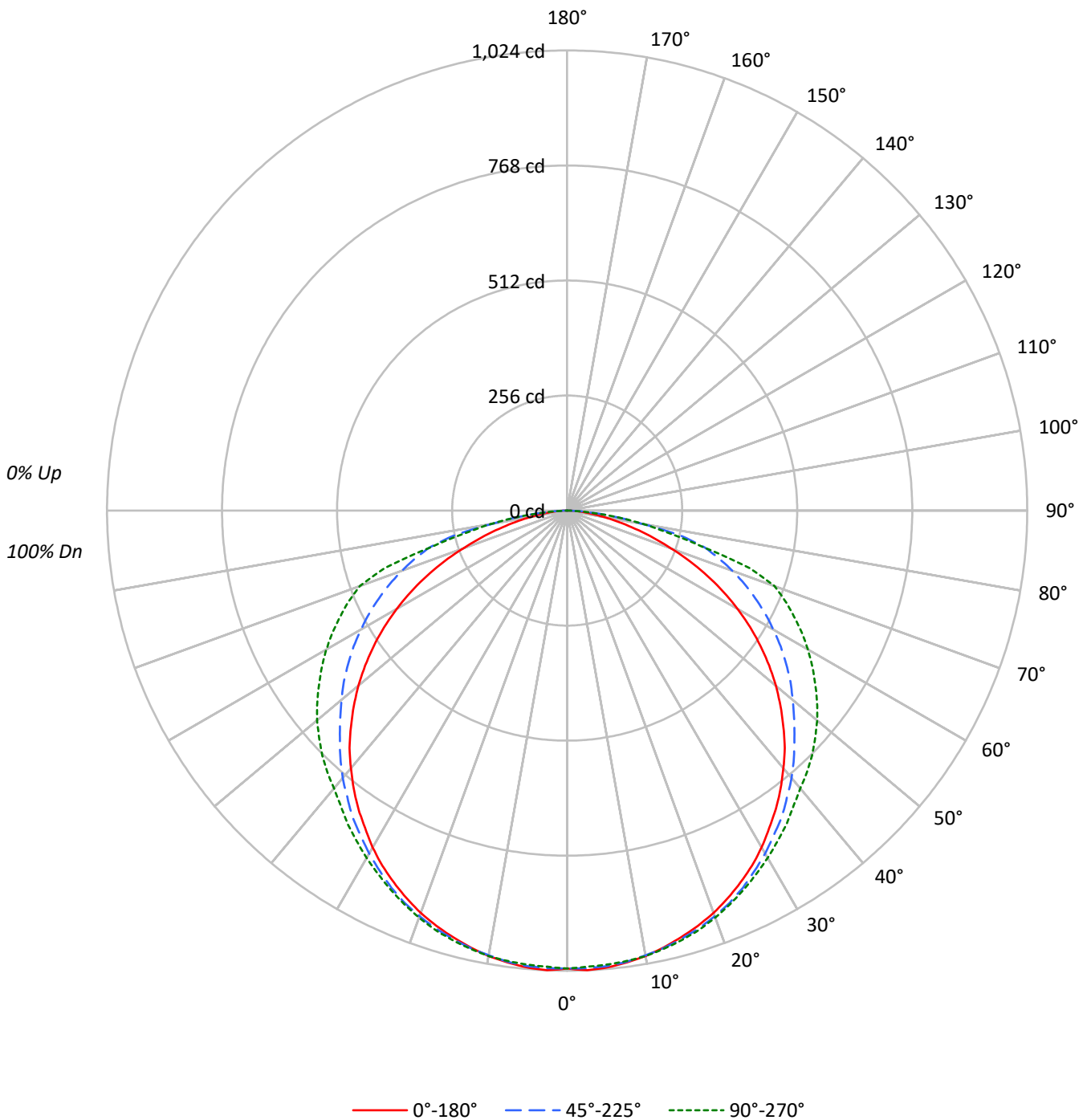
Input Watts (W): 46.56  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P230519

CATALOG NUMBER: 24CZ-LD5-50SE-RDP-UNV-L950-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P230519

CATALOG NUMBER: 24CZ-LD5-50SE-RDP-UNV-L950-CD1-U

**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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1371	1371	1371
5°	1379	1374	1370
10°	1375	1373	1375
15°	1369	1373	1378
20°	1364	1375	1380
25°	1356	1374	1381
30°	1345	1369	1387
35°	1331	1367	1398
40°	1315	1365	1418
45°	1295	1361	1466
50°	1269	1371	1521
55°	1232	1396	1581
60°	1179	1426	1665
65°	1098	1471	1773
70°	971	1538	1930
75°	815	1645	1620
80°	650	1299	1349
85°	513	880	806



TEST NUMBER: P230519

CATALOG NUMBER: 24CZ-LD5-50SE-RDP-UNV-L950-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.7	3.0
10°-20°	278.2	8.7
20°-30°	424.9	13.2
30°-40°	519.5	16.2
40°-50°	556.0	17.3
50°-60°	533.3	16.6
60°-70°	450.3	14.0
70°-80°	287.8	9.0
80°-90°	68.1	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°	799.8	24.9
0°-40°	1319.2	41.0
0°-60°	2408.6	74.9
0°-90°	3214.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3214.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1021	1014	1018	1016	1014	97
15°	983	980	986	989	989	277
25°	913	912	926	929	930	421
35°	810	817	832	844	851	507
45°	680	692	715	748	771	525
55°	525	543	595	649	674	469
65°	345	378	462	527	557	340
75°	157	223	316	323	312	169
85°	33	55	57	55	52	40
90°	0	0	0	0	0	



TEST NUMBER: P230519

CATALOG NUMBER: 24CZ-LD5-50SE-RDP-UNV-L950-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1019.1	1019.1	1019.1	1019.1	1019.1
2.5°	1023.9	1017.5	1019.1	1019.1	1016.0
5°	1020.7	1014.4	1017.5	1016.0	1014.4
7.5°	1014.4	1009.6	1012.8	1012.8	1011.2
10°	1006.5	1001.7	1004.9	1006.5	1006.5
12.5°	995.4	992.2	997.0	997.0	998.5
15°	982.7	979.6	985.9	989.1	989.1
17.5°	968.5	966.9	974.8	976.4	978.0
20°	952.7	951.1	960.6	960.6	963.7
22.5°	933.7	932.1	944.7	944.7	947.9
25°	913.1	911.5	925.8	928.9	930.5
27.5°	890.9	889.4	903.6	908.3	911.5
30°	865.6	865.6	881.4	887.8	892.5
32.5°	837.1	841.9	856.1	865.6	871.9
35°	810.2	816.6	832.4	843.5	851.4
37.5°	780.2	786.5	803.9	818.1	827.6
40°	748.5	756.4	777.0	792.8	807.1
42.5°	716.9	724.8	746.9	770.7	789.7
45°	680.5	691.5	715.3	748.5	770.7
47.5°	644.1	655.1	685.2	726.4	748.5
50°	606.1	618.7	655.1	702.6	726.4
52.5°	566.5	580.8	626.7	677.3	701.0
55°	525.4	542.8	595.0	648.8	674.1
57.5°	482.7	501.6	563.4	620.3	647.2
60°	438.3	462.1	530.1	590.3	618.7
62.5°	392.5	420.9	496.9	558.6	588.7
65°	345.0	378.2	462.1	527.0	557.0
67.5°	295.9	340.2	427.3	495.3	525.4
70°	246.9	299.1	390.9	460.5	490.6
72.5°	201.0	261.1	354.5	419.4	425.7
75°	156.7	223.1	316.5	322.8	311.7
77.5°	117.1	185.2	261.1	232.6	231.0
80°	83.9	148.8	167.7	172.5	174.1
82.5°	55.4	112.4	109.2	112.4	110.8
85°	33.2	55.4	57.0	55.4	52.2
87.5°	15.8	20.6	15.8	14.2	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)