

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: P261062

Luminaire Tested: **24CZ-LD5-45-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261062
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-LD5-45-S-UNV-L93050-W2A1-U-3000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3559.1 lumens
Efficiency: N/A
Efficacy: 110.7 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

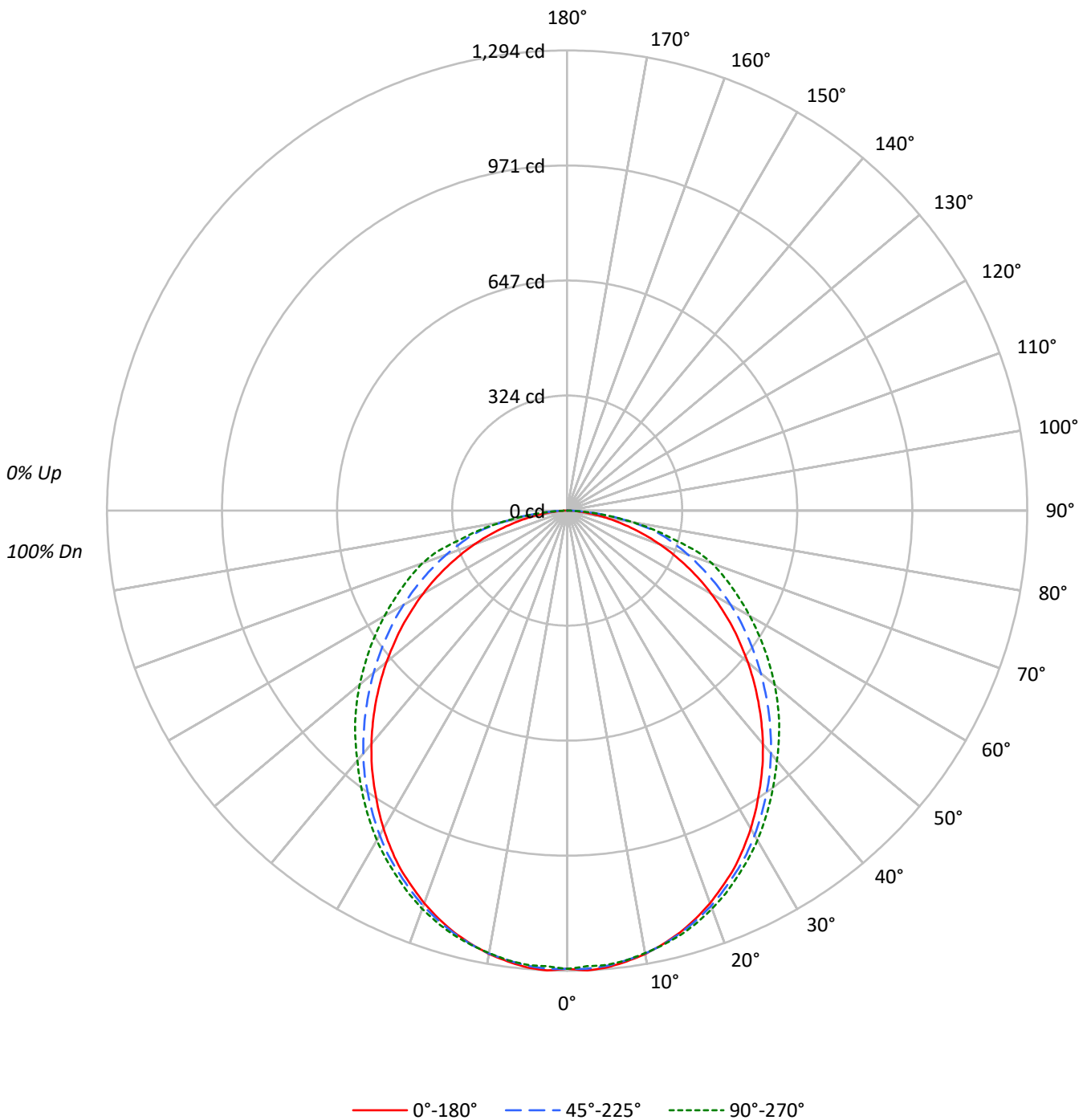
Input Watts (W): 32.156982
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P261062

CATALOG NUMBER: 24CZ-LD5-45-S-UNV-L93050-W2A1-U-3000K

Luminous Intensity Polar Plot





TEST NUMBER: P261062

CATALOG NUMBER: 24CZ-LD5-45-S-UNV-L93050-W2A1-U-3000K

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1734	1734	1734
5°	1742	1735	1732
10°	1730	1728	1726
15°	1711	1714	1721
20°	1682	1694	1706
25°	1649	1667	1684
30°	1604	1638	1663
35°	1554	1603	1636
40°	1504	1566	1612
45°	1447	1525	1604
50°	1388	1487	1594
55°	1328	1456	1589
60°	1259	1431	1597
65°	1184	1414	1629
70°	1090	1421	1705
75°	966	1471	1588
80°	807	1395	1431
85°	604	1115	1024



TEST NUMBER: P261062

CATALOG NUMBER: 24CZ-LD5-45-S-UNV-L93050-W2A1-U-3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.8	3.4
10°-20°	346.5	9.7
20°-30°	516.3	14.5
30°-40°	607.8	17.1
40°-50°	617.6	17.4
50°-60°	555.3	15.6
60°-70°	438.7	12.3
70°-80°	278.3	7.8
80°-90°	76.8	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°	984.6	27.7
0°-40°	1592.4	44.7
0°-60°	2765.3	77.7
0°-90°	3559.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3559.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1288	1288	1288	1288	1288	
5°	1290	1279	1285	1282	1282	122
15°	1228	1222	1230	1234	1235	346
25°	1111	1110	1123	1130	1134	511
35°	946	952	976	986	996	592
45°	760	771	802	825	843	587
55°	566	580	620	661	677	506
65°	372	391	444	493	512	368
75°	186	218	283	308	306	198
85°	39	68	72	66	66	48
90°	0	0	0	0	0	



TEST NUMBER: P261062

CATALOG NUMBER: 24CZ-LD5-45-S-UNV-L93050-W2A1-U-3000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1288.5	1288.5	1288.5	1288.5	1288.5
2.5°	1294.4	1284.9	1289.6	1287.3	1282.5
5°	1289.6	1279.0	1284.9	1282.5	1282.5
7.5°	1279.0	1270.7	1275.4	1274.3	1275.4
10°	1266.0	1257.7	1264.8	1264.8	1263.6
12.5°	1248.2	1241.1	1249.4	1249.4	1250.6
15°	1228.1	1222.1	1230.4	1234.0	1235.2
17.5°	1203.2	1197.3	1207.9	1211.5	1215.0
20°	1174.8	1172.4	1183.1	1186.6	1191.4
22.5°	1142.8	1142.8	1153.5	1158.2	1165.3
25°	1110.8	1109.6	1122.7	1129.8	1134.5
27.5°	1072.9	1074.1	1090.7	1097.8	1103.7
30°	1032.7	1035.0	1054.0	1062.3	1070.6
32.5°	990.0	994.8	1016.1	1025.6	1033.9
35°	946.2	952.1	975.8	986.5	996.0
37.5°	902.4	910.7	935.6	946.2	956.9
40°	856.2	863.3	891.7	904.8	917.8
42.5°	808.8	818.3	846.7	865.7	881.1
45°	760.3	770.9	801.7	825.4	843.2
47.5°	711.7	725.9	755.6	787.5	802.9
50°	663.2	677.4	710.6	746.1	761.5
52.5°	613.4	627.7	665.5	702.3	718.8
55°	566.1	580.3	620.5	660.8	677.4
57.5°	516.3	531.7	576.7	618.2	634.8
60°	467.8	483.2	531.7	575.5	593.3
62.5°	420.4	437.0	487.9	534.1	551.9
65°	371.9	390.8	444.1	492.6	511.6
67.5°	324.5	345.8	401.5	452.4	472.5
70°	277.1	302.0	361.2	413.3	433.4
72.5°	230.9	258.2	320.9	373.0	383.7
75°	185.9	217.9	283.0	307.9	305.5
77.5°	143.3	178.8	240.4	245.1	252.2
80°	104.2	143.3	180.0	189.5	184.7
82.5°	68.7	107.8	129.1	124.3	123.2
85°	39.1	67.5	72.2	66.3	66.3
87.5°	16.6	27.2	23.7	17.8	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)