

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: P263097

Luminaire Tested: **24CZ-LD5-55-SQP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263097  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-55-SQP-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3472.0 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

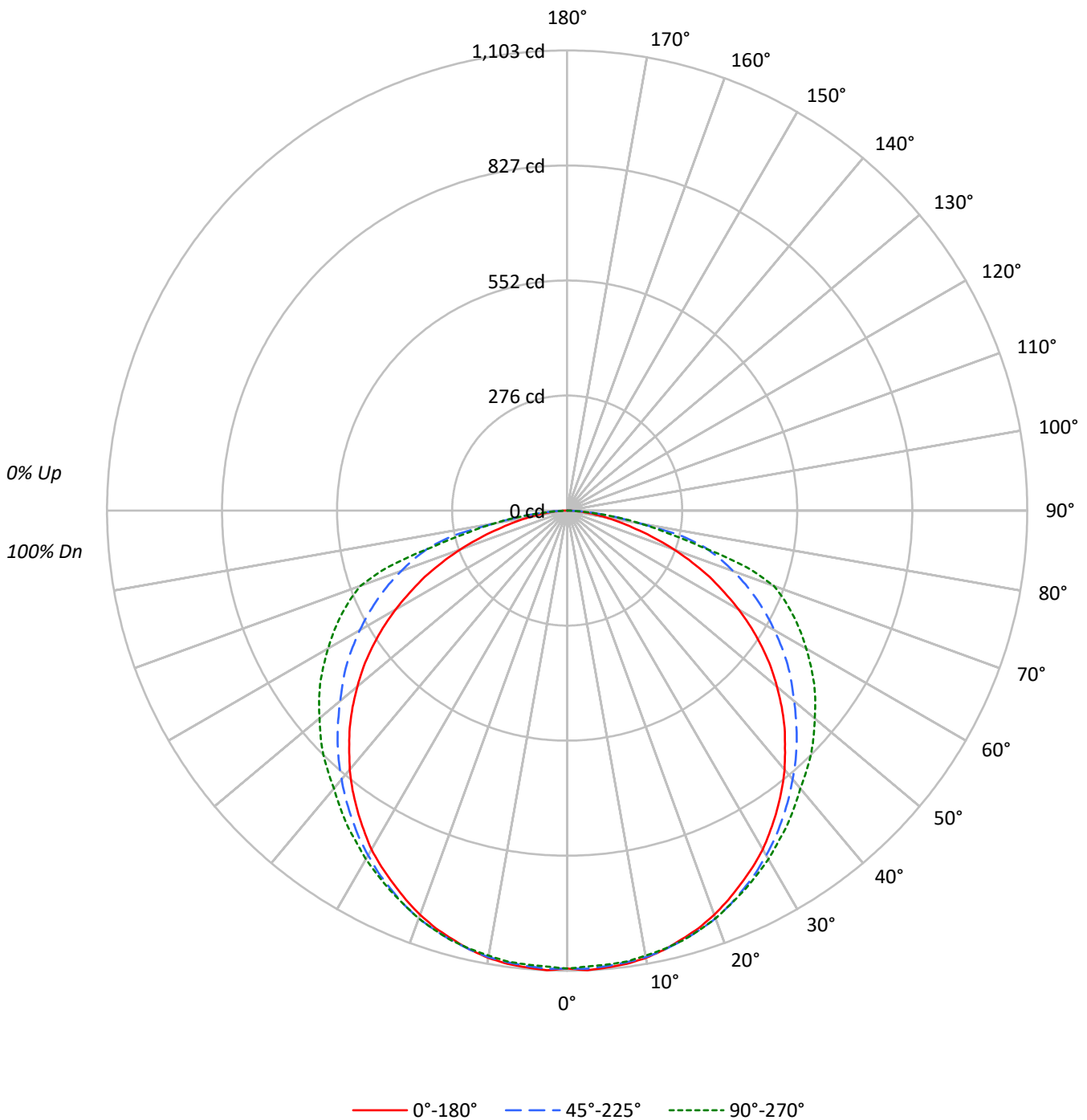
Input Watts (W): 40.002834  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263097

CATALOG NUMBER: 24CZ-LD5-55-SQP-UNV-L83050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P263097

CATALOG NUMBER: 24CZ-LD5-55-SQP-UNV-L83050-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	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	63	58	56																												
4	81	68	59	52	79	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	62	49	40	34	47	39	34	45	39	33	44	38	33	31																												
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28																												
9	55	41	33	27	54	41	33	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°	1477	1477	1477
5°	1485	1480	1475
10°	1487	1485	1480
15°	1481	1486	1486
20°	1477	1489	1489
25°	1464	1486	1491
30°	1457	1482	1499
35°	1441	1479	1511
40°	1424	1477	1528
45°	1403	1481	1573
50°	1374	1487	1622
55°	1338	1514	1695
60°	1279	1544	1781
65°	1199	1593	1907
70°	1072	1665	2074
75°	886	1781	1716
80°	723	1375	1389
85°	582	914	858



TEST NUMBER: P263097

CATALOG NUMBER: 24CZ-LD5-55-SQP-UNV-L83050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.2	3.0
10°-20°	300.8	8.7
20°-30°	459.7	13.2
30°-40°	562.3	16.2
40°-50°	601.6	17.3
50°-60°	576.1	16.6
60°-70°	487.3	14.0
70°-80°	308.9	8.9
80°-90°	71.1	2.0
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°	864.8	24.9
0°-40°	1427.0	41.1
0°-60°	2604.7	75.0
0°-90°	3472.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3472.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1098	1098	1098	1098	1098	
5°	1099	1094	1096	1094	1092	105
15°	1064	1062	1067	1067	1067	300
25°	986	986	1001	1004	1004	455
35°	877	882	900	913	920	549
45°	737	750	778	811	827	568
55°	570	588	646	699	723	509
65°	377	412	500	568	599	371
75°	170	240	342	341	330	185
85°	38	57	59	54	56	45
90°	0	0	0	0	0	



TEST NUMBER: P263097

CATALOG NUMBER: 24CZ-LD5-55-SQP-UNV-L83050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1097.6	1097.6	1097.6	1097.6	1097.6
2.5°	1102.9	1097.6	1099.4	1097.6	1094.0
5°	1099.4	1094.0	1095.8	1094.0	1092.2
7.5°	1095.8	1090.4	1092.2	1090.4	1090.4
10°	1088.6	1083.2	1086.8	1085.0	1083.2
12.5°	1077.8	1074.2	1077.8	1076.0	1076.0
15°	1063.5	1061.7	1067.1	1067.1	1067.1
17.5°	1049.1	1047.3	1054.5	1054.5	1054.5
20°	1031.2	1029.4	1040.2	1040.2	1040.2
22.5°	1009.7	1007.9	1022.2	1022.2	1022.2
25°	986.4	986.4	1000.7	1004.3	1004.3
27.5°	963.1	963.1	979.2	984.6	984.6
30°	938.0	938.0	954.1	961.3	964.9
32.5°	907.5	911.1	929.0	938.0	941.5
35°	877.0	882.4	900.3	912.8	920.0
37.5°	844.7	850.1	871.6	885.9	894.9
40°	810.6	817.8	841.1	859.0	869.8
42.5°	773.0	783.7	810.6	833.9	848.3
45°	737.1	749.6	778.3	810.6	826.8
47.5°	697.6	712.0	744.3	785.5	801.7
50°	656.4	670.7	710.2	756.8	774.8
52.5°	615.1	631.3	677.9	728.1	749.6
55°	570.3	588.2	645.6	699.4	722.7
57.5°	523.7	545.2	609.8	667.1	692.3
60°	475.3	502.2	573.9	634.9	661.8
62.5°	425.0	457.3	538.0	602.6	631.3
65°	376.6	412.5	500.4	568.5	599.0
67.5°	324.6	369.4	462.7	536.2	564.9
70°	272.6	324.6	423.2	498.6	527.3
72.5°	220.6	283.4	383.8	451.9	451.9
75°	170.4	240.3	342.5	340.7	330.0
77.5°	129.1	200.9	281.6	240.3	242.1
80°	93.3	161.4	177.5	177.5	179.3
82.5°	62.8	123.7	114.8	113.0	116.6
85°	37.7	57.4	59.2	53.8	55.6
87.5°	17.9	19.7	16.1	10.8	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)