

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: P263561

Luminaire Tested: **24CZ-LD5-45SE-RDP-UNV-L83050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263561  
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-LD5-45SE-RDP-UNV-L83050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3339.0 lumens  
Efficiency: N/A  
Efficacy: 91.0 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

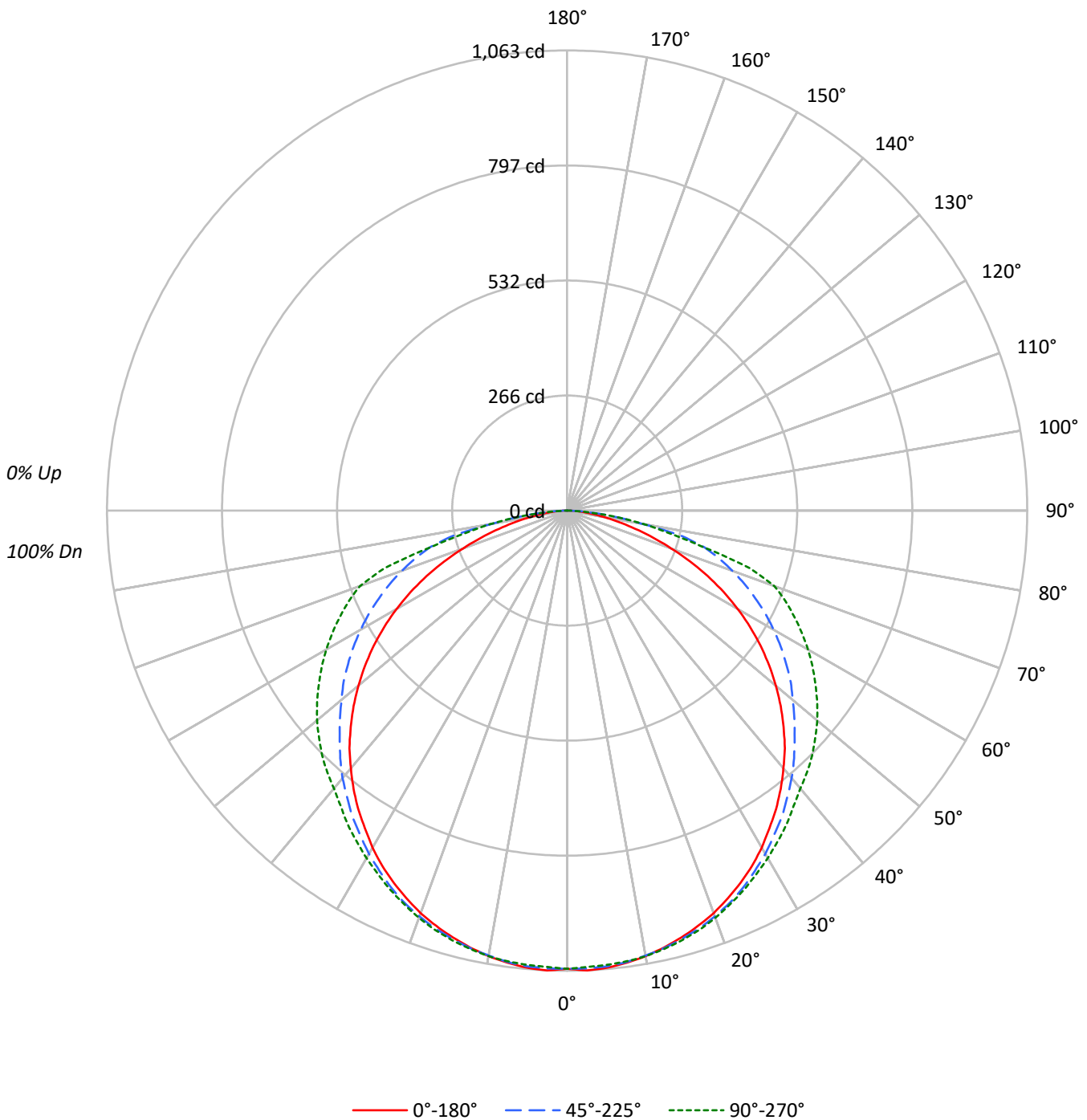
Input Watts (W): 36.681432  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263561

CATALOG NUMBER: 24CZ-LD5-45SE-RDP-UNV-L83050-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P263561

CATALOG NUMBER: 24CZ-LD5-45SE-RDP-UNV-L83050-W2A1-U-5000K

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				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°	1424	1424	1424
5°	1432	1427	1423
10°	1428	1426	1428
15°	1422	1426	1431
20°	1417	1429	1433
25°	1408	1427	1435
30°	1397	1422	1440
35°	1382	1420	1452
40°	1365	1417	1472
45°	1345	1414	1523
50°	1318	1424	1579
55°	1280	1450	1643
60°	1225	1482	1729
65°	1141	1528	1842
70°	1009	1597	2004
75°	846	1709	1683
80°	675	1350	1401
85°	533	914	837



TEST NUMBER: P263561

CATALOG NUMBER: 24CZ-LD5-45SE-RDP-UNV-L83050-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.4	3.0
10°-20°	288.9	8.7
20°-30°	441.3	13.2
30°-40°	539.5	16.2
40°-50°	577.5	17.3
50°-60°	554.0	16.6
60°-70°	467.7	14.0
70°-80°	298.9	9.0
80°-90°	70.7	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°	830.6	24.9
0°-40°	1370.2	41.0
0°-60°	2501.7	74.9
0°-90°	3339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3339.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1058	1058	1058	1058	1058	
5°	1060	1054	1057	1055	1054	101
15°	1021	1017	1024	1027	1027	288
25°	948	947	962	965	966	437
35°	842	848	864	876	884	526
45°	707	718	743	777	800	545
55°	546	564	618	674	700	487
65°	358	393	480	547	579	353
75°	163	232	329	335	324	175
85°	34	58	59	58	54	41
90°	0	0	0	0	0	



TEST NUMBER: P263561

CATALOG NUMBER: 24CZ-LD5-45SE-RDP-UNV-L83050-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1058.5	1058.5	1058.5	1058.5	1058.5
2.5°	1063.4	1056.8	1058.5	1058.5	1055.2
5°	1060.1	1053.6	1056.8	1055.2	1053.6
7.5°	1053.6	1048.6	1051.9	1051.9	1050.3
10°	1045.3	1040.4	1043.7	1045.3	1045.3
12.5°	1033.8	1030.5	1035.5	1035.5	1037.1
15°	1020.7	1017.4	1024.0	1027.3	1027.3
17.5°	1005.9	1004.3	1012.5	1014.1	1015.8
20°	989.5	987.8	997.7	997.7	1001.0
22.5°	969.7	968.1	981.2	981.2	984.5
25°	948.4	946.7	961.5	964.8	966.4
27.5°	925.4	923.7	938.5	943.4	946.7
30°	899.1	899.1	915.5	922.1	927.0
32.5°	869.5	874.4	889.2	899.1	905.6
35°	841.5	848.1	864.5	876.0	884.3
37.5°	810.3	816.9	835.0	849.8	859.6
40°	777.4	785.7	807.0	823.5	838.2
42.5°	744.6	752.8	775.8	800.4	820.2
45°	706.8	718.3	742.9	777.4	800.4
47.5°	669.0	680.5	711.7	754.4	777.4
50°	629.5	642.7	680.5	729.8	754.4
52.5°	588.4	603.2	650.9	703.5	728.1
55°	545.7	563.8	618.0	673.9	700.2
57.5°	501.3	521.0	585.1	644.3	672.2
60°	455.3	479.9	550.6	613.1	642.7
62.5°	407.6	437.2	516.1	580.2	611.4
65°	358.3	392.8	479.9	547.3	578.6
67.5°	307.4	353.4	443.8	514.5	545.7
70°	256.4	310.6	406.0	478.3	509.5
72.5°	208.7	271.2	368.2	435.6	442.1
75°	162.7	231.8	328.7	335.3	323.8
77.5°	121.6	192.3	271.2	241.6	240.0
80°	87.1	154.5	174.2	179.2	180.8
82.5°	57.5	116.7	113.4	116.7	115.1
85°	34.5	57.5	59.2	57.5	54.2
87.5°	16.4	21.4	16.4	14.8	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)