

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: P263122

Luminaire Tested: **24CZ-LD5-30SE-SQP-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263122  
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-LD5-30SE-SQP-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1897.0 lumens  
Efficiency: N/A  
Efficacy: 87.3 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

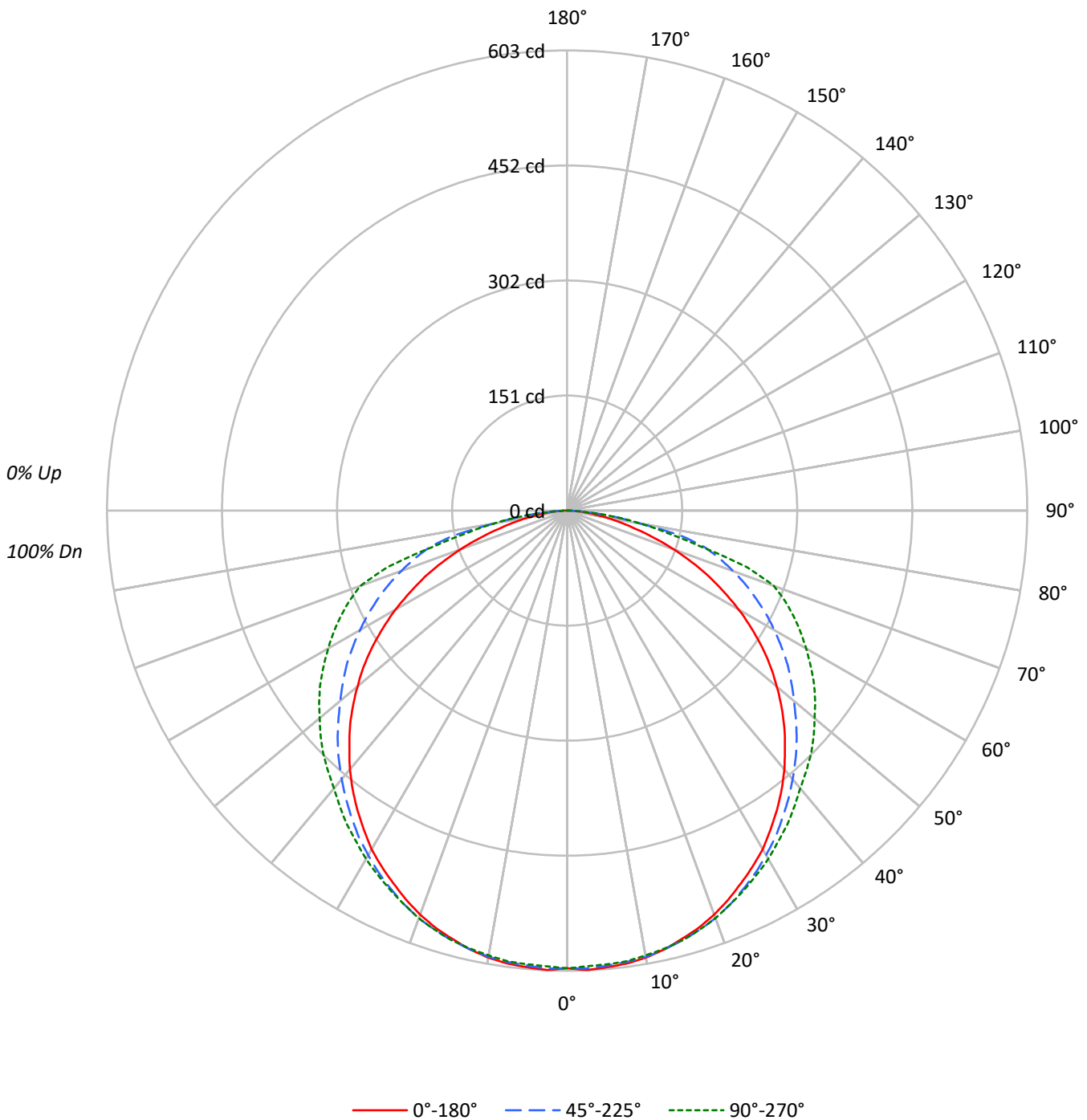
Input Watts (W): 21.718476  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263122

CATALOG NUMBER: 24CZ-LD5-30SE-SQP-UNV-L83050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P263122

CATALOG NUMBER: 24CZ-LD5-30SE-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	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°	807	807	807
5°	811	809	806
10°	813	811	809
15°	809	812	812
20°	807	814	814
25°	800	812	815
30°	796	810	819
35°	787	808	826
40°	778	807	835
45°	766	809	859
50°	751	812	886
55°	731	828	926
60°	699	844	973
65°	655	870	1042
70°	586	910	1133
75°	484	973	937
80°	395	752	759
85°	318	499	469



TEST NUMBER: P263122

CATALOG NUMBER: 24CZ-LD5-30SE-SQP-UNV-L83050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.0	3.0
10°-20°	164.3	8.7
20°-30°	251.2	13.2
30°-40°	307.2	16.2
40°-50°	328.7	17.3
50°-60°	314.8	16.6
60°-70°	266.3	14.0
70°-80°	168.8	8.9
80°-90°	38.8	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°	472.5	24.9
0°-40°	779.7	41.1
0°-60°	1423.1	75.0
0°-90°	1897.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1897.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	600	600	600	600	600	
5°	601	598	599	598	597	57
15°	581	580	583	583	583	164
25°	539	539	547	549	549	249
35°	479	482	492	499	503	300
45°	403	410	425	443	452	310
55°	312	321	353	382	395	278
65°	206	225	273	311	327	203
75°	93	131	187	186	180	101
85°	21	31	32	29	30	25
90°	0	0	0	0	0	



TEST NUMBER: P263122

CATALOG NUMBER: 24CZ-LD5-30SE-SQP-UNV-L83050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	599.7	599.7	599.7	599.7	599.7
2.5°	602.6	599.7	600.7	599.7	597.7
5°	600.7	597.7	598.7	597.7	596.7
7.5°	598.7	595.8	596.7	595.8	595.8
10°	594.8	591.8	593.8	592.8	591.8
12.5°	588.9	586.9	588.9	587.9	587.9
15°	581.1	580.1	583.0	583.0	583.0
17.5°	573.2	572.2	576.2	576.2	576.2
20°	563.4	562.4	568.3	568.3	568.3
22.5°	551.7	550.7	558.5	558.5	558.5
25°	538.9	538.9	546.8	548.7	548.7
27.5°	526.2	526.2	535.0	537.9	537.9
30°	512.5	512.5	521.3	525.2	527.2
32.5°	495.8	497.8	507.6	512.5	514.4
35°	479.2	482.1	491.9	498.8	502.7
37.5°	461.5	464.5	476.2	484.1	489.0
40°	442.9	446.8	459.6	469.4	475.2
42.5°	422.3	428.2	442.9	455.6	463.5
45°	402.7	409.6	425.3	442.9	451.7
47.5°	381.2	389.0	406.6	429.2	438.0
50°	358.6	366.5	388.0	413.5	423.3
52.5°	336.1	344.9	370.4	397.8	409.6
55°	311.6	321.4	352.8	382.1	394.9
57.5°	286.1	297.9	333.2	364.5	378.2
60°	259.7	274.4	313.6	346.9	361.6
62.5°	232.2	249.9	294.0	329.2	344.9
65°	205.8	225.4	273.4	310.6	327.3
67.5°	177.4	201.9	252.8	293.0	308.7
70°	148.9	177.4	231.2	272.4	288.1
72.5°	120.5	154.8	209.7	246.9	246.9
75°	93.1	131.3	187.2	186.2	180.3
77.5°	70.6	109.7	153.8	131.3	132.3
80°	51.0	88.2	97.0	97.0	98.0
82.5°	34.3	67.6	62.7	61.7	63.7
85°	20.6	31.4	32.3	29.4	30.4
87.5°	9.8	10.8	8.8	5.9	5.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)