

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: P263150

Luminaire Tested: **24CZ-LD5-30-SQP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P263150
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-LD5-30-SQP-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1898.2 lumens
Efficiency: N/A
Efficacy: 92.8 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

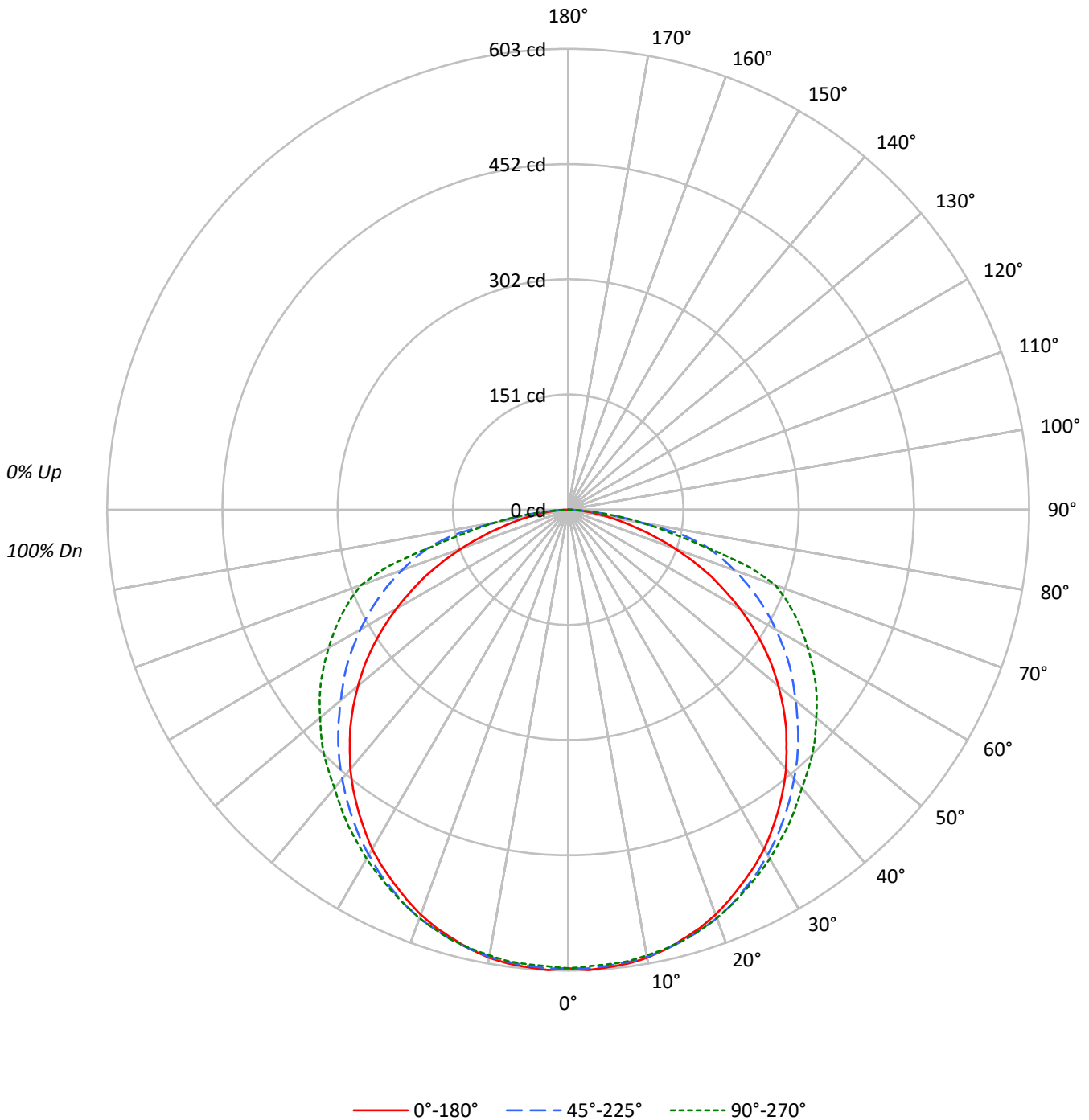
Input Watts (W): 20.447166
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P263150

CATALOG NUMBER: 24CZ-LD5-30-SQP-UNV-L93050-W2A1-U-4500K

Luminous Intensity Polar Plot





TEST NUMBER: P263150

CATALOG NUMBER: 24CZ-LD5-30-SQP-UNV-L93050-W2A1-U-4500K

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°	812	809	806
10°	813	812	809
15°	810	813	813
20°	807	814	814
25°	801	812	815
30°	797	810	820
35°	788	808	826
40°	778	808	835
45°	767	810	860
50°	751	813	887
55°	731	828	927
60°	699	844	974
65°	656	871	1043
70°	586	910	1134
75°	484	974	938
80°	395	752	759
85°	318	500	469



TEST NUMBER: P263150

CATALOG NUMBER: 24CZ-LD5-30-SQP-UNV-L93050-W2A1-U-4500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.0	3.0
10°-20°	164.4	8.7
20°-30°	251.3	13.2
30°-40°	307.4	16.2
40°-50°	328.9	17.3
50°-60°	315.0	16.6
60°-70°	266.4	14.0
70°-80°	168.9	8.9
80°-90°	38.9	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°	472.8	24.9
0°-40°	780.2	41.1
0°-60°	1424.1	75.0
0°-90°	1898.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1898.2	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°	480	482	492	499	503	300
45°	403	410	426	443	452	310
55°	312	322	353	382	395	278
65°	206	226	274	311	328	203
75°	93	131	187	186	180	101
85°	21	31	32	29	30	25
90°	0	0	0	0	0	



TEST NUMBER: P263150

CATALOG NUMBER: 24CZ-LD5-30-SQP-UNV-L93050-W2A1-U-4500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	600.1	600.1	600.1	600.1	600.1
2.5°	603.0	600.1	601.0	600.1	598.1
5°	601.0	598.1	599.1	598.1	597.1
7.5°	599.1	596.1	597.1	596.1	596.1
10°	595.2	592.2	594.2	593.2	592.2
12.5°	589.3	587.3	589.3	588.3	588.3
15°	581.4	580.4	583.4	583.4	583.4
17.5°	573.6	572.6	576.5	576.5	576.5
20°	563.8	562.8	568.7	568.7	568.7
22.5°	552.0	551.0	558.9	558.9	558.9
25°	539.3	539.3	547.1	549.1	549.1
27.5°	526.5	526.5	535.3	538.3	538.3
30°	512.8	512.8	521.6	525.5	527.5
32.5°	496.1	498.1	507.9	512.8	514.8
35°	479.5	482.4	492.2	499.1	503.0
37.5°	461.8	464.8	476.5	484.4	489.3
40°	443.2	447.1	459.8	469.7	475.5
42.5°	422.6	428.5	443.2	455.9	463.8
45°	403.0	409.8	425.5	443.2	452.0
47.5°	381.4	389.3	406.9	429.5	438.3
50°	358.9	366.7	388.3	413.8	423.6
52.5°	336.3	345.1	370.6	398.1	409.8
55°	311.8	321.6	353.0	382.4	395.1
57.5°	286.3	298.1	333.4	364.7	378.5
60°	259.8	274.5	313.8	347.1	361.8
62.5°	232.4	250.0	294.1	329.4	345.1
65°	205.9	225.5	273.6	310.8	327.5
67.5°	177.5	202.0	253.0	293.2	308.9
70°	149.0	177.5	231.4	272.6	288.3
72.5°	120.6	154.9	209.8	247.1	247.1
75°	93.1	131.4	187.3	186.3	180.4
77.5°	70.6	109.8	153.9	131.4	132.4
80°	51.0	88.2	97.1	97.1	98.0
82.5°	34.3	67.7	62.8	61.8	63.7
85°	20.6	31.4	32.4	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)