

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: P261049

Luminaire Tested: **24CZ-LD5-30-S-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261049
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-LD5-30-S-UNV-L93050-W2A1-U-4000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2874.6 lumens
Efficiency: N/A
Efficacy: 142.8 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

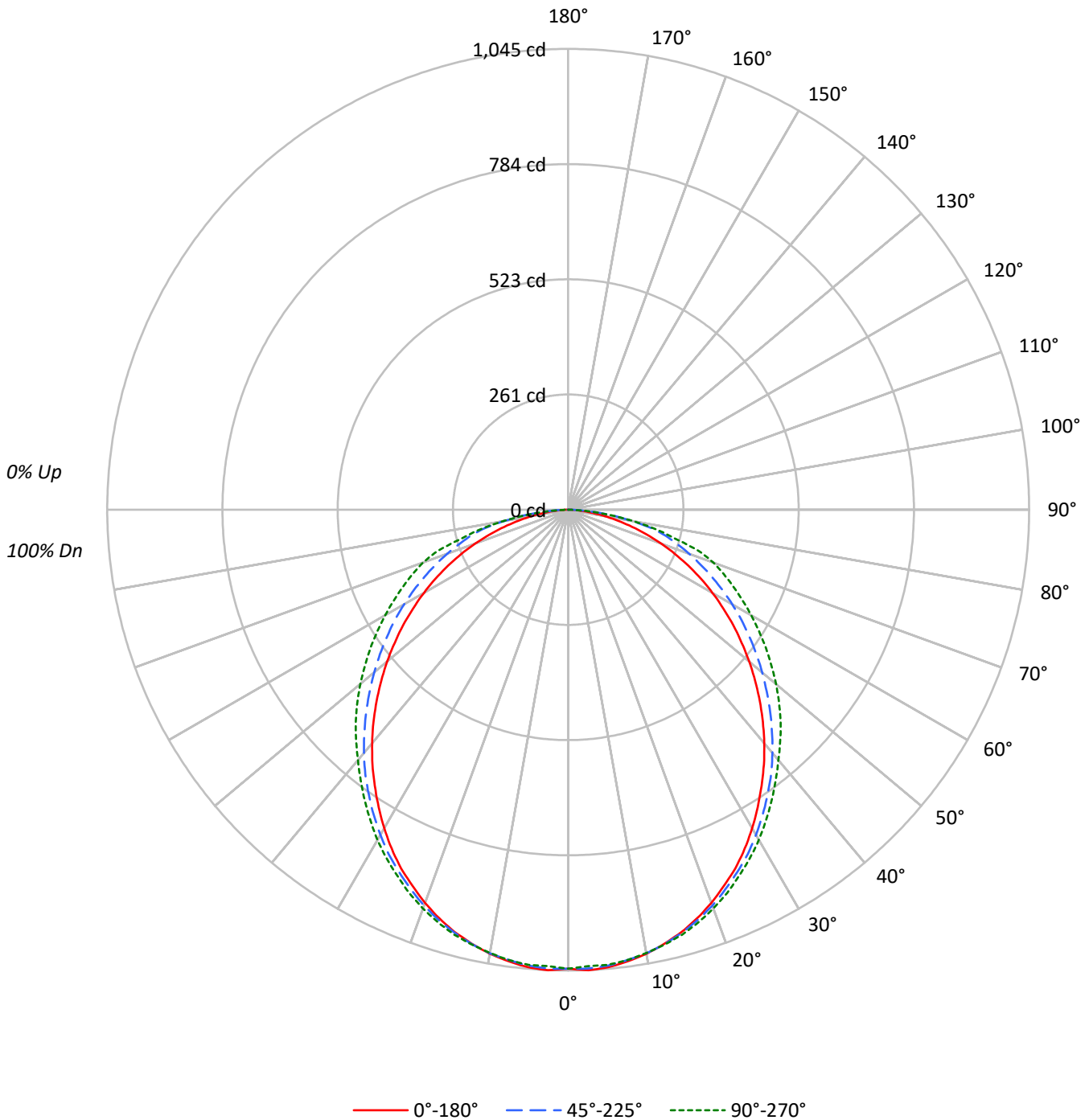
Input Watts (W): 20.133198
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	1400	1400	1400
5°	1407	1402	1399
10°	1397	1396	1394
15°	1382	1384	1390
20°	1359	1368	1378
25°	1332	1346	1360
30°	1296	1323	1343
35°	1255	1295	1321
40°	1215	1265	1302
45°	1169	1232	1296
50°	1121	1201	1287
55°	1072	1176	1283
60°	1017	1156	1290
65°	956	1142	1316
70°	880	1148	1377
75°	781	1188	1283
80°	652	1127	1156
85°	488	900	827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.4	3.4
10°-20°	279.8	9.7
20°-30°	417.0	14.5
30°-40°	490.9	17.1
40°-50°	498.8	17.4
50°-60°	448.5	15.6
60°-70°	354.3	12.3
70°-80°	224.8	7.8
80°-90°	62.0	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°	795.2	27.7
0°-40°	1286.1	44.7
0°-60°	2233.5	77.7
0°-90°	2874.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2874.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1041	1041	1041	1041	1041	
5°	1042	1033	1038	1036	1036	99
15°	992	987	994	997	998	279
25°	897	896	907	912	916	413
35°	764	769	788	797	804	478
45°	614	623	648	667	681	474
55°	457	469	501	534	547	408
65°	300	316	359	398	413	298
75°	150	176	229	249	247	160
85°	32	54	58	54	54	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.7	1040.7	1040.7	1040.7	1040.7
2.5°	1045.4	1037.8	1041.6	1039.7	1035.9
5°	1041.6	1033.0	1037.8	1035.9	1035.9
7.5°	1033.0	1026.3	1030.1	1029.2	1030.1
10°	1022.5	1015.8	1021.5	1021.5	1020.6
12.5°	1008.1	1002.4	1009.1	1009.1	1010.1
15°	991.9	987.1	993.8	996.7	997.6
17.5°	971.8	967.0	975.6	978.5	981.4
20°	948.8	946.9	955.5	958.4	962.2
22.5°	923.0	923.0	931.6	935.5	941.2
25°	897.2	896.2	906.8	912.5	916.3
27.5°	866.6	867.5	880.9	886.7	891.5
30°	834.1	836.0	851.3	858.0	864.7
32.5°	799.6	803.5	820.7	828.3	835.0
35°	764.2	769.0	788.2	796.8	804.4
37.5°	728.8	735.5	755.6	764.2	772.8
40°	691.5	697.3	720.2	730.8	741.3
42.5°	653.3	660.9	683.9	699.2	711.6
45°	614.1	622.7	647.5	666.7	681.0
47.5°	574.9	586.3	610.2	636.1	648.5
50°	535.6	547.1	573.9	602.6	615.0
52.5°	495.5	506.9	537.6	567.2	580.6
55°	457.2	468.7	501.2	533.7	547.1
57.5°	417.0	429.5	465.8	499.3	512.7
60°	377.8	390.3	429.5	464.9	479.2
62.5°	339.6	352.9	394.1	431.4	445.7
65°	300.3	315.6	358.7	397.9	413.2
67.5°	262.1	279.3	324.3	365.4	381.6
70°	223.8	243.9	291.7	333.8	350.1
72.5°	186.5	208.5	259.2	301.3	309.9
75°	150.2	176.0	228.6	248.7	246.8
77.5°	115.7	144.4	194.2	198.0	203.7
80°	84.2	115.7	145.4	153.0	149.2
82.5°	55.5	87.0	104.3	100.4	99.5
85°	31.6	54.5	58.3	53.6	53.6
87.5°	13.4	22.0	19.1	14.3	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)