

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: P263564

Luminaire Tested: **24CZ-LD5-50SE-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263564  
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-LD5-50SE-RDP-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3650.0 lumens  
Efficiency: N/A  
Efficacy: 89.8 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

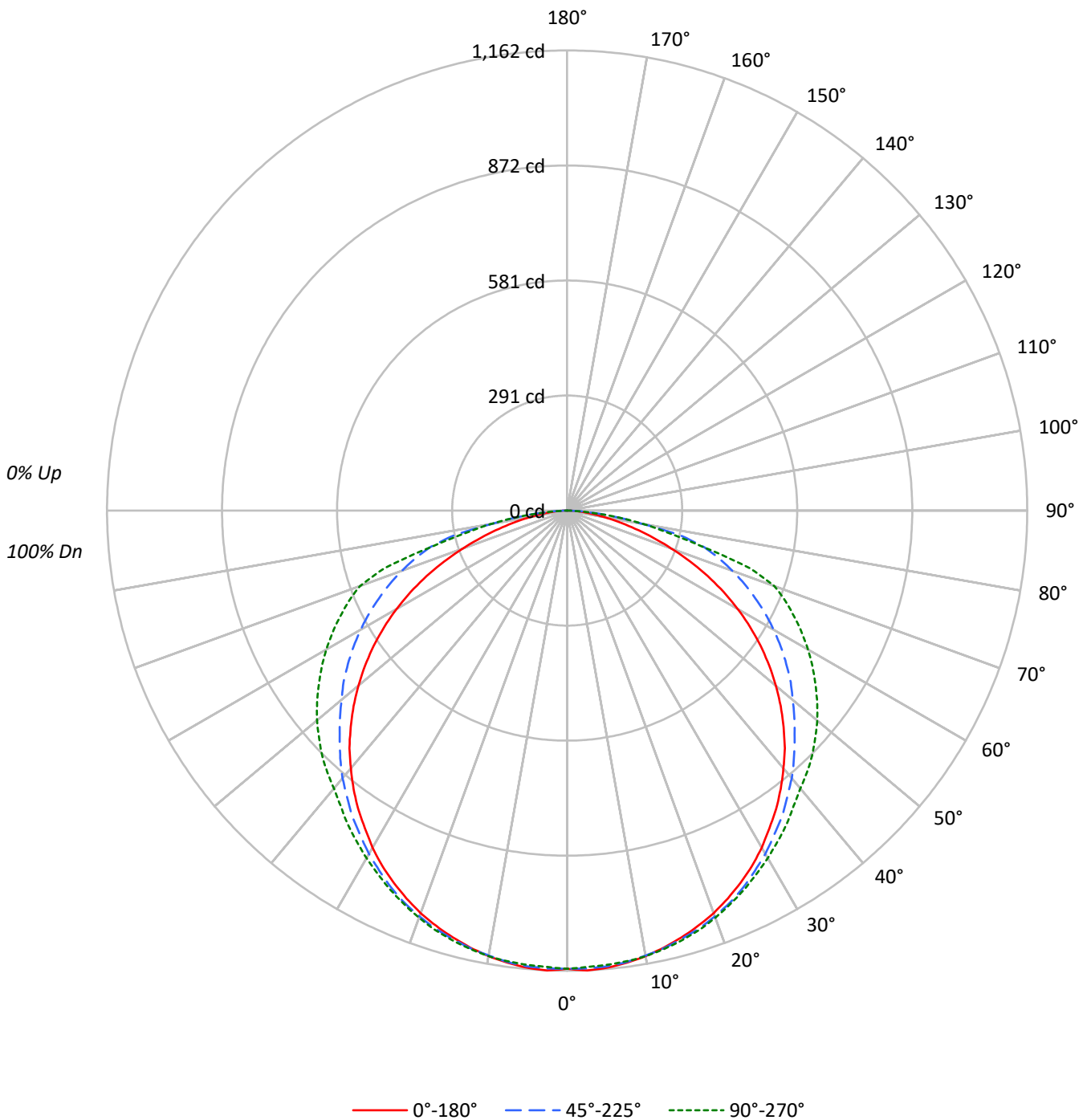
Input Watts (W): 40.624353  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	61	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°	1557	1557	1557
5°	1565	1560	1556
10°	1561	1559	1561
15°	1554	1559	1564
20°	1549	1562	1567
25°	1539	1560	1568
30°	1527	1555	1574
35°	1511	1552	1588
40°	1493	1550	1609
45°	1470	1545	1665
50°	1440	1557	1726
55°	1399	1585	1795
60°	1339	1620	1890
65°	1247	1670	2013
70°	1103	1746	2191
75°	925	1868	1840
80°	738	1476	1531
85°	582	999	915



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.7	3.0
10°-20°	315.8	8.7
20°-30°	482.4	13.2
30°-40°	589.8	16.2
40°-50°	631.3	17.3
50°-60°	605.6	16.6
60°-70°	511.3	14.0
70°-80°	326.8	9.0
80°-90°	77.3	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°	908.0	24.9
0°-40°	1497.8	41.0
0°-60°	2734.7	74.9
0°-90°	3650.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3650.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1157	1157	1157	1157	1157	
5°	1159	1152	1155	1154	1152	110
15°	1116	1112	1119	1123	1123	315
25°	1037	1035	1051	1055	1056	478
35°	920	927	945	958	967	575
45°	773	785	812	850	875	596
55°	596	616	676	737	765	532
65°	392	429	525	598	632	386
75°	178	253	359	366	354	192
85°	38	63	65	63	59	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1157.1	1157.1	1157.1	1157.1	1157.1
2.5°	1162.5	1155.3	1157.1	1157.1	1153.5
5°	1158.9	1151.7	1155.3	1153.5	1151.7
7.5°	1151.7	1146.3	1149.9	1149.9	1148.1
10°	1142.7	1137.3	1140.9	1142.7	1142.7
12.5°	1130.1	1126.5	1131.9	1131.9	1133.7
15°	1115.8	1112.2	1119.3	1122.9	1122.9
17.5°	1099.6	1097.8	1106.8	1108.6	1110.4
20°	1081.6	1079.8	1090.6	1090.6	1094.2
22.5°	1060.1	1058.3	1072.6	1072.6	1076.2
25°	1036.7	1034.9	1051.1	1054.7	1056.5
27.5°	1011.5	1009.8	1025.9	1031.3	1034.9
30°	982.8	982.8	1000.8	1008.0	1013.3
32.5°	950.5	955.8	972.0	982.8	990.0
35°	919.9	927.1	945.1	957.6	966.6
37.5°	885.8	893.0	912.7	928.9	939.7
40°	849.8	858.8	882.2	900.2	916.3
42.5°	813.9	822.9	848.0	875.0	896.6
45°	772.6	785.2	812.1	849.8	875.0
47.5°	731.3	743.8	778.0	824.7	849.8
50°	688.1	702.5	743.8	797.7	824.7
52.5°	643.2	659.4	711.5	769.0	795.9
55°	596.5	616.3	675.6	736.7	765.4
57.5°	548.0	569.6	639.6	704.3	734.9
60°	497.7	524.6	601.9	670.2	702.5
62.5°	445.6	477.9	564.2	634.2	668.4
65°	391.7	429.4	524.6	598.3	632.4
67.5°	336.0	386.3	485.1	562.4	596.5
70°	280.3	339.6	443.8	522.8	557.0
72.5°	228.2	296.5	402.5	476.1	483.3
75°	177.9	253.3	359.3	366.5	354.0
77.5°	133.0	210.2	296.5	264.1	262.3
80°	95.2	168.9	190.5	195.8	197.6
82.5°	62.9	127.6	124.0	127.6	125.8
85°	37.7	62.9	64.7	62.9	59.3
87.5°	18.0	23.4	18.0	16.2	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)