

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: P230516

Luminaire Tested: **24CZ-LD5-50SE-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230516  
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-L930-CD1-U  
Description: CRUZE 2x4 LED TROFFER  
WITH RDP LENS  
Light Source: (84) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2774.3 lumens  
Efficiency: N/A  
Efficacy: 59.6 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

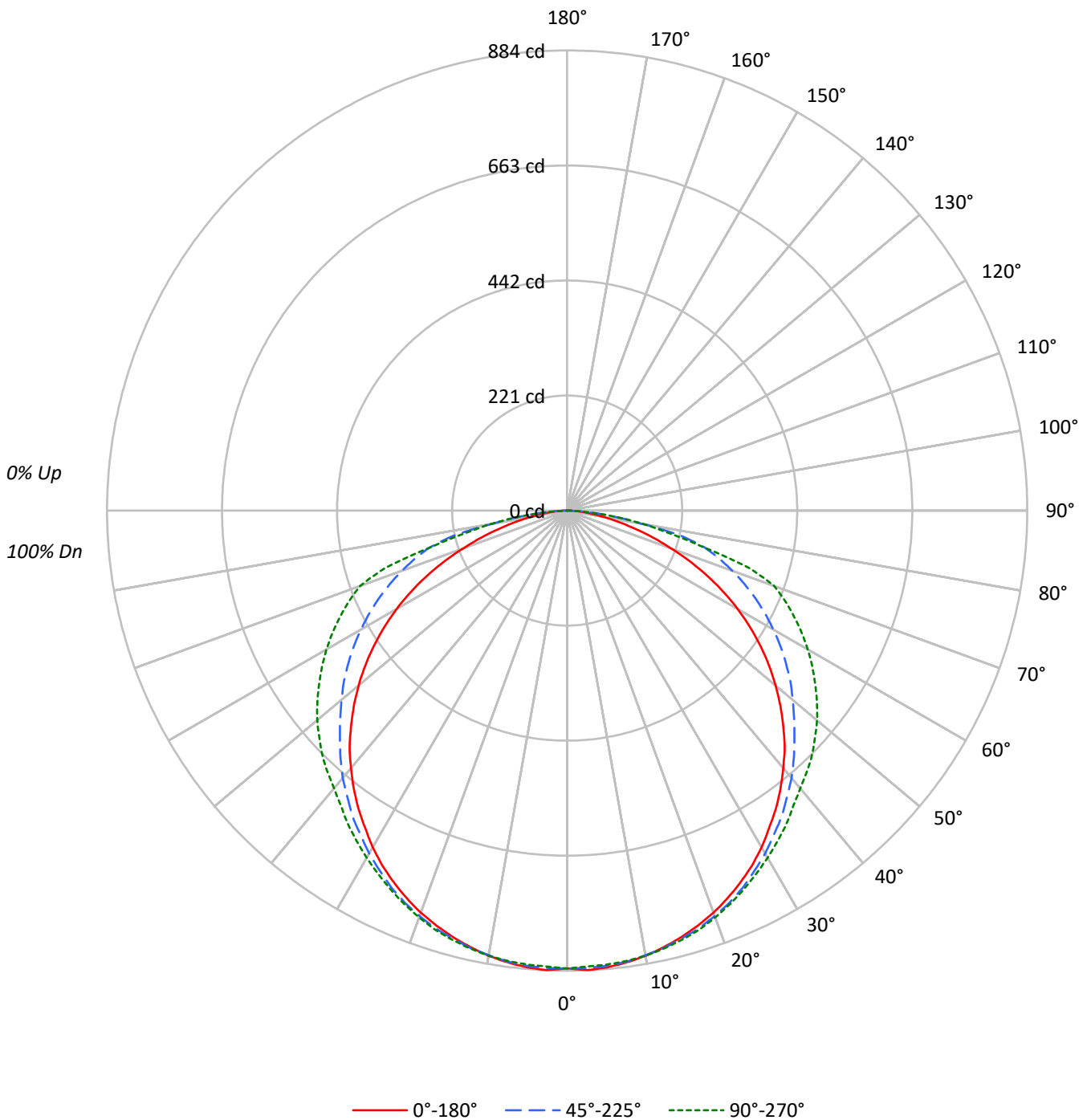
Input Watts (W): 46.56  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	55	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°	1183	1183	1183
5°	1190	1186	1182
10°	1187	1185	1187
15°	1181	1185	1189
20°	1177	1187	1191
25°	1170	1186	1192
30°	1161	1182	1197
35°	1148	1180	1207
40°	1134	1178	1223
45°	1117	1175	1266
50°	1095	1184	1312
55°	1064	1205	1365
60°	1018	1231	1437
65°	948	1270	1530
70°	838	1327	1665
75°	703	1420	1398
80°	561	1122	1164
85°	443	760	696



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	83.4	3.0
10°-20°	240.1	8.7
20°-30°	366.7	13.2
30°-40°	448.3	16.2
40°-50°	479.8	17.3
50°-60°	460.3	16.6
60°-70°	388.6	14.0
70°-80°	248.4	9.0
80°-90°	58.8	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°	690.2	24.9
0°-40°	1138.4	41.0
0°-60°	2078.5	74.9
0°-90°	2774.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2774.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	880	880	880	880	880	
5°	881	875	878	877	875	84
15°	848	845	851	854	854	239
25°	788	787	799	802	803	363
35°	699	705	718	728	735	437
45°	587	597	617	646	665	453
55°	453	468	514	560	582	405
65°	298	326	399	455	481	294
75°	135	193	273	279	269	146
85°	29	48	49	48	45	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	879.5	879.5	879.5	879.5	879.5
2.5°	883.6	878.1	879.5	879.5	876.7
5°	880.8	875.4	878.1	876.7	875.4
7.5°	875.4	871.3	874.0	874.0	872.6
10°	868.5	864.4	867.2	868.5	868.5
12.5°	859.0	856.2	860.3	860.3	861.7
15°	848.1	845.3	850.8	853.5	853.5
17.5°	835.8	834.4	841.2	842.6	844.0
20°	822.1	820.7	828.9	828.9	831.7
22.5°	805.7	804.4	815.3	815.3	818.0
25°	788.0	786.6	798.9	801.6	803.0
27.5°	768.8	767.5	779.8	783.9	786.6
30°	747.0	747.0	760.7	766.1	770.2
32.5°	722.4	726.5	738.8	747.0	752.5
35°	699.2	704.7	718.3	727.9	734.7
37.5°	673.3	678.7	693.7	706.0	714.2
40°	645.9	652.8	670.5	684.2	696.5
42.5°	618.6	625.5	644.6	665.1	681.4
45°	587.2	596.8	617.3	645.9	665.1
47.5°	555.8	565.4	591.3	626.8	645.9
50°	523.0	534.0	565.4	606.3	626.8
52.5°	488.9	501.2	540.8	584.5	605.0
55°	453.4	468.4	513.5	559.9	581.8
57.5°	416.5	432.9	486.2	535.3	558.5
60°	378.3	398.8	457.5	509.4	534.0
62.5°	338.7	363.3	428.8	482.1	508.0
65°	297.7	326.4	398.8	454.8	480.7
67.5°	255.4	293.6	368.7	427.4	453.4
70°	213.0	258.1	337.3	397.4	423.3
72.5°	173.4	225.3	305.9	361.9	367.4
75°	135.2	192.6	273.1	278.6	269.0
77.5°	101.1	159.8	225.3	200.7	199.4
80°	72.4	128.4	144.8	148.9	150.2
82.5°	47.8	97.0	94.2	97.0	95.6
85°	28.7	47.8	49.2	47.8	45.1
87.5°	13.7	17.8	13.7	12.3	10.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)