

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: P230520

Luminaire Tested: **24CZ-LD5-55SE-RDP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230520  
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-LD5-55SE-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: 3022.5 lumens  
Efficiency: N/A  
Efficacy: 55.3 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

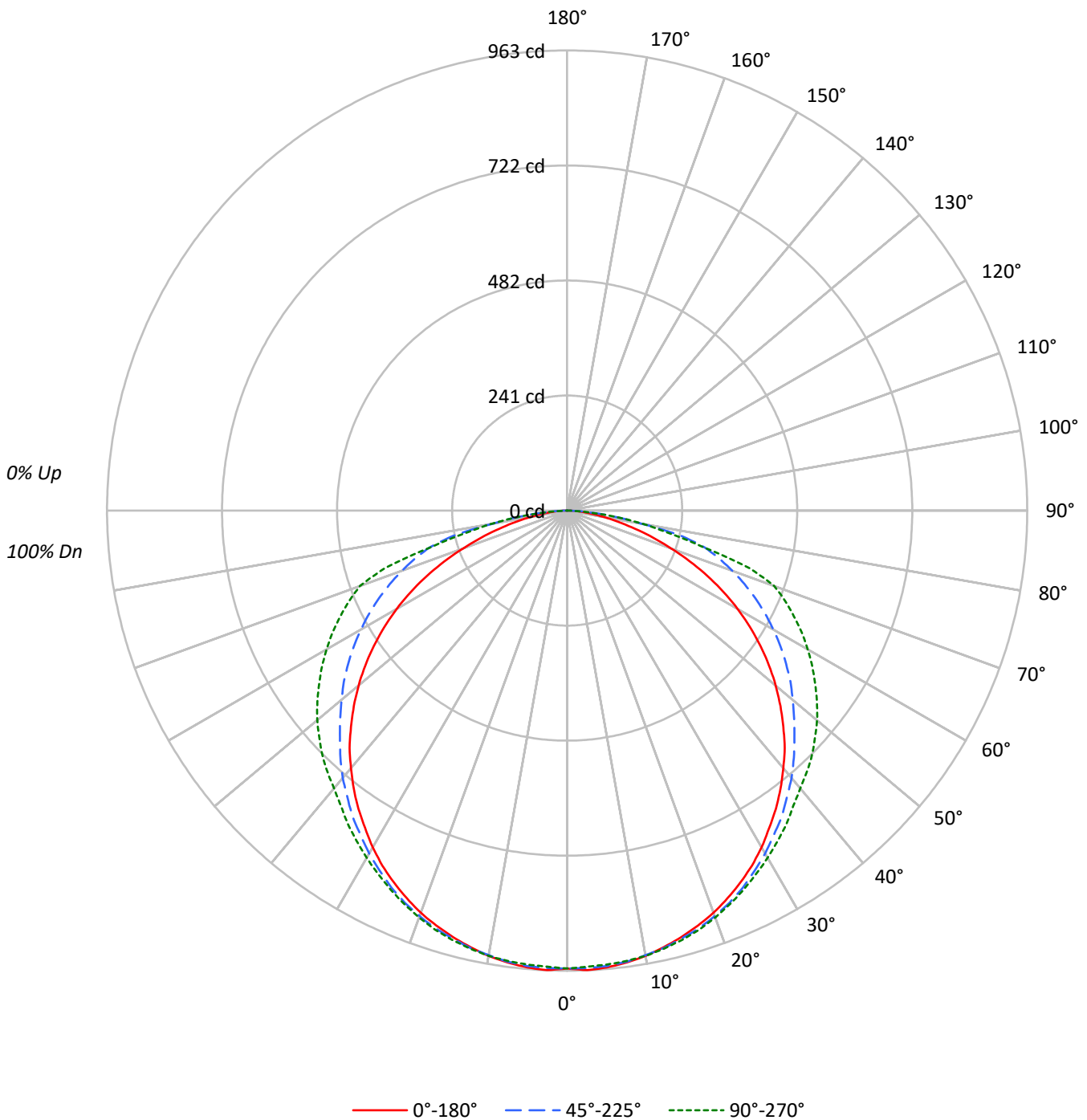
Input Watts (W): 54.69  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1289	1289	1289
5°	1296	1292	1288
10°	1293	1291	1293
15°	1287	1291	1295
20°	1282	1293	1297
25°	1275	1292	1299
30°	1264	1287	1304
35°	1251	1285	1315
40°	1236	1283	1333
45°	1217	1280	1379
50°	1193	1289	1429
55°	1159	1312	1487
60°	1109	1341	1565
65°	1032	1383	1667
70°	913	1446	1814
75°	766	1547	1524
80°	611	1222	1268
85°	482	827	758



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.9	3.0
10°-20°	261.5	8.7
20°-30°	399.5	13.2
30°-40°	488.4	16.2
40°-50°	522.8	17.3
50°-60°	501.4	16.6
60°-70°	423.4	14.0
70°-80°	270.6	9.0
80°-90°	64.0	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°	751.9	24.9
0°-40°	1240.3	41.0
0°-60°	2264.5	74.9
0°-90°	3022.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3022.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	958	958	958	958	958	
5°	960	954	957	955	954	91
15°	924	921	927	930	930	261
25°	858	857	870	873	875	396
35°	762	768	783	793	800	476
45°	640	650	672	704	725	493
55°	494	510	559	610	634	441
65°	324	356	434	495	524	320
75°	147	210	298	304	293	159
85°	31	52	54	52	49	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	958.2	958.2	958.2	958.2	958.2
2.5°	962.6	956.7	958.2	958.2	955.2
5°	959.7	953.7	956.7	955.2	953.7
7.5°	953.7	949.2	952.2	952.2	950.7
10°	946.3	941.8	944.8	946.3	946.3
12.5°	935.8	932.9	937.3	937.3	938.8
15°	923.9	921.0	926.9	929.9	929.9
17.5°	910.6	909.1	916.5	918.0	919.5
20°	895.7	894.2	903.1	903.1	906.1
22.5°	877.8	876.3	888.2	888.2	891.2
25°	858.5	857.0	870.4	873.4	874.8
27.5°	837.6	836.2	849.6	854.0	857.0
30°	813.8	813.8	828.7	834.7	839.1
32.5°	787.1	791.5	804.9	813.8	819.8
35°	761.8	767.7	782.6	793.0	800.5
37.5°	733.5	739.5	755.8	769.2	778.1
40°	703.7	711.2	730.5	745.4	758.8
42.5°	674.0	681.4	702.3	724.6	742.4
45°	639.8	650.2	672.5	703.7	724.6
47.5°	605.5	616.0	644.2	682.9	703.7
50°	569.8	581.7	616.0	660.6	682.9
52.5°	532.6	546.0	589.2	636.8	659.1
55°	494.0	510.3	559.4	610.0	633.8
57.5°	453.8	471.6	529.7	583.2	608.5
60°	412.1	434.4	498.4	555.0	581.7
62.5°	369.0	395.8	467.2	525.2	553.5
65°	324.3	355.6	434.4	495.4	523.7
67.5°	278.2	319.9	401.7	465.7	494.0
70°	232.1	281.2	367.5	433.0	461.2
72.5°	189.0	245.5	333.3	394.3	400.2
75°	147.3	209.8	297.6	303.5	293.1
77.5°	110.1	174.1	245.5	218.7	217.2
80°	78.9	139.9	157.7	162.2	163.7
82.5°	52.1	105.6	102.7	105.6	104.1
85°	31.2	52.1	53.6	52.1	49.1
87.5°	14.9	19.3	14.9	13.4	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)