

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: P230470

Luminaire Tested: **24CZ-LD5-40-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230470
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-LD5-40-RDP-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2302.8 lumens
Efficiency: N/A
Efficacy: 79.3 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

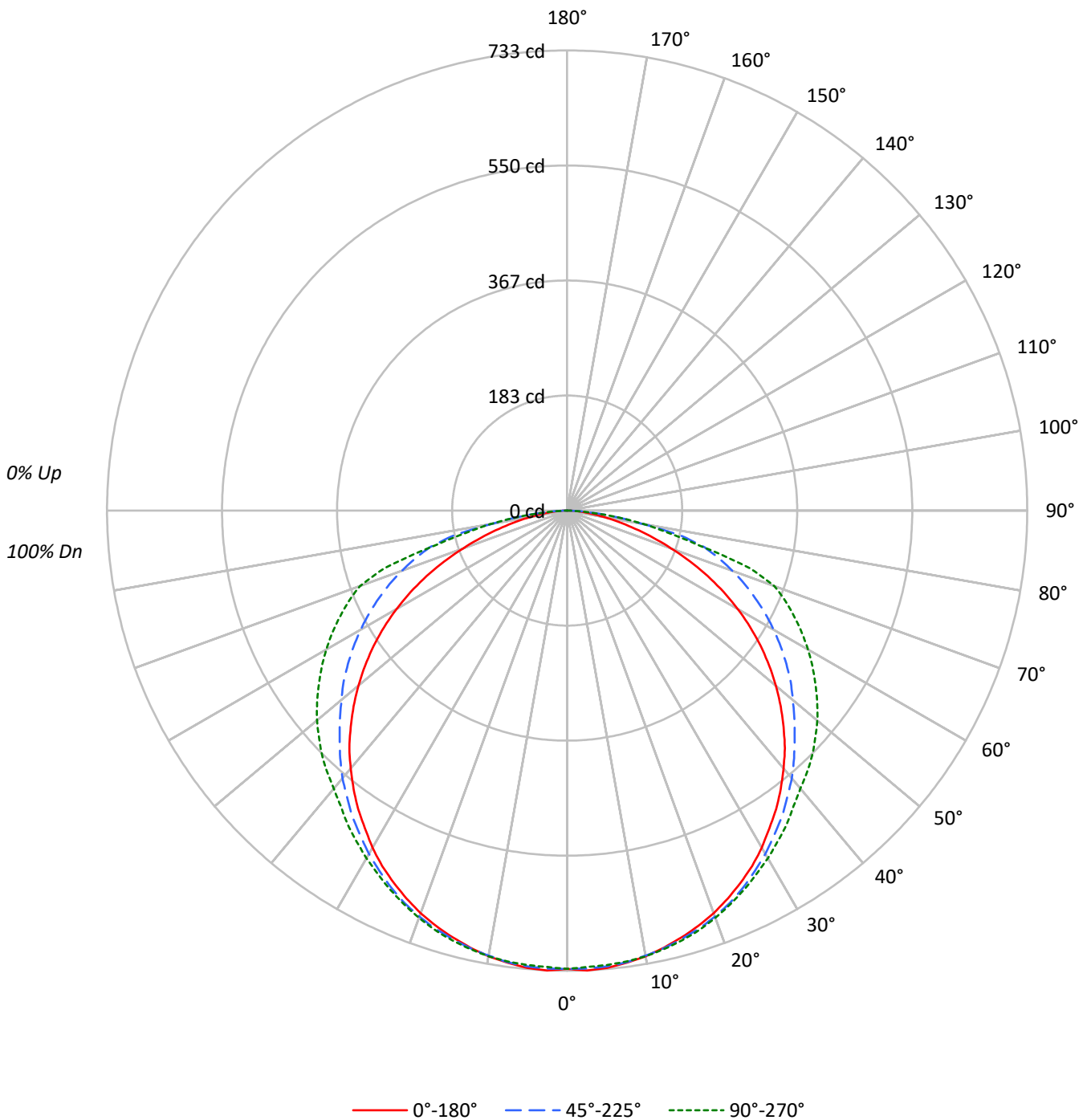
Input Watts (W): 29.04
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230470

CATALOG NUMBER: 24CZ-LD5-40-RDP-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230470

CATALOG NUMBER: 24CZ-LD5-40-RDP-UNV-L940-CD1-U

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	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°	982	982	982
5°	987	984	981
10°	985	983	985
15°	980	984	987
20°	977	985	988
25°	971	984	989
30°	963	981	993
35°	953	979	1002
40°	942	978	1015
45°	927	975	1050
50°	909	982	1089
55°	883	1000	1133
60°	845	1022	1193
65°	787	1054	1270
70°	696	1102	1382
75°	583	1179	1161
80°	466	931	966
85°	367	630	577



TEST NUMBER: P230470

CATALOG NUMBER: 24CZ-LD5-40-RDP-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.2	3.0
10°-20°	199.3	8.7
20°-30°	304.4	13.2
30°-40°	372.1	16.2
40°-50°	398.3	17.3
50°-60°	382.0	16.6
60°-70°	322.6	14.0
70°-80°	206.1	9.0
80°-90°	48.8	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°	572.9	24.9
0°-40°	945.0	41.0
0°-60°	1725.3	74.9
0°-90°	2302.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2302.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	731	727	729	728	727	69
15°	704	702	706	708	708	199
25°	654	653	663	665	666	301
35°	580	585	596	604	610	363
45°	487	495	512	536	552	376
55°	376	389	426	465	483	336
65°	247	271	331	378	399	244
75°	112	160	227	231	223	121
85°	24	40	41	40	37	29
90°	0	0	0	0	0	



TEST NUMBER: P230470

CATALOG NUMBER: 24CZ-LD5-40-RDP-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	730.0	730.0	730.0	730.0	730.0
2.5°	733.4	728.9	730.0	730.0	727.7
5°	731.1	726.6	728.9	727.7	726.6
7.5°	726.6	723.2	725.5	725.5	724.3
10°	720.9	717.5	719.8	720.9	720.9
12.5°	713.0	710.7	714.1	714.1	715.3
15°	703.9	701.7	706.2	708.5	708.5
17.5°	693.7	692.6	698.3	699.4	700.5
20°	682.4	681.3	688.1	688.1	690.3
22.5°	668.8	667.7	676.7	676.7	679.0
25°	654.1	652.9	663.1	665.4	666.5
27.5°	638.2	637.0	647.3	650.7	652.9
30°	620.0	620.0	631.4	635.9	639.3
32.5°	599.6	603.0	613.2	620.0	624.6
35°	580.4	584.9	596.2	604.2	609.8
37.5°	558.8	563.4	575.8	586.0	592.8
40°	536.2	541.8	556.6	567.9	578.1
42.5°	513.5	519.2	535.0	552.0	565.6
45°	487.4	495.4	512.4	536.2	552.0
47.5°	461.4	469.3	490.8	520.3	536.2
50°	434.1	443.2	469.3	503.3	520.3
52.5°	405.8	416.0	448.9	485.2	502.2
55°	376.3	388.8	426.2	464.8	482.9
57.5°	345.7	359.3	403.5	444.3	463.6
60°	314.0	331.0	379.7	422.8	443.2
62.5°	281.1	301.5	355.9	400.1	421.7
65°	247.1	270.9	331.0	377.5	399.0
67.5°	212.0	243.7	306.1	354.8	376.3
70°	176.8	214.2	280.0	329.9	351.4
72.5°	144.0	187.0	253.9	300.4	304.9
75°	112.2	159.8	226.7	231.2	223.3
77.5°	83.9	132.6	187.0	166.6	165.5
80°	60.1	106.6	120.2	123.6	124.7
82.5°	39.7	80.5	78.2	80.5	79.3
85°	23.8	39.7	40.8	39.7	37.4
87.5°	11.3	14.7	11.3	10.2	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)