

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: P230502

Luminaire Tested: **24CZ-LD5-30SE-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230502
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-LD5-30SE-RDP-UNV-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1776.0 lumens
Efficiency: N/A
Efficacy: 75.6 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

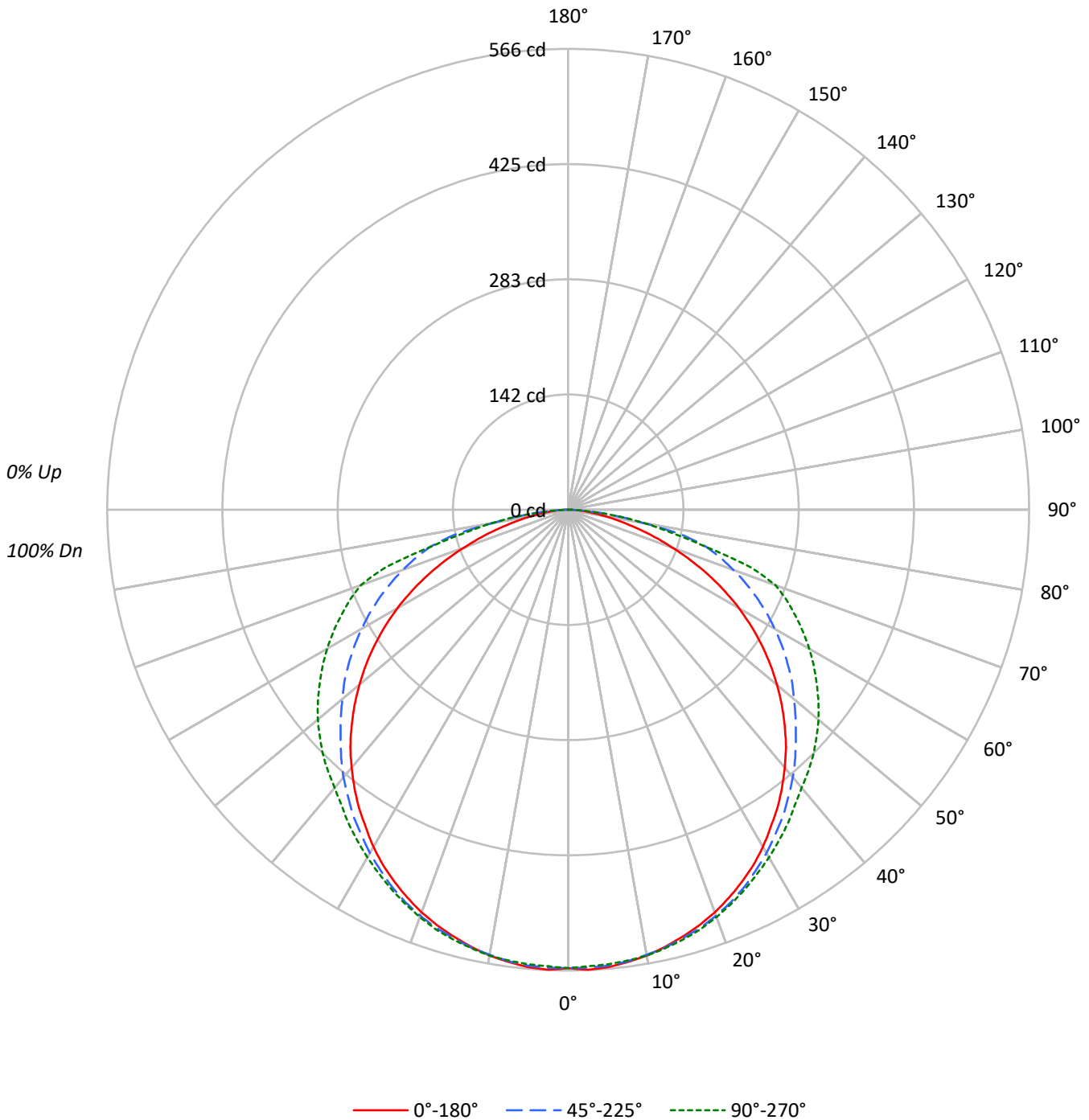
Input Watts (W): 23.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230502

CATALOG NUMBER: 24CZ-LD5-30SE-RDP-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230502

CATALOG NUMBER: 24CZ-LD5-30SE-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°	758	758	758
5°	762	759	757
10°	760	758	760
15°	756	759	761
20°	754	760	762
25°	749	759	763
30°	743	756	766
35°	735	755	772
40°	726	754	783
45°	715	752	810
50°	701	758	840
55°	681	771	874
60°	652	788	920
65°	607	813	980
70°	537	849	1066
75°	450	909	895
80°	359	718	745
85°	284	486	445



TEST NUMBER: P230502

CATALOG NUMBER: 24CZ-LD5-30SE-RDP-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.4	3.0
10°-20°	153.7	8.7
20°-30°	234.7	13.2
30°-40°	287.0	16.2
40°-50°	307.2	17.3
50°-60°	294.6	16.6
60°-70°	248.8	14.0
70°-80°	159.0	9.0
80°-90°	37.6	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°	441.8	24.9
0°-40°	728.8	41.0
0°-60°	1330.6	74.9
0°-90°	1776.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1776.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	563	563	563	563	563	
5°	564	560	562	561	560	54
15°	543	541	545	546	546	153
25°	504	504	511	513	514	232
35°	448	451	460	466	470	280
45°	376	382	395	414	426	290
55°	290	300	329	358	372	259
65°	191	209	255	291	308	188
75°	86	123	175	178	172	93
85°	18	31	32	31	29	22
90°	0	0	0	0	0	



TEST NUMBER: P230502

CATALOG NUMBER: 24CZ-LD5-30SE-RDP-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	563.0	563.0	563.0	563.0	563.0
2.5°	565.6	562.1	563.0	563.0	561.3
5°	563.9	560.4	562.1	561.3	560.4
7.5°	560.4	557.8	559.5	559.5	558.6
10°	556.0	553.4	555.1	556.0	556.0
12.5°	549.9	548.1	550.8	550.8	551.6
15°	542.9	541.1	544.6	546.4	546.4
17.5°	535.0	534.1	538.5	539.4	540.3
20°	526.3	525.4	530.7	530.7	532.4
22.5°	515.8	514.9	521.9	521.9	523.7
25°	504.4	503.6	511.4	513.2	514.0
27.5°	492.2	491.3	499.2	501.8	503.6
30°	478.2	478.2	486.9	490.4	493.1
32.5°	462.5	465.1	473.0	478.2	481.7
35°	447.6	451.1	459.8	466.0	470.3
37.5°	431.0	434.5	444.1	452.0	457.2
40°	413.5	417.9	429.2	438.0	445.9
42.5°	396.0	400.4	412.6	425.7	436.2
45°	375.9	382.0	395.1	413.5	425.7
47.5°	355.8	361.9	378.5	401.3	413.5
50°	334.8	341.8	361.9	388.2	401.3
52.5°	313.0	320.8	346.2	374.2	387.3
55°	290.2	299.9	328.7	358.4	372.4
57.5°	266.6	277.1	311.2	342.7	357.6
60°	242.2	255.3	292.9	326.1	341.8
62.5°	216.8	232.5	274.5	308.6	325.2
65°	190.6	208.9	255.3	291.1	307.7
67.5°	163.5	188.0	236.0	273.6	290.2
70°	136.4	165.2	215.9	254.4	271.0
72.5°	111.0	144.2	195.8	231.7	235.2
75°	86.5	123.3	174.8	178.3	172.2
77.5°	64.7	102.3	144.2	128.5	127.6
80°	46.3	82.2	92.7	95.3	96.2
82.5°	30.6	62.1	60.3	62.1	61.2
85°	18.4	30.6	31.5	30.6	28.8
87.5°	8.7	11.4	8.7	7.9	7.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)