

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: P230509

Luminaire Tested: **24CZ-LD5-40SE-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230509
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-LD5-40SE-RDP-UNV-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RDP LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2278.4 lumens
Efficiency: N/A
Efficacy: 70.0 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

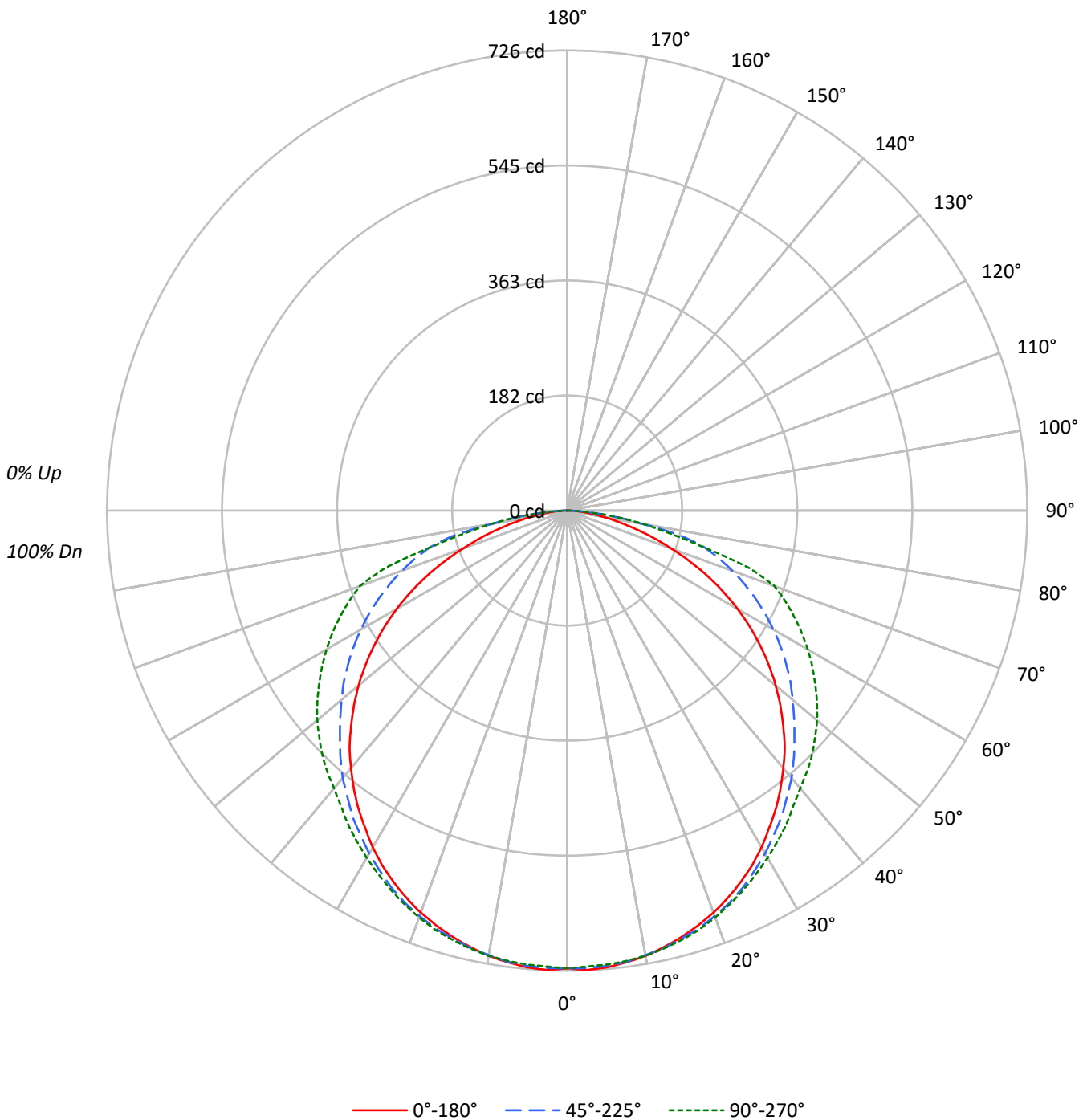
Input Watts (W): 32.55
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20				20			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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82	82	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67	67	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56	56	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47	47	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41	41	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35	35	35
7	63	49	40	34	61	48	40	34	47	39	34	45	38	33	44	38	33	31	31	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27	27	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25	25	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22	22	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	972	972	972
5°	977	974	971
10°	975	973	975
15°	970	973	976
20°	967	975	978
25°	961	974	979
30°	953	971	983
35°	943	969	991
40°	932	967	1005
45°	918	965	1039
50°	899	972	1078
55°	874	989	1121
60°	836	1011	1180
65°	778	1043	1257
70°	688	1090	1368
75°	577	1166	1148
80°	460	921	956
85°	364	624	571



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	3.0
10°-20°	197.2	8.7
20°-30°	301.1	13.2
30°-40°	368.2	16.2
40°-50°	394.1	17.3
50°-60°	378.0	16.6
60°-70°	319.2	14.0
70°-80°	204.0	9.0
80°-90°	48.2	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°	566.8	24.9
0°-40°	935.0	41.0
0°-60°	1707.0	74.9
0°-90°	2278.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2278.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	722	722	722	722	722	
5°	723	719	721	720	719	69
15°	696	694	699	701	701	197
25°	647	646	656	658	660	298
35°	574	579	590	598	603	359
45°	482	490	507	530	546	372
55°	372	385	422	460	478	332
65°	244	268	328	374	395	241
75°	111	158	224	229	221	120
85°	24	39	40	39	37	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	722.3	722.3	722.3	722.3	722.3
2.5°	725.6	721.2	722.3	722.3	720.0
5°	723.4	718.9	721.2	720.0	718.9
7.5°	718.9	715.5	717.8	717.8	716.7
10°	713.3	709.9	712.2	713.3	713.3
12.5°	705.5	703.2	706.6	706.6	707.7
15°	696.5	694.2	698.7	701.0	701.0
17.5°	686.4	685.3	690.9	692.0	693.1
20°	675.2	674.0	680.8	680.8	683.0
22.5°	661.7	660.6	669.6	669.6	671.8
25°	647.1	646.0	656.1	658.3	659.5
27.5°	631.4	630.3	640.4	643.8	646.0
30°	613.5	613.5	624.7	629.2	632.6
32.5°	593.3	596.7	606.8	613.5	618.0
35°	574.2	578.7	589.9	597.8	603.4
37.5°	552.9	557.4	569.7	579.8	586.6
40°	530.5	536.1	550.7	561.9	572.0
42.5°	508.1	513.7	529.4	546.2	559.7
45°	482.3	490.1	506.9	530.5	546.2
47.5°	456.5	464.3	485.6	514.8	530.5
50°	429.6	438.5	464.3	498.0	514.8
52.5°	401.5	411.6	444.1	480.0	496.8
55°	372.4	384.7	421.7	459.8	477.8
57.5°	342.1	355.5	399.3	439.6	458.7
60°	310.7	327.5	375.7	418.3	438.5
62.5°	278.1	298.3	352.2	395.9	417.2
65°	244.5	268.0	327.5	373.5	394.8
67.5°	209.7	241.1	302.8	351.0	372.4
70°	175.0	212.0	277.0	326.4	347.7
72.5°	142.4	185.1	251.2	297.2	301.7
75°	111.0	158.1	224.3	228.8	220.9
77.5°	83.0	131.2	185.1	164.9	163.7
80°	59.4	105.4	118.9	122.2	123.4
82.5°	39.3	79.6	77.4	79.6	78.5
85°	23.6	39.3	40.4	39.3	37.0
87.5°	11.2	14.6	11.2	10.1	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)