

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: P230506

Luminaire Tested: **24CZ-LD5-35SE-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230506
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-LD5-35SE-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: 2051.2 lumens
Efficiency: N/A
Efficacy: 71.8 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

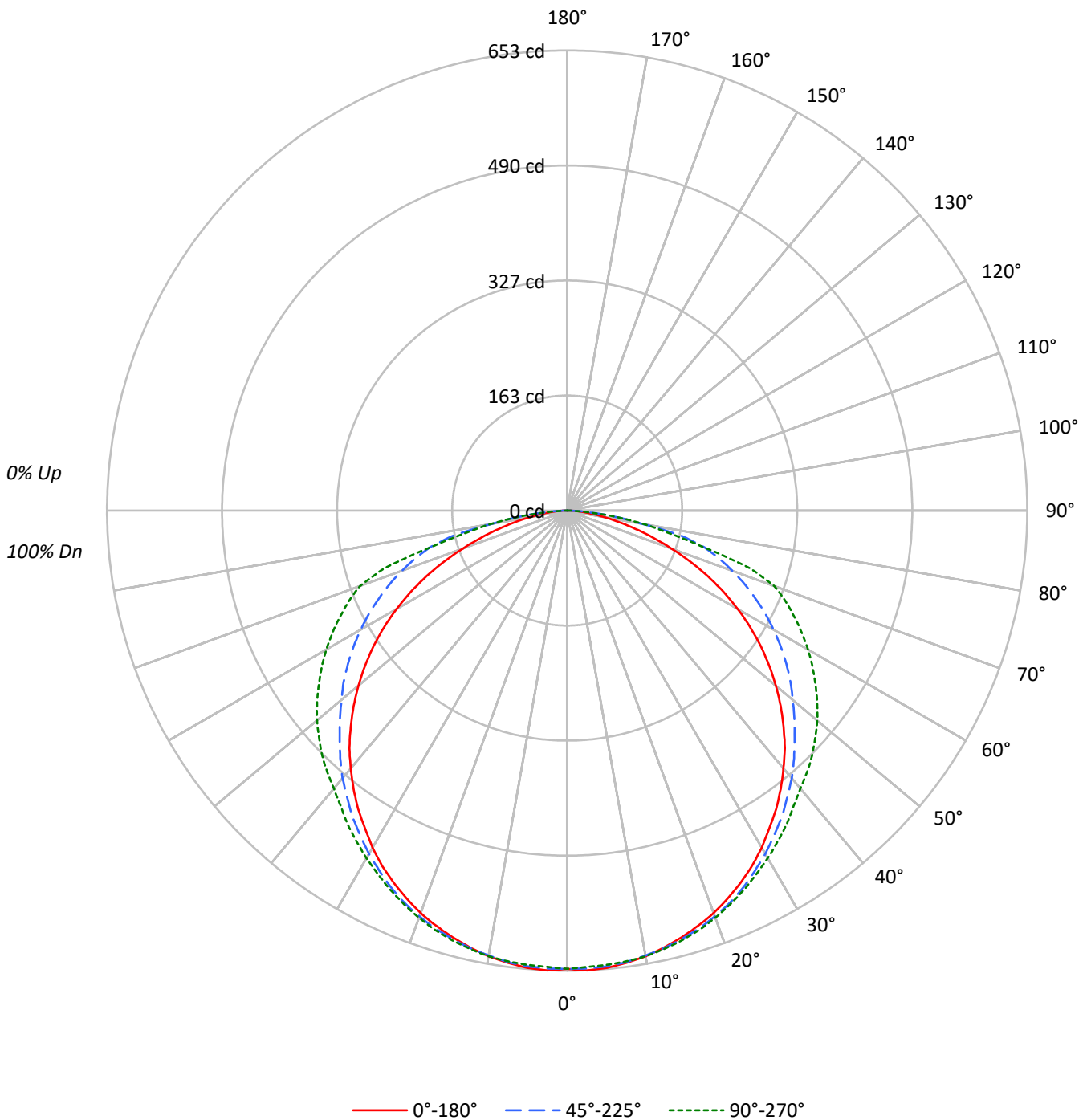
Input Watts (W): 28.57
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	875	875	875
5°	880	877	874
10°	877	876	877
15°	873	876	879
20°	870	878	880
25°	865	877	881
30°	858	874	885
35°	849	872	892
40°	839	871	905
45°	826	868	936
50°	809	875	970
55°	786	891	1009
60°	753	910	1062
65°	701	939	1131
70°	620	981	1231
75°	520	1050	1034
80°	415	829	861
85°	327	560	514



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.7	3.0
10°-20°	177.5	8.7
20°-30°	271.1	13.2
30°-40°	331.5	16.2
40°-50°	354.8	17.3
50°-60°	340.3	16.6
60°-70°	287.3	14.0
70°-80°	183.6	9.0
80°-90°	43.4	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°	510.3	24.9
0°-40°	841.7	41.0
0°-60°	1536.8	74.9
0°-90°	2051.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2051.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	650	650	650	650	650	
5°	651	647	649	648	647	62
15°	627	625	629	631	631	177
25°	583	582	591	593	594	269
35°	517	521	531	538	543	323
45°	434	441	456	478	492	335
55°	335	346	380	414	430	299
65°	220	241	295	336	355	217
75°	100	142	202	206	199	108
85°	21	35	36	35	33	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	650.3	650.3	650.3	650.3	650.3
2.5°	653.3	649.2	650.3	650.3	648.2
5°	651.3	647.2	649.2	648.2	647.2
7.5°	647.2	644.2	646.2	646.2	645.2
10°	642.2	639.1	641.2	642.2	642.2
12.5°	635.1	633.1	636.1	636.1	637.1
15°	627.0	625.0	629.1	631.1	631.1
17.5°	617.9	616.9	622.0	623.0	624.0
20°	607.8	606.8	612.9	612.9	614.9
22.5°	595.7	594.7	602.8	602.8	604.8
25°	582.6	581.6	590.7	592.7	593.7
27.5°	568.5	567.5	576.5	579.6	581.6
30°	552.3	552.3	562.4	566.4	569.5
32.5°	534.1	537.2	546.3	552.3	556.4
35°	517.0	521.0	531.1	538.2	543.2
37.5°	497.8	501.8	512.9	522.0	528.1
40°	477.6	482.6	495.8	505.9	515.0
42.5°	457.4	462.4	476.6	491.7	503.8
45°	434.2	441.2	456.4	477.6	491.7
47.5°	411.0	418.0	437.2	463.5	477.6
50°	386.7	394.8	418.0	448.3	463.5
52.5°	361.5	370.6	399.8	432.2	447.3
55°	335.2	346.3	379.7	414.0	430.1
57.5°	308.0	320.1	359.5	395.8	413.0
60°	279.7	294.8	338.3	376.6	394.8
62.5°	250.4	268.6	317.1	356.4	375.6
65°	220.1	241.3	294.8	336.2	355.4
67.5°	188.8	217.1	272.6	316.0	335.2
70°	157.5	190.8	249.4	293.8	313.0
72.5°	128.2	166.6	226.2	267.6	271.6
75°	100.0	142.4	201.9	206.0	198.9
77.5°	74.7	118.1	166.6	148.4	147.4
80°	53.5	94.9	107.0	110.1	111.1
82.5°	35.3	71.7	69.7	71.7	70.7
85°	21.2	35.3	36.3	35.3	33.3
87.5°	10.1	13.1	10.1	9.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)