

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: P230433

Luminaire Tested: **24CZ-LD5-35SE-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230433
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-35SE-SQP-UNV-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2100.0 lumens
Efficiency: N/A
Efficacy: 73.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

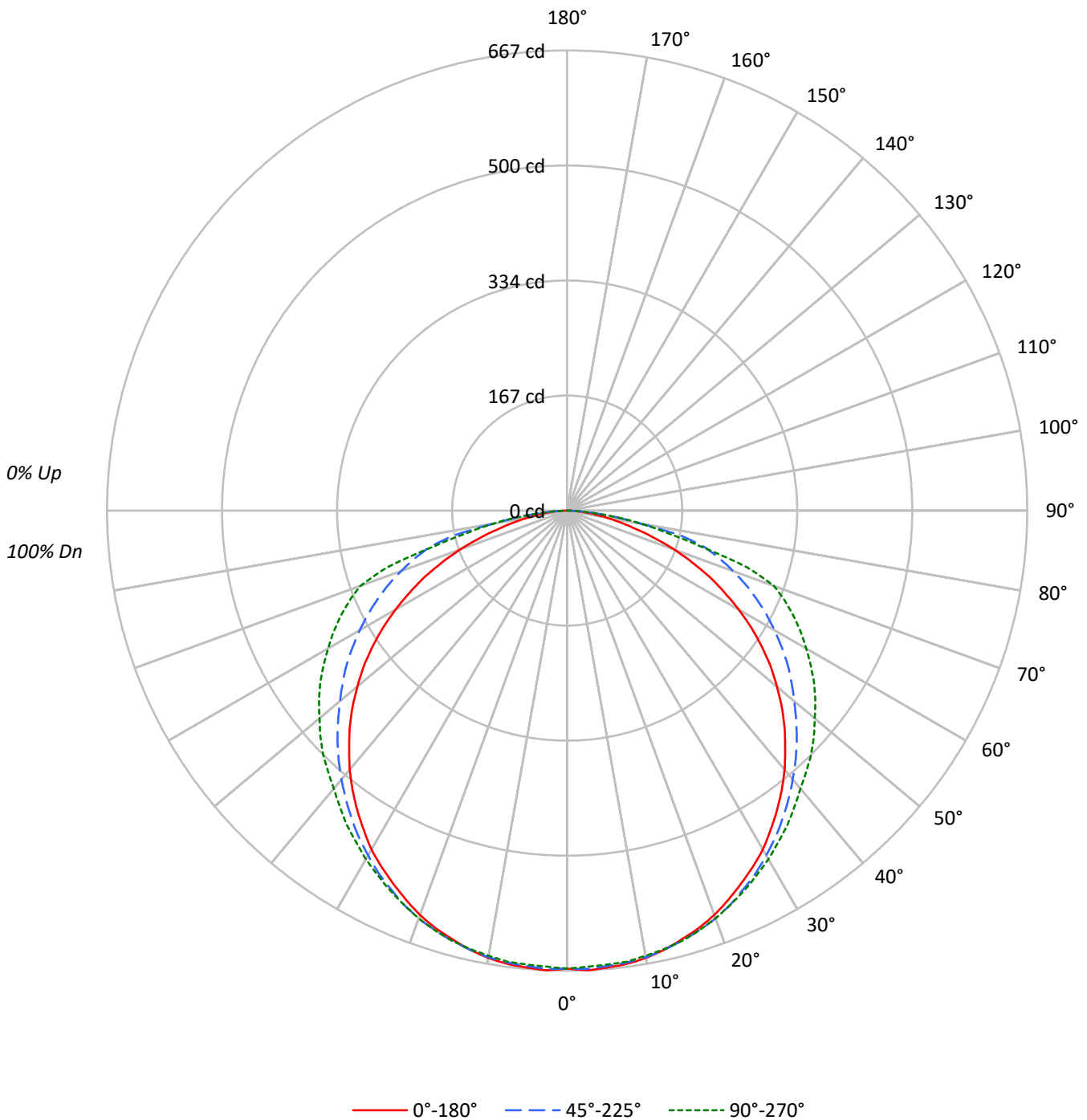
Input Watts (W): 28.57
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
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	63	58	56
4	81	68	59	52	79	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	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	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°	893	893	893
5°	898	895	892
10°	900	898	895
15°	896	899	899
20°	893	901	901
25°	886	899	902
30°	881	897	907
35°	871	894	914
40°	861	893	924
45°	848	896	952
50°	831	899	981
55°	809	916	1025
60°	774	934	1077
65°	725	963	1153
70°	649	1007	1255
75°	536	1077	1038
80°	437	832	841
85°	352	553	519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.0	3.0
10°-20°	181.9	8.7
20°-30°	278.1	13.2
30°-40°	340.1	16.2
40°-50°	363.9	17.3
50°-60°	348.4	16.6
60°-70°	294.8	14.0
70°-80°	186.9	8.9
80°-90°	43.0	2.0
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°	523.0	24.9
0°-40°	863.1	41.1
0°-60°	1575.4	75.0
0°-90°	2100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2100.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	664	664	664	664	664	
5°	665	662	663	662	661	63
15°	643	642	645	645	645	182
25°	597	597	605	608	608	275
35°	530	534	544	552	556	332
45°	446	453	471	490	500	343
55°	345	356	390	423	437	308
65°	228	250	303	344	362	224
75°	103	145	207	206	200	112
85°	23	35	36	32	34	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	663.9	663.9	663.9	663.9	663.9
2.5°	667.1	663.9	664.9	663.9	661.7
5°	664.9	661.7	662.8	661.7	660.6
7.5°	662.8	659.5	660.6	659.5	659.5
10°	658.4	655.2	657.4	656.3	655.2
12.5°	651.9	649.8	651.9	650.8	650.8
15°	643.2	642.2	645.4	645.4	645.4
17.5°	634.6	633.5	637.8	637.8	637.8
20°	623.7	622.6	629.1	629.1	629.1
22.5°	610.7	609.6	618.3	618.3	618.3
25°	596.6	596.6	605.3	607.5	607.5
27.5°	582.5	582.5	592.3	595.5	595.5
30°	567.3	567.3	577.1	581.4	583.6
32.5°	548.9	551.0	561.9	567.3	569.5
35°	530.4	533.7	544.5	552.1	556.5
37.5°	510.9	514.2	527.2	535.9	541.3
40°	490.3	494.6	508.7	519.6	526.1
42.5°	467.5	474.0	490.3	504.4	513.1
45°	445.8	453.4	470.8	490.3	500.1
47.5°	422.0	430.6	450.2	475.1	484.9
50°	397.0	405.7	429.6	457.8	468.6
52.5°	372.1	381.8	410.0	440.4	453.4
55°	344.9	355.8	390.5	423.0	437.1
57.5°	316.7	329.8	368.8	403.5	418.7
60°	287.5	303.7	347.1	384.0	400.3
62.5°	257.1	276.6	325.4	364.5	381.8
65°	227.8	249.5	302.6	343.9	362.3
67.5°	196.3	223.5	279.9	324.3	341.7
70°	164.9	196.3	256.0	301.6	318.9
72.5°	133.4	171.4	232.1	273.4	273.4
75°	103.1	145.4	207.2	206.1	199.6
77.5°	78.1	121.5	170.3	145.4	146.4
80°	56.4	97.6	107.4	107.4	108.5
82.5°	38.0	74.8	69.4	68.3	70.5
85°	22.8	34.7	35.8	32.5	33.6
87.5°	10.8	11.9	9.8	6.5	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)