

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: P230397

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230397
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-LD5-40-SQP-UNV-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2357.7 lumens
Efficiency: N/A
Efficacy: 81.2 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

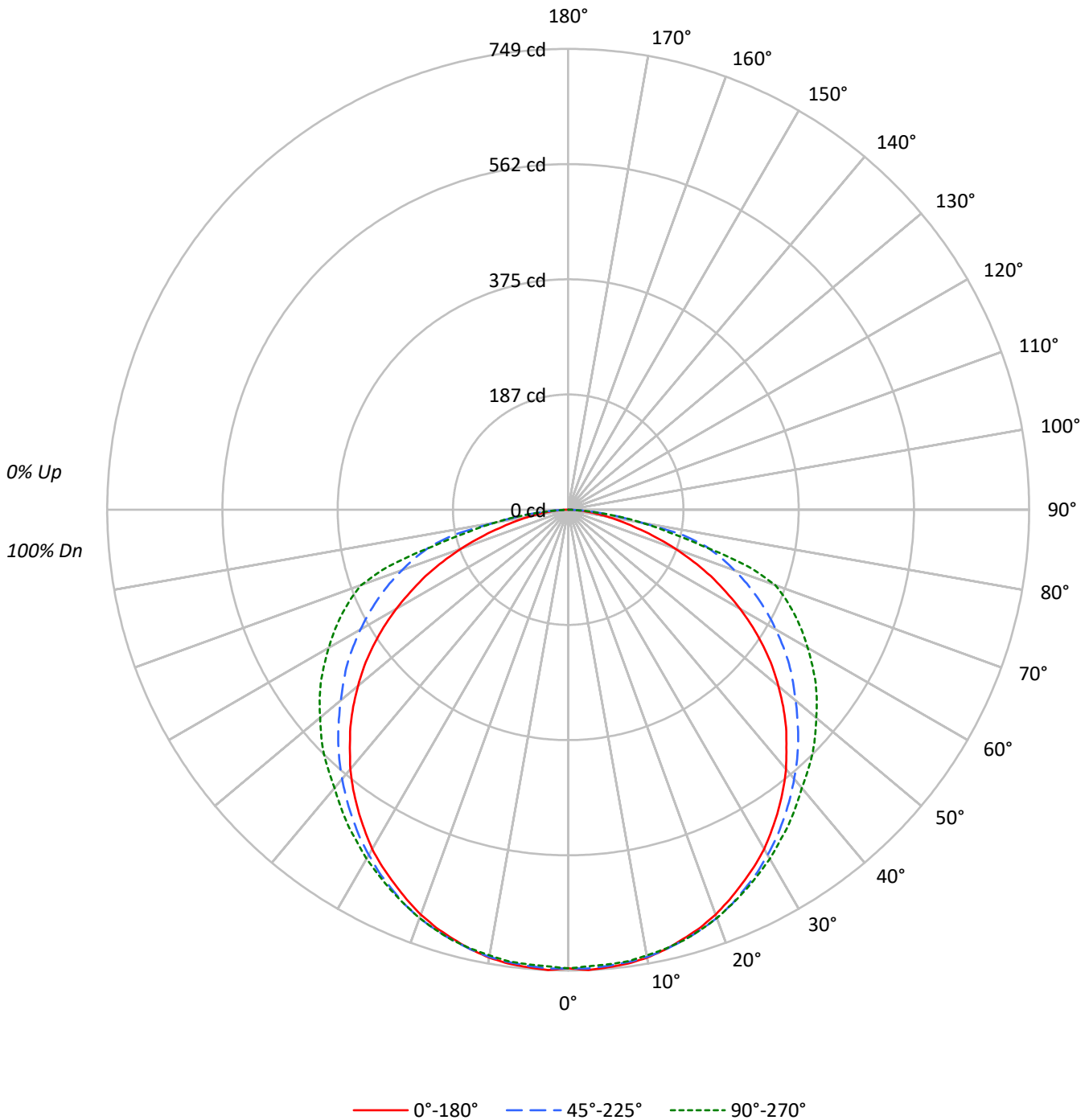
Input Watts (W): 29.04
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1003	1003	1003
5°	1008	1005	1002
10°	1010	1008	1005
15°	1006	1009	1009
20°	1003	1011	1011
25°	994	1009	1012
30°	990	1007	1018
35°	978	1004	1026
40°	967	1003	1037
45°	952	1006	1068
50°	933	1010	1101
55°	909	1028	1151
60°	868	1049	1209
65°	814	1082	1295
70°	728	1131	1408
75°	601	1209	1165
80°	490	934	944
85°	395	621	584



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	3.0
10°-20°	204.3	8.7
20°-30°	312.2	13.2
30°-40°	381.8	16.2
40°-50°	408.5	17.3
50°-60°	391.2	16.6
60°-70°	330.9	14.0
70°-80°	209.8	8.9
80°-90°	48.3	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°	587.2	24.9
0°-40°	969.0	41.1
0°-60°	1768.8	75.0
0°-90°	2357.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2357.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	745	745	745	745	745	
5°	746	743	744	743	742	71
15°	722	721	725	725	725	204
25°	670	670	680	682	682	309
35°	596	599	611	620	625	373
45°	500	509	528	550	561	386
55°	387	399	438	475	491	345
65°	256	280	340	386	407	252
75°	116	163	233	231	224	126
85°	26	39	40	36	38	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	745.3	745.3	745.3	745.3	745.3
2.5°	749.0	745.3	746.5	745.3	742.9
5°	746.5	742.9	744.1	742.9	741.7
7.5°	744.1	740.4	741.7	740.4	740.4
10°	739.2	735.6	738.0	736.8	735.6
12.5°	731.9	729.5	731.9	730.7	730.7
15°	722.2	721.0	724.6	724.6	724.6
17.5°	712.4	711.2	716.1	716.1	716.1
20°	700.3	699.0	706.3	706.3	706.3
22.5°	685.6	684.4	694.2	694.2	694.2
25°	669.8	669.8	679.6	682.0	682.0
27.5°	654.0	654.0	664.9	668.6	668.6
30°	636.9	636.9	647.9	652.8	655.2
32.5°	616.2	618.7	630.8	636.9	639.4
35°	595.5	599.2	611.4	619.9	624.7
37.5°	573.6	577.3	591.9	601.6	607.7
40°	550.5	555.3	571.2	583.3	590.6
42.5°	524.9	532.2	550.5	566.3	576.0
45°	500.5	509.1	528.5	550.5	561.4
47.5°	473.7	483.5	505.4	533.4	544.4
50°	445.7	455.5	482.3	513.9	526.1
52.5°	417.7	428.7	460.3	494.4	509.1
55°	387.3	399.4	438.4	475.0	490.8
57.5°	355.6	370.2	414.1	453.0	470.1
60°	322.7	341.0	389.7	431.1	449.4
62.5°	288.6	310.5	365.3	409.2	428.7
65°	255.7	280.1	339.8	386.1	406.8
67.5°	220.4	250.9	314.2	364.1	383.6
70°	185.1	220.4	287.4	338.6	358.0
72.5°	149.8	192.4	260.6	306.9	306.9
75°	115.7	163.2	232.6	231.4	224.1
77.5°	87.7	136.4	191.2	163.2	164.4
80°	63.3	109.6	120.6	120.6	121.8
82.5°	42.6	84.0	77.9	76.7	79.2
85°	25.6	39.0	40.2	36.5	37.8
87.5°	12.2	13.4	11.0	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)