

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: P230436

Luminaire Tested: **24CZ-LD5-40SE-SQP-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230436
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-LD5-40SE-SQP-UNV-L930-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (84) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2299.7 lumens
Efficiency: N/A
Efficacy: 70.7 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

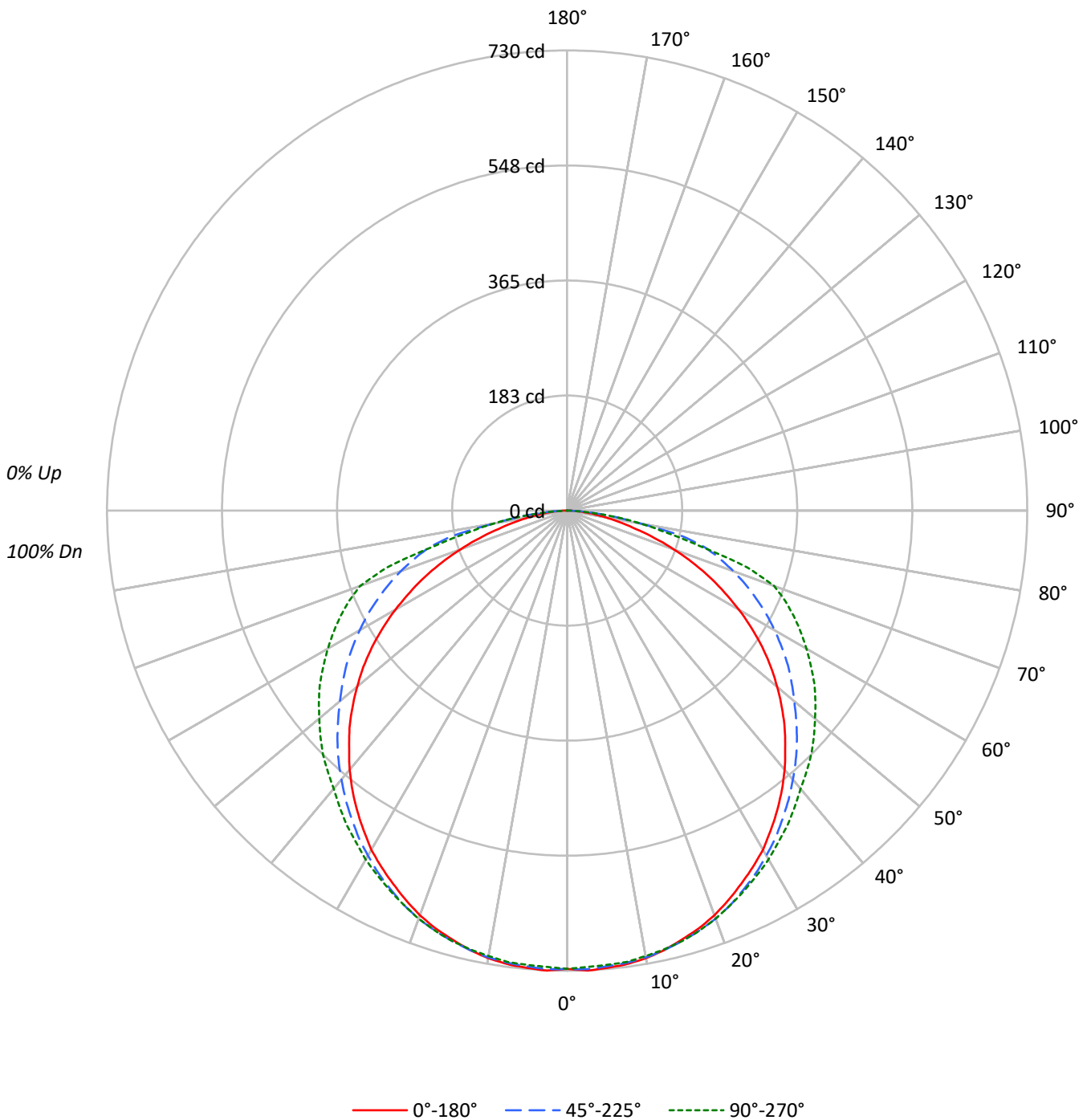
Input Watts (W): 32.55
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
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°	978	978	978
5°	984	980	977
10°	985	983	980
15°	981	985	985
20°	978	987	987
25°	970	984	988
30°	965	982	993
35°	954	979	1001
40°	943	978	1012
45°	929	981	1042
50°	910	985	1074
55°	886	1003	1123
60°	847	1023	1179
65°	794	1055	1263
70°	710	1103	1374
75°	586	1180	1136
80°	479	911	921
85°	384	605	568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.0	3.0
10°-20°	199.2	8.7
20°-30°	304.5	13.2
30°-40°	372.4	16.2
40°-50°	398.5	17.3
50°-60°	381.6	16.6
60°-70°	322.8	14.0
70°-80°	204.6	8.9
80°-90°	47.1	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°	572.8	24.9
0°-40°	945.2	41.1
0°-60°	1725.2	75.0
0°-90°	2299.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2299.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	728	725	726	725	723	69
15°	704	703	707	707	707	199
25°	653	653	663	665	665	301
35°	581	584	596	605	609	363
45°	488	496	516	537	548	376
55°	378	390	428	463	479	337
65°	250	273	331	377	397	246
75°	113	159	227	226	219	123
85°	25	38	39	36	37	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	727.0	727.0	727.0	727.0	727.0
2.5°	730.5	727.0	728.2	727.0	724.6
5°	728.2	724.6	725.8	724.6	723.4
7.5°	725.8	722.2	723.4	722.2	722.2
10°	721.0	717.5	719.8	718.7	717.5
12.5°	713.9	711.5	713.9	712.7	712.7
15°	704.4	703.2	706.8	706.8	706.8
17.5°	694.9	693.7	698.5	698.5	698.5
20°	683.0	681.8	689.0	689.0	689.0
22.5°	668.8	667.6	677.1	677.1	677.1
25°	653.3	653.3	662.8	665.2	665.2
27.5°	637.9	637.9	648.6	652.1	652.1
30°	621.3	621.3	631.9	636.7	639.1
32.5°	601.1	603.4	615.3	621.3	623.6
35°	580.9	584.4	596.3	604.6	609.4
37.5°	559.5	563.0	577.3	586.8	592.7
40°	536.9	541.7	557.1	569.0	576.1
42.5°	512.0	519.1	536.9	552.4	561.9
45°	488.2	496.5	515.5	536.9	547.6
47.5°	462.1	471.6	493.0	520.3	531.0
50°	434.8	444.3	470.4	501.3	513.2
52.5°	407.4	418.1	449.0	482.3	496.5
55°	377.7	389.6	427.6	463.3	478.7
57.5°	346.9	361.1	403.9	441.9	458.5
60°	314.8	332.6	380.1	420.5	438.3
62.5°	281.5	302.9	356.4	399.1	418.1
65°	249.5	273.2	331.4	376.6	396.7
67.5°	215.0	244.7	306.5	355.2	374.2
70°	180.6	215.0	280.3	330.2	349.2
72.5°	146.1	187.7	254.2	299.3	299.3
75°	112.8	159.2	226.9	225.7	218.6
77.5°	85.5	133.0	186.5	159.2	160.4
80°	61.8	106.9	117.6	117.6	118.8
82.5°	41.6	82.0	76.0	74.8	77.2
85°	24.9	38.0	39.2	35.6	36.8
87.5°	11.9	13.1	10.7	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)