

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: P230398

Luminaire Tested: **24CZ-LD5-40-SQP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230398
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-L940-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2415.7 lumens
Efficiency: N/A
Efficacy: 83.2 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

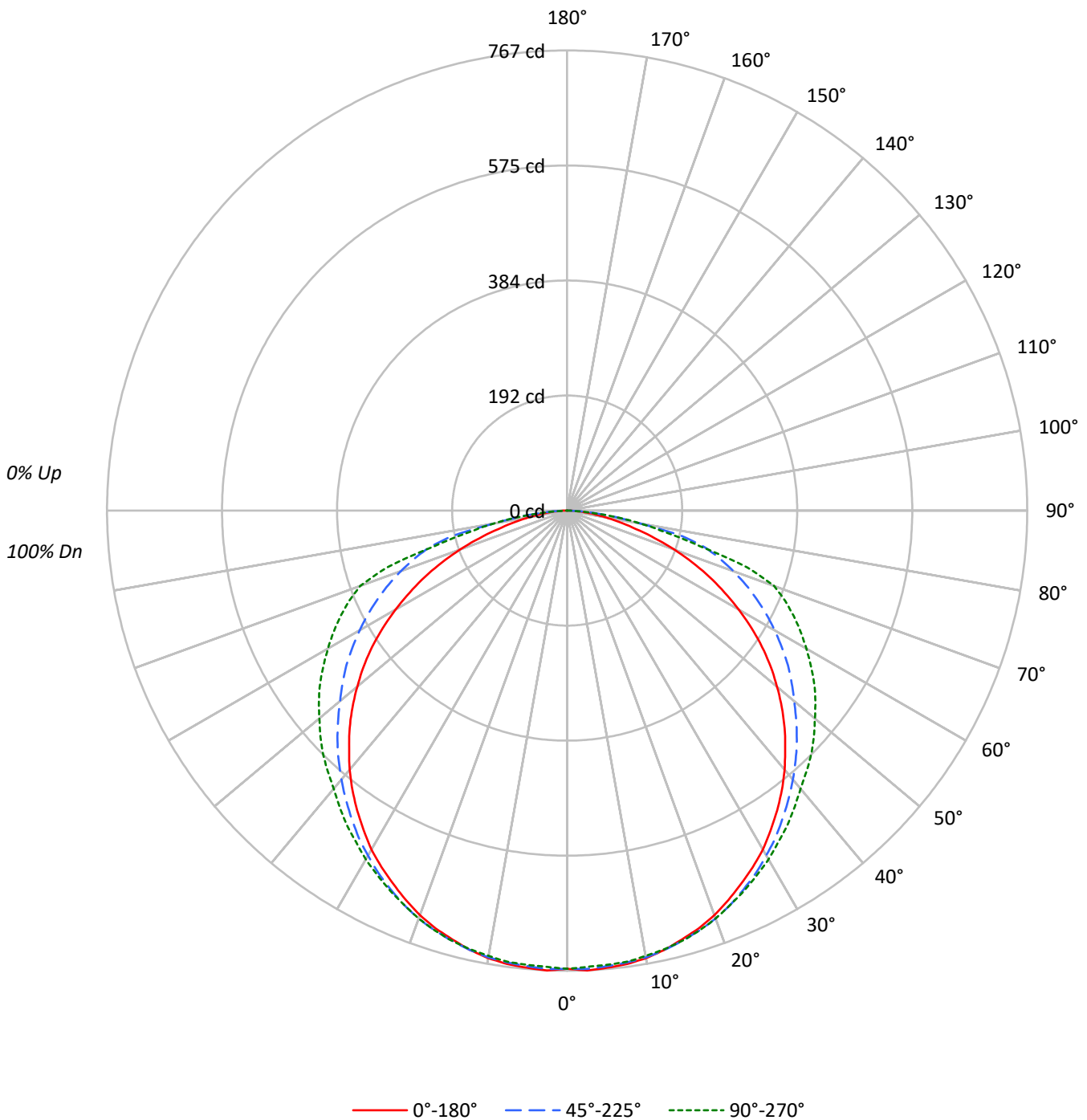
Input Watts (W): 29.04
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	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
1	108	103	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1028	1028	1028
5°	1033	1030	1026
10°	1035	1033	1030
15°	1031	1034	1034
20°	1027	1036	1036
25°	1019	1034	1037
30°	1014	1031	1043
35°	1002	1029	1051
40°	991	1028	1063
45°	976	1030	1094
50°	956	1034	1128
55°	931	1054	1180
60°	890	1075	1239
65°	834	1108	1327
70°	746	1159	1443
75°	616	1239	1194
80°	503	957	967
85°	404	636	597



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.5	3.0
10°-20°	209.3	8.7
20°-30°	319.9	13.2
30°-40°	391.2	16.2
40°-50°	418.6	17.3
50°-60°	400.8	16.6
60°-70°	339.1	14.0
70°-80°	214.9	8.9
80°-90°	49.4	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°	601.7	24.9
0°-40°	992.9	41.1
0°-60°	1812.3	75.0
0°-90°	2415.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2415.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	764	764	764	764	764	
5°	765	761	762	761	760	73
15°	740	739	742	742	742	209
25°	686	686	696	699	699	317
35°	610	614	626	635	640	382
45°	513	522	542	564	575	395
55°	397	409	449	487	503	354
65°	262	287	348	396	417	258
75°	118	167	238	237	230	129
85°	26	40	41	37	39	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	763.7	763.7	763.7	763.7	763.7
2.5°	767.4	763.7	764.9	763.7	761.2
5°	764.9	761.2	762.4	761.2	759.9
7.5°	762.4	758.7	759.9	758.7	758.7
10°	757.4	753.7	756.2	754.9	753.7
12.5°	749.9	747.4	749.9	748.7	748.7
15°	739.9	738.7	742.4	742.4	742.4
17.5°	730.0	728.7	733.7	733.7	733.7
20°	717.5	716.2	723.7	723.7	723.7
22.5°	702.5	701.3	711.2	711.2	711.2
25°	686.3	686.3	696.3	698.8	698.8
27.5°	670.1	670.1	681.3	685.0	685.0
30°	652.6	652.6	663.8	668.8	671.3
32.5°	631.4	633.9	646.4	652.6	655.1
35°	610.2	613.9	626.4	635.1	640.1
37.5°	587.7	591.5	606.4	616.4	622.7
40°	564.0	569.0	585.2	597.7	605.2
42.5°	537.8	545.3	564.0	580.2	590.2
45°	512.8	521.6	541.5	564.0	575.2
47.5°	485.4	495.4	517.8	546.5	557.8
50°	456.7	466.7	494.1	526.6	539.1
52.5°	428.0	439.2	471.7	506.6	521.6
55°	396.8	409.3	449.2	486.6	502.9
57.5°	364.4	379.3	424.3	464.2	481.7
60°	330.7	349.4	399.3	441.7	460.4
62.5°	295.7	318.2	374.3	419.3	439.2
65°	262.0	287.0	348.1	395.6	416.8
67.5°	225.9	257.0	321.9	373.1	393.1
70°	189.7	225.9	294.5	346.9	366.9
72.5°	153.5	197.2	267.0	314.4	314.4
75°	118.5	167.2	238.3	237.1	229.6
77.5°	89.8	139.8	195.9	167.2	168.5
80°	64.9	112.3	123.5	123.5	124.8
82.5°	43.7	86.1	79.9	78.6	81.1
85°	26.2	39.9	41.2	37.4	38.7
87.5°	12.5	13.7	11.2	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)