

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: P263208

Luminaire Tested: **24CZ-LD5-40SE-SQP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263208  
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-L93050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2277.8 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

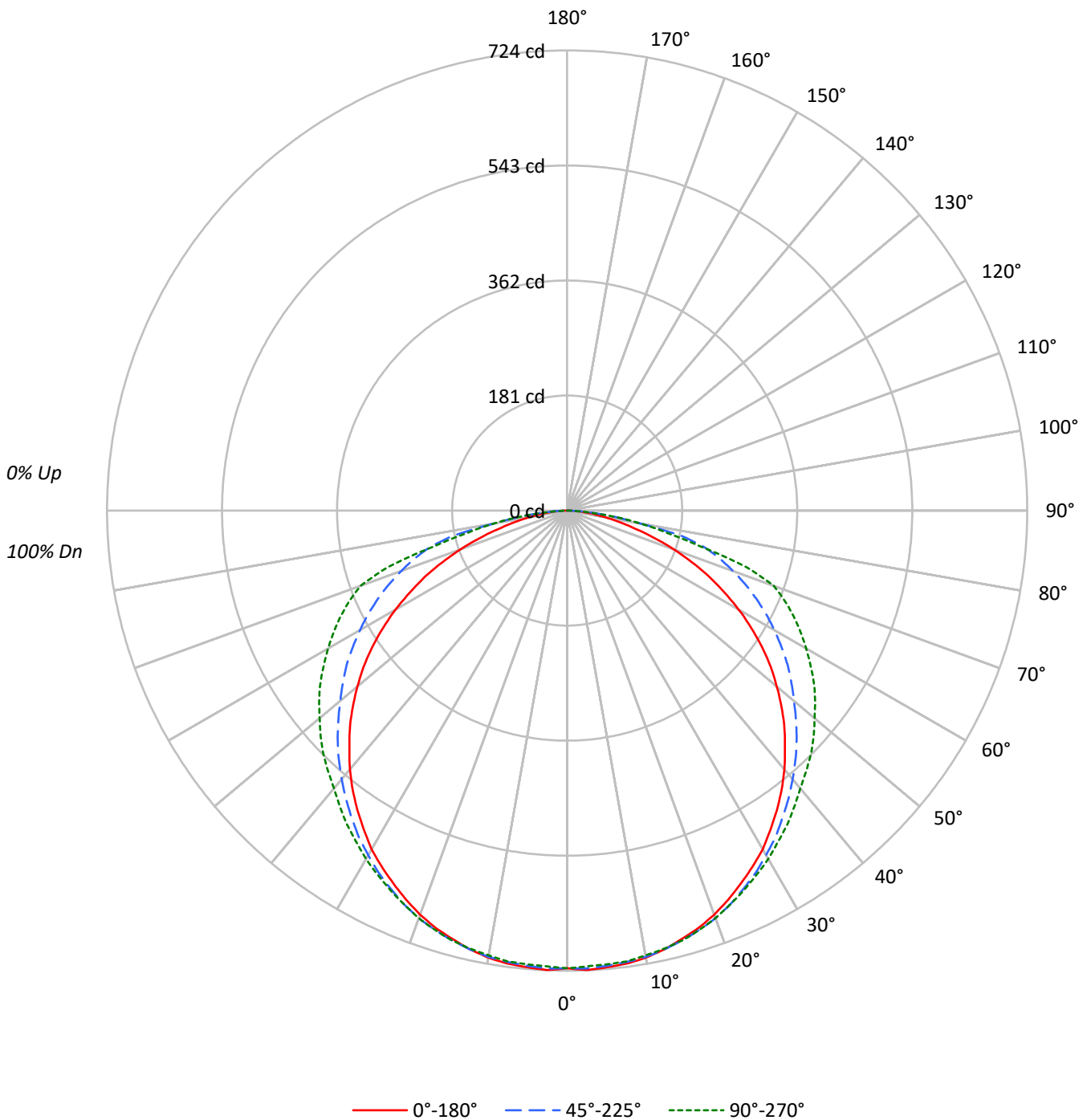
Input Watts (W): 30.988809  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	969	969	969
5°	974	971	968
10°	976	974	971
15°	972	975	975
20°	969	977	977
25°	961	975	978
30°	956	972	983
35°	945	970	991
40°	934	969	1002
45°	920	972	1032
50°	901	975	1064
55°	878	994	1112
60°	839	1013	1168
65°	787	1045	1251
70°	703	1092	1361
75°	581	1168	1125
80°	474	903	912
85°	381	599	563



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.4	3.0
10°-20°	197.3	8.7
20°-30°	301.6	13.2
30°-40°	368.9	16.2
40°-50°	394.7	17.3
50°-60°	377.9	16.6
60°-70°	319.7	14.0
70°-80°	202.7	8.9
80°-90°	46.6	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°	567.3	24.9
0°-40°	936.2	41.1
0°-60°	1708.8	75.0
0°-90°	2277.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2277.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	720	720	720	720	720	
5°	721	718	719	718	716	69
15°	698	696	700	700	700	197
25°	647	647	656	659	659	299
35°	575	579	591	599	604	360
45°	484	492	511	532	542	373
55°	374	386	424	459	474	334
65°	247	271	328	373	393	243
75°	112	158	225	224	216	122
85°	25	38	39	35	36	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	720.1	720.1	720.1	720.1	720.1
2.5°	723.6	720.1	721.2	720.1	717.7
5°	721.2	717.7	718.9	717.7	716.5
7.5°	718.9	715.4	716.5	715.4	715.4
10°	714.2	710.6	713.0	711.8	710.6
12.5°	707.1	704.8	707.1	705.9	705.9
15°	697.7	696.5	700.1	700.1	700.1
17.5°	688.3	687.1	691.8	691.8	691.8
20°	676.5	675.3	682.4	682.4	682.4
22.5°	662.4	661.2	670.6	670.6	670.6
25°	647.1	647.1	656.5	658.9	658.9
27.5°	631.8	631.8	642.4	645.9	645.9
30°	615.3	615.3	625.9	630.6	633.0
32.5°	595.3	597.7	609.5	615.3	617.7
35°	575.3	578.9	590.6	598.9	603.6
37.5°	554.2	557.7	571.8	581.2	587.1
40°	531.8	536.5	551.8	563.6	570.6
42.5°	507.1	514.2	531.8	547.1	556.5
45°	483.6	491.8	510.6	531.8	542.4
47.5°	457.7	467.1	488.3	515.3	525.9
50°	430.6	440.0	465.9	496.5	508.3
52.5°	403.6	414.2	444.7	477.7	491.8
55°	374.1	385.9	423.6	458.9	474.2
57.5°	343.6	357.7	400.0	437.7	454.2
60°	311.8	329.4	376.5	416.5	434.2
62.5°	278.8	300.0	353.0	395.3	414.2
65°	247.1	270.6	328.3	373.0	393.0
67.5°	213.0	242.4	303.6	351.8	370.6
70°	178.8	213.0	277.7	327.1	345.9
72.5°	144.7	185.9	251.8	296.5	296.5
75°	111.8	157.7	224.7	223.5	216.5
77.5°	84.7	131.8	184.7	157.7	158.8
80°	61.2	105.9	116.5	116.5	117.7
82.5°	41.2	81.2	75.3	74.1	76.5
85°	24.7	37.7	38.8	35.3	36.5
87.5°	11.8	12.9	10.6	7.1	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)