

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: P263474

Luminaire Tested: **24CZ-LD5-45SE-SQP-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263474  
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-LD5-45SE-SQP-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2351.0 lumens  
Efficiency: N/A  
Efficacy: 67.4 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

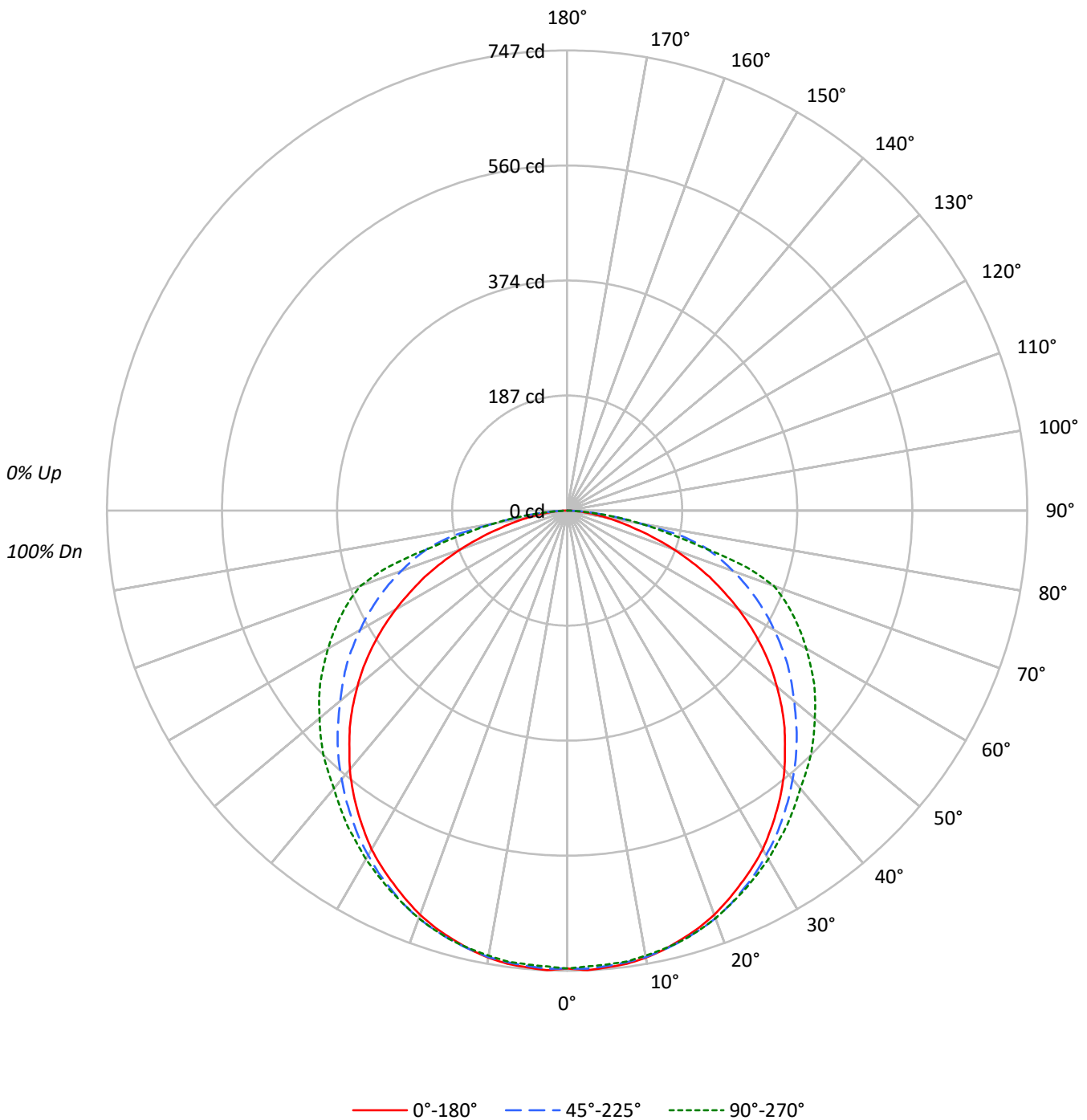
Input Watts (W): 34.875  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1000	1000	1000
5°	1005	1002	999
10°	1007	1005	1002
15°	1003	1007	1007
20°	1000	1008	1008
25°	992	1006	1010
30°	987	1004	1015
35°	975	1001	1023
40°	964	1000	1035
45°	950	1003	1065
50°	930	1007	1098
55°	906	1026	1148
60°	866	1046	1206
65°	812	1079	1291
70°	726	1127	1404
75°	600	1206	1161
80°	489	931	941
85°	394	619	580



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.6	3.0
10°-20°	203.7	8.7
20°-30°	311.3	13.2
30°-40°	380.7	16.2
40°-50°	407.4	17.3
50°-60°	390.1	16.6
60°-70°	330.0	14.0
70°-80°	209.2	8.9
80°-90°	48.1	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°	585.5	24.9
0°-40°	966.3	41.1
0°-60°	1763.7	75.0
0°-90°	2351.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2351.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	743	743	743	743	743	
5°	744	741	742	741	740	71
15°	720	719	723	723	723	203
25°	668	668	678	680	680	308
35°	594	598	610	618	623	372
45°	499	508	527	549	560	385
55°	386	398	437	474	489	344
65°	255	279	339	385	406	251
75°	115	163	232	231	223	125
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°	743.2	743.2	743.2	743.2	743.2
2.5°	746.8	743.2	744.4	743.2	740.8
5°	744.4	740.8	742.0	740.8	739.6
7.5°	742.0	738.3	739.6	738.3	738.3
10°	737.1	733.5	735.9	734.7	733.5
12.5°	729.8	727.4	729.8	728.6	728.6
15°	720.1	718.9	722.6	722.6	722.6
17.5°	710.4	709.2	714.1	714.1	714.1
20°	698.3	697.0	704.3	704.3	704.3
22.5°	683.7	682.5	692.2	692.2	692.2
25°	667.9	667.9	677.6	680.0	680.0
27.5°	652.1	652.1	663.0	666.7	666.7
30°	635.1	635.1	646.0	650.9	653.3
32.5°	614.5	616.9	629.0	635.1	637.5
35°	593.8	597.5	609.6	618.1	623.0
37.5°	572.0	575.6	590.2	599.9	606.0
40°	548.9	553.8	569.5	581.7	589.0
42.5°	523.4	530.7	548.9	564.7	574.4
45°	499.1	507.6	527.0	548.9	559.8
47.5°	472.4	482.1	504.0	531.9	542.8
50°	444.5	454.2	480.9	512.5	524.6
52.5°	416.5	427.5	459.0	493.0	507.6
55°	386.2	398.3	437.2	473.6	489.4
57.5°	354.6	369.2	412.9	451.7	468.7
60°	321.8	340.0	388.6	429.9	448.1
62.5°	287.8	309.7	364.3	408.0	427.5
65°	255.0	279.3	338.8	385.0	405.6
67.5°	219.8	250.2	313.3	363.1	382.5
70°	184.6	219.8	286.6	337.6	357.0
72.5°	149.4	191.9	259.9	306.0	306.0
75°	115.4	162.7	231.9	230.7	223.4
77.5°	87.4	136.0	190.7	162.7	163.9
80°	63.1	109.3	120.2	120.2	121.4
82.5°	42.5	83.8	77.7	76.5	78.9
85°	25.5	38.9	40.1	36.4	37.6
87.5°	12.1	13.4	10.9	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)