

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: P263385

Luminaire Tested: **24CZ-LD5-45-SQP-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263385  
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-LD5-45-SQP-UNV-L92765-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2420.1 lumens  
Efficiency: N/A  
Efficacy: 77.7 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

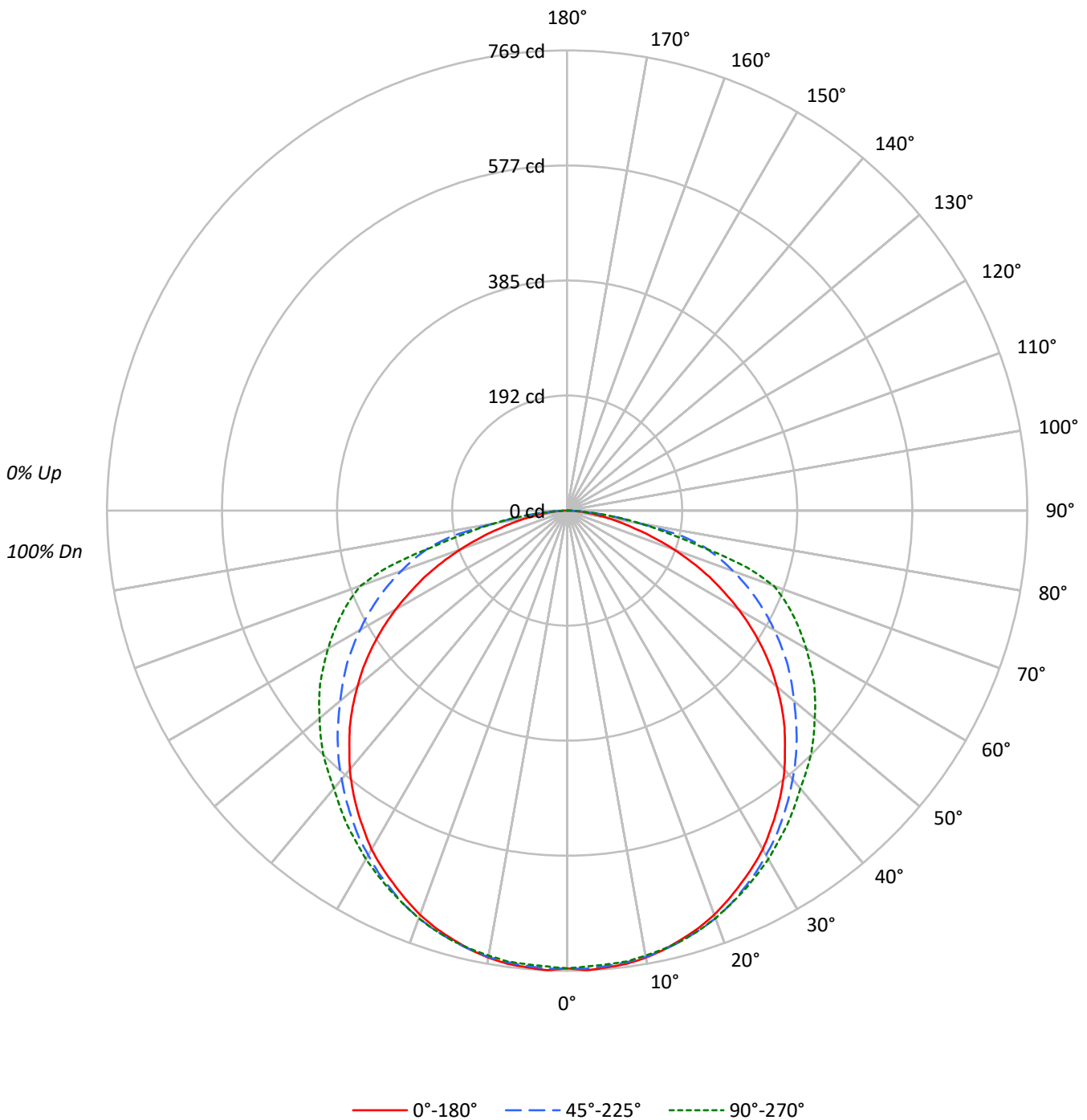
Input Watts (W): 31.155  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1029	1029	1029
5°	1035	1032	1028
10°	1037	1035	1032
15°	1033	1036	1036
20°	1029	1038	1038
25°	1021	1035	1039
30°	1016	1033	1045
35°	1004	1031	1053
40°	992	1030	1065
45°	978	1032	1097
50°	958	1036	1130
55°	932	1056	1182
60°	892	1076	1241
65°	836	1110	1329
70°	747	1161	1446
75°	618	1241	1196
80°	504	959	969
85°	406	638	599



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.7	3.0
10°-20°	209.7	8.7
20°-30°	320.4	13.2
30°-40°	391.9	16.2
40°-50°	419.3	17.3
50°-60°	401.5	16.6
60°-70°	339.7	14.0
70°-80°	215.3	8.9
80°-90°	49.6	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°	602.7	24.9
0°-40°	994.6	41.1
0°-60°	1815.5	75.0
0°-90°	2420.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2420.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	765	765	765	765	765	
5°	766	762	764	762	761	73
15°	741	740	744	744	744	209
25°	688	688	698	700	700	317
35°	611	615	628	636	641	382
45°	514	522	542	565	576	396
55°	398	410	450	488	504	355
65°	262	288	349	396	418	259
75°	119	168	239	238	230	129
85°	26	40	41	38	39	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	765.0	765.0	765.0	765.0	765.0
2.5°	768.8	765.0	766.3	765.0	762.5
5°	766.3	762.5	763.8	762.5	761.3
7.5°	763.8	760.0	761.3	760.0	760.0
10°	758.8	755.0	757.5	756.3	755.0
12.5°	751.3	748.8	751.3	750.0	750.0
15°	741.3	740.0	743.8	743.8	743.8
17.5°	731.3	730.0	735.0	735.0	735.0
20°	718.8	717.5	725.0	725.0	725.0
22.5°	703.8	702.5	712.5	712.5	712.5
25°	687.5	687.5	697.5	700.0	700.0
27.5°	671.3	671.3	682.5	686.3	686.3
30°	653.8	653.8	665.0	670.0	672.5
32.5°	632.5	635.0	647.5	653.8	656.3
35°	611.3	615.0	627.5	636.3	641.3
37.5°	588.8	592.5	607.5	617.5	623.8
40°	565.0	570.0	586.3	598.8	606.3
42.5°	538.8	546.3	565.0	581.3	591.3
45°	513.8	522.5	542.5	565.0	576.3
47.5°	486.3	496.3	518.8	547.5	558.8
50°	457.5	467.5	495.0	527.5	540.0
52.5°	428.8	440.0	472.5	507.5	522.5
55°	397.5	410.0	450.0	487.5	503.8
57.5°	365.0	380.0	425.0	465.0	482.5
60°	331.3	350.0	400.0	442.5	461.3
62.5°	296.3	318.8	375.0	420.0	440.0
65°	262.5	287.5	348.8	396.3	417.5
67.5°	226.3	257.5	322.5	373.8	393.8
70°	190.0	226.3	295.0	347.5	367.5
72.5°	153.8	197.5	267.5	315.0	315.0
75°	118.8	167.5	238.8	237.5	230.0
77.5°	90.0	140.0	196.3	167.5	168.8
80°	65.0	112.5	123.8	123.8	125.0
82.5°	43.8	86.3	80.0	78.8	81.3
85°	26.3	40.0	41.3	37.5	38.8
87.5°	12.5	13.8	11.3	7.5	7.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)