

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: P263212

Luminaire Tested: **24CZ-LD5-45SE-SQP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263212  
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-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2334.2 lumens  
Efficiency: N/A  
Efficacy: 65.3 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

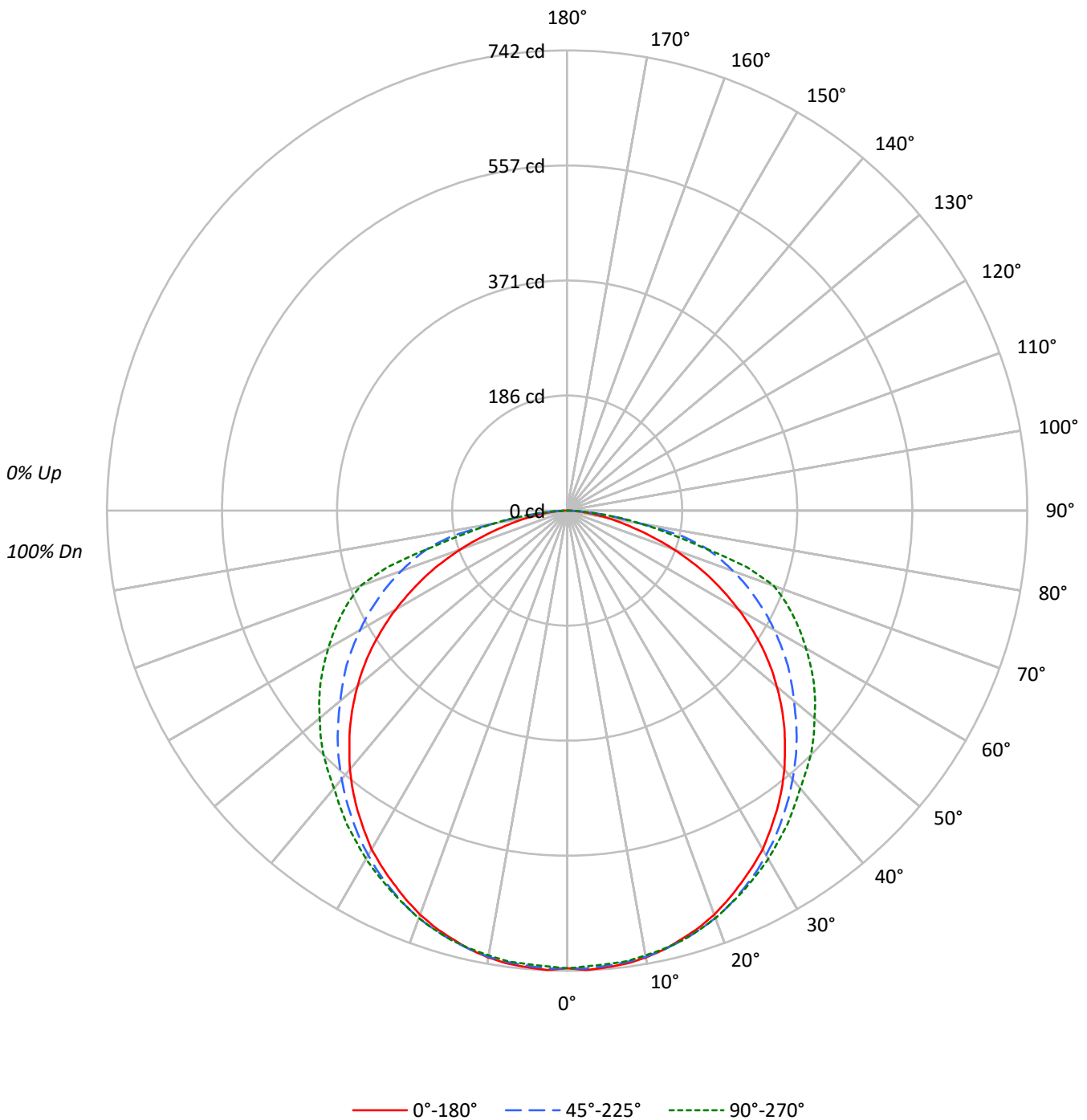
Input Watts (W): 35.772264  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	993	993	993
5°	998	995	992
10°	1000	998	995
15°	996	999	999
20°	993	1001	1001
25°	984	999	1002
30°	980	997	1008
35°	968	994	1016
40°	957	993	1027
45°	943	996	1058
50°	924	999	1090
55°	899	1018	1140
60°	860	1038	1197
65°	806	1071	1282
70°	721	1119	1395
75°	595	1197	1153
80°	486	925	934
85°	391	614	577



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.1	3.0
10°-20°	202.2	8.7
20°-30°	309.1	13.2
30°-40°	378.0	16.2
40°-50°	404.5	17.3
50°-60°	387.3	16.6
60°-70°	327.6	14.0
70°-80°	207.7	8.9
80°-90°	47.8	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°	581.4	24.9
0°-40°	959.3	41.1
0°-60°	1751.1	75.0
0°-90°	2334.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2334.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	738	738	738	738	738	
5°	739	736	737	736	734	70
15°	715	714	717	717	717	202
25°	663	663	673	675	675	306
35°	590	593	605	614	618	369
45°	496	504	523	545	556	382
55°	383	396	434	470	486	342
65°	253	277	336	382	403	249
75°	114	162	230	229	222	125
85°	25	39	40	36	37	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	737.9	737.9	737.9	737.9	737.9
2.5°	741.5	737.9	739.1	737.9	735.5
5°	739.1	735.5	736.7	735.5	734.2
7.5°	736.7	733.0	734.2	733.0	733.0
10°	731.8	728.2	730.6	729.4	728.2
12.5°	724.6	722.2	724.6	723.4	723.4
15°	715.0	713.8	717.4	717.4	717.4
17.5°	705.3	704.1	708.9	708.9	708.9
20°	693.3	692.1	699.3	699.3	699.3
22.5°	678.8	677.6	687.2	687.2	687.2
25°	663.1	663.1	672.8	675.2	675.2
27.5°	647.4	647.4	658.3	661.9	661.9
30°	630.6	630.6	641.4	646.2	648.6
32.5°	610.1	612.5	624.5	630.6	633.0
35°	589.6	593.2	605.2	613.7	618.5
37.5°	567.9	571.5	586.0	595.6	601.6
40°	545.0	549.8	565.5	577.5	584.7
42.5°	519.6	526.9	545.0	560.6	570.3
45°	495.5	504.0	523.3	545.0	555.8
47.5°	469.0	478.6	500.4	528.1	538.9
50°	441.3	450.9	477.4	508.8	520.8
52.5°	413.5	424.4	455.7	489.5	504.0
55°	383.4	395.5	434.0	470.2	485.9
57.5°	352.1	366.5	409.9	448.5	465.4
60°	319.5	337.6	385.8	426.8	444.9
62.5°	285.7	307.4	361.7	405.1	424.4
65°	253.2	277.3	336.4	382.2	402.7
67.5°	218.2	248.4	311.1	360.5	379.8
70°	183.3	218.2	284.5	335.2	354.5
72.5°	148.3	190.5	258.0	303.8	303.8
75°	114.5	161.6	230.3	229.1	221.8
77.5°	86.8	135.0	189.3	161.6	162.8
80°	62.7	108.5	119.4	119.4	120.6
82.5°	42.2	83.2	77.2	76.0	78.4
85°	25.3	38.6	39.8	36.2	37.4
87.5°	12.1	13.3	10.9	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)