

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: P263219

Luminaire Tested: **24CZ-LD5-50SE-SQP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263219  
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-LD5-50SE-SQP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3039.8 lumens  
Efficiency: N/A  
Efficacy: 74.6 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

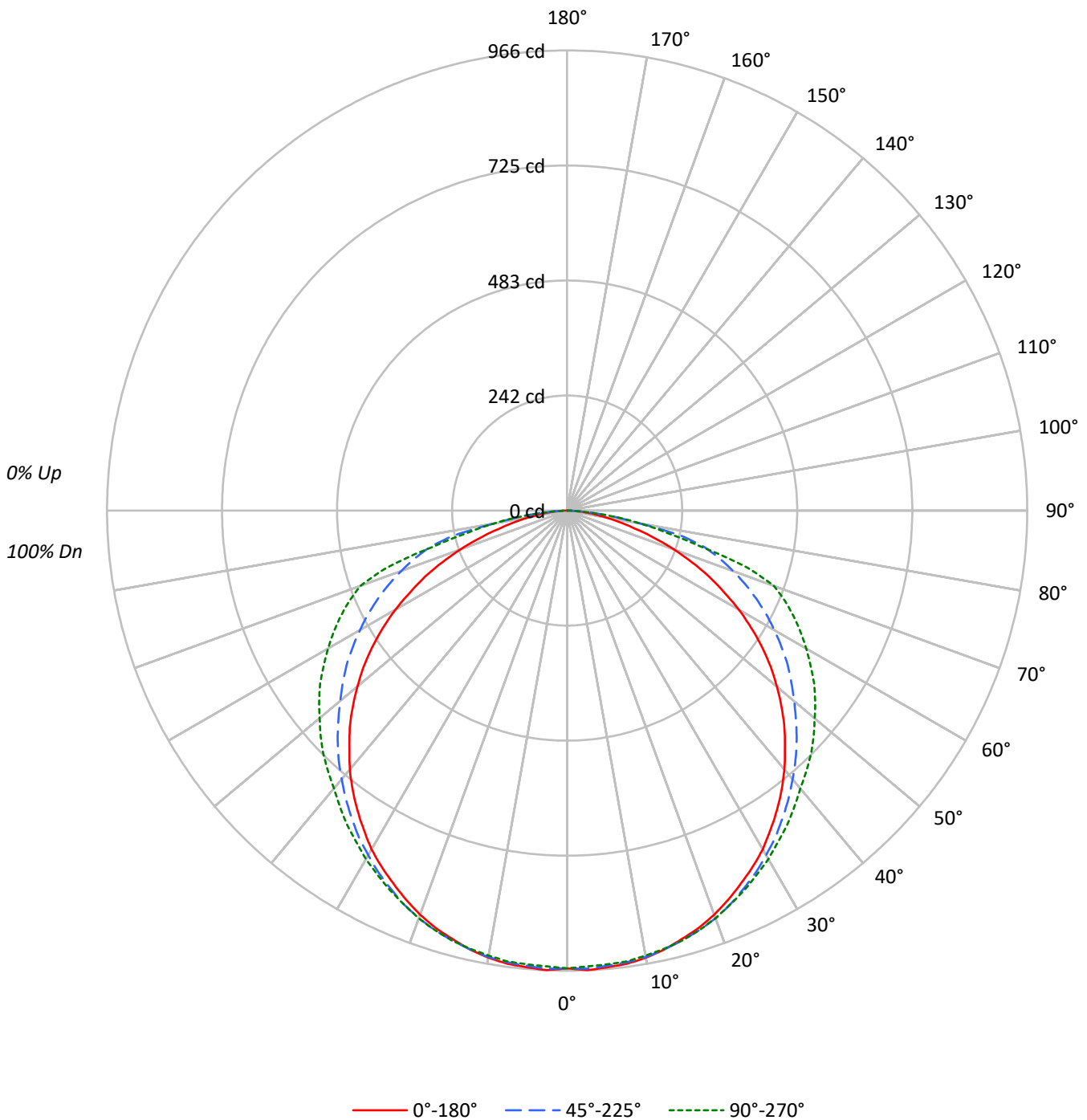
Input Watts (W): 40.743486  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1293	1293	1293
5°	1300	1296	1291
10°	1302	1300	1296
15°	1297	1301	1301
20°	1293	1304	1304
25°	1282	1301	1305
30°	1276	1298	1312
35°	1261	1295	1323
40°	1247	1293	1338
45°	1228	1297	1377
50°	1203	1302	1420
55°	1171	1326	1484
60°	1120	1352	1559
65°	1050	1395	1670
70°	939	1458	1816
75°	776	1559	1502
80°	632	1204	1216
85°	509	800	752



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.3	3.0
10°-20°	263.4	8.7
20°-30°	402.5	13.2
30°-40°	492.3	16.2
40°-50°	526.7	17.3
50°-60°	504.4	16.6
60°-70°	426.7	14.0
70°-80°	270.5	8.9
80°-90°	62.2	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°	757.1	24.9
0°-40°	1249.4	41.1
0°-60°	2280.5	75.0
0°-90°	3039.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3039.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	961	961	961	961	961	
5°	962	958	959	958	956	92
15°	931	930	934	934	934	263
25°	864	864	876	879	879	398
35°	768	772	788	799	806	480
45°	645	656	681	710	724	497
55°	499	515	565	612	633	445
65°	330	361	438	498	524	325
75°	149	210	300	298	289	162
85°	33	50	52	47	49	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	960.9	960.9	960.9	960.9	960.9
2.5°	965.6	960.9	962.5	960.9	957.8
5°	962.5	957.8	959.4	957.8	956.2
7.5°	959.4	954.7	956.2	954.7	954.7
10°	953.1	948.4	951.5	949.9	948.4
12.5°	943.7	940.5	943.7	942.1	942.1
15°	931.1	929.5	934.2	934.2	934.2
17.5°	918.5	917.0	923.3	923.3	923.3
20°	902.8	901.3	910.7	910.7	910.7
22.5°	884.0	882.4	895.0	895.0	895.0
25°	863.6	863.6	876.1	879.3	879.3
27.5°	843.2	843.2	857.3	862.0	862.0
30°	821.2	821.2	835.3	841.6	844.7
32.5°	794.5	797.6	813.3	821.2	824.3
35°	767.8	772.5	788.2	799.2	805.5
37.5°	739.5	744.3	763.1	775.7	783.5
40°	709.7	716.0	736.4	752.1	761.5
42.5°	676.7	686.2	709.7	730.1	742.7
45°	645.3	656.3	681.4	709.7	723.8
47.5°	610.8	623.4	651.6	687.7	701.9
50°	574.7	587.2	621.8	662.6	678.3
52.5°	538.6	552.7	593.5	637.5	656.3
55°	499.3	515.0	565.3	612.4	632.8
57.5°	458.5	477.3	533.9	584.1	606.1
60°	416.1	439.6	502.5	555.8	579.4
62.5°	372.1	400.4	471.0	527.6	552.7
65°	329.7	361.1	438.1	497.7	524.4
67.5°	284.2	323.5	405.1	469.5	494.6
70°	238.7	284.2	370.6	436.5	461.6
72.5°	193.1	248.1	336.0	395.7	395.7
75°	149.2	210.4	299.9	298.3	288.9
77.5°	113.1	175.9	246.5	210.4	212.0
80°	81.6	141.3	155.4	155.4	157.0
82.5°	55.0	108.3	100.5	98.9	102.1
85°	33.0	50.2	51.8	47.1	48.7
87.5°	15.7	17.3	14.1	9.4	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)