

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: P263176

Luminaire Tested: **24CZ-LD5-55-SQP-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263176  
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-LD5-55-SQP-UNV-L93050-W2A1-U-5000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3431.6 lumens  
Efficiency: N/A  
Efficacy: 82.2 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

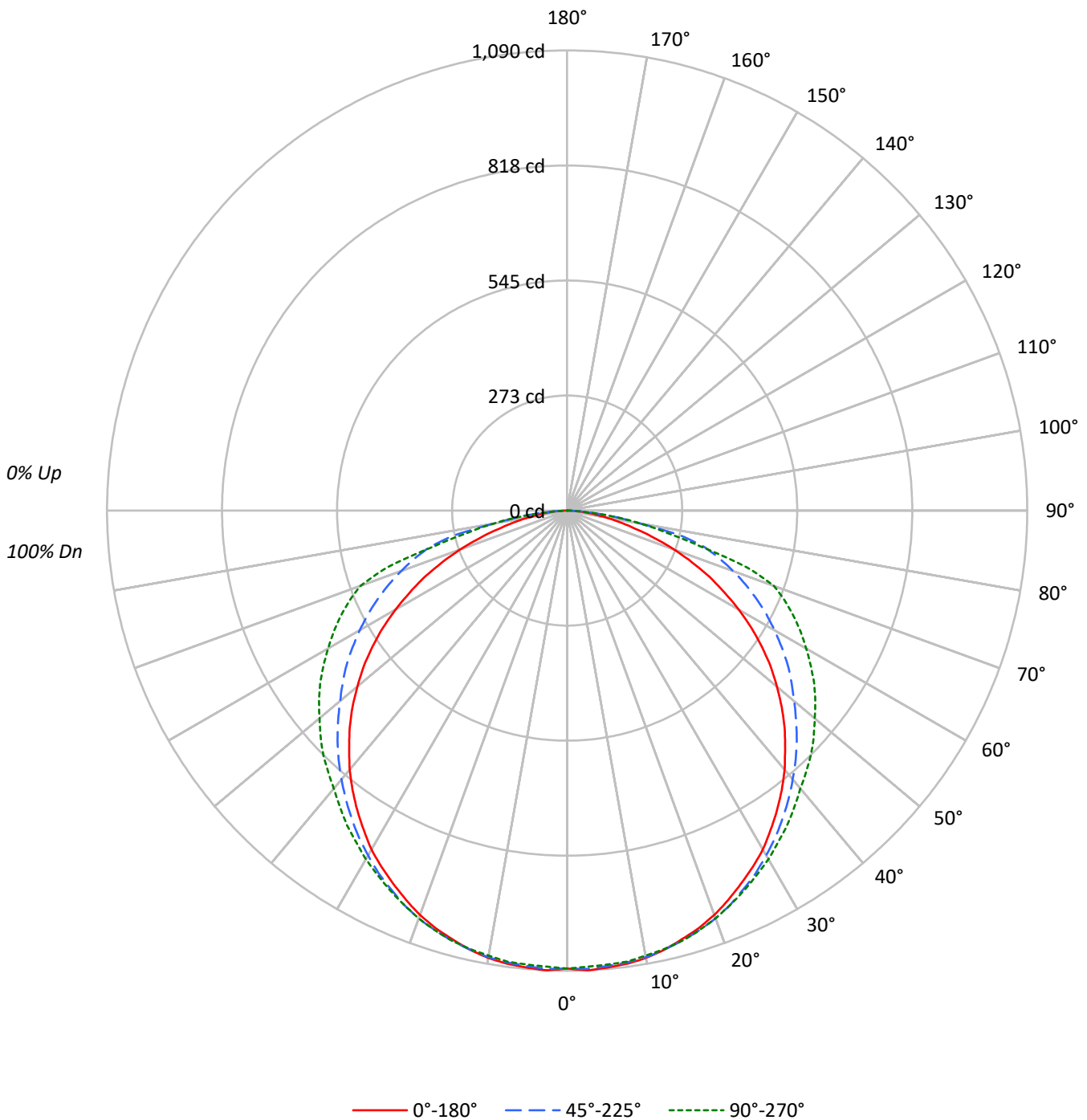
Input Watts (W): 41.766486  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1460	1460	1460
5°	1468	1463	1458
10°	1470	1468	1463
15°	1464	1469	1469
20°	1459	1472	1472
25°	1447	1468	1474
30°	1440	1465	1482
35°	1424	1462	1494
40°	1407	1460	1510
45°	1386	1464	1555
50°	1358	1469	1603
55°	1322	1497	1676
60°	1264	1526	1760
65°	1185	1574	1885
70°	1060	1646	2050
75°	875	1760	1695
80°	714	1360	1374
85°	574	903	848



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.0	3.0
10°-20°	297.3	8.7
20°-30°	454.4	13.2
30°-40°	555.7	16.2
40°-50°	594.6	17.3
50°-60°	569.4	16.6
60°-70°	481.7	14.0
70°-80°	305.3	8.9
80°-90°	70.2	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°	854.7	24.9
0°-40°	1410.4	41.1
0°-60°	2574.4	75.0
0°-90°	3431.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3431.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1087	1081	1083	1081	1080	103
15°	1051	1049	1055	1055	1055	297
25°	975	975	989	993	993	450
35°	867	872	890	902	909	542
45°	728	741	769	801	817	561
55°	564	581	638	691	714	503
65°	372	408	494	562	592	367
75°	168	238	339	337	326	183
85°	37	57	58	53	55	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1084.8	1084.8	1084.8	1084.8	1084.8
2.5°	1090.1	1084.8	1086.6	1084.8	1081.3
5°	1086.6	1081.3	1083.0	1081.3	1079.5
7.5°	1083.0	1077.7	1079.5	1077.7	1077.7
10°	1075.9	1070.6	1074.2	1072.4	1070.6
12.5°	1065.3	1061.8	1065.3	1063.5	1063.5
15°	1051.1	1049.3	1054.7	1054.7	1054.7
17.5°	1036.9	1035.2	1042.3	1042.3	1042.3
20°	1019.2	1017.4	1028.1	1028.1	1028.1
22.5°	997.9	996.2	1010.3	1010.3	1010.3
25°	974.9	974.9	989.1	992.6	992.6
27.5°	951.9	951.9	967.8	973.1	973.1
30°	927.0	927.0	943.0	950.1	953.6
32.5°	896.9	900.5	918.2	927.0	930.6
35°	866.8	872.1	889.8	902.2	909.3
37.5°	834.9	840.2	861.5	875.6	884.5
40°	801.2	808.3	831.3	849.0	859.7
42.5°	764.0	774.6	801.2	824.2	838.4
45°	728.5	740.9	769.3	801.2	817.1
47.5°	689.5	703.7	735.6	776.4	792.3
50°	648.8	662.9	701.9	748.0	765.7
52.5°	608.0	623.9	670.0	719.7	740.9
55°	563.7	581.4	638.1	691.3	714.3
57.5°	517.6	538.9	602.7	659.4	684.2
60°	469.7	496.3	567.2	627.5	654.1
62.5°	420.1	452.0	531.8	595.6	623.9
65°	372.2	407.7	494.5	561.9	592.0
67.5°	320.8	365.1	457.3	530.0	558.4
70°	269.4	320.8	418.3	492.8	521.1
72.5°	218.0	280.1	379.3	446.7	446.7
75°	168.4	237.5	338.6	336.8	326.1
77.5°	127.6	198.5	278.3	237.5	239.3
80°	92.2	159.5	175.5	175.5	177.3
82.5°	62.0	122.3	113.4	111.7	115.2
85°	37.2	56.7	58.5	53.2	54.9
87.5°	17.7	19.5	16.0	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)