

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: P263604

Luminaire Tested: **24CZ-LD5-65-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263604  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-65-RDP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4170.0 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

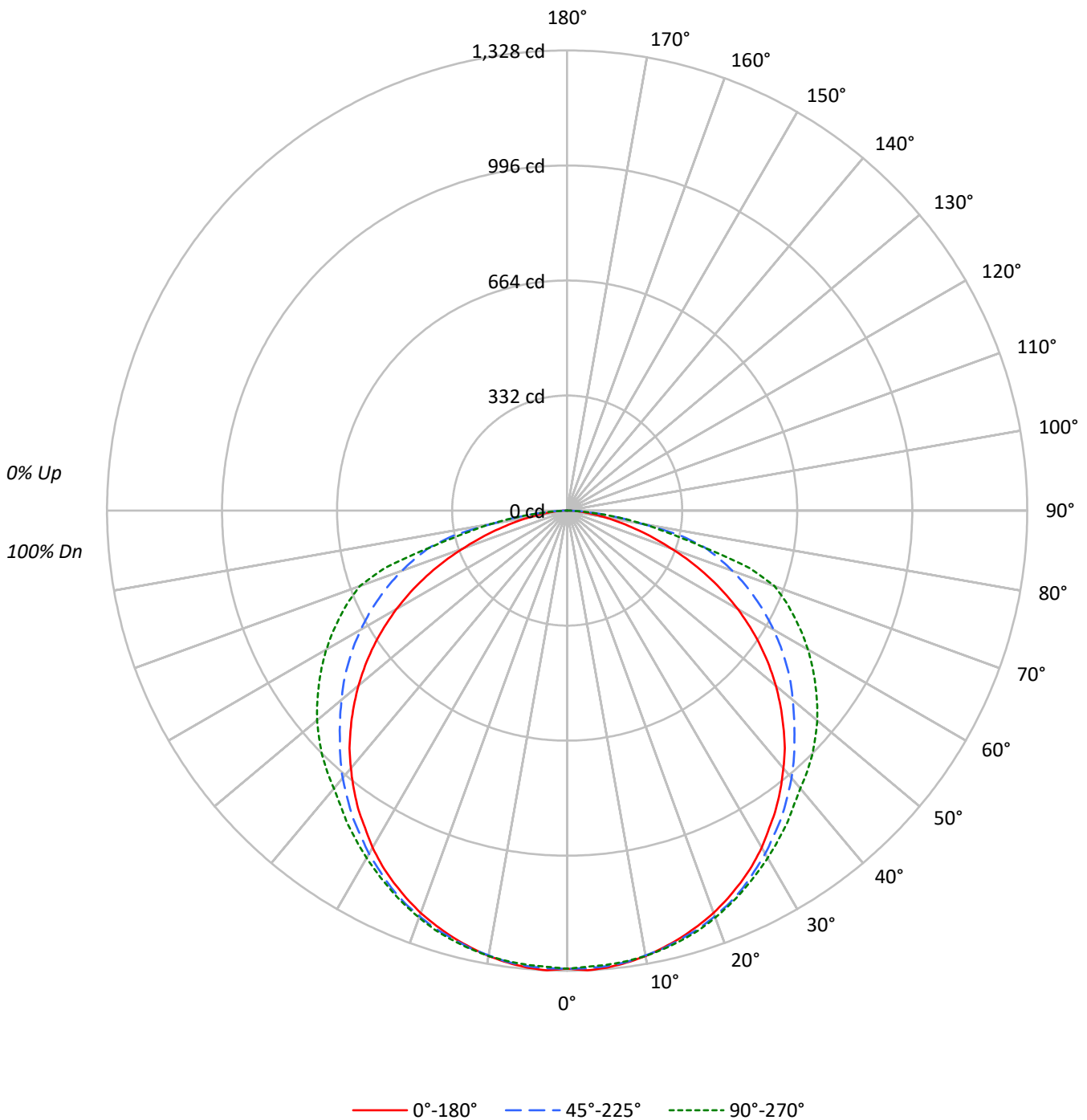
Input Watts (W): 50.189868  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	62	58	56
4	81	68	59	52	78	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	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	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°	1779	1779	1779
5°	1788	1783	1777
10°	1784	1781	1784
15°	1776	1781	1787
20°	1769	1784	1790
25°	1758	1783	1792
30°	1744	1776	1799
35°	1726	1773	1814
40°	1705	1770	1839
45°	1680	1765	1902
50°	1646	1779	1972
55°	1599	1810	2051
60°	1530	1851	2160
65°	1425	1908	2300
70°	1260	1995	2503
75°	1056	2134	2102
80°	843	1686	1750
85°	665	1141	1045



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.4	3.0
10°-20°	360.8	8.7
20°-30°	551.2	13.2
30°-40°	673.8	16.2
40°-50°	721.3	17.3
50°-60°	691.8	16.6
60°-70°	584.1	14.0
70°-80°	373.3	9.0
80°-90°	88.3	2.1
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°	1037.4	24.9
0°-40°	1711.2	41.0
0°-60°	3124.3	74.9
0°-90°	4170.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4170.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1322	1322	1322	1322	1322	
5°	1324	1316	1320	1318	1316	126
15°	1275	1271	1279	1283	1283	360
25°	1184	1182	1201	1205	1207	546
35°	1051	1059	1080	1094	1104	657
45°	883	897	928	971	1000	681
55°	682	704	772	842	874	608
65°	448	491	599	684	722	441
75°	203	289	410	419	404	219
85°	43	72	74	72	68	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1321.9	1321.9	1321.9	1321.9	1321.9
2.5°	1328.1	1319.9	1321.9	1321.9	1317.8
5°	1324.0	1315.8	1319.9	1317.8	1315.8
7.5°	1315.8	1309.6	1313.7	1313.7	1311.7
10°	1305.5	1299.4	1303.5	1305.5	1305.5
12.5°	1291.1	1287.0	1293.2	1293.2	1295.3
15°	1274.7	1270.6	1278.8	1282.9	1282.9
17.5°	1256.2	1254.2	1264.5	1266.5	1268.6
20°	1235.7	1233.7	1246.0	1246.0	1250.1
22.5°	1211.1	1209.0	1225.5	1225.5	1229.6
25°	1184.4	1182.4	1200.8	1204.9	1207.0
27.5°	1155.7	1153.6	1172.1	1178.2	1182.4
30°	1122.8	1122.8	1143.4	1151.6	1157.7
32.5°	1085.9	1092.0	1110.5	1122.8	1131.0
35°	1051.0	1059.2	1079.7	1094.1	1104.3
37.5°	1012.0	1020.2	1042.8	1061.2	1073.6
40°	970.9	981.2	1007.9	1028.4	1046.9
42.5°	929.9	940.1	968.9	999.7	1024.3
45°	882.7	897.0	927.8	970.9	999.7
47.5°	835.4	849.8	888.8	942.2	970.9
50°	786.2	802.6	849.8	911.4	942.2
52.5°	734.9	753.3	812.9	878.6	909.3
55°	681.5	704.1	771.8	841.6	874.4
57.5°	626.1	650.7	730.8	804.7	839.6
60°	568.6	599.4	687.7	765.7	802.6
62.5°	509.1	546.0	644.5	724.6	763.6
65°	447.5	490.6	599.4	683.5	722.5
67.5°	383.9	441.3	554.2	642.5	681.5
70°	320.2	388.0	507.0	597.3	636.3
72.5°	260.7	338.7	459.8	544.0	552.2
75°	203.2	289.4	410.5	418.7	404.4
77.5°	151.9	240.2	338.7	301.7	299.7
80°	108.8	193.0	217.6	223.7	225.8
82.5°	71.8	145.7	141.6	145.7	143.7
85°	43.1	71.8	73.9	71.8	67.7
87.5°	20.5	26.7	20.5	18.5	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)