

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: P261067

Luminaire Tested: **24CZ-LD5-50-S-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261067  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50-S-UNV-L93050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3988.5 lumens  
Efficiency: N/A  
Efficacy: 109.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

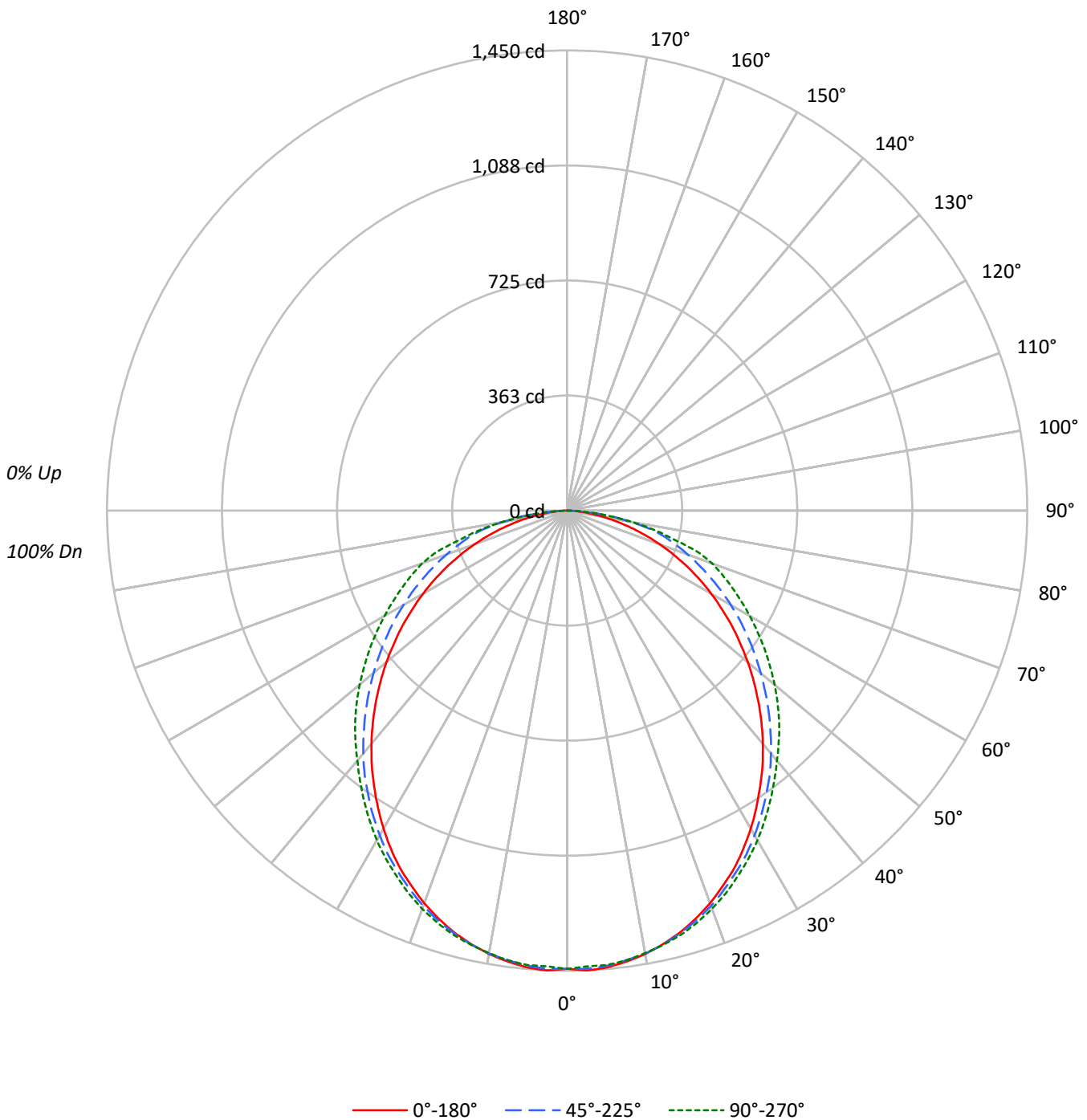
Input Watts (W): 36.533376  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50					50			
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1943	1943	1943
5°	1952	1945	1941
10°	1938	1936	1935
15°	1917	1921	1928
20°	1885	1898	1912
25°	1848	1868	1887
30°	1798	1835	1864
35°	1742	1796	1833
40°	1685	1755	1806
45°	1621	1709	1798
50°	1556	1667	1786
55°	1488	1631	1781
60°	1411	1604	1789
65°	1327	1585	1825
70°	1221	1592	1911
75°	1083	1649	1780
80°	905	1563	1604
85°	676	1250	1147



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.5	3.4
10°-20°	388.2	9.7
20°-30°	578.6	14.5
30°-40°	681.1	17.1
40°-50°	692.1	17.4
50°-60°	622.3	15.6
60°-70°	491.6	12.3
70°-80°	311.9	7.8
80°-90°	86.1	2.2
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°	1103.4	27.7
0°-40°	1784.5	44.7
0°-60°	3098.9	77.7
0°-90°	3988.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3988.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1445	1433	1440	1437	1437	137
15°	1376	1370	1379	1383	1384	388
25°	1245	1244	1258	1266	1271	572
35°	1060	1067	1094	1106	1116	663
45°	852	864	898	925	945	657
55°	634	650	695	740	759	567
65°	417	438	498	552	573	413
75°	208	244	317	345	342	222
85°	44	76	81	74	74	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1443.9	1443.9	1443.9	1443.9	1443.9
2.5°	1450.5	1439.9	1445.2	1442.6	1437.3
5°	1445.2	1433.3	1439.9	1437.3	1437.3
7.5°	1433.3	1424.0	1429.3	1428.0	1429.3
10°	1418.7	1409.4	1417.3	1417.3	1416.0
12.5°	1398.8	1390.8	1400.1	1400.1	1401.4
15°	1376.2	1369.6	1378.9	1382.8	1384.2
17.5°	1348.3	1341.7	1353.6	1357.6	1361.6
20°	1316.5	1313.8	1325.8	1329.8	1335.1
22.5°	1280.7	1280.7	1292.6	1297.9	1305.9
25°	1244.8	1243.5	1258.1	1266.1	1271.4
27.5°	1202.4	1203.7	1222.3	1230.2	1236.9
30°	1157.2	1159.9	1181.1	1190.4	1199.7
32.5°	1109.5	1114.8	1138.7	1149.3	1158.6
35°	1060.4	1067.0	1093.5	1105.5	1116.1
37.5°	1011.3	1020.5	1048.4	1060.4	1072.3
40°	959.5	967.5	999.3	1013.9	1028.5
42.5°	906.4	917.0	948.9	970.1	987.4
45°	852.0	863.9	898.4	925.0	944.9
47.5°	797.6	813.5	846.7	882.5	899.8
50°	743.2	759.1	796.3	836.1	853.3
52.5°	687.4	703.4	745.8	787.0	805.6
55°	634.4	650.3	695.4	740.5	759.1
57.5°	578.6	595.9	646.3	692.7	711.3
60°	524.2	541.5	595.9	645.0	664.9
62.5°	471.1	489.7	546.8	598.5	618.4
65°	416.7	437.9	497.7	552.1	573.3
67.5°	363.6	387.5	449.9	507.0	529.5
70°	310.5	338.4	404.8	463.2	485.7
72.5°	258.8	289.3	359.6	418.0	430.0
75°	208.4	244.2	317.2	345.0	342.4
77.5°	160.6	200.4	269.4	274.7	282.7
80°	116.8	160.6	201.7	212.3	207.0
82.5°	77.0	120.8	144.7	139.3	138.0
85°	43.8	75.6	81.0	74.3	74.3
87.5°	18.6	30.5	26.5	19.9	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)