

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: P260622

Luminaire Tested: **24CZ-LD5-50SE-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P260622  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25697)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50SE-UNV-L83050-W2A1-U-3000K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4727.0 lumens  
Efficiency: N/A  
Efficacy: 119.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

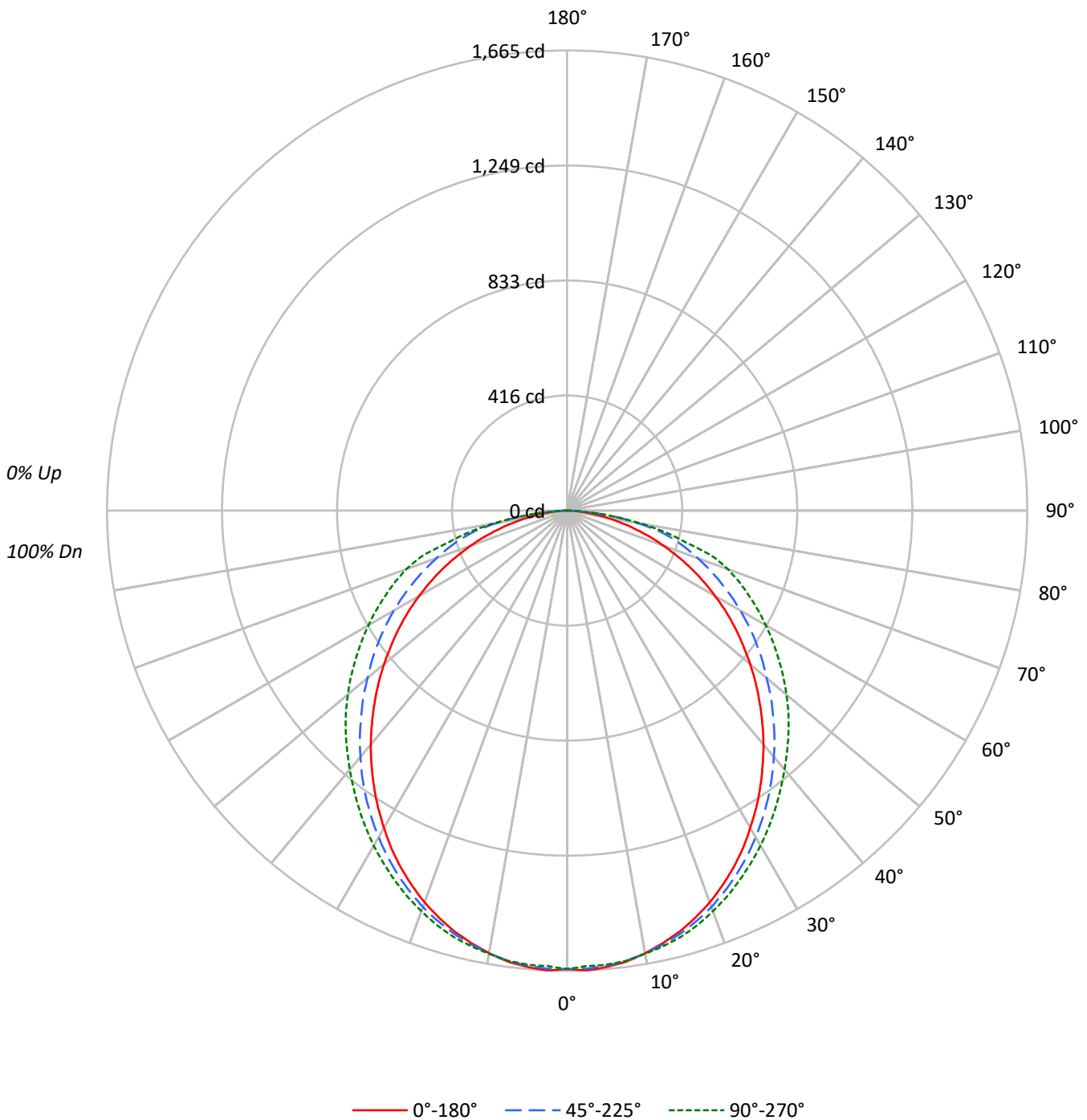
Input Watts (W): 39.631578  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	60	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	2232	2232	2232
5°	2238	2232	2227
10°	2222	2222	2225
15°	2196	2207	2223
20°	2160	2185	2208
25°	2114	2155	2191
30°	2059	2120	2175
35°	2002	2084	2159
40°	1942	2044	2149
45°	1875	2005	2156
50°	1809	1972	2168
55°	1743	1959	2191
60°	1664	1947	2234
65°	1577	1948	2309
70°	1458	1980	2432
75°	1304	2070	2314
80°	1091	1981	2119
85°	824	1524	1450



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.8	3.3
10°-20°	446.2	9.4
20°-30°	667.0	14.1
30°-40°	791.3	16.7
40°-50°	814.4	17.2
50°-60°	747.1	15.8
60°-70°	604.1	12.8
70°-80°	392.1	8.3
80°-90°	108.1	2.3
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°	1269.9	26.9
0°-40°	2061.2	43.6
0°-60°	3622.8	76.6
0°-90°	4727.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4727.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1659	1659	1659	1659	1659	
5°	1657	1646	1652	1651	1649	157
15°	1576	1570	1584	1591	1596	444
25°	1424	1426	1452	1465	1476	656
35°	1219	1228	1269	1296	1314	762
45°	986	1002	1054	1104	1133	761
55°	743	766	835	903	934	664
65°	495	524	612	693	725	489
75°	251	298	398	445	445	267
85°	53	91	99	96	94	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1658.9	1658.9	1658.9	1658.9	1658.9
2.5°	1665.4	1652.5	1658.9	1657.3	1649.2
5°	1657.3	1646.0	1652.5	1650.8	1649.2
7.5°	1646.0	1634.7	1642.7	1641.1	1642.7
10°	1626.6	1616.9	1626.6	1628.2	1628.2
12.5°	1602.3	1594.2	1607.1	1610.4	1613.6
15°	1576.4	1569.9	1584.5	1591.0	1595.8
17.5°	1544.0	1539.2	1557.0	1565.1	1571.5
20°	1508.4	1506.8	1526.2	1534.3	1542.4
22.5°	1468.0	1468.0	1490.6	1500.3	1511.7
25°	1424.3	1425.9	1451.8	1464.7	1476.0
27.5°	1377.3	1378.9	1409.7	1425.9	1438.8
30°	1325.5	1332.0	1364.4	1385.4	1400.0
32.5°	1273.7	1281.8	1317.4	1341.7	1357.9
35°	1218.7	1228.4	1268.9	1296.4	1314.2
37.5°	1162.1	1173.4	1217.1	1247.8	1268.9
40°	1105.4	1118.4	1163.7	1199.3	1223.6
42.5°	1045.5	1060.1	1110.3	1152.4	1178.2
45°	985.6	1001.8	1053.6	1103.8	1132.9
47.5°	925.8	945.2	1000.2	1055.2	1086.0
50°	864.3	883.7	941.9	1005.1	1035.8
52.5°	802.8	825.4	890.2	954.9	985.6
55°	742.9	765.5	835.1	903.1	933.9
57.5°	681.4	704.0	780.1	851.3	882.1
60°	618.3	644.2	723.5	796.3	830.3
62.5°	556.8	584.3	668.4	746.1	778.5
65°	495.3	524.4	611.8	692.7	725.1
67.5°	432.1	466.1	556.8	639.3	673.3
70°	370.6	407.9	503.3	585.9	618.3
72.5°	310.7	351.2	449.9	534.1	553.5
75°	250.9	297.8	398.1	445.1	445.1
77.5°	194.2	246.0	339.9	357.7	367.4
80°	140.8	197.5	255.7	276.8	273.5
82.5°	93.9	150.5	182.9	182.9	178.0
85°	53.4	90.6	98.7	95.5	93.9
87.5°	22.7	34.0	30.8	24.3	21.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)