

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: P261120

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261120
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-LD5-50SE-S-UNV-L93050-W2A1-U-4500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4765.3 lumens
Efficiency: N/A
Efficacy: 115.2 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

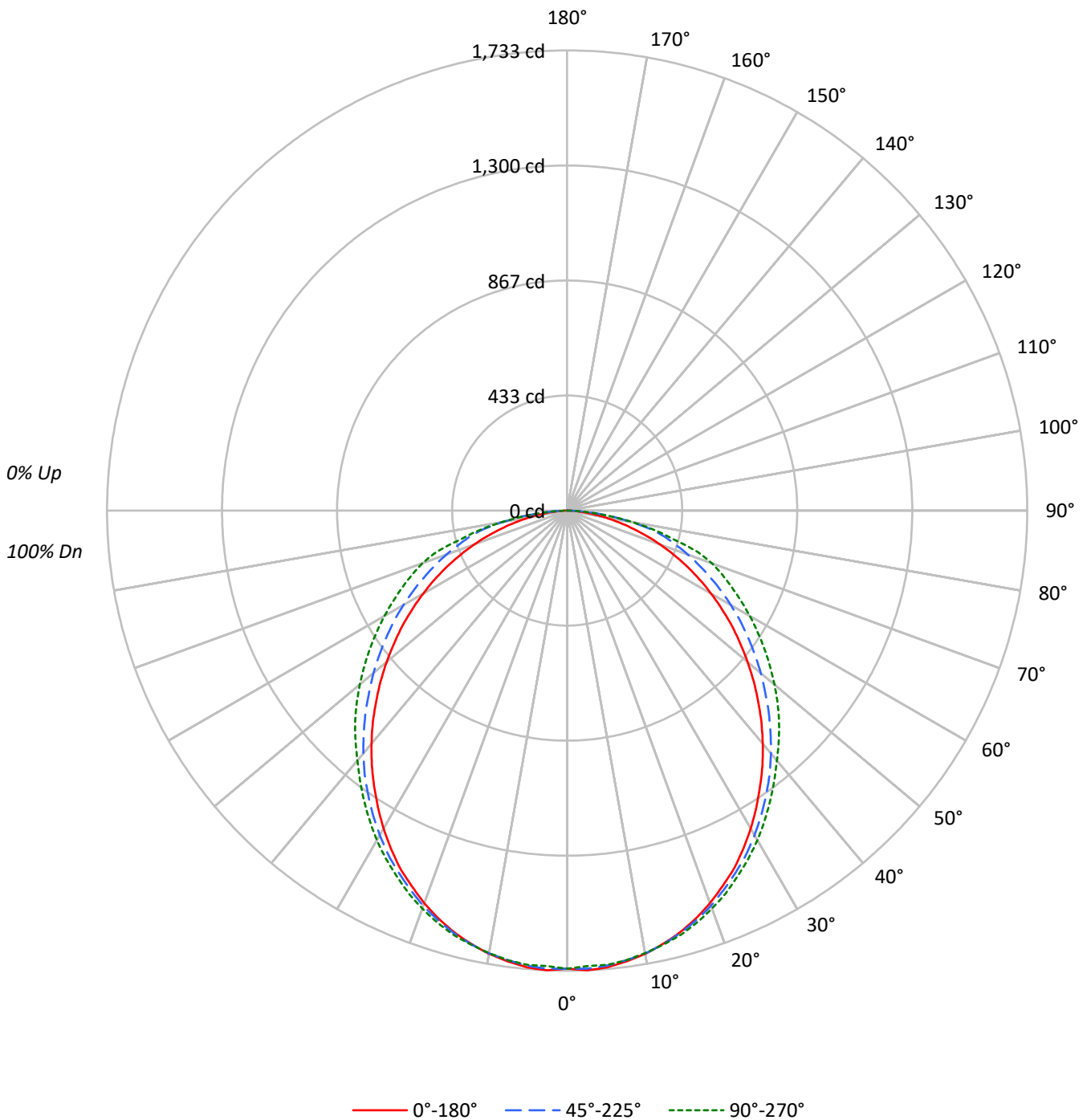
Input Watts (W): 41.378862
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2321	2321	2321
5°	2332	2324	2319
10°	2316	2314	2311
15°	2290	2295	2304
20°	2252	2268	2284
25°	2208	2231	2255
30°	2148	2192	2227
35°	2081	2146	2190
40°	2014	2097	2158
45°	1937	2042	2148
50°	1859	1991	2134
55°	1778	1949	2128
60°	1685	1916	2138
65°	1585	1893	2181
70°	1459	1902	2283
75°	1294	1970	2127
80°	1081	1867	1917
85°	807	1493	1371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	163.1	3.4
10°-20°	463.9	9.7
20°-30°	691.3	14.5
30°-40°	813.7	17.1
40°-50°	827.0	17.4
50°-60°	743.5	15.6
60°-70°	587.4	12.3
70°-80°	372.6	7.8
80°-90°	102.8	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°	1318.3	27.7
0°-40°	2132.0	44.7
0°-60°	3702.5	77.7
0°-90°	4765.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4765.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1725	1725	1725	1725	1725	
5°	1727	1712	1720	1717	1717	164
15°	1644	1636	1647	1652	1654	463
25°	1487	1486	1503	1513	1519	684
35°	1267	1275	1306	1321	1334	793
45°	1018	1032	1073	1105	1129	785
55°	758	777	831	885	907	677
65°	498	523	595	660	685	493
75°	249	292	379	412	409	265
85°	52	90	97	89	89	64
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1725.1	1725.1	1725.1	1725.1	1725.1
2.5°	1733.1	1720.4	1726.7	1723.5	1717.2
5°	1726.7	1712.4	1720.4	1717.2	1717.2
7.5°	1712.4	1701.3	1707.7	1706.1	1707.7
10°	1695.0	1683.9	1693.4	1693.4	1691.8
12.5°	1671.2	1661.7	1672.8	1672.8	1674.4
15°	1644.3	1636.3	1647.4	1652.2	1653.8
17.5°	1611.0	1603.0	1617.3	1622.1	1626.8
20°	1572.9	1569.7	1584.0	1588.8	1595.1
22.5°	1530.1	1530.1	1544.4	1550.7	1560.2
25°	1487.3	1485.7	1503.1	1512.7	1519.0
27.5°	1436.5	1438.1	1460.3	1469.8	1477.8
30°	1382.6	1385.8	1411.2	1422.3	1433.4
32.5°	1325.6	1331.9	1360.4	1373.1	1384.2
35°	1266.9	1274.8	1306.5	1320.8	1333.5
37.5°	1208.2	1219.3	1252.6	1266.9	1281.2
40°	1146.4	1155.9	1194.0	1211.4	1228.8
42.5°	1083.0	1095.6	1133.7	1159.1	1179.7
45°	1018.0	1032.2	1073.4	1105.2	1128.9
47.5°	952.9	972.0	1011.6	1054.4	1075.0
50°	887.9	907.0	951.4	998.9	1019.5
52.5°	821.3	840.4	891.1	940.3	962.5
55°	757.9	776.9	830.9	884.8	907.0
57.5°	691.3	711.9	772.2	827.7	849.9
60°	626.3	646.9	711.9	770.6	794.4
62.5°	562.9	585.1	653.3	715.1	738.9
65°	497.9	523.2	594.6	659.6	685.0
67.5°	434.5	463.0	537.5	605.7	632.7
70°	371.0	404.3	483.6	553.4	580.3
72.5°	309.2	345.7	429.7	499.5	513.7
75°	248.9	291.7	379.0	412.3	409.1
77.5°	191.9	239.4	321.9	328.2	337.7
80°	139.5	191.9	241.0	253.7	247.4
82.5°	92.0	144.3	172.8	166.5	164.9
85°	52.3	90.4	96.7	88.8	88.8
87.5°	22.2	36.5	31.7	23.8	22.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)