

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: P261118

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P261118
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-3500K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4336.8 lumens
Efficiency: N/A
Efficacy: 107.2 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

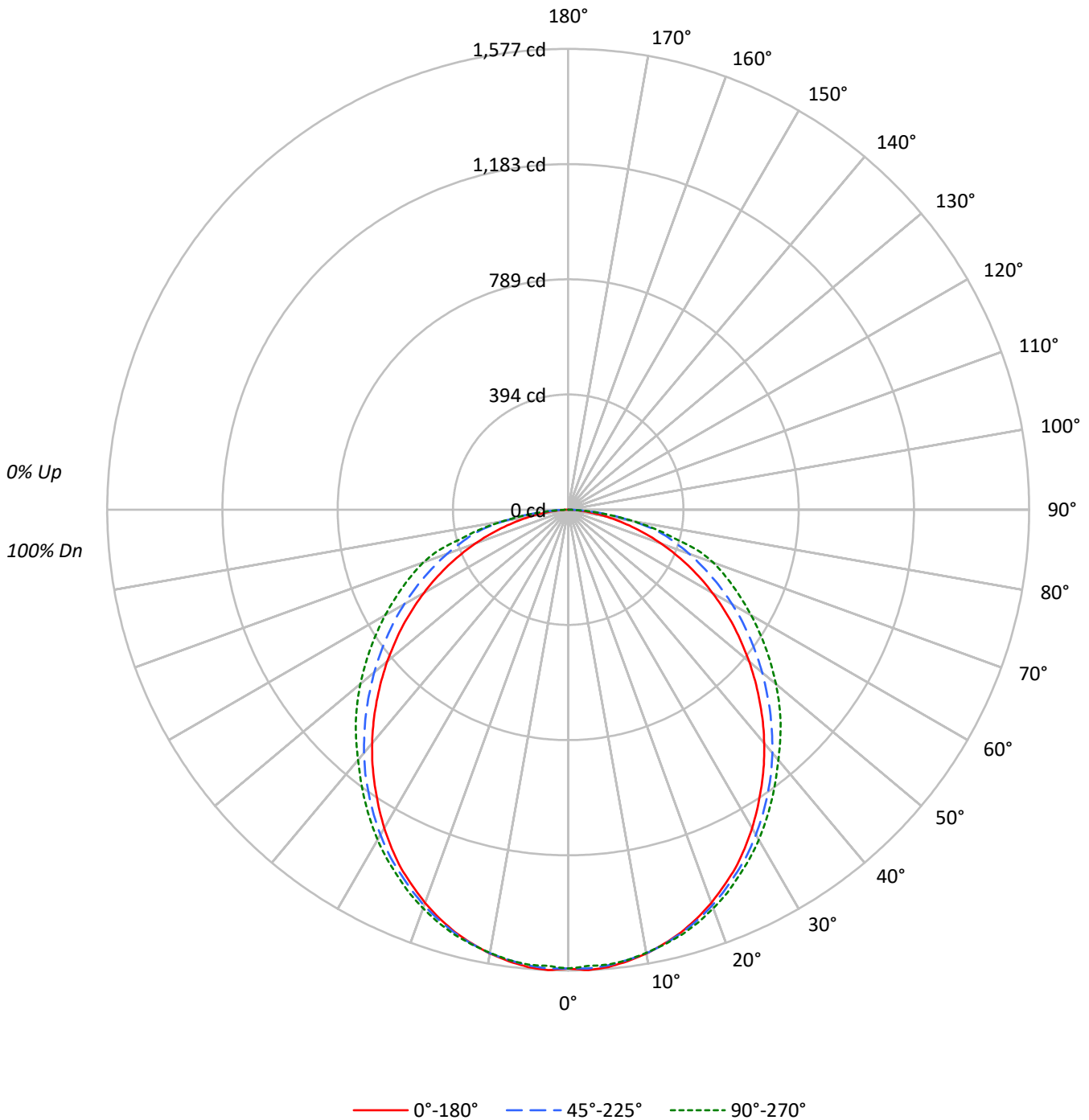
Input Watts (W): 40.465509
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2112	2112	2112
5°	2122	2115	2111
10°	2108	2106	2104
15°	2084	2088	2096
20°	2050	2064	2079
25°	2009	2031	2052
30°	1955	1995	2027
35°	1894	1953	1993
40°	1832	1909	1964
45°	1763	1859	1955
50°	1692	1812	1942
55°	1618	1774	1936
60°	1534	1743	1945
65°	1443	1723	1985
70°	1328	1731	2078
75°	1178	1793	1935
80°	984	1699	1744
85°	735	1359	1247



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.4	3.4
10°-20°	422.2	9.7
20°-30°	629.1	14.5
30°-40°	740.6	17.1
40°-50°	752.6	17.4
50°-60°	676.6	15.6
60°-70°	534.6	12.3
70°-80°	339.1	7.8
80°-90°	93.6	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°	1199.7	27.7
0°-40°	1940.3	44.7
0°-60°	3369.5	77.7
0°-90°	4336.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4336.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1570	1570	1570	1570	1570	
5°	1571	1558	1566	1563	1563	149
15°	1496	1489	1499	1504	1505	422
25°	1354	1352	1368	1377	1382	622
35°	1153	1160	1189	1202	1214	721
45°	926	939	977	1006	1027	715
55°	690	707	756	805	825	616
65°	453	476	541	600	623	449
75°	227	266	345	375	372	241
85°	48	82	88	81	81	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1570.0	1570.0	1570.0	1570.0	1570.0
2.5°	1577.2	1565.6	1571.4	1568.5	1562.8
5°	1571.4	1558.4	1565.6	1562.8	1562.8
7.5°	1558.4	1548.3	1554.1	1552.7	1554.1
10°	1542.6	1532.5	1541.1	1541.1	1539.7
12.5°	1520.9	1512.3	1522.4	1522.4	1523.8
15°	1496.4	1489.2	1499.3	1503.6	1505.0
17.5°	1466.1	1458.9	1471.9	1476.2	1480.5
20°	1431.5	1428.6	1441.6	1445.9	1451.7
22.5°	1392.5	1392.5	1405.5	1411.2	1419.9
25°	1353.5	1352.1	1368.0	1376.6	1382.4
27.5°	1307.4	1308.8	1329.0	1337.7	1344.9
30°	1258.3	1261.2	1284.3	1294.4	1304.5
32.5°	1206.3	1212.1	1238.1	1249.6	1259.7
35°	1153.0	1160.2	1189.0	1202.0	1213.6
37.5°	1099.6	1109.7	1140.0	1153.0	1165.9
40°	1043.3	1051.9	1086.6	1102.4	1118.3
42.5°	985.6	997.1	1031.7	1054.8	1073.6
45°	926.4	939.4	976.9	1005.8	1027.4
47.5°	867.2	884.6	920.6	959.6	978.3
50°	808.1	825.4	865.8	909.1	927.8
52.5°	747.5	764.8	811.0	855.7	875.9
55°	689.8	707.1	756.1	805.2	825.4
57.5°	629.1	647.9	702.7	753.2	773.4
60°	570.0	588.7	647.9	701.3	722.9
62.5°	512.3	532.5	594.5	650.8	672.4
65°	453.1	476.2	541.1	600.3	623.4
67.5°	395.4	421.4	489.2	551.2	575.8
70°	337.7	368.0	440.1	503.6	528.1
72.5°	281.4	314.6	391.1	454.5	467.5
75°	226.6	265.5	344.9	375.2	372.3
77.5°	174.6	217.9	292.9	298.7	307.4
80°	127.0	174.6	219.3	230.9	225.1
82.5°	83.7	131.3	157.3	151.5	150.1
85°	47.6	82.3	88.0	80.8	80.8
87.5°	20.2	33.2	28.9	21.6	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)