

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: P260701

Luminaire Tested: **24CZ-LD5-50SE-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P260701
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-L93050-W2A1-U-5000K
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS
Light Source: (168) 90 CRI LEDS TUNED AT 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4671.9 lumens
Efficiency: N/A
Efficacy: 112.9 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

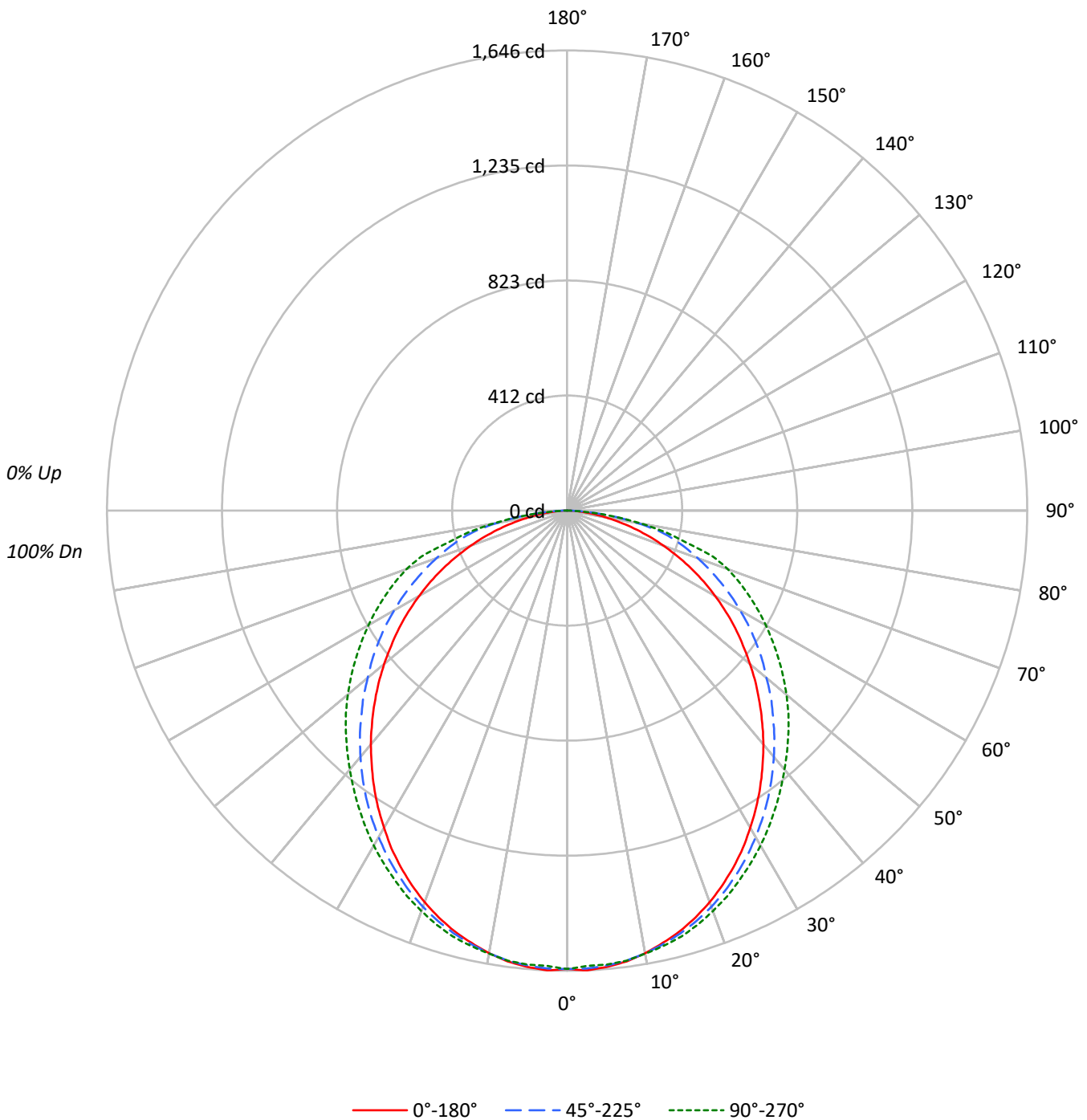
Input Watts (W): 41.378862
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2206	2206	2206
5°	2212	2206	2202
10°	2196	2196	2199
15°	2170	2181	2197
20°	2135	2160	2183
25°	2090	2130	2166
30°	2035	2095	2150
35°	1978	2060	2133
40°	1919	2020	2124
45°	1854	1981	2131
50°	1788	1949	2143
55°	1722	1936	2165
60°	1644	1924	2208
65°	1558	1925	2281
70°	1441	1957	2404
75°	1289	2046	2287
80°	1079	1958	2094
85°	815	1507	1433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.9	3.3
10°-20°	441.0	9.4
20°-30°	659.2	14.1
30°-40°	782.1	16.7
40°-50°	804.9	17.2
50°-60°	738.4	15.8
60°-70°	597.0	12.8
70°-80°	387.5	8.3
80°-90°	106.9	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°	1255.1	26.9
0°-40°	2037.2	43.6
0°-60°	3580.5	76.6
0°-90°	4671.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4671.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1640	1640	1640	1640	1640	
5°	1638	1627	1633	1632	1630	155
15°	1558	1552	1566	1572	1577	439
25°	1408	1409	1435	1448	1459	648
35°	1204	1214	1254	1281	1299	753
45°	974	990	1041	1091	1120	752
55°	734	757	825	893	923	656
65°	490	518	605	685	717	484
75°	248	294	394	440	440	264
85°	53	90	98	94	93	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1639.6	1639.6	1639.6	1639.6	1639.6
2.5°	1646.0	1633.2	1639.6	1638.0	1630.0
5°	1638.0	1626.8	1633.2	1631.6	1630.0
7.5°	1626.8	1615.6	1623.6	1622.0	1623.6
10°	1607.6	1598.0	1607.6	1609.2	1609.2
12.5°	1583.6	1575.6	1588.4	1591.6	1594.8
15°	1558.0	1551.6	1566.0	1572.4	1577.2
17.5°	1526.0	1521.2	1538.8	1546.8	1553.2
20°	1490.8	1489.2	1508.4	1516.4	1524.4
22.5°	1450.8	1450.8	1473.2	1482.8	1494.0
25°	1407.6	1409.2	1434.8	1447.6	1458.8
27.5°	1361.3	1362.9	1393.2	1409.2	1422.0
30°	1310.1	1316.5	1348.5	1369.3	1383.6
32.5°	1258.9	1266.9	1302.1	1326.1	1342.1
35°	1204.5	1214.1	1254.1	1281.3	1298.9
37.5°	1148.5	1159.7	1202.9	1233.3	1254.1
40°	1092.5	1105.3	1150.1	1185.3	1209.3
42.5°	1033.3	1047.7	1097.3	1138.9	1164.5
45°	974.2	990.1	1041.3	1090.9	1119.7
47.5°	915.0	934.2	988.5	1042.9	1073.3
50°	854.2	873.4	931.0	993.3	1023.7
52.5°	793.4	815.8	879.8	943.8	974.2
55°	734.2	756.6	825.4	892.6	923.0
57.5°	673.4	695.8	771.0	841.4	871.8
60°	611.0	636.6	715.0	787.0	820.6
62.5°	550.3	577.5	660.6	737.4	769.4
65°	489.5	518.3	604.6	684.6	716.6
67.5°	427.1	460.7	550.3	631.8	665.4
70°	366.3	403.1	497.5	579.1	611.0
72.5°	307.1	347.1	444.7	527.9	547.1
75°	247.9	294.3	393.5	439.9	439.9
77.5°	192.0	243.1	335.9	353.5	363.1
80°	139.2	195.2	252.7	273.5	270.3
82.5°	92.8	148.8	180.8	180.8	176.0
85°	52.8	89.6	97.6	94.4	92.8
87.5°	22.4	33.6	30.4	24.0	20.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)