

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: P230015

Luminaire Tested: **24CZ-LD5-50SE-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230015
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-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH RIBBED LENS
Light Source: (84) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4882.0 lumens
Efficiency: N/A
Efficacy: 104.9 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

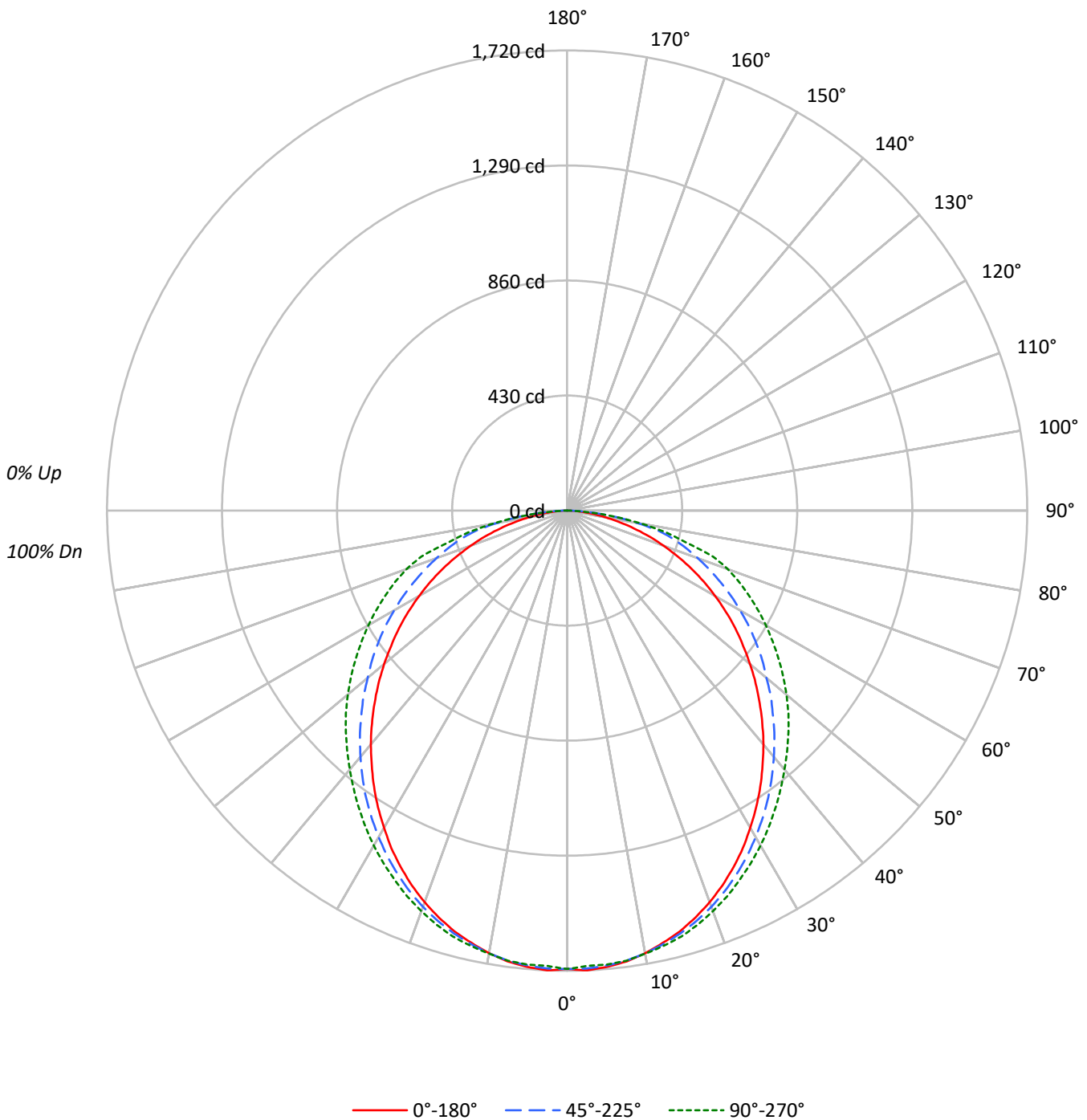
Input Watts (W): 46.56
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2305	2305	2305
5°	2312	2305	2301
10°	2295	2295	2297
15°	2268	2279	2296
20°	2231	2257	2281
25°	2184	2226	2263
30°	2127	2189	2246
35°	2067	2153	2229
40°	2005	2111	2220
45°	1937	2071	2226
50°	1868	2036	2239
55°	1800	2023	2263
60°	1718	2011	2308
65°	1628	2011	2384
70°	1506	2045	2512
75°	1347	2138	2390
80°	1127	2046	2189
85°	852	1575	1496



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.9	3.3
10°-20°	460.8	9.4
20°-30°	688.9	14.1
30°-40°	817.2	16.7
40°-50°	841.1	17.2
50°-60°	771.6	15.8
60°-70°	623.9	12.8
70°-80°	404.9	8.3
80°-90°	111.7	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°	1311.6	26.9
0°-40°	2128.8	43.6
0°-60°	3741.5	76.6
0°-90°	4882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4882.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1713	1713	1713	1713	1713	
5°	1712	1700	1707	1705	1703	162
15°	1628	1621	1636	1643	1648	459
25°	1471	1473	1499	1513	1524	677
35°	1259	1269	1310	1339	1357	787
45°	1018	1035	1088	1140	1170	786
55°	767	791	862	933	964	685
65°	512	542	632	715	749	505
75°	259	308	411	460	460	275
85°	55	94	102	99	97	68
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1713.3	1713.3	1713.3	1713.3	1713.3
2.5°	1720.0	1706.6	1713.3	1711.7	1703.3
5°	1711.7	1700.0	1706.6	1705.0	1703.3
7.5°	1700.0	1688.3	1696.6	1694.9	1696.6
10°	1679.9	1669.9	1679.9	1681.6	1681.6
12.5°	1654.8	1646.5	1659.8	1663.2	1666.5
15°	1628.1	1621.4	1636.4	1643.1	1648.1
17.5°	1594.6	1589.6	1608.0	1616.4	1623.1
20°	1557.9	1556.2	1576.3	1584.6	1593.0
22.5°	1516.1	1516.1	1539.5	1549.5	1561.2
25°	1471.0	1472.6	1499.4	1512.7	1524.4
27.5°	1422.5	1424.2	1455.9	1472.6	1486.0
30°	1369.0	1375.7	1409.1	1430.8	1445.9
32.5°	1315.5	1323.9	1360.6	1385.7	1402.4
35°	1258.7	1268.7	1310.5	1338.9	1357.3
37.5°	1200.2	1211.9	1257.0	1288.8	1310.5
40°	1141.7	1155.0	1201.8	1238.6	1263.7
42.5°	1079.8	1094.9	1146.7	1190.1	1216.9
45°	1018.0	1034.7	1088.2	1140.0	1170.1
47.5°	956.1	976.2	1033.0	1089.8	1121.6
50°	892.6	912.7	972.8	1038.0	1069.8
52.5°	829.1	852.5	919.3	986.2	1018.0
55°	767.2	790.6	862.5	932.7	964.5
57.5°	703.7	727.1	805.7	879.2	911.0
60°	638.5	665.3	747.2	822.4	857.5
62.5°	575.0	603.4	690.3	770.6	804.0
65°	511.5	541.6	631.8	715.4	748.8
67.5°	446.3	481.4	575.0	660.3	695.4
70°	382.8	421.2	519.8	605.1	638.5
72.5°	320.9	362.7	464.7	551.6	571.7
75°	259.1	307.6	411.2	459.7	459.7
77.5°	200.6	254.1	351.0	369.4	379.4
80°	145.4	203.9	264.1	285.8	282.5
82.5°	96.9	155.5	188.9	188.9	183.9
85°	55.2	93.6	102.0	98.6	96.9
87.5°	23.4	35.1	31.8	25.1	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)