

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: P#

Luminaire Tested: **24CZ-LD5-40SE-S-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
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-LD5-40SE-S-UNV-L840-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

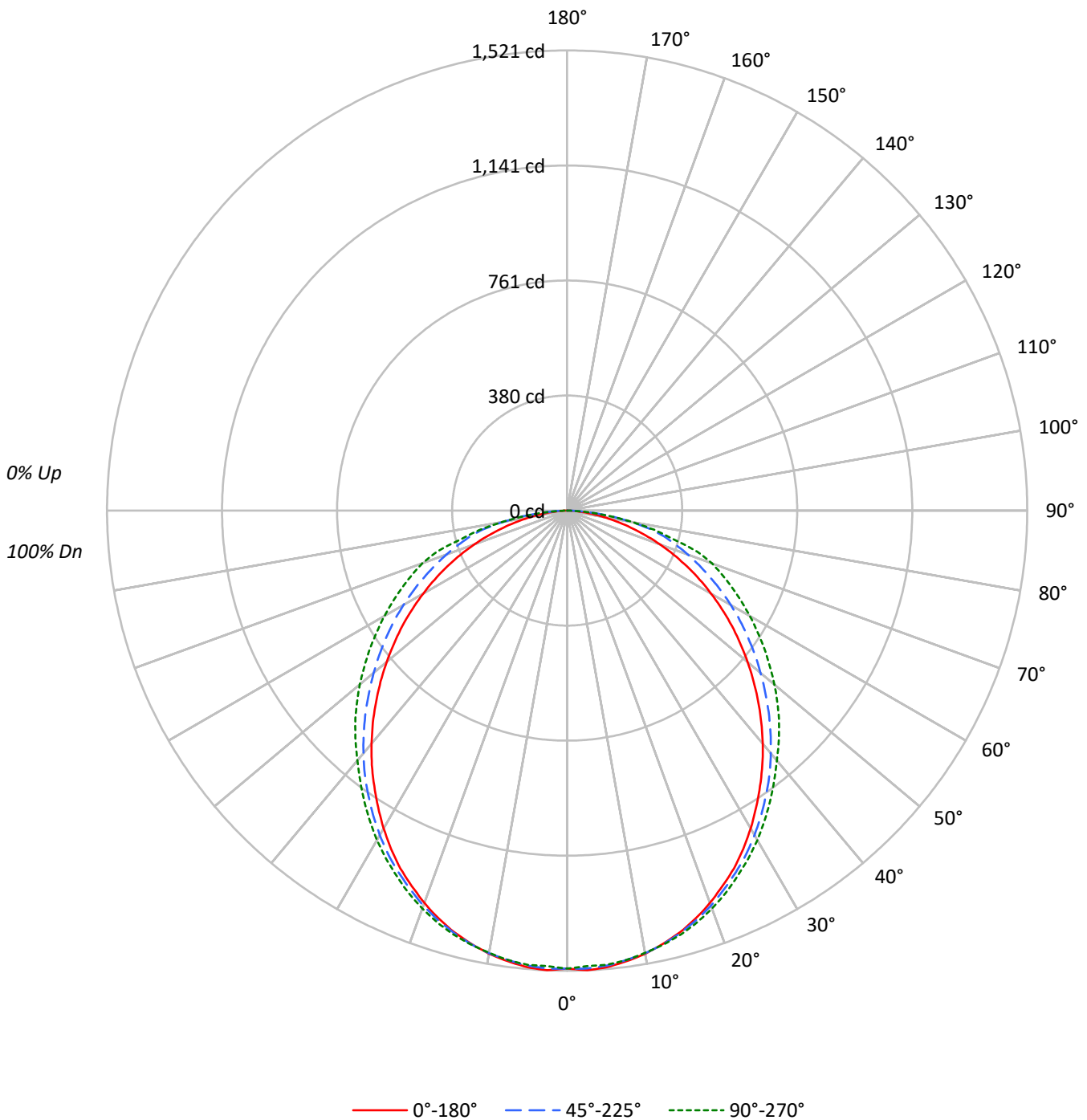
Lumens per Lamp: N/A
Luminaire Lumens: 4181.3 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 32.55
Input Voltage (V): NR
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°	2037	2037	2037
5°	2042	2029	2026
10°	2023	2011	2010
15°	1996	1985	1995
20°	1958	1952	1968
25°	1915	1911	1934
30°	1858	1867	1899
35°	1794	1816	1857
40°	1730	1762	1818
45°	1658	1702	1795
50°	1584	1644	1767
55°	1506	1590	1742
60°	1418	1540	1726
65°	1320	1491	1728
70°	1199	1457	1761
75°	1038	1443	1573
80°	831	1260	1310
85°	551	816	765



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.1	3.4
10°-20°	407.0	9.7
20°-30°	606.6	14.5
30°-40°	714.0	17.1
40°-50°	725.6	17.4
50°-60°	652.4	15.6
60°-70°	515.4	12.3
70°-80°	327.0	7.8
80°-90°	90.2	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°	1156.7	27.7
0°-40°	1870.8	44.7
0°-60°	3248.7	77.7
0°-90°	4181.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4181.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1514	1514	1514	1514	1514	
5°	1515	1503	1510	1507	1507	144
15°	1443	1436	1446	1450	1451	406
25°	1305	1304	1319	1327	1333	600
35°	1112	1119	1146	1159	1170	695
45°	893	906	942	970	991	689
55°	665	682	729	776	796	594
65°	437	459	522	579	601	433
75°	218	256	332	362	359	232
85°	46	79	85	78	78	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1513.7	1513.7	1513.7	1513.7	1513.7
2.5°	1520.7	1509.6	1515.1	1512.3	1506.8
5°	1515.1	1502.6	1509.6	1506.8	1506.8
7.5°	1502.6	1492.9	1498.4	1497.0	1498.4
10°	1487.3	1477.6	1485.9	1485.9	1484.5
12.5°	1466.4	1458.1	1467.8	1467.8	1469.2
15°	1442.8	1435.8	1445.6	1449.7	1451.1
17.5°	1413.6	1406.6	1419.1	1423.3	1427.5
20°	1380.2	1377.4	1389.9	1394.1	1399.6
22.5°	1342.6	1342.6	1355.1	1360.7	1369.0
25°	1305.0	1303.6	1319.0	1327.3	1332.9
27.5°	1260.5	1261.9	1281.4	1289.7	1296.7
30°	1213.2	1216.0	1238.3	1248.0	1257.7
32.5°	1163.1	1168.7	1193.7	1204.9	1214.6
35°	1111.6	1118.6	1146.4	1159.0	1170.1
37.5°	1060.2	1069.9	1099.1	1111.6	1124.2
40°	1005.9	1014.3	1047.6	1063.0	1078.3
42.5°	950.3	961.4	994.8	1017.0	1035.1
45°	893.2	905.7	941.9	969.7	990.6
47.5°	836.2	852.9	887.6	925.2	943.3
50°	779.1	795.8	834.8	876.5	894.6
52.5°	720.7	737.4	781.9	825.0	844.5
55°	665.0	681.7	729.0	776.3	795.8
57.5°	606.6	624.7	677.6	726.3	745.7
60°	549.6	567.6	624.7	676.2	697.0
62.5°	493.9	513.4	573.2	627.5	648.3
65°	436.9	459.1	521.7	578.8	601.0
67.5°	381.2	406.3	471.6	531.5	555.1
70°	325.6	354.8	424.3	485.6	509.2
72.5°	271.3	303.3	377.0	438.3	450.8
75°	218.4	256.0	332.5	361.7	359.0
77.5°	168.3	210.1	282.4	288.0	296.3
80°	122.4	168.3	211.5	222.6	217.0
82.5°	80.7	126.6	151.7	146.1	144.7
85°	45.9	79.3	84.9	77.9	77.9
87.5°	19.5	32.0	27.8	20.9	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)