

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-LD5-45-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 (P25689)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-45-UNV-L840-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

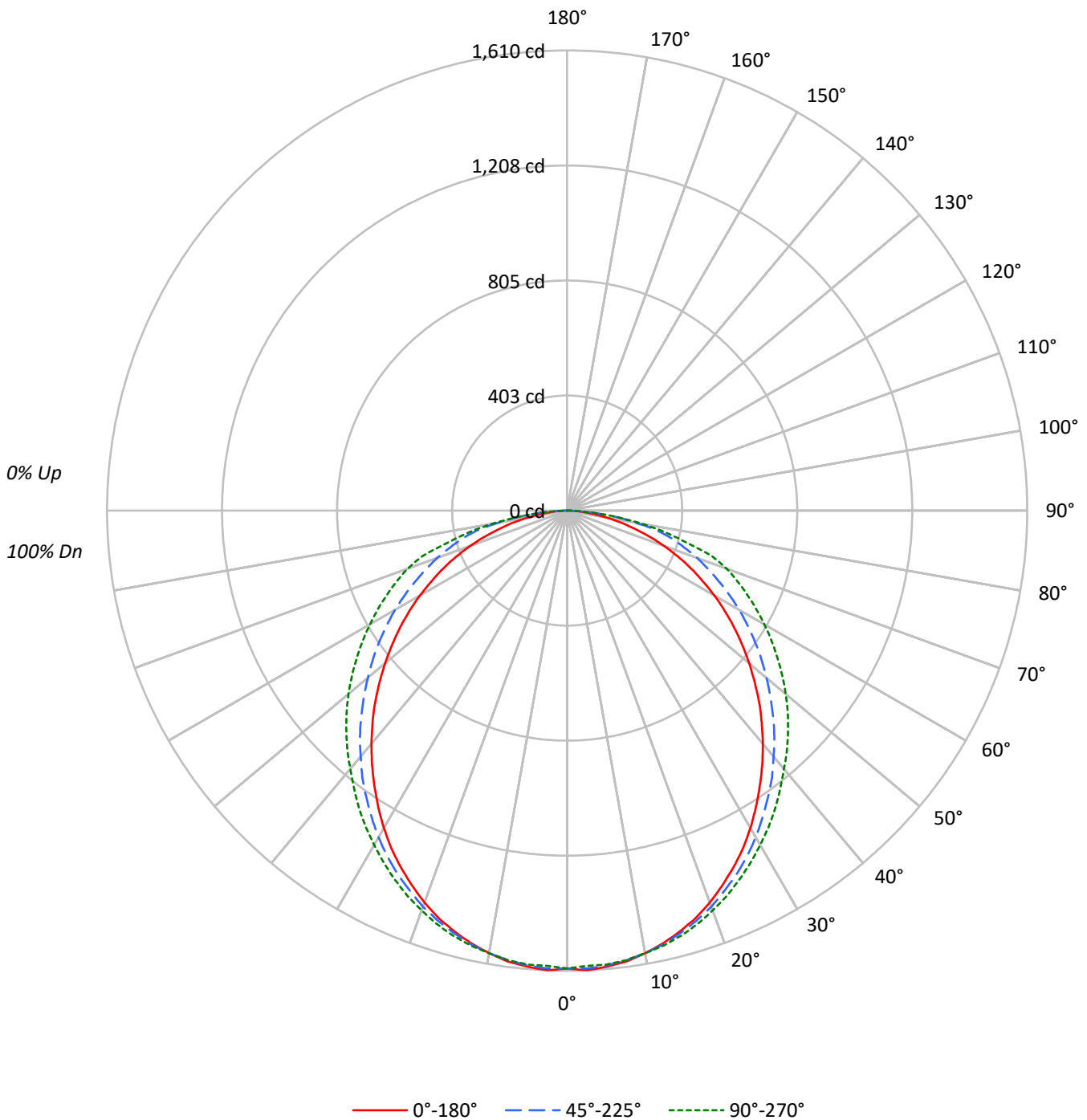
Lumens per Lamp: N/A
Luminaire Lumens: 4558.4 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 35.69
Input Voltage (V): NR
Input Current (A_{in}): 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



TEST NUMBER: P#
CATALOG NUMBER: 24CZ-LD5-45-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-45-UNV-L840-CD1-U

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	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	79	70	63	87	77	69	63	74	67	62	71	65	61	69	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	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2155	2155	2155
5°	2159	2147	2144
10°	2139	2128	2130
15°	2109	2102	2117
20°	2071	2072	2093
25°	2021	2033	2067
30°	1964	1989	2039
35°	1897	1940	2015
40°	1833	1890	1989
45°	1765	1841	1981
50°	1690	1792	1973
55°	1616	1752	1966
60°	1536	1712	1974
65°	1443	1676	1998
70°	1324	1656	2054
75°	1158	1649	1889
80°	947	1450	1601
85°	652	939	914



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-45-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.5	3.3
10°-20°	431.1	9.5
20°-30°	644.5	14.1
30°-40°	764.2	16.8
40°-50°	785.9	17.2
50°-60°	718.9	15.8
60°-70°	579.8	12.7
70°-80°	376.4	8.3
80°-90°	105.9	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°	1227.1	26.9
0°-40°	1991.4	43.7
0°-60°	3496.2	76.7
0°-90°	4558.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4558.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1602	1591	1597	1594	1594	152
15°	1524	1517	1530	1537	1540	430
25°	1377	1377	1403	1414	1425	634
35°	1175	1186	1225	1250	1270	735
45°	951	968	1019	1065	1093	733
55°	713	737	803	867	898	638
65°	478	506	586	662	695	472
75°	244	288	380	426	431	260
85°	54	90	98	96	93	65
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-45-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1601.9	1601.9	1601.9	1601.9	1601.9
2.5°	1609.6	1597.2	1603.4	1600.3	1594.1
5°	1601.9	1591.0	1597.2	1594.1	1594.1
7.5°	1591.0	1580.1	1586.4	1586.4	1586.4
10°	1572.4	1563.1	1572.4	1572.4	1572.4
12.5°	1550.7	1542.9	1553.8	1555.3	1558.4
15°	1524.3	1516.6	1530.5	1536.7	1539.8
17.5°	1494.9	1488.7	1504.2	1511.9	1516.6
20°	1459.2	1454.5	1474.7	1482.5	1488.7
22.5°	1418.9	1418.9	1439.0	1448.3	1459.2
25°	1377.0	1377.0	1403.4	1414.2	1425.1
27.5°	1332.0	1333.6	1363.1	1378.6	1389.4
30°	1282.4	1288.6	1319.6	1338.2	1350.6
32.5°	1229.7	1237.4	1273.1	1296.4	1311.9
35°	1175.4	1186.3	1225.0	1249.9	1270.0
37.5°	1121.1	1135.1	1177.0	1204.9	1225.0
40°	1065.3	1080.8	1124.2	1156.8	1180.1
42.5°	1007.9	1025.0	1073.1	1110.3	1138.2
45°	950.6	967.6	1018.8	1065.3	1093.2
47.5°	890.1	910.3	964.5	1018.8	1046.7
50°	831.2	852.9	910.3	969.2	998.6
52.5°	772.2	797.1	857.5	919.6	949.0
55°	713.3	736.6	803.3	866.8	897.8
57.5°	654.4	679.2	749.0	815.7	848.2
60°	595.5	621.8	694.7	764.5	797.1
62.5°	535.0	562.9	640.4	713.3	745.9
65°	477.6	505.5	586.2	662.1	694.7
67.5°	418.7	449.7	533.4	611.0	645.1
70°	359.8	393.9	482.3	559.8	593.9
72.5°	300.8	339.6	429.5	507.1	531.9
75°	243.5	288.4	379.9	426.4	431.1
77.5°	190.7	237.3	324.1	342.7	352.0
80°	139.6	190.7	243.5	266.7	265.2
82.5°	93.0	145.8	175.2	178.3	175.2
85°	54.3	89.9	97.7	96.1	93.0
87.5°	23.3	35.7	31.0	26.4	21.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)