

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-L830-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-L830-CD1-U
Description: CRUZE 2x4 LED TROFFER

Light Source: -
Ballast/Driver: -

Summary

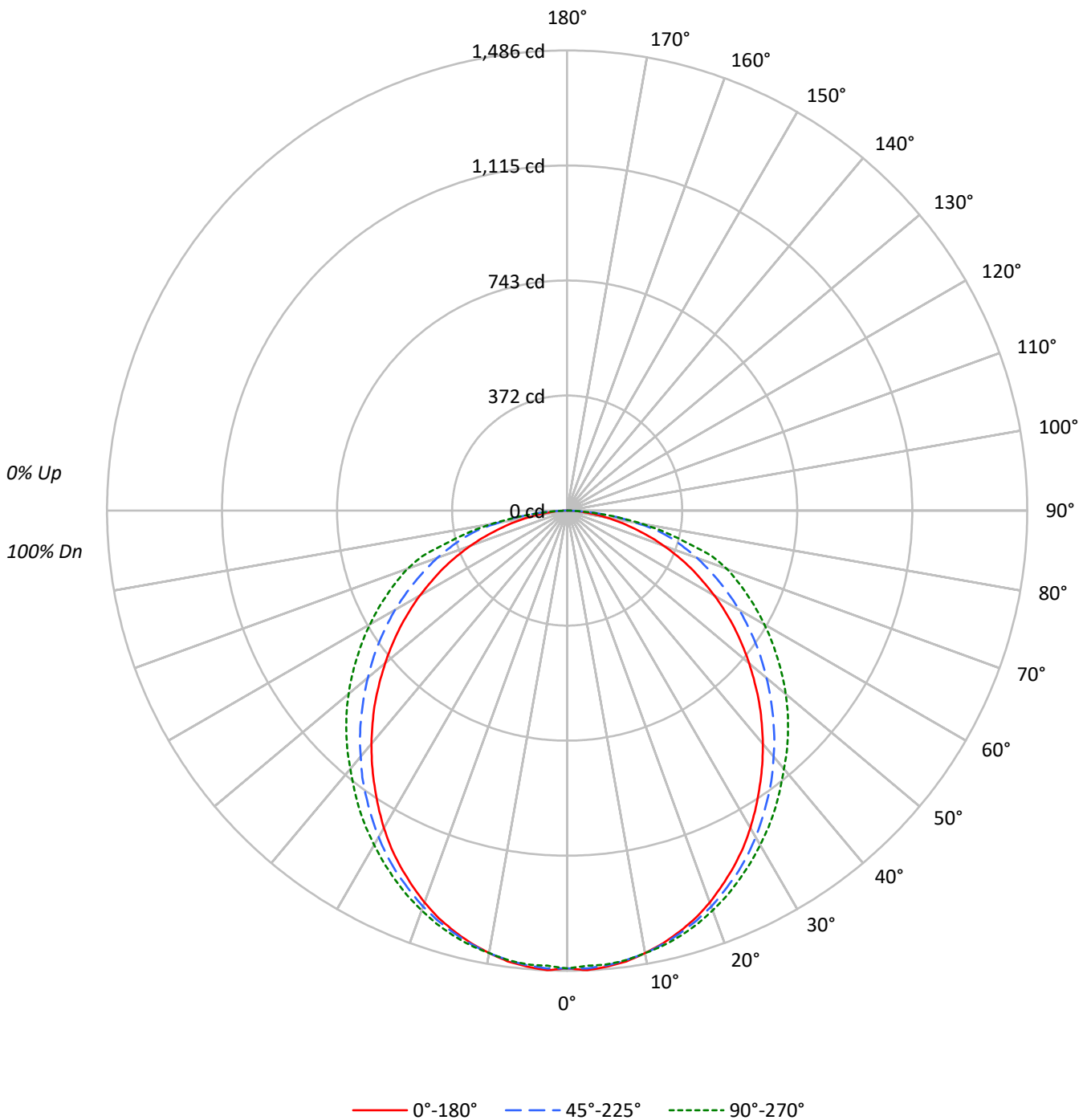
Lumens per Lamp: N/A
Luminaire Lumens: 4206.9 lumens
Efficiency: N/A
Efficacy: 117.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 35.69
Input Voltage (V): NR
Input Current (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	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°	1989	1989	1989
5°	1992	1982	1978
10°	1974	1964	1965
15°	1947	1940	1953
20°	1911	1912	1932
25°	1865	1876	1908
30°	1813	1836	1882
35°	1751	1791	1860
40°	1691	1745	1836
45°	1628	1699	1828
50°	1559	1654	1821
55°	1491	1617	1814
60°	1418	1580	1822
65°	1332	1546	1844
70°	1222	1528	1896
75°	1068	1521	1743
80°	874	1338	1477
85°	602	867	844



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.8	3.3
10°-20°	397.9	9.5
20°-30°	594.8	14.1
30°-40°	705.3	16.8
40°-50°	725.3	17.2
50°-60°	663.5	15.8
60°-70°	535.1	12.7
70°-80°	347.4	8.3
80°-90°	97.7	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°	1132.5	26.9
0°-40°	1837.8	43.7
0°-60°	3226.6	76.7
0°-90°	4206.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4206.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1478	1468	1474	1471	1471	140
15°	1407	1400	1412	1418	1421	397
25°	1271	1271	1295	1305	1315	585
35°	1085	1095	1131	1154	1172	679
45°	877	893	940	983	1009	676
55°	658	680	741	800	829	589
65°	441	466	541	611	641	436
75°	225	266	351	394	398	240
85°	50	83	90	89	86	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1478.3	1478.3	1478.3	1478.3	1478.3
2.5°	1485.5	1474.0	1479.7	1476.9	1471.2
5°	1478.3	1468.3	1474.0	1471.2	1471.2
7.5°	1468.3	1458.2	1464.0	1464.0	1464.0
10°	1451.1	1442.6	1451.1	1451.1	1451.1
12.5°	1431.1	1424.0	1433.9	1435.4	1438.3
15°	1406.8	1399.6	1412.5	1418.3	1421.1
17.5°	1379.6	1373.9	1388.1	1395.4	1399.6
20°	1346.6	1342.4	1361.0	1368.1	1373.9
22.5°	1309.5	1309.5	1328.1	1336.6	1346.6
25°	1270.8	1270.8	1295.1	1305.2	1315.2
27.5°	1229.3	1230.7	1257.9	1272.2	1282.3
30°	1183.5	1189.2	1217.9	1235.0	1246.5
32.5°	1134.9	1142.0	1175.0	1196.4	1210.7
35°	1084.8	1094.8	1130.6	1153.5	1172.1
37.5°	1034.6	1047.6	1086.2	1112.0	1130.6
40°	983.2	997.5	1037.6	1067.6	1089.1
42.5°	930.2	945.9	990.3	1024.7	1050.4
45°	877.2	893.0	940.2	983.2	1008.9
47.5°	821.5	840.1	890.2	940.2	966.0
50°	767.0	787.1	840.1	894.4	921.6
52.5°	712.7	735.6	791.3	848.6	875.8
55°	658.4	679.7	741.3	800.0	828.6
57.5°	603.9	626.8	691.2	752.8	782.8
60°	549.6	573.9	641.2	705.6	735.6
62.5°	493.7	519.5	591.1	658.4	688.4
65°	440.8	466.5	540.9	611.0	641.2
67.5°	386.4	415.1	492.3	563.8	595.4
70°	332.0	363.5	445.1	516.6	548.2
72.5°	277.6	313.4	396.4	468.0	490.9
75°	224.7	266.2	350.6	393.6	397.9
77.5°	176.0	219.0	299.1	316.3	324.9
80°	128.8	176.0	224.7	246.1	244.7
82.5°	85.9	134.5	161.7	164.5	161.7
85°	50.1	83.0	90.2	88.7	85.9
87.5°	21.5	32.9	28.6	24.3	20.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)