

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: P230031

Luminaire Tested: **24CZ-LD5-30-S-UNV-L950-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230031
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-LD5-30-S-UNV-L950-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

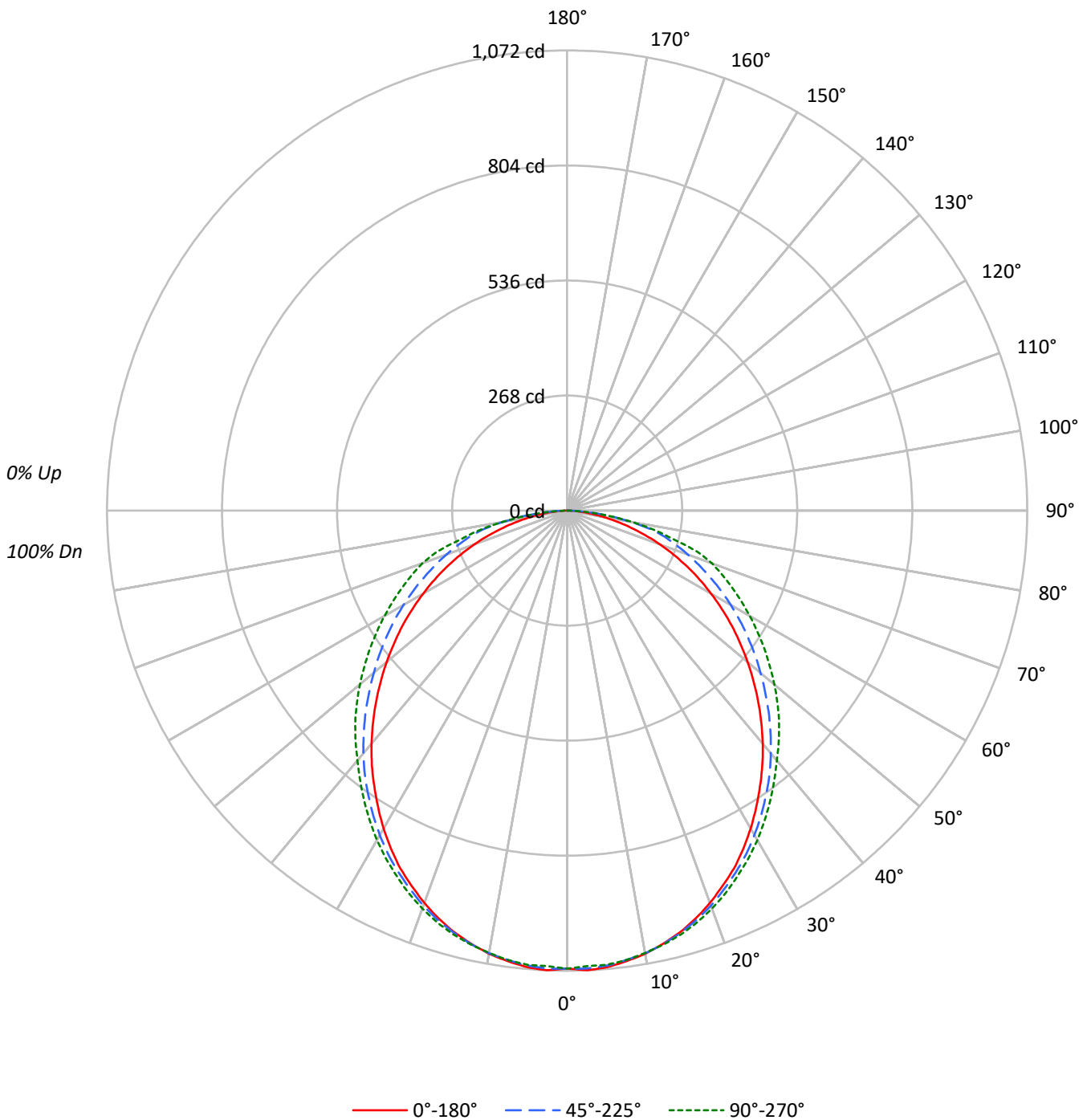
Lumens per Lamp: N/A
Luminaire Lumens: 2947.0 lumens
Efficiency: N/A
Efficacy: 136.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.62
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



TEST NUMBER: P230031
CATALOG NUMBER: 24CZ-LD5-30-S-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230031

CATALOG NUMBER: 24CZ-LD5-30-S-UNV-L950-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	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°	1436	1436	1436
5°	1442	1437	1434
10°	1432	1431	1430
15°	1416	1419	1425
20°	1393	1403	1413
25°	1366	1380	1395
30°	1329	1356	1377
35°	1287	1327	1355
40°	1245	1297	1335
45°	1198	1263	1329
50°	1149	1231	1320
55°	1099	1205	1316
60°	1042	1185	1322
65°	980	1171	1349
70°	903	1177	1412
75°	801	1219	1315
80°	669	1155	1185
85°	500	923	848



TEST NUMBER: P230031

CATALOG NUMBER: 24CZ-LD5-30-S-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	3.4
10°-20°	286.9	9.7
20°-30°	427.5	14.5
30°-40°	503.3	17.1
40°-50°	511.4	17.4
50°-60°	459.8	15.6
60°-70°	363.2	12.3
70°-80°	230.5	7.8
80°-90°	63.6	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°	815.3	27.7
0°-40°	1318.5	44.7
0°-60°	2289.7	77.7
0°-90°	2947.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2947.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1067	1067	1067	1067	1067	
5°	1068	1059	1064	1062	1062	101
15°	1017	1012	1019	1022	1023	286
25°	920	919	930	936	939	423
35°	784	788	808	817	825	490
45°	630	638	664	684	698	486
55°	469	480	514	547	561	419
65°	308	324	368	408	424	305
75°	154	180	234	255	253	164
85°	32	56	60	55	55	40
90°	0	0	0	0	0	



TEST NUMBER: P230031

CATALOG NUMBER: 24CZ-LD5-30-S-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1066.9	1066.9	1066.9	1066.9	1066.9
2.5°	1071.8	1063.9	1067.8	1065.9	1062.0
5°	1067.8	1059.0	1063.9	1062.0	1062.0
7.5°	1059.0	1052.2	1056.1	1055.1	1056.1
10°	1048.2	1041.4	1047.3	1047.3	1046.3
12.5°	1033.5	1027.6	1034.5	1034.5	1035.5
15°	1016.9	1012.0	1018.8	1021.8	1022.7
17.5°	996.3	991.4	1000.2	1003.1	1006.1
20°	972.7	970.8	979.6	982.5	986.5
22.5°	946.3	946.3	955.1	959.0	964.9
25°	919.8	918.8	929.6	935.5	939.4
27.5°	888.4	889.4	903.1	909.0	913.9
30°	855.1	857.0	872.7	879.6	886.4
32.5°	819.8	823.7	841.3	849.2	856.0
35°	783.5	788.4	808.0	816.8	824.7
37.5°	747.2	754.1	774.7	783.5	792.3
40°	709.0	714.8	738.4	749.2	759.9
42.5°	669.7	677.6	701.1	716.8	729.5
45°	629.5	638.4	663.9	683.5	698.2
47.5°	589.3	601.1	625.6	652.1	664.8
50°	549.1	560.9	588.3	617.8	630.5
52.5°	507.9	519.7	551.1	581.5	595.2
55°	468.7	480.5	513.8	547.2	560.9
57.5°	427.5	440.3	477.5	511.9	525.6
60°	387.3	400.1	440.3	476.6	491.3
62.5°	348.1	361.8	404.0	442.2	456.9
65°	307.9	323.6	367.7	407.9	423.6
67.5°	268.7	286.3	332.4	374.6	391.3
70°	229.5	250.0	299.1	342.2	358.9
72.5°	191.2	213.8	265.7	308.9	317.7
75°	154.0	180.4	234.4	255.0	253.0
77.5°	118.6	148.1	199.1	203.0	208.9
80°	86.3	118.6	149.0	156.9	153.0
82.5°	56.9	89.2	106.9	103.0	102.0
85°	32.4	55.9	59.8	54.9	54.9
87.5°	13.7	22.6	19.6	14.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)