

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: P230409

Luminaire Tested: **24CZ-LD5-55-SQP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P230409
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25695)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-55-SQP-UNV-L935-CD1-U
Description: CRUZE 2x4 LED TROFFER
WITH SQP LENS
Light Source: (168) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3273.7 lumens
Efficiency: N/A
Efficacy: 71.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.31 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

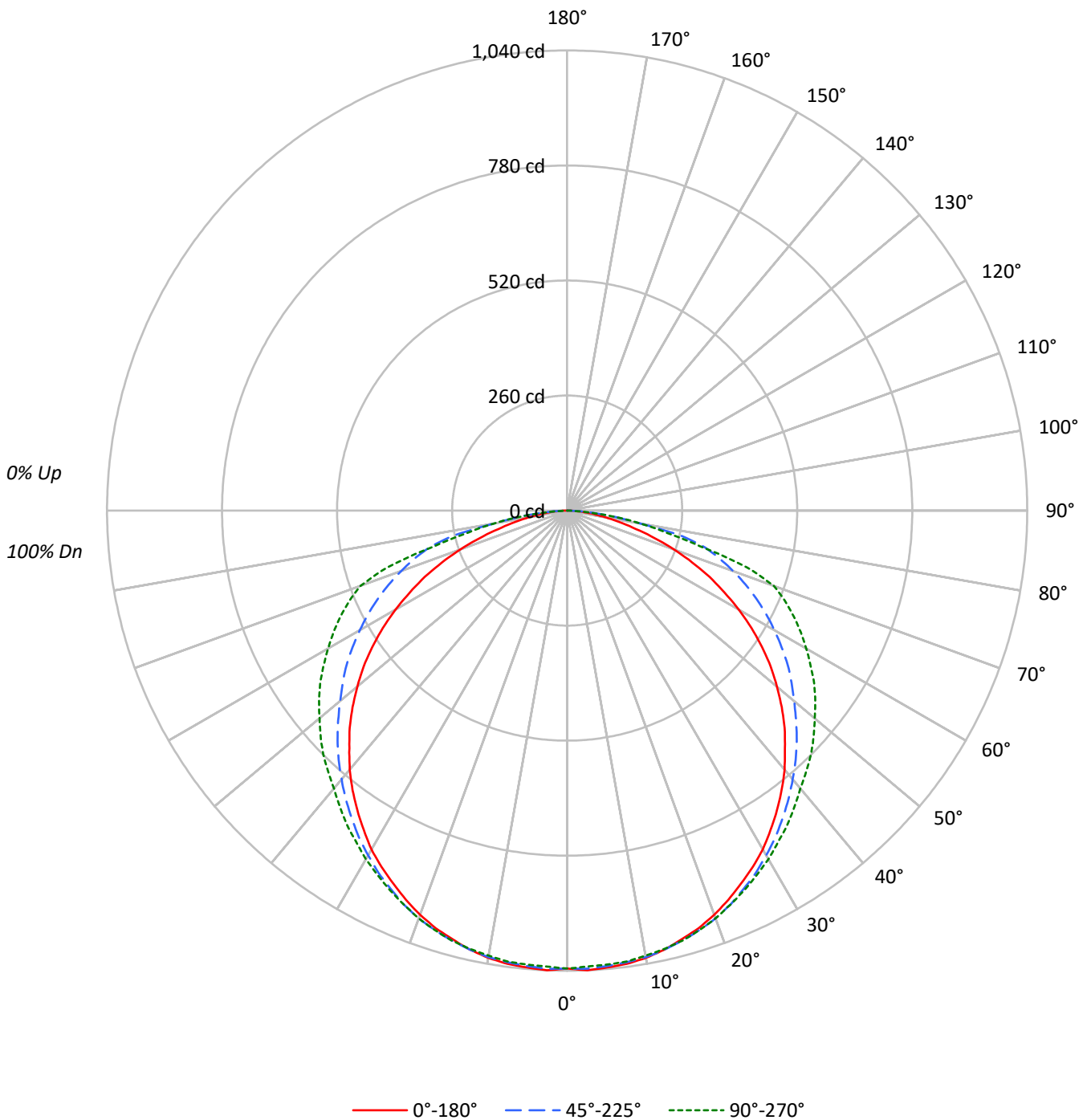
Input Watts (W): 45.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P230409

CATALOG NUMBER: 24CZ-LD5-55-SQP-UNV-L935-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P230409

CATALOG NUMBER: 24CZ-LD5-55-SQP-UNV-L935-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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	72	60	51	44	57	50	44	55	49	43	54	48	43	41
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	28
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1392	1392	1392
5°	1400	1395	1391
10°	1402	1400	1395
15°	1397	1401	1401
20°	1392	1404	1404
25°	1381	1401	1406
30°	1374	1398	1413
35°	1358	1394	1425
40°	1342	1393	1440
45°	1322	1396	1483
50°	1295	1402	1529
55°	1261	1428	1599
60°	1206	1456	1679
65°	1131	1502	1798
70°	1011	1570	1956
75°	835	1679	1617
80°	681	1297	1310
85°	548	861	809



TEST NUMBER: P230409

CATALOG NUMBER: 24CZ-LD5-55-SQP-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.3	3.0
10°-20°	283.6	8.7
20°-30°	433.5	13.2
30°-40°	530.1	16.2
40°-50°	567.2	17.3
50°-60°	543.2	16.6
60°-70°	459.5	14.0
70°-80°	291.3	8.9
80°-90°	67.0	2.0
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°	815.4	24.9
0°-40°	1345.5	41.1
0°-60°	2455.9	75.0
0°-90°	3273.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3273.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1035	1035	1035	1035	1035	
5°	1037	1032	1033	1032	1030	99
15°	1003	1001	1006	1006	1006	283
25°	930	930	944	947	947	429
35°	827	832	849	861	868	517
45°	695	707	734	764	780	535
55°	538	555	609	660	682	480
65°	355	389	472	536	565	350
75°	161	227	323	321	311	175
85°	36	54	56	51	52	42
90°	0	0	0	0	0	



TEST NUMBER: P230409

CATALOG NUMBER: 24CZ-LD5-55-SQP-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1034.9	1034.9	1034.9	1034.9	1034.9
2.5°	1040.0	1034.9	1036.6	1034.9	1031.5
5°	1036.6	1031.5	1033.2	1031.5	1029.8
7.5°	1033.2	1028.1	1029.8	1028.1	1028.1
10°	1026.4	1021.4	1024.7	1023.0	1021.4
12.5°	1016.3	1012.9	1016.3	1014.6	1014.6
15°	1002.7	1001.1	1006.1	1006.1	1006.1
17.5°	989.2	987.5	994.3	994.3	994.3
20°	972.3	970.6	980.8	980.8	980.8
22.5°	952.0	950.3	963.9	963.9	963.9
25°	930.0	930.0	943.6	946.9	946.9
27.5°	908.1	908.1	923.3	928.3	928.3
30°	884.4	884.4	899.6	906.4	909.7
32.5°	855.6	859.0	875.9	884.4	887.8
35°	826.9	832.0	848.9	860.7	867.5
37.5°	796.5	801.5	821.8	835.3	843.8
40°	764.3	771.1	793.1	810.0	820.1
42.5°	728.8	739.0	764.3	786.3	799.8
45°	695.0	706.8	733.9	764.3	779.5
47.5°	657.8	671.3	701.8	740.6	755.9
50°	618.9	632.4	669.6	713.6	730.5
52.5°	580.0	595.2	639.2	686.5	706.8
55°	537.7	554.6	608.8	659.5	681.5
57.5°	493.8	514.1	574.9	629.0	652.7
60°	448.1	473.5	541.1	598.6	624.0
62.5°	400.8	431.2	507.3	568.2	595.2
65°	355.1	388.9	471.8	536.0	564.8
67.5°	306.1	348.3	436.3	505.6	532.7
70°	257.0	306.1	399.1	470.1	497.1
72.5°	208.0	267.2	361.9	426.1	426.1
75°	160.6	226.6	323.0	321.3	311.1
77.5°	121.8	189.4	265.5	226.6	228.3
80°	87.9	152.2	167.4	167.4	169.1
82.5°	59.2	116.7	108.2	106.5	109.9
85°	35.5	54.1	55.8	50.7	52.4
87.5°	16.9	18.6	15.2	10.1	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)