

Scaled data based on original data using
LM-46-04 Photometric Testing of Indoor Luminaires Using High Intensity Discharge or
Incandescent Filament Lamps (Reaffirmed 2012)

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P#

Luminaire Tested: **24CZ-LD5-65SE-SQP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-46-04
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-65SE-SQP-UNV-L830-CD1-U
Description:

Light Source: -
Ballast/Driver: -

Luminaire Equipment:	<u>Sample No.</u>	<u>Condition</u>	<u>Description</u>
	AS-5443-1	Good	WHITE TWIN R-EVOLVE FLOOD
	AS-5443-2	Good	REFLECTOR
	AS-5443-3	Good	DRIVER
	AS-5443-4	Good	UPPER MODULE
	AS-5443-5	Good	LENS
	AS-5443-6	Good	DRIVER 2
	AS-5443-7	Good	TRIM RING

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4038.4 lumens
Efficiency: N/A
Efficacy: 67.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')
CIE Type: Direct

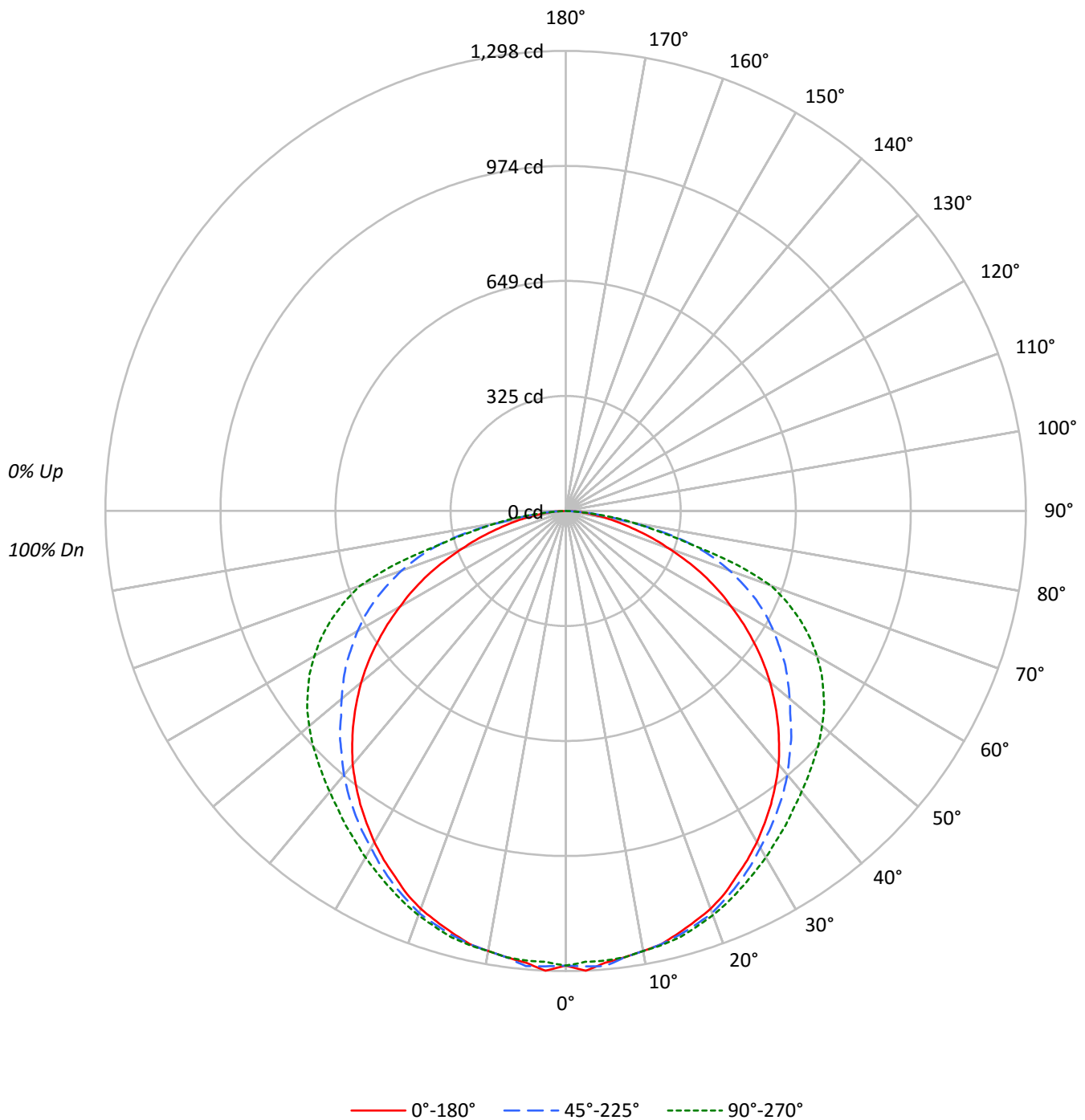
Input Watts (W): 60
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-65SE-SQP-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-65SE-SQP-UNV-L830-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		83
2	98	89	82	76	95	87	81	75	84	78	73		80	76	71		68
3	89	78	69	62	86	76	68	62	73	66	61		70	64	59		56
4	81	68	59	52	79	67	58	52	64	57	51		62	56	50		47
5	74	61	52	45	72	60	51	44	58	50	44		56	49	43		41
6	68	55	45	39	66	54	45	39	52	44	38		50	43	38		35
7	63	49	40	34	62	49	40	34	47	39	34		45	39	33		31
8	59	45	36	30	57	44	36	30	43	35	30		42	35	30		28
9	55	41	33	27	54	41	33	27	39	32	27		38	32	27		25
10	51	38	30	24	50	37	30	24	36	29	24		35	29	24		22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1726	1726	1726
5°	1724	1733	1712
10°	1715	1706	1707
15°	1705	1701	1711
20°	1695	1696	1707
25°	1671	1677	1702
30°	1652	1655	1705
35°	1630	1644	1717
40°	1608	1635	1745
45°	1572	1626	1796
50°	1530	1624	1865
55°	1470	1648	1943
60°	1391	1670	2027
65°	1298	1694	2101
70°	1143	1691	2137
75°	970	1620	1621
80°	787	1103	1212
85°	603	603	554



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-65SE-SQP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.8	3.0
10°-20°	349.8	8.7
20°-30°	533.0	13.2
30°-40°	652.1	16.1
40°-50°	701.7	17.4
50°-60°	679.7	16.8
60°-70°	575.8	14.3
70°-80°	348.1	8.6
80°-90°	76.5	1.9
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°	1004.5	24.9
0°-40°	1656.7	41.0
0°-60°	3038.1	75.2
0°-90°	4038.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4038.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1283	1283	1283	1283	1283	
5°	1280	1280	1289	1283	1273	122
15°	1232	1236	1239	1242	1245	348
25°	1138	1145	1157	1167	1173	526
35°	1010	1016	1038	1066	1082	632
45°	847	862	900	957	991	653
55°	649	677	756	844	888	580
65°	430	477	593	687	731	423
75°	204	276	373	380	370	219
85°	50	60	63	60	56	57
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-65SE-SQP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1282.7	1282.7	1282.7	1282.7	1282.7
2.5°	1298.4	1295.2	1285.8	1279.6	1273.3
5°	1279.6	1279.6	1289.0	1282.7	1273.3
7.5°	1270.1	1270.1	1270.1	1285.8	1270.1
10°	1260.7	1263.9	1260.7	1273.3	1260.7
12.5°	1251.3	1251.3	1251.3	1254.5	1254.5
15°	1232.5	1235.7	1238.8	1241.9	1245.1
17.5°	1213.7	1216.9	1223.1	1226.3	1229.4
20°	1194.9	1198.0	1207.4	1207.4	1213.7
22.5°	1169.8	1169.8	1182.4	1185.5	1194.9
25°	1138.5	1144.8	1157.3	1166.7	1173.0
27.5°	1110.2	1116.5	1129.1	1141.6	1151.0
30°	1078.8	1085.1	1097.6	1116.5	1129.1
32.5°	1044.3	1050.6	1069.4	1091.4	1103.9
35°	1009.8	1016.1	1038.1	1066.3	1082.0
37.5°	972.2	981.6	1006.7	1038.1	1056.9
40°	934.6	944.0	972.2	1006.7	1034.9
42.5°	890.7	903.3	934.6	981.6	1013.0
45°	846.7	862.4	900.1	956.6	991.0
47.5°	799.7	815.4	859.3	931.5	969.1
50°	752.7	771.5	824.8	903.3	944.0
52.5°	702.5	721.3	790.3	875.0	918.9
55°	649.2	677.4	755.8	843.6	887.6
57.5°	595.8	627.3	715.1	809.1	856.1
60°	539.4	577.0	677.4	771.5	818.5
62.5°	486.1	526.9	636.7	730.7	777.8
65°	429.7	476.7	592.7	686.8	730.7
67.5°	370.0	429.7	542.5	633.6	677.4
70°	310.5	379.5	492.4	577.0	617.8
72.5°	257.2	329.3	436.0	508.1	508.1
75°	203.9	276.0	373.3	379.5	370.0
77.5°	156.8	225.8	291.6	266.6	272.8
80°	116.0	172.5	185.1	194.5	200.7
82.5°	78.4	116.0	119.1	125.5	125.5
85°	50.2	59.6	62.7	59.6	56.4
87.5°	21.9	25.1	18.8	12.5	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)