

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-LD5-65SE-RDP-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-79-08  
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-RDP-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**

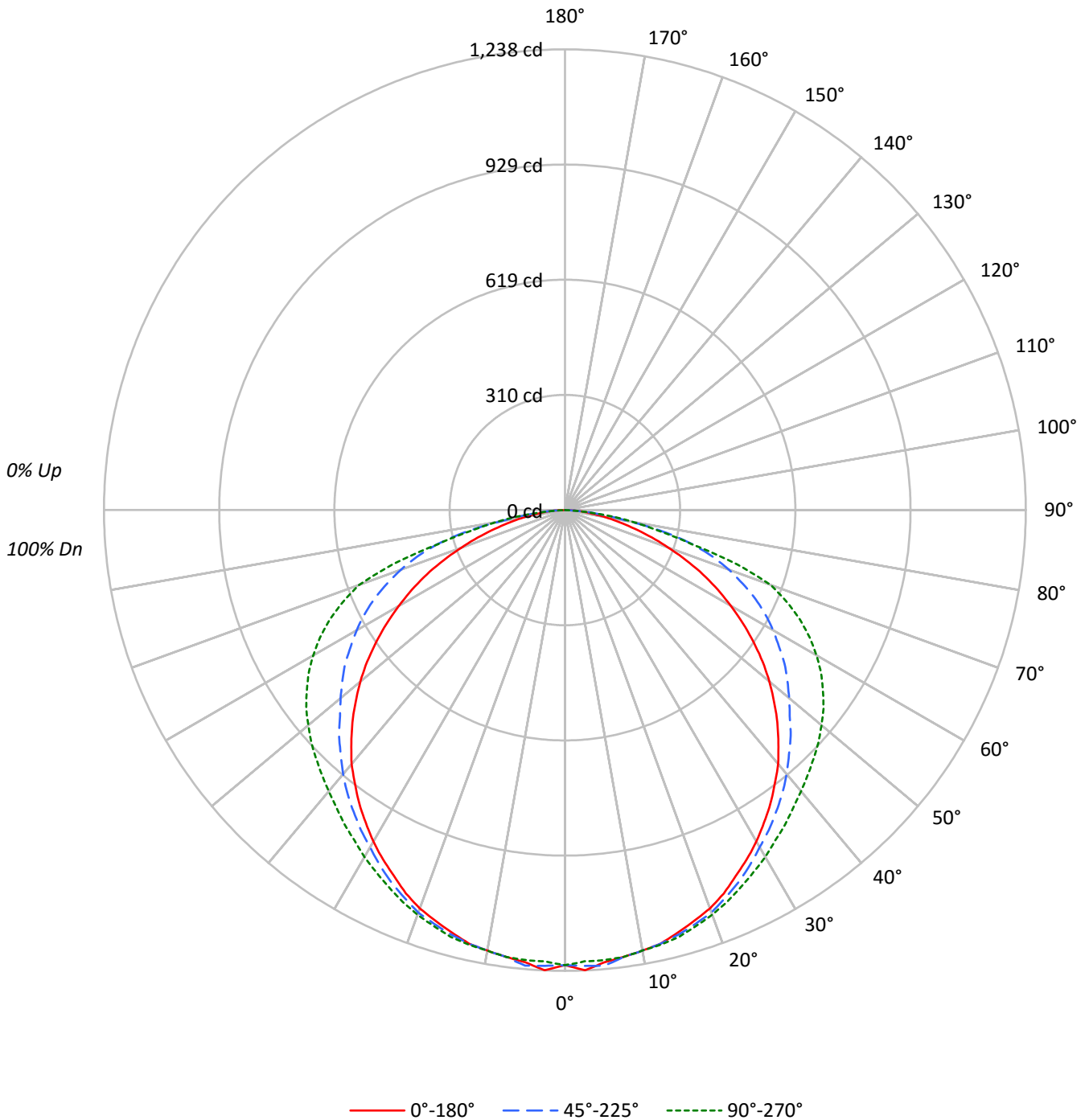
Lumens per Lamp: N/A  
Luminaire Lumens: 3849.5 lumens  
Efficiency: N/A  
Efficacy: 64.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 60  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	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	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	39	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°	1645	1645	1645
5°	1644	1652	1632
10°	1635	1627	1628
15°	1626	1622	1631
20°	1616	1617	1627
25°	1593	1598	1622
30°	1575	1577	1625
35°	1554	1567	1637
40°	1533	1558	1663
45°	1498	1550	1712
50°	1458	1548	1778
55°	1402	1571	1852
60°	1326	1591	1932
65°	1237	1615	2003
70°	1089	1612	2037
75°	924	1544	1545
80°	751	1051	1155
85°	574	575	529



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.1	3.0
10°-20°	333.4	8.7
20°-30°	508.1	13.2
30°-40°	621.6	16.1
40°-50°	668.9	17.4
50°-60°	647.9	16.8
60°-70°	548.8	14.3
70°-80°	331.8	8.6
80°-90°	72.9	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°	957.6	24.9
0°-40°	1579.2	41.0
0°-60°	2896.0	75.2
0°-90°	3849.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3849.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1223	1223	1223	1223	1223	
5°	1220	1220	1229	1223	1214	116
15°	1175	1178	1181	1184	1187	332
25°	1085	1091	1103	1112	1118	501
35°	963	969	990	1016	1031	602
45°	807	822	858	912	945	622
55°	619	646	720	804	846	553
65°	410	454	565	655	696	403
75°	194	263	356	362	353	209
85°	48	57	60	57	54	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1222.7	1222.7	1222.7	1222.7	1222.7
2.5°	1237.7	1234.6	1225.7	1219.7	1213.7
5°	1219.7	1219.7	1228.7	1222.7	1213.7
7.5°	1210.8	1210.8	1210.8	1225.7	1210.8
10°	1201.8	1204.8	1201.8	1213.7	1201.8
12.5°	1192.8	1192.8	1192.8	1195.8	1195.8
15°	1174.9	1177.9	1180.8	1183.9	1186.8
17.5°	1156.9	1160.0	1165.9	1168.9	1171.9
20°	1139.0	1142.0	1150.9	1150.9	1156.9
22.5°	1115.1	1115.1	1127.1	1130.0	1139.0
25°	1085.2	1091.2	1103.1	1112.1	1118.1
27.5°	1058.3	1064.3	1076.3	1088.2	1097.2
30°	1028.4	1034.4	1046.3	1064.3	1076.3
32.5°	995.5	1001.5	1019.4	1040.3	1052.3
35°	962.6	968.6	989.5	1016.4	1031.4
37.5°	926.7	935.8	959.6	989.5	1007.5
40°	890.9	899.8	926.7	959.6	986.6
42.5°	849.0	861.0	890.9	935.8	965.6
45°	807.1	822.1	857.9	911.8	944.7
47.5°	762.3	777.3	819.1	887.9	923.8
50°	717.4	735.4	786.2	861.0	899.8
52.5°	669.7	687.6	753.3	834.1	875.9
55°	618.8	645.7	720.5	804.2	846.1
57.5°	568.0	597.9	681.6	771.3	816.1
60°	514.2	550.0	645.7	735.4	780.2
62.5°	463.4	502.3	606.9	696.5	741.4
65°	409.5	454.4	565.1	654.7	696.5
67.5°	352.7	409.5	517.2	603.9	645.7
70°	295.9	361.8	469.4	550.0	588.9
72.5°	245.1	313.9	415.5	484.3	484.3
75°	194.3	263.1	355.8	361.8	352.7
77.5°	149.4	215.3	278.1	254.1	260.1
80°	110.6	164.4	176.4	185.3	191.3
82.5°	74.8	110.6	113.6	119.6	119.6
85°	47.8	56.8	59.8	56.8	53.8
87.5°	20.9	23.9	18.0	12.0	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)