

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-LD5-45SE-SQP-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 (P25713)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-LD5-45SE-SQP-UNV-L830-CD1-U
Description:

Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2824.5 lumens
Efficiency: N/A
Efficacy: 70.8 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

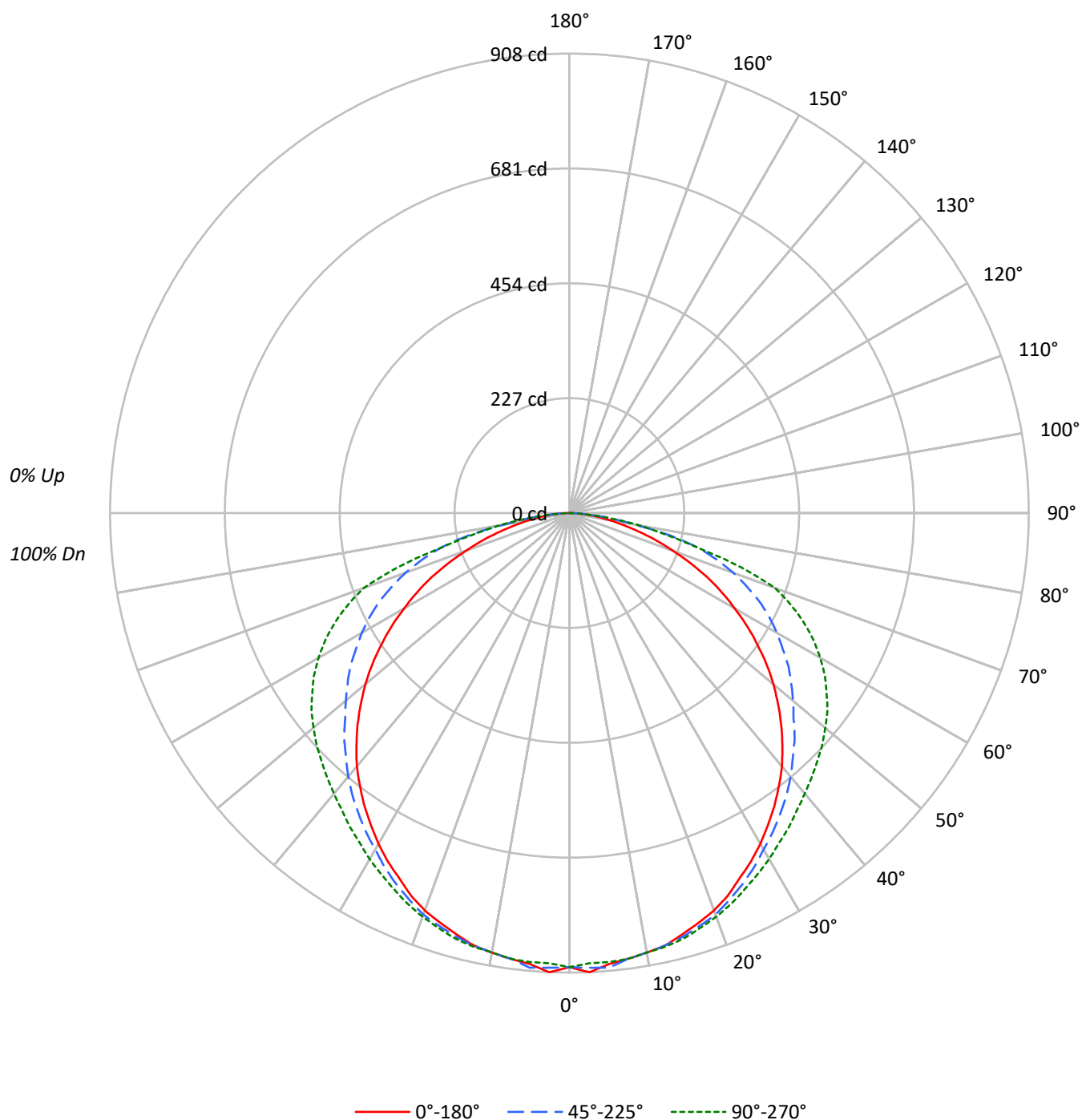
Input Watts (W): 39.91
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-45SE-SQP-UNV-L830-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-45SE-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	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°	1207	1207	1207
5°	1206	1212	1197
10°	1199	1194	1194
15°	1193	1190	1197
20°	1186	1186	1194
25°	1168	1173	1190
30°	1156	1157	1192
35°	1140	1150	1201
40°	1125	1143	1220
45°	1099	1138	1256
50°	1070	1136	1304
55°	1028	1153	1359
60°	973	1168	1418
65°	908	1185	1470
70°	800	1183	1495
75°	678	1133	1134
80°	550	771	848
85°	421	422	388



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-45SE-SQP-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	3.0
10°-20°	244.6	8.7
20°-30°	372.8	13.2
30°-40°	456.1	16.1
40°-50°	490.8	17.4
50°-60°	475.4	16.8
60°-70°	402.7	14.3
70°-80°	243.4	8.6
80°-90°	53.5	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°	702.6	24.9
0°-40°	1158.7	41.0
0°-60°	2124.9	75.2
0°-90°	2824.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2824.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	897	897	897	897	897	
5°	895	895	902	897	890	85
15°	862	864	866	869	871	243
25°	796	801	809	816	820	368
35°	706	711	726	746	757	442
45°	592	603	630	669	693	456
55°	454	474	529	590	621	406
65°	300	333	415	480	511	296
75°	143	193	261	265	259	153
85°	35	42	44	42	40	40
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: 24CZ-LD5-45SE-SQP-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	897.1	897.1	897.1	897.1	897.1
2.5°	908.1	905.9	899.4	894.9	890.5
5°	894.9	894.9	901.6	897.1	890.5
7.5°	888.3	888.3	888.3	899.4	888.3
10°	881.8	884.0	881.8	890.5	881.8
12.5°	875.2	875.2	875.2	877.4	877.4
15°	862.0	864.2	866.4	868.6	870.8
17.5°	848.9	851.1	855.5	857.7	859.8
20°	835.7	837.9	844.5	844.5	848.9
22.5°	818.1	818.1	827.0	829.2	835.7
25°	796.2	800.7	809.4	816.0	820.3
27.5°	776.5	780.9	789.6	798.4	805.0
30°	754.6	759.0	767.7	780.9	789.6
32.5°	730.5	734.8	747.9	763.3	772.1
35°	706.3	710.7	726.1	745.8	756.8
37.5°	680.0	686.6	704.1	726.1	739.2
40°	653.7	660.2	680.0	704.1	723.8
42.5°	622.9	631.8	653.7	686.6	708.5
45°	592.2	603.2	629.6	669.0	693.1
47.5°	559.4	570.3	601.0	651.4	677.8
50°	526.4	539.6	576.8	631.8	660.2
52.5°	491.3	504.5	552.7	612.0	642.7
55°	454.0	473.8	528.6	590.0	620.7
57.5°	416.8	438.7	500.1	565.9	598.8
60°	377.2	403.6	473.8	539.6	572.5
62.5°	340.0	368.5	445.3	511.1	544.0
65°	300.5	333.4	414.6	480.4	511.1
67.5°	258.9	300.5	379.4	443.1	473.8
70°	217.2	265.4	344.4	403.6	432.2
72.5°	179.8	230.3	304.9	355.3	355.3
75°	142.6	193.0	261.1	265.4	258.9
77.5°	109.6	157.9	204.0	186.5	190.9
80°	81.1	120.6	129.4	136.0	140.4
82.5°	54.8	81.1	83.3	87.8	87.8
85°	35.1	41.7	43.9	41.7	39.5
87.5°	15.4	17.6	13.2	8.7	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)