

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-LD5-40SE-SQP-UNV-L850-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-LD5-40SE-SQP-UNV-L850-CD1-U  
Description:

Light Source: -  
Ballast/Driver: -

**Summary**

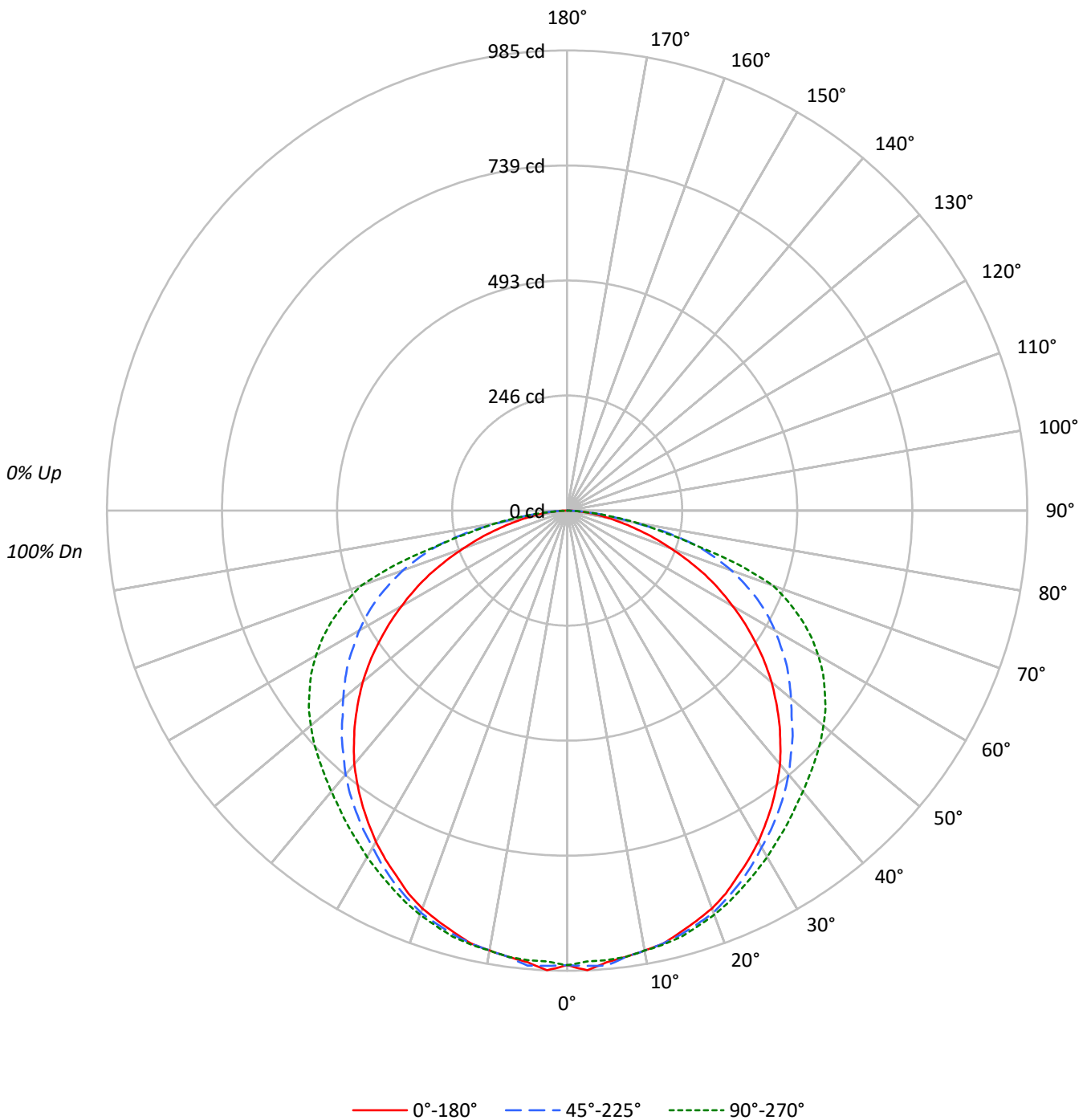
Lumens per Lamp: N/A  
Luminaire Lumens: 3063.3 lumens  
Efficiency: N/A  
Efficacy: 94.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 32.55  
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



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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°	1309	1309	1309
5°	1308	1314	1299
10°	1301	1294	1295
15°	1294	1291	1298
20°	1286	1287	1295
25°	1267	1272	1291
30°	1253	1255	1293
35°	1237	1247	1302
40°	1220	1240	1323
45°	1192	1234	1362
50°	1160	1232	1415
55°	1115	1250	1474
60°	1055	1267	1538
65°	985	1285	1594
70°	867	1282	1621
75°	735	1229	1230
80°	597	836	919
85°	457	458	420



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.4	3.0
10°-20°	265.3	8.7
20°-30°	404.3	13.2
30°-40°	494.7	16.1
40°-50°	532.3	17.4
50°-60°	515.6	16.8
60°-70°	436.8	14.3
70°-80°	264.0	8.6
80°-90°	58.0	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°	762.0	24.9
0°-40°	1256.7	41.0
0°-60°	2304.5	75.2
0°-90°	3063.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3063.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	971	971	978	973	966	92
15°	935	937	940	942	944	264
25°	864	868	878	885	890	399
35°	766	771	787	809	821	479
45°	642	654	683	726	752	495
55°	492	514	573	640	673	440
65°	326	362	450	521	554	321
75°	155	209	283	288	281	166
85°	38	45	48	45	43	43
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	973.0	973.0	973.0	973.0	973.0
2.5°	984.9	982.5	975.4	970.6	965.9
5°	970.6	970.6	977.7	973.0	965.9
7.5°	963.5	963.5	963.5	975.4	963.5
10°	956.3	958.7	956.3	965.9	956.3
12.5°	949.2	949.2	949.2	951.6	951.6
15°	934.9	937.3	939.7	942.1	944.4
17.5°	920.7	923.0	927.8	930.2	932.5
20°	906.4	908.8	915.9	915.9	920.7
22.5°	887.3	887.3	896.9	899.2	906.4
25°	863.6	868.3	877.8	885.0	889.7
27.5°	842.1	846.9	856.4	865.9	873.1
30°	818.4	823.1	832.6	846.9	856.4
32.5°	792.2	796.9	811.2	827.9	837.4
35°	766.0	770.8	787.4	808.8	820.7
37.5°	737.5	744.6	763.6	787.4	801.7
40°	708.9	716.1	737.5	763.6	785.1
42.5°	675.6	685.1	708.9	744.6	768.4
45°	642.3	654.2	682.8	725.6	751.7
47.5°	606.6	618.5	651.8	706.5	735.1
50°	570.9	585.2	625.7	685.1	716.1
52.5°	532.9	547.2	599.5	663.7	697.0
55°	492.4	513.9	573.3	639.9	673.2
57.5°	452.0	475.8	542.4	613.8	649.5
60°	409.2	437.7	513.9	585.2	620.9
62.5°	368.7	399.7	482.9	554.3	590.0
65°	325.9	361.6	449.6	521.0	554.3
67.5°	280.7	325.9	411.6	480.5	513.9
70°	235.5	287.9	373.5	437.7	468.7
72.5°	195.1	249.8	330.7	385.4	385.4
75°	154.6	209.3	283.1	287.9	280.7
77.5°	118.9	171.3	221.2	202.2	207.0
80°	88.0	130.8	140.4	147.5	152.3
82.5°	59.5	88.0	90.4	95.2	95.2
85°	38.1	45.2	47.6	45.2	42.8
87.5°	16.7	19.0	14.3	9.5	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)