

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-L840-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-L840-CD1-U  
Description:

Light Source: -  
Ballast/Driver: -

**Summary**

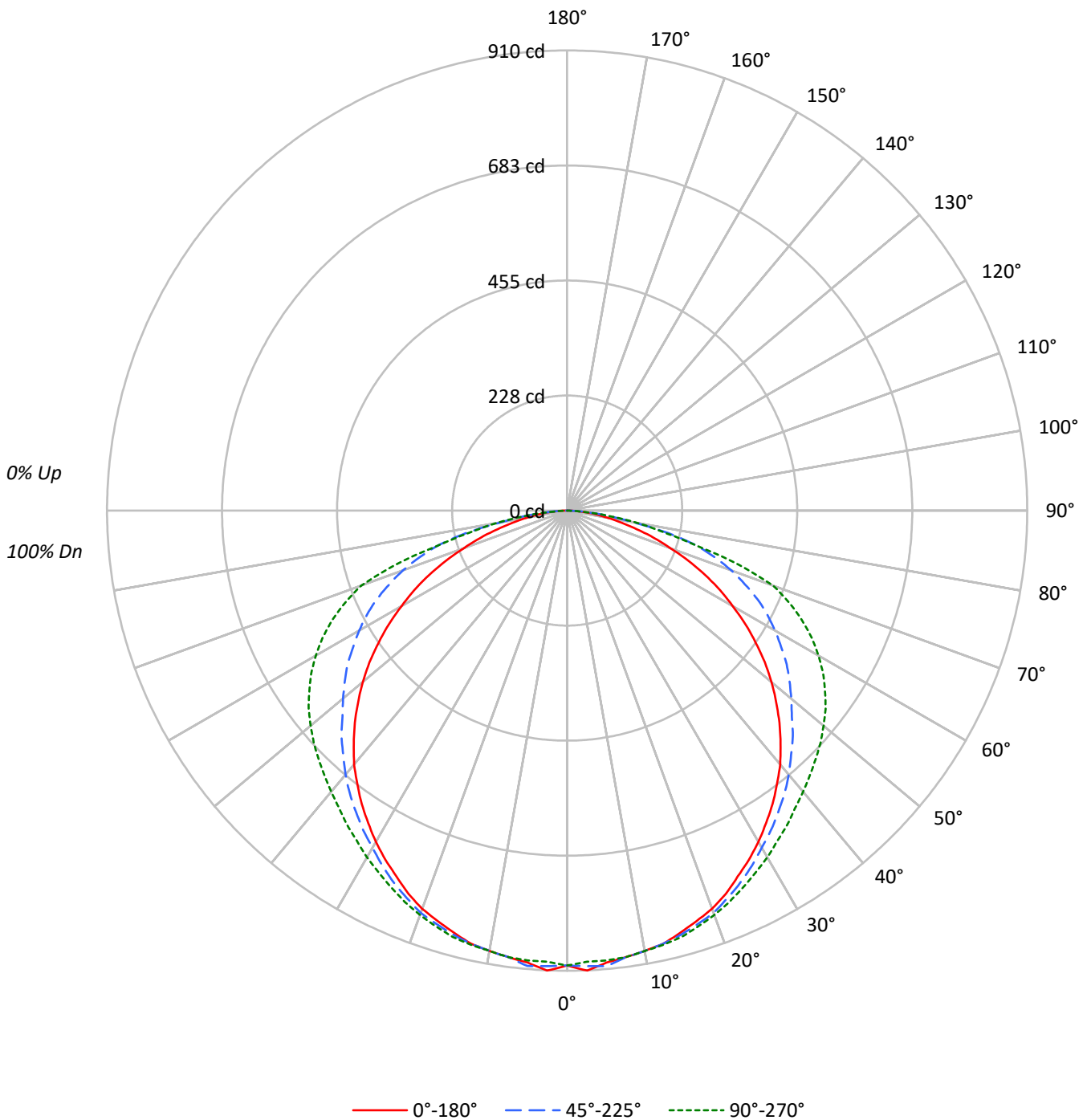
Lumens per Lamp: N/A  
Luminaire Lumens: 2831.9 lumens  
Efficiency: N/A  
Efficacy: 87.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 32.55  
Input Voltage (V): NR  
Input Current (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°	1210	1210	1210
5°	1209	1215	1201
10°	1203	1197	1197
15°	1196	1193	1200
20°	1189	1189	1197
25°	1171	1176	1193
30°	1159	1160	1196
35°	1143	1153	1204
40°	1128	1147	1223
45°	1102	1141	1259
50°	1073	1139	1308
55°	1031	1156	1363
60°	976	1171	1422
65°	910	1188	1473
70°	801	1186	1499
75°	680	1136	1137
80°	552	773	850
85°	423	423	389



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.4	3.0
10°-20°	245.3	8.7
20°-30°	373.7	13.2
30°-40°	457.3	16.1
40°-50°	492.1	17.4
50°-60°	476.6	16.8
60°-70°	403.8	14.3
70°-80°	244.1	8.6
80°-90°	53.6	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°	704.4	24.9
0°-40°	1161.7	41.0
0°-60°	2130.5	75.2
0°-90°	2831.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2831.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	900	900	900	900	900	
5°	897	897	904	900	893	85
15°	864	866	869	871	873	244
25°	798	803	812	818	822	369
35°	708	713	728	748	759	443
45°	594	605	631	671	695	458
55°	455	475	530	592	622	407
65°	301	334	416	482	512	297
75°	143	194	262	266	260	154
85°	35	42	44	42	40	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	899.5	899.5	899.5	899.5	899.5
2.5°	910.5	908.3	901.7	897.3	892.9
5°	897.3	897.3	903.9	899.5	892.9
7.5°	890.7	890.7	890.7	901.7	890.7
10°	884.1	886.3	884.1	892.9	884.1
12.5°	877.5	877.5	877.5	879.7	879.7
15°	864.3	866.5	868.7	870.9	873.1
17.5°	851.1	853.3	857.7	859.9	862.1
20°	837.9	840.1	846.7	846.7	851.1
22.5°	820.3	820.3	829.1	831.3	837.9
25°	798.3	802.7	811.5	818.1	822.5
27.5°	778.5	782.9	791.7	800.5	807.1
30°	756.5	760.9	769.7	782.9	791.7
32.5°	732.4	736.7	749.9	765.3	774.1
35°	708.2	712.6	728.0	747.7	758.7
37.5°	681.8	688.4	706.0	728.0	741.1
40°	655.4	662.0	681.8	706.0	725.8
42.5°	624.6	633.4	655.4	688.4	710.4
45°	593.8	604.8	631.2	670.8	695.0
47.5°	560.8	571.8	602.6	653.2	679.6
50°	527.8	541.0	578.4	633.4	662.0
52.5°	492.6	505.8	554.2	613.6	644.4
55°	455.2	475.0	530.0	591.6	622.4
57.5°	417.9	439.9	501.4	567.4	600.4
60°	378.3	404.7	475.0	541.0	574.0
62.5°	340.9	369.5	446.4	512.4	545.4
65°	301.3	334.3	415.7	481.6	512.4
67.5°	259.5	301.3	380.5	444.2	475.0
70°	217.7	266.1	345.3	404.7	433.3
72.5°	180.3	230.9	305.7	356.3	356.3
75°	143.0	193.5	261.7	266.1	259.5
77.5°	110.0	158.3	204.5	186.9	191.3
80°	81.4	121.0	129.8	136.4	140.8
82.5°	55.0	81.4	83.6	88.0	88.0
85°	35.2	41.8	44.0	41.8	39.6
87.5°	15.4	17.6	13.2	8.8	6.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)