

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: A1616677H001

Luminaire Tested: **22CZRK-LD4-24HP-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: A1616677H001
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (A1616677H001)
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZRK-LD4-24HP-UNV-L840-CD1-U
Description: 22CRZ RETROFIT DLC Prem 2400 40K 0-10Dim
Light Source: 7S17P CCT:4000K CRI:80
PCB_L-PL-A94-04-A-V2.0E lumens3030E©
Ballast/Driver: OSRAM
OPTOTRONIC OTI 30

Summary

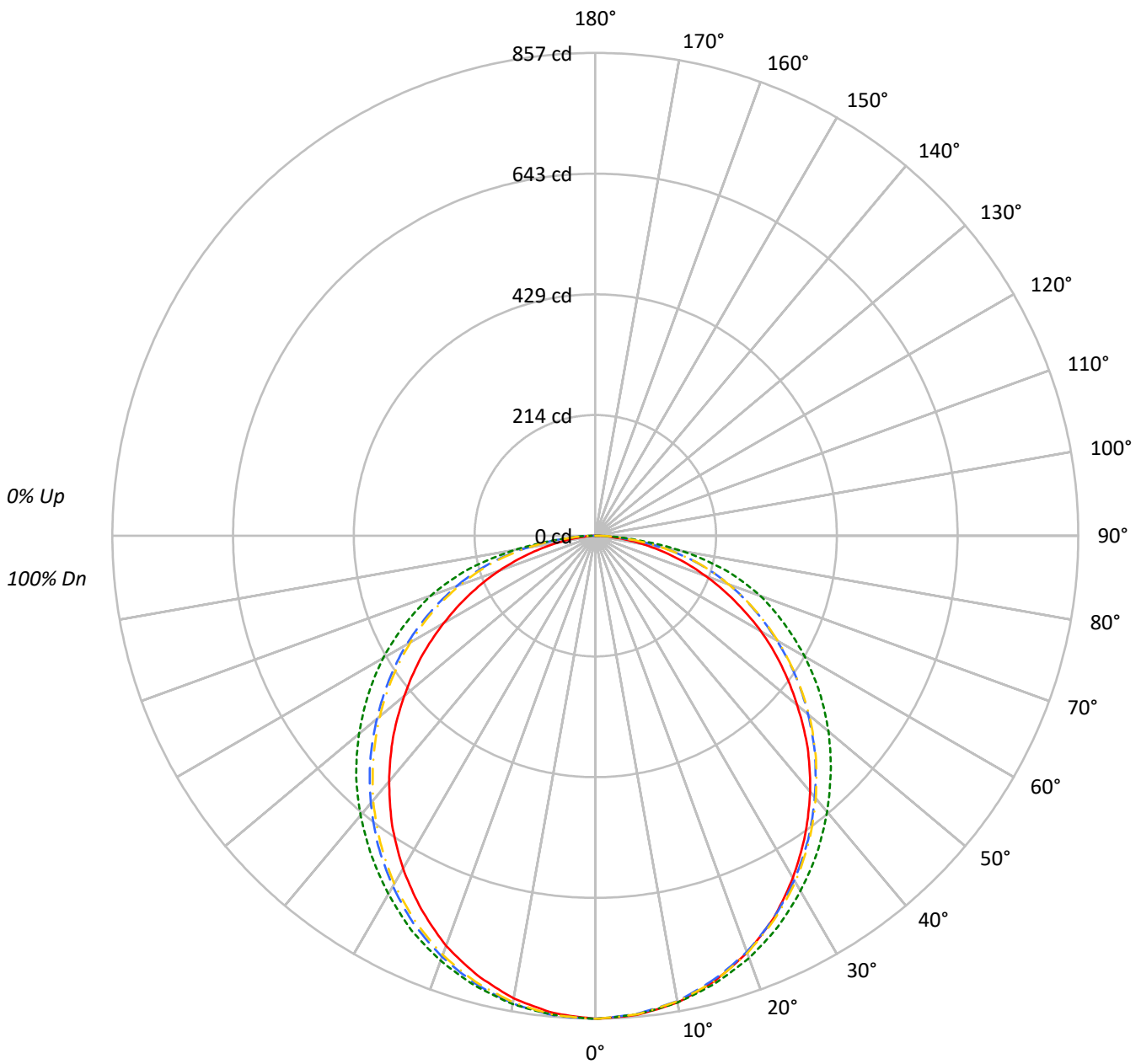
Lumens per Lamp: 2466.411 (1 lamp)
Luminaire Lumens: 2466.4 lumens
Efficiency: 100.0%
Efficacy: 127.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.36
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.1')
CIE Type: Direct

Input Watts (W): 19.299
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



— 0°-180° - - 45°-225° - - - 90°-270° - - - 135°-315°



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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	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	69	64	60	57
4	82	69	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	35	32
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	2307	2307	2307	2307
5°	2295	2293	2287	2295
10°	2278	2278	2258	2287
15°	2249	2261	2221	2272
20°	2214	2243	2179	2258
25°	2172	2223	2121	2241
30°	2117	2198	2060	2217
35°	2060	2179	1994	2198
40°	1999	2156	1918	2184
45°	1931	2141	1840	2175
50°	1846	2133	1748	2162
55°	1769	2128	1655	2155
60°	1682	2124	1538	2155
65°	1565	2126	1410	2144
70°	1437	2155	1257	2148
75°	1274	2120	1028	2074
80°	1015	1893	752	1742
85°	652	1122	387	939



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	81.0	3.3	3.3	0°	857	857	857	857	857	
10°-20°	231.0	9.4	9.4	5°	854	852	850	854	854	81
20°-30°	347.5	14.1	14.1	15°	818	822	808	826	818	231
30°-40°	415.5	16.8	16.8	25°	749	766	731	772	749	345
40°-50°	429.7	17.4	17.4	35°	649	686	628	693	649	406
50°-60°	392.8	15.9	15.9	45°	533	591	508	600	533	410
60°-70°	313.2	12.7	12.7	55°	404	486	378	492	404	361
70°-80°	198.4	8.0	8.0	65°	272	370	245	373	272	270
80°-90°	57.1	2.3	2.3	75°	145	242	117	237	145	154
90°-100°	0.0	0.0	0.0	85°	33	57	20	48	33	42
100°-110°	0.0	0.0	0.0	90°	3	1	2	2	3	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	659.6	26.7	26.7							
0°-40°	1075.1	43.6	43.6							
0°-60°	1897.6	76.9	76.9							
0°-90°	2466.4	100.0	100.0							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	2466.4	100.0	100.0							



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	857.3	857.3	857.3	857.3	857.3	857.3	857.3	857.3	857.3	857.3	857.3
5°	853.5	852.5	850.4	852.5	851.5	853.5	850.4	853.5	855.6	853.5	854.6
10°	841.1	839.0	838.0	841.1	839.0	839.0	833.8	840.0	846.3	844.2	843.1
15°	818.2	815.1	815.1	822.4	819.3	817.2	807.8	818.2	827.6	826.5	824.5
20°	787.1	785.0	787.1	797.5	790.2	786.0	774.6	787.1	803.7	802.7	798.5
25°	748.7	745.5	751.8	766.3	755.9	747.6	731.0	749.7	772.5	772.5	765.3
30°	700.9	700.9	711.3	727.9	716.5	703.0	682.2	704.0	733.1	734.1	725.8
35°	649.0	651.1	665.6	686.4	669.7	653.1	628.2	653.1	690.5	692.6	682.2
40°	592.9	597.1	614.7	639.6	620.9	596.0	569.0	598.1	641.7	647.9	633.4
45°	532.7	538.9	563.8	590.8	568.0	537.9	507.8	538.9	590.8	600.2	579.4
50°	467.3	476.6	508.8	539.9	514.0	476.6	442.3	476.6	534.8	547.2	525.4
55°	403.9	415.3	452.7	486.0	455.8	413.3	378.0	414.3	479.7	492.2	470.4
60°	339.5	351.0	392.5	428.8	397.7	351.0	310.5	353.0	421.6	435.1	410.2
65°	272.1	290.7	333.3	369.7	336.4	289.7	245.1	289.7	358.2	372.8	349.9
70°	207.7	230.5	274.1	311.5	276.2	226.4	181.7	228.4	295.9	310.5	285.5
75°	145.4	168.2	208.7	241.9	212.9	166.1	117.3	166.1	228.4	236.7	221.2
80°	84.1	109.0	130.8	156.8	133.9	104.9	62.3	102.8	148.5	144.3	142.3
85°	33.2	46.7	46.7	57.1	53.0	43.6	19.7	42.6	56.1	47.8	49.8
90°	3.1	2.1	2.1	1.0	2.1	2.1	2.1	1.0	2.1	2.1	2.1



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CANDELA DISTRIBUTION (continued):

	330°	360°
0°	857.3	857.3
5°	852.5	853.5
10°	838.0	841.1
15°	815.1	818.2
20°	785.0	787.1
25°	745.5	748.7
30°	700.9	700.9
35°	647.9	649.0
40°	592.9	592.9
45°	533.7	532.7
50°	472.5	467.3
55°	409.1	403.9
60°	346.8	339.5
65°	285.5	272.1
70°	223.2	207.7
75°	162.0	145.4
80°	100.7	84.1
85°	41.5	33.2
90°	1.0	3.1

(END OF REPORT)