

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: P397523

Luminaire Tested: **14CZRK-LD4-20-UNV-L840-CD1-U**

Issue Date: 5/18/2020

Test Information

Test Method: LM-79-08
Report Number: P397523
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-549-1)
Test Lab: INNOVATIONS CENTER(G2)
Issue Date: 5/18/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZRK-LD4-20-UNV-L840-CD1-U
Description: 1X4 CRUZE RETROFIT KIT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1898.0 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

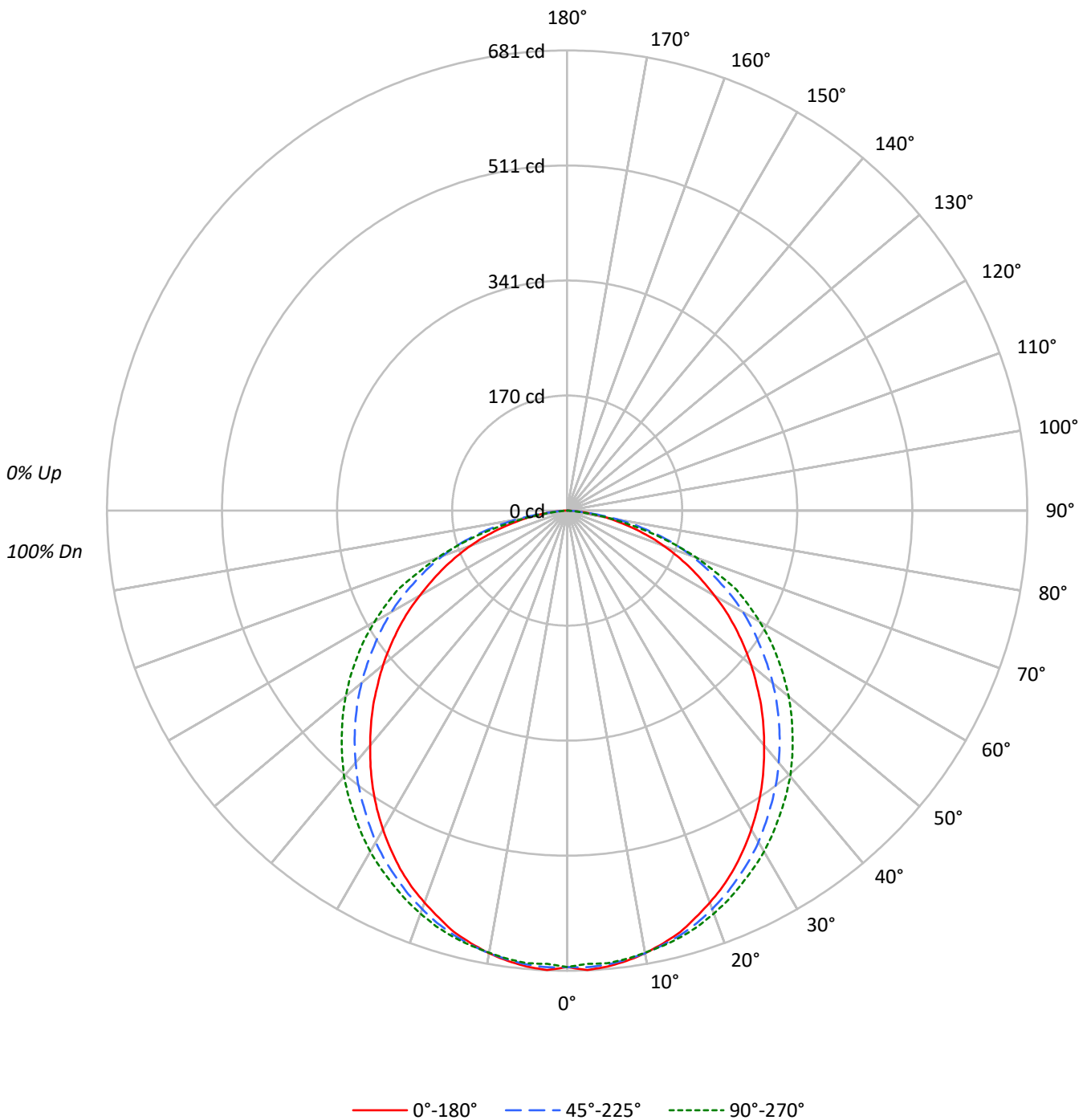
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P397523

CATALOG NUMBER: 14CZRK-LD4-20-UNV-L840-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P397523

CATALOG NUMBER: 14CZRK-LD4-20-UNV-L840-CD1-U

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	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	51	45	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1818	1818	1818
5°	1830	1822	1816
10°	1818	1818	1815
15°	1799	1811	1819
20°	1768	1797	1818
25°	1736	1779	1812
30°	1694	1760	1811
35°	1647	1734	1804
40°	1593	1711	1804
45°	1543	1687	1795
50°	1489	1663	1791
55°	1429	1635	1783
60°	1354	1618	1771
65°	1284	1577	1758
70°	1194	1547	1603
75°	1059	1451	1345
80°	900	1168	931
85°	630	534	188



TEST NUMBER: P397523

CATALOG NUMBER: 14CZRK-LD4-20-UNV-L840-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	3.4
10°-20°	182.7	9.6
20°-30°	274.9	14.5
30°-40°	328.7	17.3
40°-50°	339.3	17.9
50°-60°	308.4	16.2
60°-70°	239.4	12.6
70°-80°	134.7	7.1
80°-90°	26.1	1.4
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°	521.6	27.5
0°-40°	850.2	44.8
0°-60°	1497.9	78.9
0°-90°	1898.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1898.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	676	676	676	676	676	
5°	678	670	674	672	672	64
15°	646	641	650	652	653	182
25°	585	584	599	605	610	269
35°	501	506	528	541	549	313
45°	406	414	443	462	472	313
55°	305	317	348	371	380	272
65°	202	216	248	268	276	199
75°	102	121	140	134	129	109
85°	20	28	17	8	6	26
90°	0	0	0	0	0	



TEST NUMBER: P397523

CATALOG NUMBER: 14CZRK-LD4-20-UNV-L840-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	675.5	675.5	675.5	675.5	675.5
2.5°	680.6	672.4	676.5	674.5	671.4
5°	677.5	670.4	674.5	672.4	672.4
7.5°	672.4	665.3	670.4	669.4	669.4
10°	665.3	659.2	665.3	664.3	664.3
12.5°	656.1	651.0	658.2	658.2	659.2
15°	645.9	640.8	650.0	652.0	653.1
17.5°	631.7	629.6	639.8	642.9	644.9
20°	617.4	615.4	627.6	631.7	634.7
22.5°	602.1	600.1	614.3	618.4	623.5
25°	584.8	583.8	599.1	605.2	610.3
27.5°	565.4	566.5	583.8	591.9	597.0
30°	545.1	548.1	566.5	575.6	582.8
32.5°	523.7	527.7	547.1	559.3	566.5
35°	501.3	506.4	527.7	541.0	549.1
37.5°	477.8	483.9	508.4	523.7	531.8
40°	453.4	461.5	487.0	504.3	513.5
42.5°	429.9	438.1	465.6	483.9	493.1
45°	405.5	413.6	443.2	462.5	471.7
47.5°	380.0	390.2	420.8	441.1	450.3
50°	355.6	365.8	397.3	418.7	427.9
52.5°	330.1	341.3	372.9	396.3	404.5
55°	304.6	316.9	348.4	370.8	380.0
57.5°	279.2	293.4	325.0	346.4	355.6
60°	251.6	265.9	300.6	321.9	329.1
62.5°	226.2	241.5	275.1	295.5	302.6
65°	201.7	216.0	247.6	267.9	276.1
67.5°	176.3	192.6	222.1	238.4	237.4
70°	151.8	168.1	196.6	204.8	203.8
72.5°	127.4	143.7	169.1	170.1	167.1
75°	101.9	121.2	139.6	134.5	129.4
77.5°	78.4	98.8	108.0	98.8	92.7
80°	58.1	76.4	75.4	64.2	60.1
82.5°	36.7	52.0	44.8	34.6	29.5
85°	20.4	27.5	17.3	8.2	6.1
87.5°	8.2	6.1	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)