

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: P397522

Luminaire Tested: **14CZRK-LD4-20-UNV-L835-CD1-U**

Issue Date: 5/18/2020

Test Information

Test Method: LM-79-08
Report Number: P397522
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-L835-CD1-U
Description: 1X4 CRUZE RETROFIT KIT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1840.0 lumens
Efficiency: N/A
Efficacy: 133.3 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

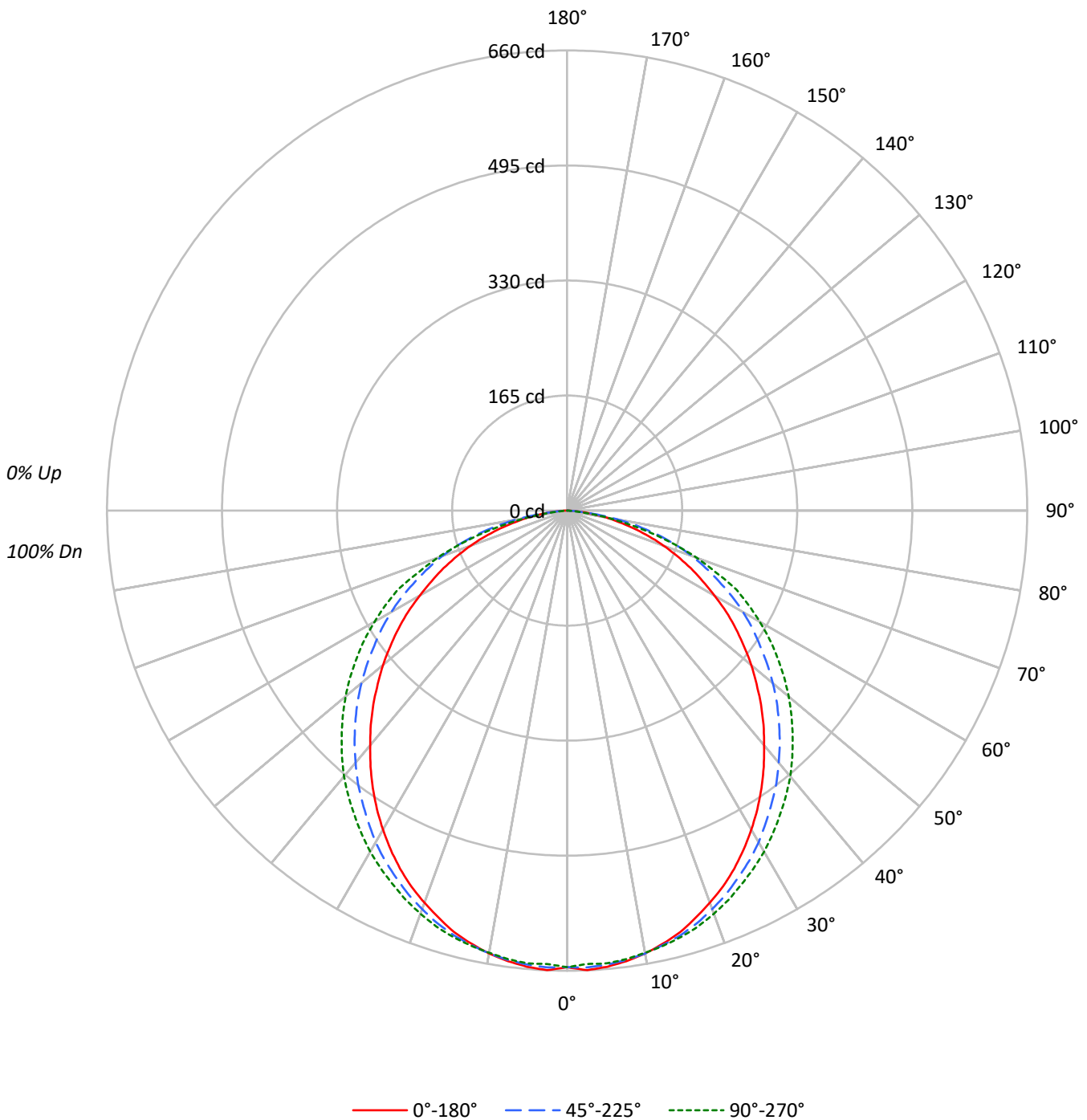
Input Watts (W): 13.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1762	1762	1762
5°	1774	1766	1761
10°	1762	1762	1760
15°	1745	1755	1764
20°	1714	1742	1762
25°	1683	1724	1757
30°	1642	1707	1756
35°	1596	1681	1749
40°	1544	1658	1749
45°	1496	1635	1740
50°	1443	1613	1737
55°	1385	1585	1728
60°	1313	1568	1717
65°	1245	1528	1705
70°	1158	1500	1554
75°	1027	1407	1304
80°	872	1133	903
85°	611	519	182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.0	3.4
10°-20°	177.2	9.6
20°-30°	266.5	14.5
30°-40°	318.6	17.3
40°-50°	328.9	17.9
50°-60°	299.0	16.2
60°-70°	232.1	12.6
70°-80°	130.5	7.1
80°-90°	25.3	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°	505.6	27.5
0°-40°	824.3	44.8
0°-60°	1452.1	78.9
0°-90°	1840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	655	655	655	655	655	
5°	657	650	654	652	652	62
15°	626	621	630	632	633	176
25°	567	566	581	587	592	261
35°	486	491	512	524	532	304
45°	393	401	430	448	457	303
55°	295	307	338	360	368	264
65°	196	209	240	260	268	193
75°	99	118	135	130	125	105
85°	20	27	17	8	6	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	654.8	654.8	654.8	654.8	654.8
2.5°	659.8	651.9	655.8	653.8	650.9
5°	656.8	649.9	653.8	651.9	651.9
7.5°	651.9	645.0	649.9	648.9	648.9
10°	645.0	639.0	645.0	644.0	644.0
12.5°	636.1	631.1	638.0	638.0	639.0
15°	626.2	621.3	630.1	632.1	633.1
17.5°	612.4	610.4	620.3	623.2	625.2
20°	598.5	596.6	608.4	612.4	615.3
22.5°	583.7	581.7	595.6	599.5	604.5
25°	566.9	565.9	580.8	586.7	591.6
27.5°	548.2	549.2	565.9	573.8	578.8
30°	528.4	531.4	549.2	558.0	565.0
32.5°	507.7	511.6	530.4	542.2	549.2
35°	485.9	490.9	511.6	524.5	532.4
37.5°	463.2	469.1	492.9	507.7	515.6
40°	439.5	447.4	472.1	488.9	497.8
42.5°	416.8	424.7	451.4	469.1	478.0
45°	393.1	401.0	429.6	448.4	457.3
47.5°	368.4	378.3	407.9	427.7	436.6
50°	344.7	354.6	385.2	405.9	414.8
52.5°	320.0	330.9	361.5	384.2	392.1
55°	295.3	307.2	337.8	359.5	368.4
57.5°	270.6	284.5	315.1	335.8	344.7
60°	244.0	257.8	291.4	312.1	319.0
62.5°	219.3	234.1	266.7	286.4	293.3
65°	195.6	209.4	240.0	259.8	267.7
67.5°	170.9	186.7	215.3	231.1	230.1
70°	147.2	163.0	190.6	198.5	197.5
72.5°	123.5	139.3	164.0	164.9	162.0
75°	98.8	117.5	135.3	130.4	125.4
77.5°	76.1	95.8	104.7	95.8	89.9
80°	56.3	74.1	73.1	62.2	58.3
82.5°	35.6	50.4	43.5	33.6	28.6
85°	19.8	26.7	16.8	7.9	5.9
87.5°	7.9	5.9	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)