

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: P345155

Luminaire Tested: **14CZ-20-L835-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345155
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1905-313-1)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ-20-L835-HRP-UNV-CD1-U
Description: CRUZE 1X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1781.4 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

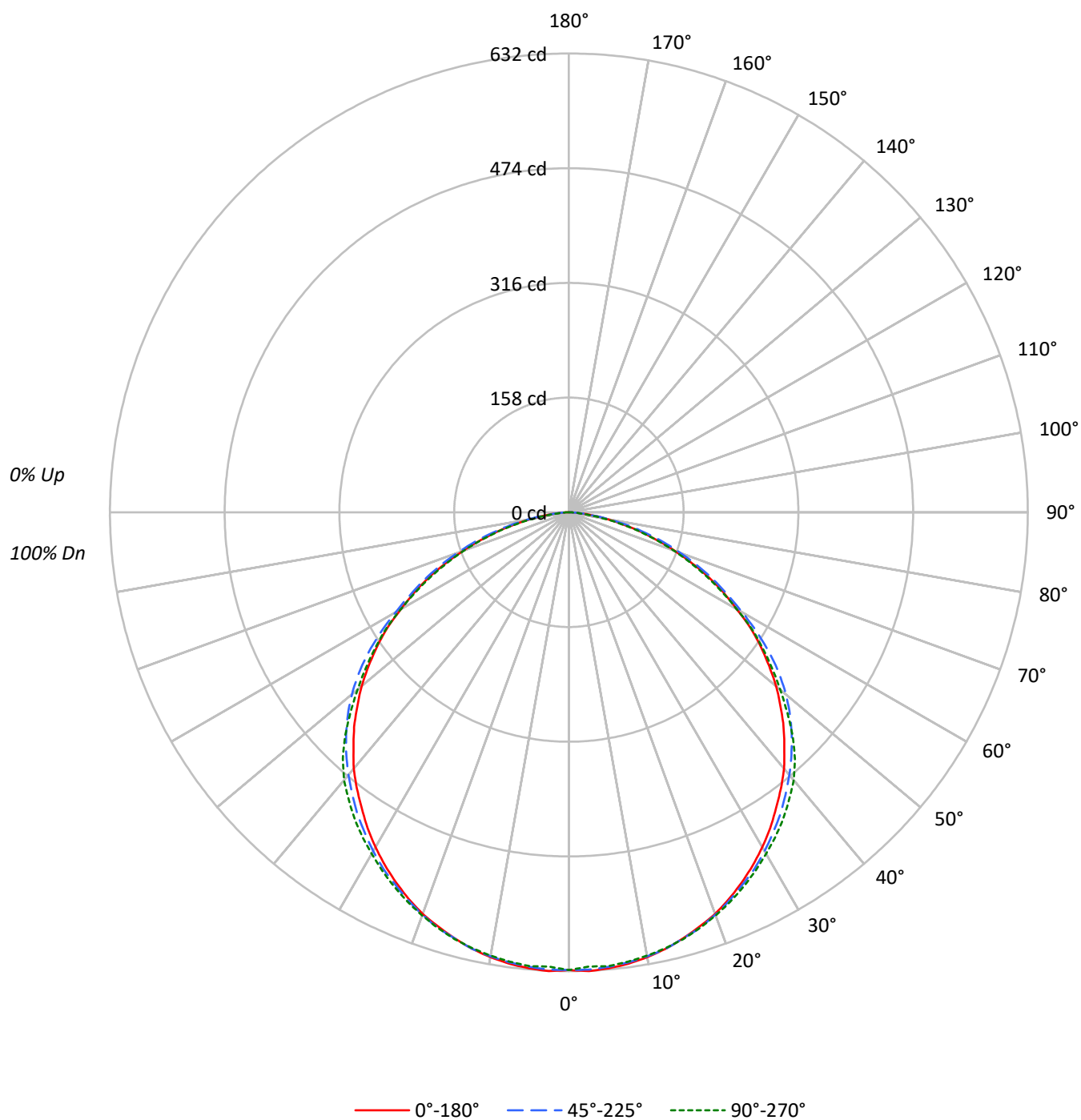
Input Watts (W): 16.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20				
RC	80				70					50					30				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	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	95	98	95	92	94	91	89	90	88	86	84	
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70	
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	66	62	59	
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51	
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44	
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38	
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	46	40	36	34	
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30	
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27	
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	31	26	24	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1696	1696	1696
5°	1703	1697	1694
10°	1700	1697	1694
15°	1692	1692	1696
20°	1686	1689	1692
25°	1671	1680	1689
30°	1655	1675	1687
35°	1633	1668	1691
40°	1619	1659	1692
45°	1592	1651	1659
50°	1559	1633	1590
55°	1513	1581	1528
60°	1439	1484	1439
65°	1358	1398	1331
70°	1220	1285	1203
75°	1049	1135	1027
80°	823	886	742
85°	577	513	451



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	3.3
10°-20°	171.4	9.6
20°-30°	260.4	14.6
30°-40°	316.3	17.8
40°-50°	330.4	18.5
50°-60°	293.8	16.5
60°-70°	214.4	12.0
70°-80°	111.9	6.3
80°-90°	23.1	1.3
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°	491.5	27.6
0°-40°	807.8	45.3
0°-60°	1432.0	80.4
0°-90°	1781.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1781.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	630	630	630	630	630	
5°	630	626	628	627	627	60
15°	608	604	608	609	609	171
25°	563	561	566	567	569	259
35°	497	497	508	511	515	312
45°	418	419	434	437	436	322
55°	322	329	337	328	326	288
65°	213	225	220	213	209	210
75°	101	110	109	102	99	107
85°	19	21	17	15	15	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	630.4	630.4	630.4	630.4	630.4
2.5°	632.5	628.3	630.4	629.4	626.2
5°	630.4	626.2	628.3	627.3	627.3
7.5°	627.3	623.1	625.2	624.2	624.2
10°	622.1	617.9	621.0	620.0	620.0
12.5°	615.8	611.7	615.8	614.8	614.8
15°	607.5	604.4	607.5	608.6	608.6
17.5°	598.2	596.1	600.2	600.2	600.2
20°	588.8	585.7	589.8	589.8	590.9
22.5°	576.3	573.2	578.4	577.3	580.5
25°	562.8	560.7	565.9	566.9	569.0
27.5°	548.2	547.2	553.4	554.5	556.5
30°	532.6	530.5	538.9	539.9	543.0
32.5°	516.0	516.0	523.3	525.3	529.5
35°	497.2	497.2	507.6	510.8	514.9
37.5°	479.6	479.6	490.0	495.2	498.3
40°	460.8	460.8	472.3	477.5	481.6
42.5°	439.0	440.0	453.6	458.8	460.8
45°	418.2	419.2	433.8	436.9	435.9
47.5°	395.3	398.4	413.0	410.9	407.8
50°	372.4	375.5	390.1	381.8	379.7
52.5°	347.4	352.6	365.1	353.7	352.6
55°	322.5	328.7	337.0	327.7	325.6
57.5°	296.5	304.8	306.9	300.6	298.6
60°	267.3	278.8	275.7	270.5	267.3
62.5°	240.3	250.7	246.5	241.3	238.2
65°	213.3	224.7	219.5	213.3	209.1
67.5°	184.1	197.6	191.4	184.1	181.0
70°	155.0	166.4	163.3	156.0	152.9
72.5°	126.9	137.3	136.3	129.0	125.9
75°	100.9	110.3	109.2	101.9	98.8
77.5°	75.9	85.3	82.2	75.9	72.8
80°	53.1	61.4	57.2	51.0	47.9
82.5°	34.3	38.5	34.3	29.1	27.0
85°	18.7	20.8	16.6	14.6	14.6
87.5°	6.2	7.3	7.3	7.3	7.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)