

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: P345154

Luminaire Tested: **14CZ-20-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345154
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-L830-HRP-UNV-CD1-U
Description: CRUZE 1X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1765.6 lumens
Efficiency: N/A
Efficacy: 108.3 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

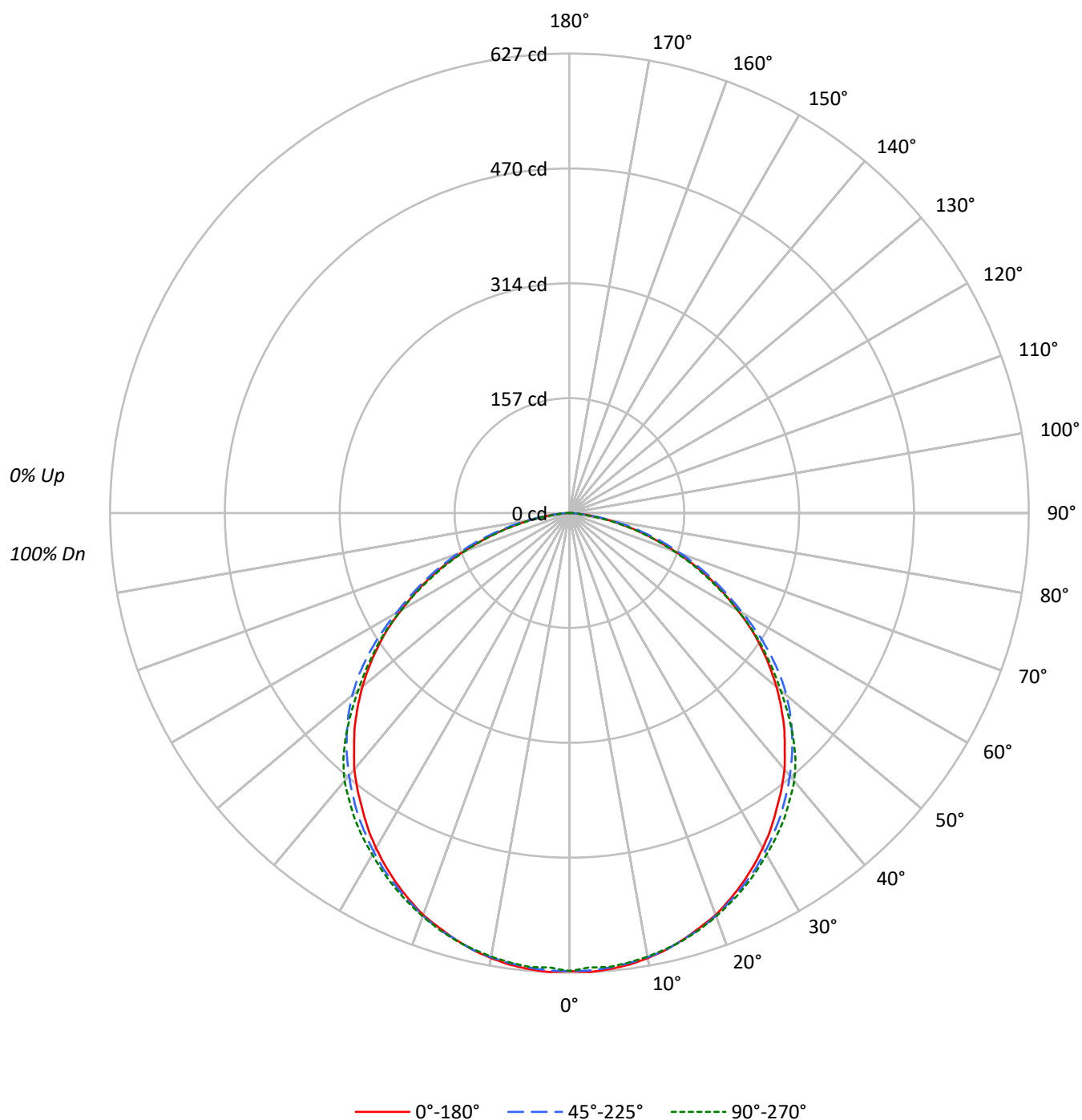
Input Watts (W): 16.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1681	1681	1681
5°	1688	1682	1679
10°	1685	1682	1679
15°	1677	1677	1680
20°	1671	1674	1677
25°	1656	1665	1675
30°	1640	1660	1672
35°	1619	1653	1677
40°	1604	1644	1677
45°	1577	1636	1644
50°	1545	1618	1575
55°	1499	1567	1514
60°	1426	1470	1426
65°	1346	1385	1319
70°	1209	1274	1193
75°	1040	1126	1018
80°	815	879	735
85°	574	509	445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.1	3.3
10°-20°	169.9	9.6
20°-30°	258.1	14.6
30°-40°	313.5	17.8
40°-50°	327.5	18.5
50°-60°	291.2	16.5
60°-70°	212.6	12.0
70°-80°	110.9	6.3
80°-90°	22.9	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°	487.1	27.6
0°-40°	800.6	45.3
0°-60°	1419.3	80.4
0°-90°	1765.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1765.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	625	625	625	625	625	
5°	625	621	623	622	622	59
15°	602	599	602	603	603	170
25°	558	556	561	562	564	257
35°	493	493	503	506	510	309
45°	414	416	430	433	432	319
55°	320	326	334	325	323	285
65°	211	223	218	211	207	208
75°	100	109	108	101	98	107
85°	19	21	16	14	14	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	624.8	624.8	624.8	624.8	624.8
2.5°	626.9	622.7	624.8	623.8	620.7
5°	624.8	620.7	622.7	621.7	621.7
7.5°	621.7	617.6	619.6	618.6	618.6
10°	616.6	612.4	615.5	614.5	614.5
12.5°	610.4	606.2	610.4	609.3	609.3
15°	602.1	599.0	602.1	603.2	603.2
17.5°	592.8	590.8	594.9	594.9	594.9
20°	583.6	580.5	584.6	584.6	585.6
22.5°	571.2	568.1	573.3	572.2	575.3
25°	557.8	555.7	560.9	561.9	564.0
27.5°	543.4	542.3	548.5	549.5	551.6
30°	527.9	525.8	534.1	535.1	538.2
32.5°	511.4	511.4	518.6	520.7	524.8
35°	492.8	492.8	503.1	506.2	510.4
37.5°	475.3	475.3	485.6	490.8	493.9
40°	456.7	456.7	468.1	473.2	477.4
42.5°	435.1	436.1	449.5	454.7	456.7
45°	414.5	415.5	429.9	433.0	432.0
47.5°	391.8	394.9	409.3	407.3	404.2
50°	369.1	372.2	386.6	378.4	376.3
52.5°	344.4	349.5	361.9	350.5	349.5
55°	319.6	325.8	334.1	324.8	322.7
57.5°	293.8	302.1	304.2	298.0	295.9
60°	265.0	276.3	273.2	268.1	265.0
62.5°	238.2	248.5	244.4	239.2	236.1
65°	211.4	222.7	217.5	211.4	207.2
67.5°	182.5	195.9	189.7	182.5	179.4
70°	153.6	165.0	161.9	154.7	151.6
72.5°	125.8	136.1	135.1	127.8	124.8
75°	100.0	109.3	108.3	101.0	97.9
77.5°	75.3	84.5	81.5	75.3	72.2
80°	52.6	60.8	56.7	50.5	47.4
82.5°	34.0	38.1	34.0	28.9	26.8
85°	18.6	20.6	16.5	14.4	14.4
87.5°	6.2	7.2	7.2	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)