

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: P345156

Luminaire Tested: **14CZ-20-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345156
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-L840-HRP-UNV-CD1-U
Description: CRUZE 1X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1817.4 lumens
Efficiency: N/A
Efficacy: 111.5 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

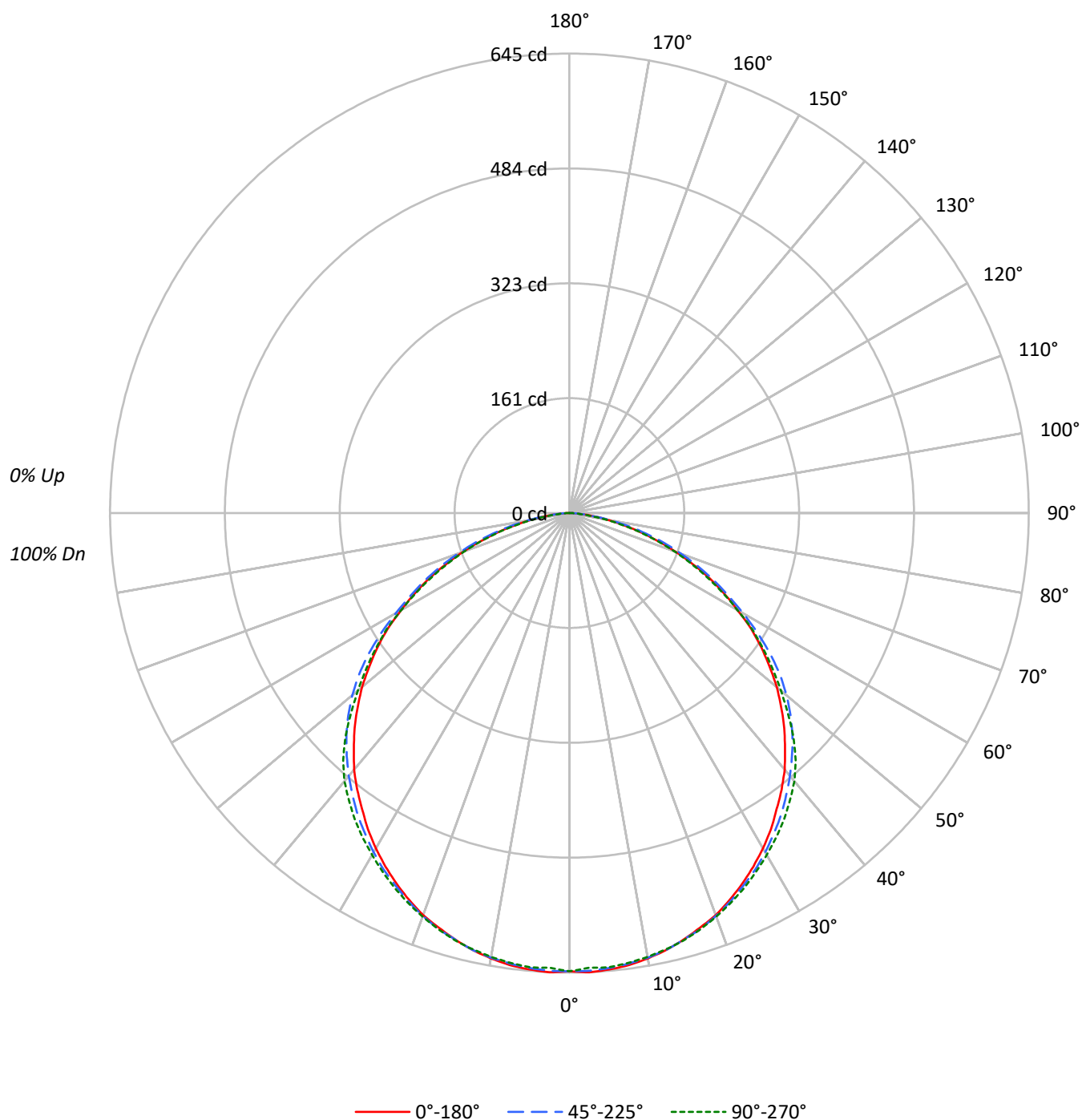
Input Watts (W): 16.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		0
RCR																			
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106		100
1	109	104	100	96	106	102	98	95		98	95	92			94	91	89		84
2	99	91	84	79	97	89	83	78		86	80	76			82	78	74		70
3	90	80	72	65	88	78	71	65		75	69	64			73	67	63		59
4	83	71	62	55	81	70	61	55		67	60	54			65	59	54		51
5	76	63	54	48	74	62	54	47		60	53	47			58	52	46		44
6	70	57	48	42	68	56	48	41		54	47	41			53	46	41		38
7	65	52	43	37	63	51	43	37		49	42	36			48	41	36		34
8	61	47	39	33	59	46	38	33		45	38	32			44	37	32		30
9	57	43	35	29	55	43	35	29		41	34	29			40	34	29		27
10	53	40	32	27	52	39	32	27		38	31	26			37	31	26		24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1731	1731	1731
5°	1737	1732	1729
10°	1734	1731	1728
15°	1727	1727	1730
20°	1720	1723	1726
25°	1705	1714	1724
30°	1688	1708	1721
35°	1667	1701	1726
40°	1652	1692	1726
45°	1623	1684	1692
50°	1590	1666	1622
55°	1544	1613	1559
60°	1468	1513	1468
65°	1386	1426	1358
70°	1244	1311	1227
75°	1070	1158	1048
80°	838	905	756
85°	590	525	460



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.9	3.3
10°-20°	174.9	9.6
20°-30°	265.7	14.6
30°-40°	322.7	17.8
40°-50°	337.1	18.5
50°-60°	299.8	16.5
60°-70°	218.8	12.0
70°-80°	114.1	6.3
80°-90°	23.6	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°	501.4	27.6
0°-40°	824.1	45.3
0°-60°	1461.0	80.4
0°-90°	1817.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1817.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	643	643	643	643	643	
5°	643	639	641	640	640	61
15°	620	617	620	621	621	175
25°	574	572	577	578	580	265
35°	507	507	518	521	525	318
45°	427	428	443	446	445	329
55°	329	335	344	334	332	293
65°	218	229	224	218	213	214
75°	103	112	111	104	101	110
85°	19	21	17	15	15	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	643.1	643.1	643.1	643.1	643.1
2.5°	645.3	641.0	643.1	642.1	638.9
5°	643.1	638.9	641.0	640.0	640.0
7.5°	640.0	635.7	637.8	636.8	636.8
10°	634.7	630.4	633.6	632.5	632.5
12.5°	628.3	624.0	628.3	627.2	627.2
15°	619.8	616.6	619.8	620.9	620.9
17.5°	610.2	608.1	612.4	612.4	612.4
20°	600.7	597.5	601.8	601.8	602.8
22.5°	588.0	584.8	590.1	589.0	592.2
25°	574.2	572.0	577.3	578.4	580.5
27.5°	559.3	558.2	564.6	565.7	567.8
30°	543.4	541.3	549.7	550.8	554.0
32.5°	526.4	526.4	533.8	536.0	540.2
35°	507.3	507.3	517.9	521.1	525.3
37.5°	489.3	489.3	499.9	505.2	508.4
40°	470.2	470.2	481.8	487.1	491.4
42.5°	447.9	448.9	462.7	468.0	470.2
45°	426.6	427.7	442.6	445.7	444.7
47.5°	403.3	406.5	421.3	419.2	416.0
50°	379.9	383.1	398.0	389.5	387.4
52.5°	354.5	359.8	372.5	360.8	359.8
55°	329.0	335.4	343.9	334.3	332.2
57.5°	302.5	311.0	313.1	306.7	304.6
60°	272.8	284.4	281.2	275.9	272.8
62.5°	245.2	255.8	251.5	246.2	243.0
65°	217.6	229.2	223.9	217.6	213.3
67.5°	187.8	201.6	195.3	187.8	184.7
70°	158.1	169.8	166.6	159.2	156.0
72.5°	129.5	140.1	139.0	131.6	128.4
75°	102.9	112.5	111.4	104.0	100.8
77.5°	77.5	87.0	83.8	77.5	74.3
80°	54.1	62.6	58.4	52.0	48.8
82.5°	35.0	39.3	35.0	29.7	27.6
85°	19.1	21.2	17.0	14.9	14.9
87.5°	6.4	7.4	7.4	7.4	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)