

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: P345136

Luminaire Tested: **22CZ-20SE-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345136
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1905-313-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ-20SE-L840-HRP-UNV-CD1-U
Description: CRUZE 2X2 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1863.7 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

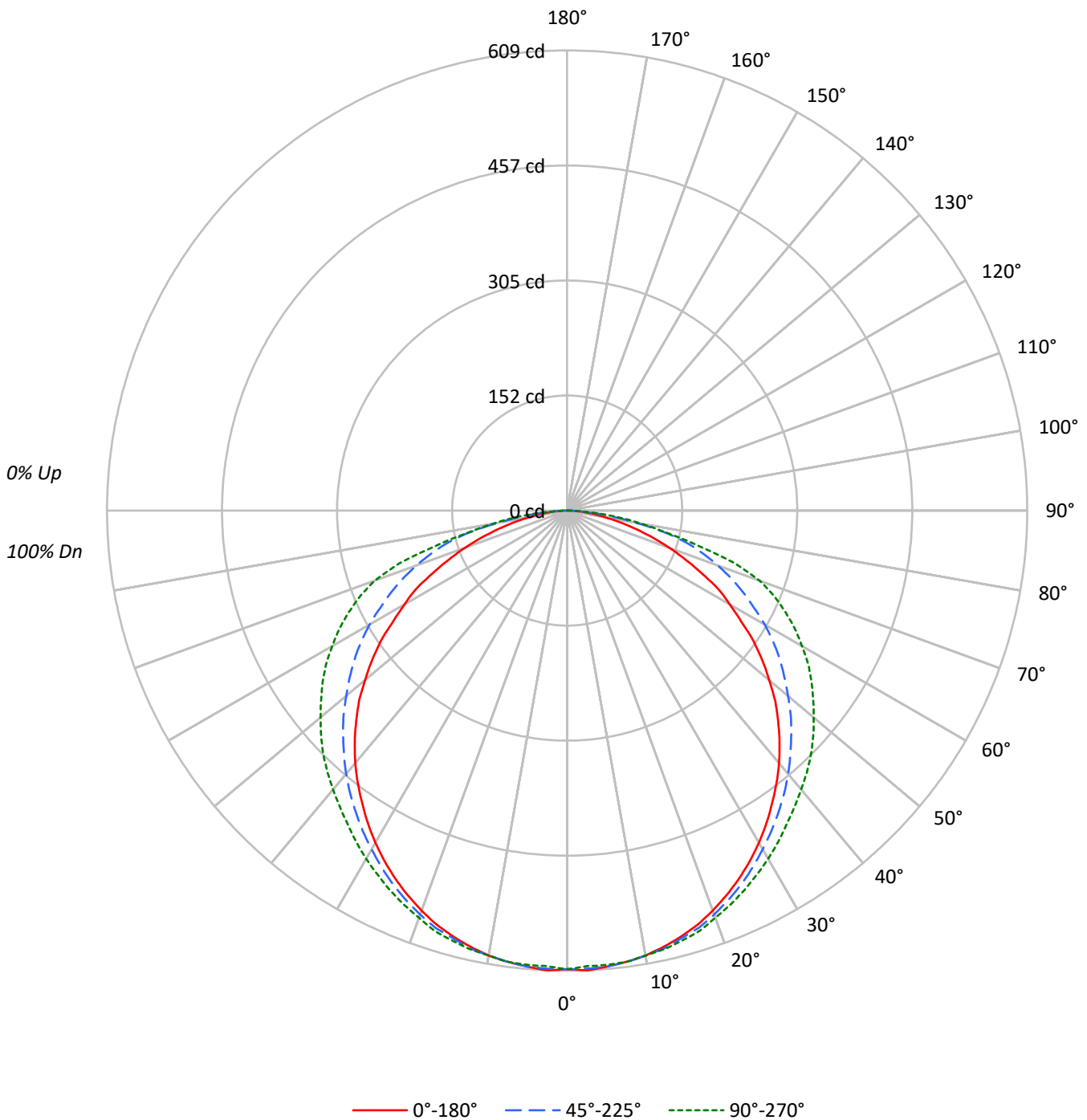
Input Watts (W): 17.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	74	70	68
3	89	78	69	63	86	76	68	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	45	38	34	32
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	32	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1633	1633	1633
5°	1636	1636	1630
10°	1634	1634	1634
15°	1625	1632	1641
20°	1613	1629	1642
25°	1597	1620	1646
30°	1577	1608	1653
35°	1554	1601	1664
40°	1532	1599	1693
45°	1503	1596	1737
50°	1462	1597	1784
55°	1413	1612	1853
60°	1339	1627	1933
65°	1250	1641	2031
70°	1132	1668	2133
75°	974	1694	1867
80°	795	1418	1539
85°	655	1034	1136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.5	3.1
10°-20°	165.5	8.9
20°-30°	251.5	13.5
30°-40°	306.1	16.4
40°-50°	326.0	17.5
50°-60°	308.4	16.5
60°-70°	254.2	13.6
70°-80°	156.3	8.4
80°-90°	38.2	2.0
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°	474.5	25.5
0°-40°	780.6	41.9
0°-60°	1415.0	75.9
0°-90°	1863.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1863.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	607	607	607	607	607	
5°	606	606	606	605	604	58
15°	583	584	586	588	589	165
25°	538	540	546	551	554	248
35°	473	478	488	500	506	296
45°	395	402	419	443	456	304
55°	301	312	344	377	395	268
65°	196	215	258	299	319	195
75°	94	119	163	177	180	100
85°	21	28	34	36	37	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	606.9	606.9	606.9	606.9	606.9
2.5°	609.1	608.0	606.9	604.6	603.5
5°	605.7	605.7	605.7	604.6	603.5
7.5°	602.4	602.4	602.4	602.4	602.4
10°	597.9	597.9	597.9	597.9	597.9
12.5°	591.2	592.4	593.5	593.5	594.6
15°	583.4	584.5	585.7	587.9	589.0
17.5°	574.5	575.6	579.0	581.2	583.4
20°	563.4	564.5	568.9	571.2	573.4
22.5°	551.1	553.3	557.8	562.2	564.5
25°	537.7	539.9	545.5	551.1	554.4
27.5°	523.2	525.4	532.1	539.9	543.3
30°	507.6	509.8	517.6	526.5	532.1
32.5°	490.8	494.2	503.1	514.3	519.8
35°	473.0	477.5	487.5	499.8	506.5
37.5°	455.1	459.6	471.9	486.4	494.2
40°	436.2	441.8	455.1	471.9	481.9
42.5°	416.1	422.8	437.3	457.4	469.6
45°	394.9	401.6	419.4	442.9	456.3
47.5°	373.7	381.5	401.6	427.3	441.8
50°	349.2	358.1	381.5	411.6	426.1
52.5°	325.7	336.9	362.6	394.9	410.5
55°	301.2	312.4	343.6	377.1	394.9
57.5°	273.3	286.7	323.5	359.2	378.2
60°	248.8	262.2	302.3	340.2	359.2
62.5°	226.5	238.7	278.9	320.2	340.2
65°	196.3	215.3	257.7	299.0	319.0
67.5°	169.6	190.8	235.4	274.4	296.7
70°	143.9	166.2	212.0	249.9	271.1
72.5°	118.2	142.8	188.5	222.0	233.2
75°	93.7	119.4	162.9	177.4	179.6
77.5°	71.4	97.1	131.6	130.5	132.8
80°	51.3	73.6	91.5	94.8	99.3
82.5°	34.6	51.3	59.1	64.7	69.2
85°	21.2	27.9	33.5	35.7	36.8
87.5°	10.0	11.2	11.2	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)