

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: P345135

Luminaire Tested: **22CZ-20SE-L835-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345135  
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-L835-HRP-UNV-CD1-U  
Description: CRUZE 2X2 WITH HRP LENS INSERT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1827.5 lumens  
Efficiency: N/A  
Efficacy: 106.2 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

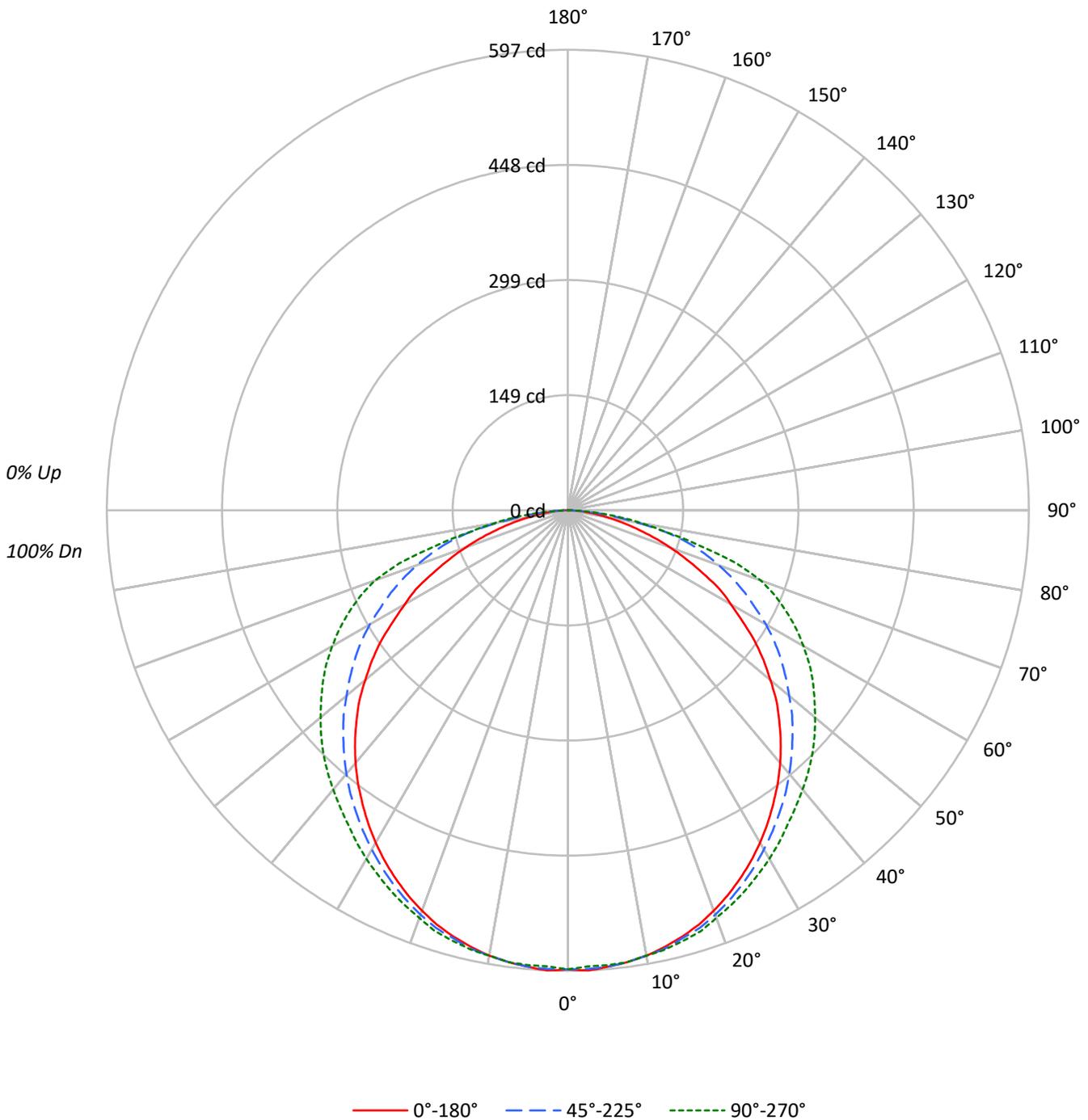
Input Watts (W): 17.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1601	1601	1601
5°	1605	1605	1599
10°	1602	1602	1602
15°	1594	1600	1609
20°	1582	1598	1610
25°	1565	1588	1614
30°	1546	1577	1621
35°	1524	1570	1631
40°	1502	1568	1660
45°	1474	1565	1703
50°	1433	1566	1750
55°	1385	1581	1817
60°	1313	1595	1896
65°	1226	1609	1992
70°	1110	1635	2091
75°	955	1660	1831
80°	779	1390	1509
85°	642	1013	1115



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.4	3.1
10°-20°	162.3	8.9
20°-30°	246.6	13.5
30°-40°	300.1	16.4
40°-50°	319.7	17.5
50°-60°	302.4	16.5
60°-70°	249.2	13.6
70°-80°	153.3	8.4
80°-90°	37.4	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°	465.3	25.5
0°-40°	765.4	41.9
0°-60°	1387.5	75.9
0°-90°	1827.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1827.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	594	594	594	593	592	56
15°	572	573	574	576	578	161
25°	527	529	535	540	544	243
35°	464	468	478	490	497	290
45°	387	394	411	434	447	299
55°	295	306	337	370	387	263
65°	192	211	253	293	313	191
75°	92	117	160	174	176	98
85°	21	27	33	35	36	24
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	595.1	595.1	595.1	595.1	595.1
2.5°	597.3	596.2	595.1	592.9	591.8
5°	594.0	594.0	594.0	592.9	591.8
7.5°	590.7	590.7	590.7	590.7	590.7
10°	586.3	586.3	586.3	586.3	586.3
12.5°	579.8	580.8	581.9	581.9	583.0
15°	572.1	573.2	574.3	576.5	577.6
17.5°	563.3	564.4	567.7	569.9	572.1
20°	552.4	553.5	557.9	560.1	562.3
22.5°	540.4	542.6	546.9	551.3	553.5
25°	527.2	529.4	534.9	540.4	543.7
27.5°	513.0	515.2	521.8	529.4	532.7
30°	497.7	499.9	507.6	516.3	521.8
32.5°	481.3	484.6	493.3	504.3	509.7
35°	463.8	468.2	478.0	490.1	496.6
37.5°	446.3	450.7	462.7	476.9	484.6
40°	427.7	433.2	446.3	462.7	472.6
42.5°	408.0	414.6	428.8	448.5	460.5
45°	387.2	393.8	411.3	434.3	447.4
47.5°	366.4	374.1	393.8	419.0	433.2
50°	342.4	351.1	374.1	403.6	417.9
52.5°	319.4	330.3	355.5	387.2	402.5
55°	295.3	306.3	336.9	369.7	387.2
57.5°	268.0	281.1	317.2	352.2	370.8
60°	243.9	257.1	296.4	333.6	352.2
62.5°	222.1	234.1	273.5	313.9	333.6
65°	192.5	211.1	252.7	293.2	312.8
67.5°	166.3	187.1	230.8	269.1	291.0
70°	141.1	163.0	207.8	245.0	265.8
72.5°	116.0	140.0	184.9	217.7	228.6
75°	91.9	117.0	159.7	173.9	176.1
77.5°	70.0	95.2	129.1	128.0	130.2
80°	50.3	72.2	89.7	93.0	97.4
82.5°	33.9	50.3	58.0	63.4	67.8
85°	20.8	27.3	32.8	35.0	36.1
87.5°	9.8	10.9	10.9	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)