

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: P345141

Luminaire Tested: **22CZ-24SE-L850-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345141  
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-24SE-L850-HRP-UNV-CD1-U  
Description: CRUZE 2X2 WITH HRP LENS INSERT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2404.2 lumens  
Efficiency: N/A  
Efficacy: 113.9 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

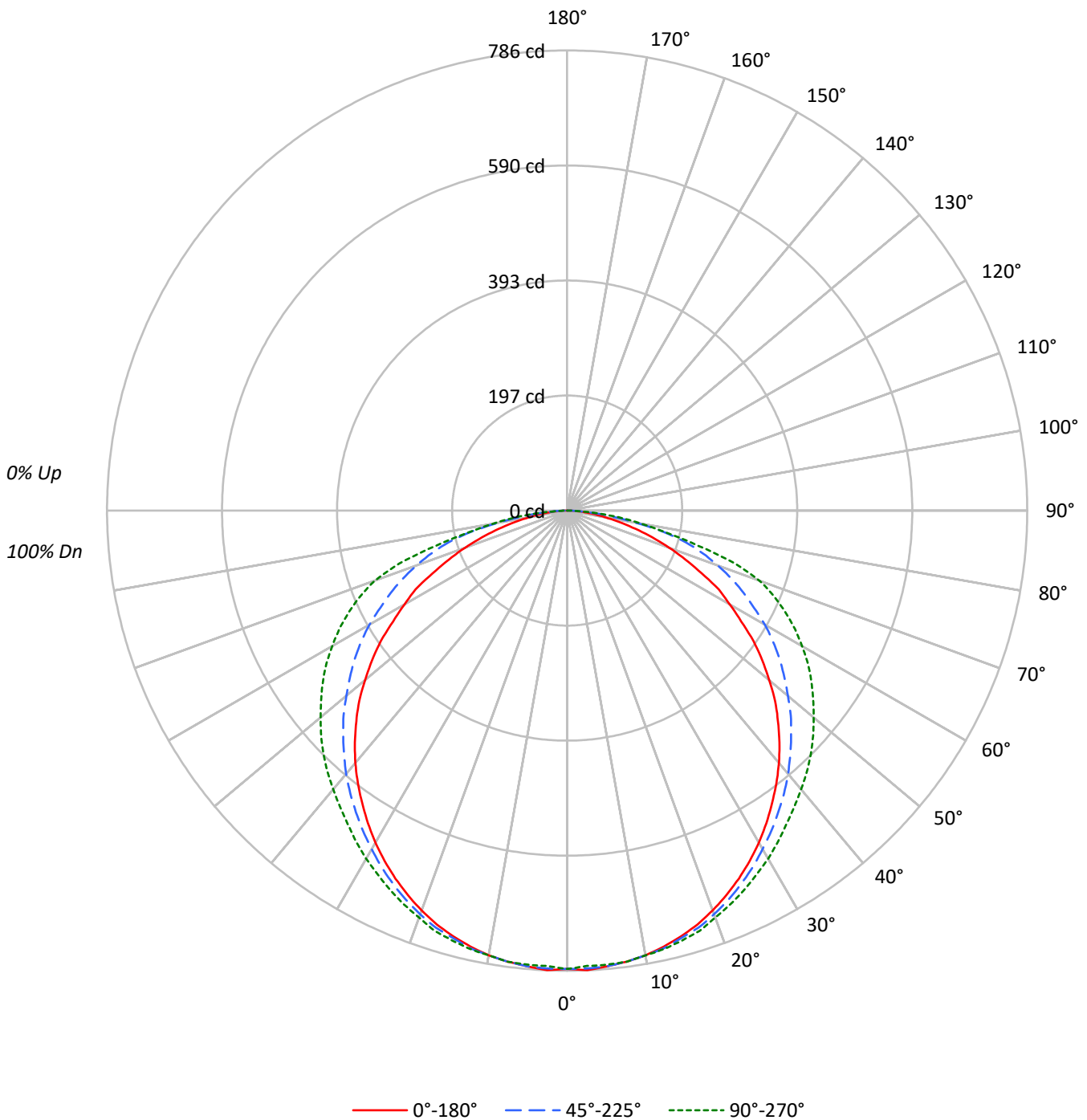
Input Watts (W): 21.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2107	2107	2107
5°	2111	2111	2103
10°	2108	2108	2108
15°	2097	2105	2117
20°	2081	2102	2118
25°	2060	2089	2124
30°	2035	2075	2133
35°	2005	2066	2146
40°	1977	2063	2184
45°	1939	2059	2240
50°	1886	2061	2301
55°	1823	2079	2390
60°	1727	2099	2494
65°	1613	2117	2621
70°	1460	2151	2751
75°	1257	2184	2409
80°	1026	1829	1985
85°	843	1334	1467



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.2	3.1
10°-20°	213.5	8.9
20°-30°	324.5	13.5
30°-40°	394.8	16.4
40°-50°	420.6	17.5
50°-60°	397.8	16.5
60°-70°	327.9	13.6
70°-80°	201.7	8.4
80°-90°	49.2	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°	612.2	25.5
0°-40°	1007.0	41.9
0°-60°	1825.4	75.9
0°-90°	2404.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2404.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	783	783	783	783	783	
5°	781	781	781	780	779	74
15°	753	754	756	758	760	212
25°	694	696	704	711	715	320
35°	610	616	629	645	653	382
45°	509	518	541	571	589	393
55°	389	403	443	486	509	346
65°	253	278	332	386	412	252
75°	121	154	210	229	232	129
85°	27	36	43	46	48	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	782.9	782.9	782.9	782.9	782.9
2.5°	785.8	784.3	782.9	780.0	778.6
5°	781.4	781.4	781.4	780.0	778.6
7.5°	777.1	777.1	777.1	777.1	777.1
10°	771.4	771.4	771.4	771.4	771.4
12.5°	762.7	764.2	765.6	765.6	767.0
15°	752.7	754.1	755.5	758.4	759.9
17.5°	741.1	742.6	746.9	749.8	752.7
20°	726.8	728.2	733.9	736.8	739.7
22.5°	710.9	713.8	719.6	725.3	728.2
25°	693.7	696.5	703.7	710.9	715.2
27.5°	674.9	677.8	686.5	696.5	700.8
30°	654.8	657.7	667.7	679.3	686.5
32.5°	633.2	637.5	649.0	663.4	670.6
35°	610.2	615.9	628.9	644.7	653.4
37.5°	587.2	592.9	608.7	627.5	637.5
40°	562.7	569.9	587.2	608.7	621.7
42.5°	536.8	545.4	564.1	590.0	605.9
45°	509.4	518.1	541.1	571.3	588.6
47.5°	482.1	492.2	518.1	551.2	569.9
50°	450.4	462.0	492.2	531.0	549.7
52.5°	420.2	434.6	467.7	509.4	529.6
55°	388.6	403.0	443.2	486.4	509.4
57.5°	352.6	369.9	417.3	463.4	487.9
60°	320.9	338.2	390.0	438.9	463.4
62.5°	292.1	308.0	359.8	413.0	438.9
65°	253.3	277.7	332.4	385.7	411.6
67.5°	218.7	246.1	303.7	354.0	382.8
70°	185.6	214.4	273.4	322.4	349.7
72.5°	152.5	184.2	243.2	286.4	300.8
75°	120.9	154.0	210.1	228.8	231.7
77.5°	92.1	125.2	169.8	168.4	171.3
80°	66.2	95.0	118.0	122.3	128.1
82.5°	44.6	66.2	76.3	83.5	89.2
85°	27.3	36.0	43.2	46.1	47.5
87.5°	13.0	14.4	14.4	11.5	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)