

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: P345139

Luminaire Tested: **22CZ-24SE-L835-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P345139  
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-L835-HRP-UNV-CD1-U  
Description: CRUZE 2X2 WITH HRP LENS INSERT  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2179.0 lumens  
Efficiency: N/A  
Efficacy: 103.3 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

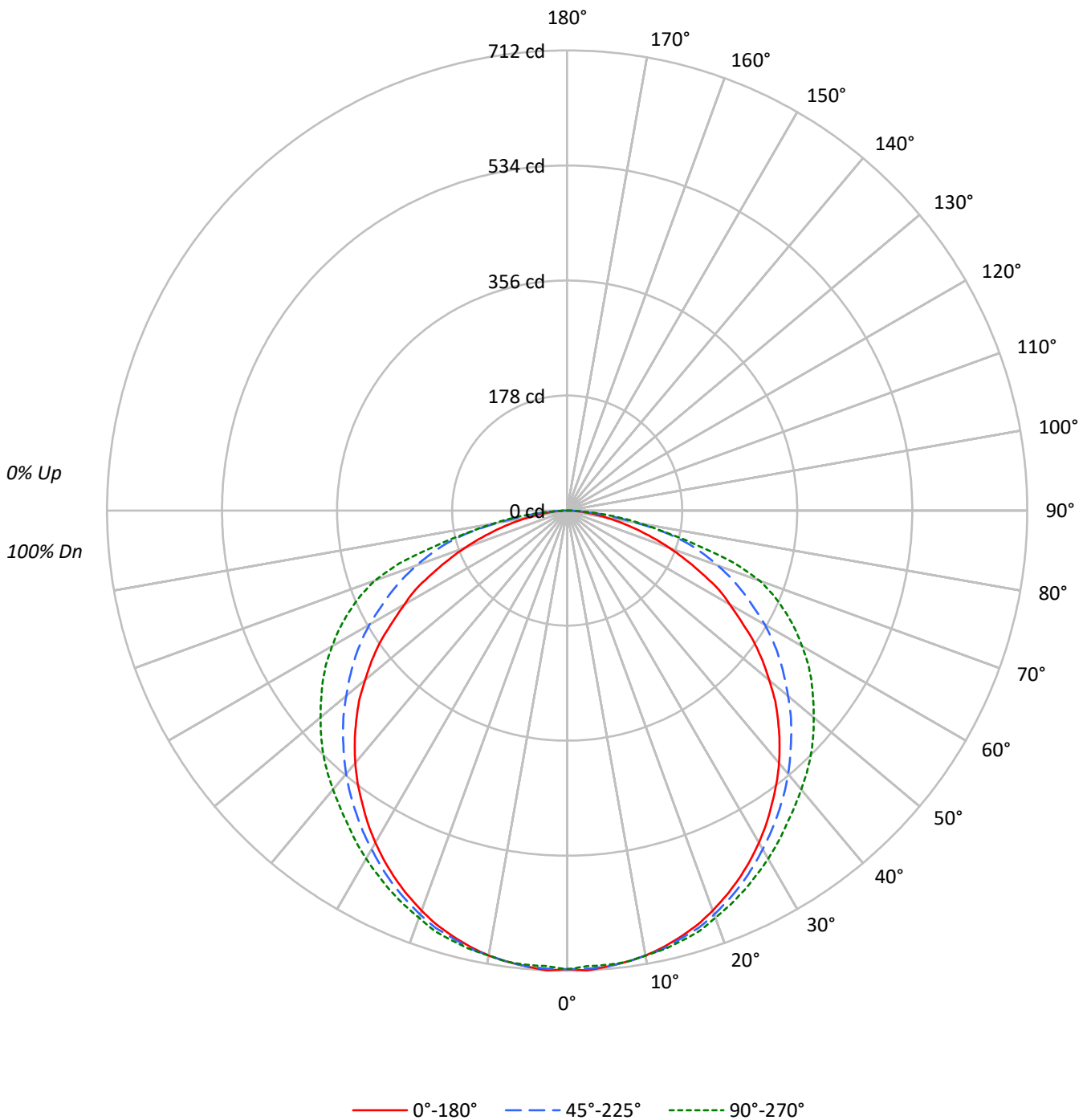
Input Watts (W): 21.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1909	1909	1909
5°	1913	1913	1906
10°	1910	1910	1910
15°	1900	1908	1919
20°	1886	1905	1920
25°	1867	1894	1925
30°	1844	1881	1933
35°	1817	1872	1945
40°	1792	1870	1979
45°	1757	1866	2030
50°	1709	1868	2086
55°	1652	1885	2166
60°	1566	1903	2260
65°	1462	1918	2375
70°	1324	1950	2493
75°	1140	1980	2183
80°	930	1658	1799
85°	766	1207	1328



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	67.3	3.1
10°-20°	193.5	8.9
20°-30°	294.1	13.5
30°-40°	357.9	16.4
40°-50°	381.2	17.5
50°-60°	360.6	16.5
60°-70°	297.2	13.6
70°-80°	182.8	8.4
80°-90°	44.6	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°	554.8	25.5
0°-40°	912.7	41.9
0°-60°	1654.4	75.9
0°-90°	2179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2179.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	710	710	710	710	710	
5°	708	708	708	707	706	67
15°	682	684	685	687	689	192
25°	629	631	638	644	648	290
35°	553	558	570	584	592	346
45°	462	470	490	518	534	356
55°	352	365	402	441	462	313
65°	230	252	301	350	373	228
75°	110	140	190	207	210	117
85°	25	33	39	42	43	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	709.5	709.5	709.5	709.5	709.5
2.5°	712.1	710.8	709.5	706.9	705.6
5°	708.2	708.2	708.2	706.9	705.6
7.5°	704.3	704.3	704.3	704.3	704.3
10°	699.1	699.1	699.1	699.1	699.1
12.5°	691.3	692.6	693.9	693.9	695.2
15°	682.1	683.5	684.8	687.4	688.7
17.5°	671.7	673.0	676.9	679.5	682.1
20°	658.7	660.0	665.2	667.8	670.4
22.5°	644.3	646.9	652.1	657.4	660.0
25°	628.7	631.3	637.8	644.3	648.2
27.5°	611.7	614.3	622.1	631.3	635.2
30°	593.5	596.1	605.2	615.6	622.1
32.5°	573.9	577.8	588.2	601.3	607.8
35°	553.0	558.2	570.0	584.3	592.2
37.5°	532.2	537.4	551.7	568.7	577.8
40°	510.0	516.5	532.2	551.7	563.5
42.5°	486.5	494.3	511.3	534.8	549.1
45°	461.7	469.5	490.4	517.8	533.5
47.5°	436.9	446.1	469.5	499.5	516.5
50°	408.2	418.7	446.1	481.3	498.2
52.5°	380.9	393.9	423.9	461.7	480.0
55°	352.2	365.2	401.7	440.9	461.7
57.5°	319.6	335.2	378.2	420.0	442.2
60°	290.9	306.5	353.5	397.8	420.0
62.5°	264.8	279.1	326.1	374.3	397.8
65°	229.6	251.7	301.3	349.6	373.0
67.5°	198.3	223.0	275.2	320.9	346.9
70°	168.3	194.3	247.8	292.2	316.9
72.5°	138.3	166.9	220.4	259.6	272.6
75°	109.6	139.6	190.4	207.4	210.0
77.5°	83.5	113.5	153.9	152.6	155.2
80°	60.0	86.1	107.0	110.9	116.1
82.5°	40.4	60.0	69.1	75.6	80.9
85°	24.8	32.6	39.1	41.7	43.0
87.5°	11.7	13.0	13.0	10.4	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)