

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: P345138

Luminaire Tested: **22CZ-24SE-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345138
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-L830-HRP-UNV-CD1-U
Description: CRUZE 2X2 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2159.6 lumens
Efficiency: N/A
Efficacy: 102.3 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

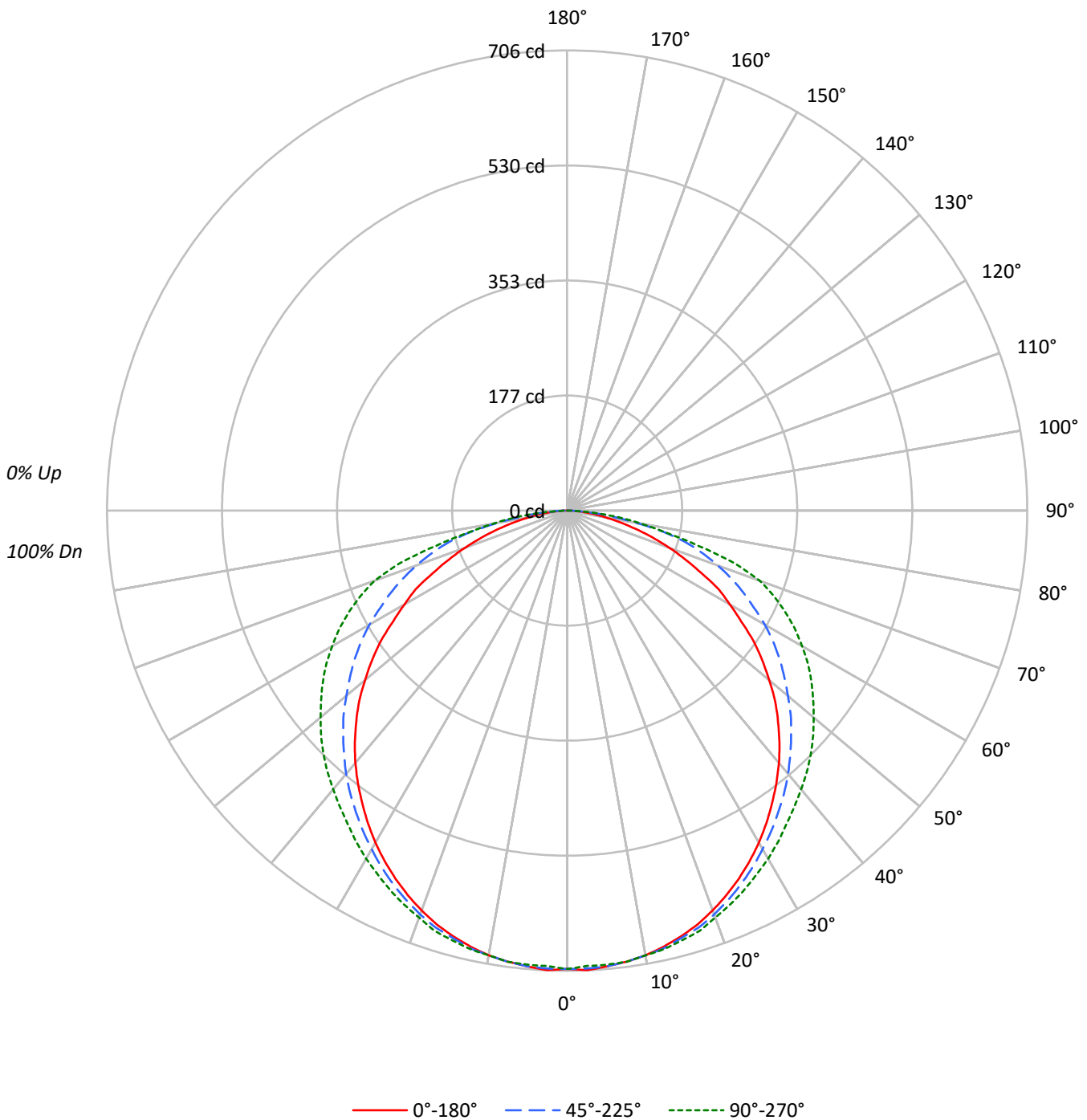
Input Watts (W): 21.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1892	1892	1892
5°	1896	1896	1889
10°	1893	1893	1893
15°	1884	1891	1901
20°	1869	1888	1903
25°	1850	1877	1908
30°	1828	1864	1916
35°	1801	1856	1928
40°	1775	1853	1962
45°	1741	1850	2012
50°	1694	1851	2067
55°	1637	1868	2147
60°	1552	1885	2240
65°	1449	1901	2354
70°	1312	1932	2471
75°	1129	1962	2164
80°	922	1643	1782
85°	760	1198	1318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	3.1
10°-20°	191.7	8.9
20°-30°	291.5	13.5
30°-40°	354.7	16.4
40°-50°	377.8	17.5
50°-60°	357.3	16.5
60°-70°	294.5	13.6
70°-80°	181.2	8.4
80°-90°	44.2	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°	549.9	25.5
0°-40°	904.5	41.9
0°-60°	1639.7	75.9
0°-90°	2159.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2159.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	702	702	702	701	699	67
15°	676	677	679	681	682	191
25°	623	626	632	639	642	287
35°	548	553	565	579	587	343
45°	458	465	486	513	529	353
55°	349	362	398	437	458	311
65°	228	250	299	346	370	226
75°	109	138	189	206	208	116
85°	25	32	39	41	43	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.2	703.2	703.2	703.2	703.2
2.5°	705.8	704.5	703.2	700.6	699.3
5°	701.9	701.9	701.9	700.6	699.3
7.5°	698.0	698.0	698.0	698.0	698.0
10°	692.9	692.9	692.9	692.9	692.9
12.5°	685.1	686.4	687.7	687.7	689.0
15°	676.1	677.4	678.6	681.2	682.5
17.5°	665.7	667.0	670.9	673.5	676.1
20°	652.8	654.1	659.3	661.8	664.4
22.5°	638.6	641.2	646.3	651.5	654.1
25°	623.1	625.6	632.1	638.6	642.5
27.5°	606.3	608.8	616.6	625.6	629.5
30°	588.2	590.7	599.8	610.1	616.6
32.5°	568.8	572.7	583.0	595.9	602.4
35°	548.1	553.3	564.9	579.1	586.9
37.5°	527.4	532.6	546.8	563.6	572.7
40°	505.4	511.9	527.4	546.8	558.4
42.5°	482.2	489.9	506.7	530.0	544.2
45°	457.6	465.4	486.0	513.2	528.7
47.5°	433.0	442.1	465.4	495.1	511.9
50°	404.6	414.9	442.1	477.0	493.8
52.5°	377.5	390.4	420.1	457.6	475.7
55°	349.0	361.9	398.1	436.9	457.6
57.5°	316.7	332.2	374.9	416.2	438.2
60°	288.3	303.8	350.3	394.3	416.2
62.5°	262.4	276.6	323.2	371.0	394.3
65°	227.5	249.5	298.6	346.4	369.7
67.5°	196.5	221.0	272.8	318.0	343.8
70°	166.8	192.6	245.6	289.6	314.1
72.5°	137.0	165.5	218.5	257.2	270.2
75°	108.6	138.3	188.7	205.5	208.1
77.5°	82.7	112.5	152.5	151.2	153.8
80°	59.5	85.3	106.0	109.9	115.0
82.5°	40.1	59.5	68.5	75.0	80.1
85°	24.6	32.3	38.8	41.4	42.7
87.5°	11.6	12.9	12.9	10.3	10.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)