

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: P345140

Luminaire Tested: **22CZ-24SE-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345140
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-L840-HRP-UNV-CD1-U
Description: CRUZE 2X2 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2222.3 lumens
Efficiency: N/A
Efficacy: 105.3 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

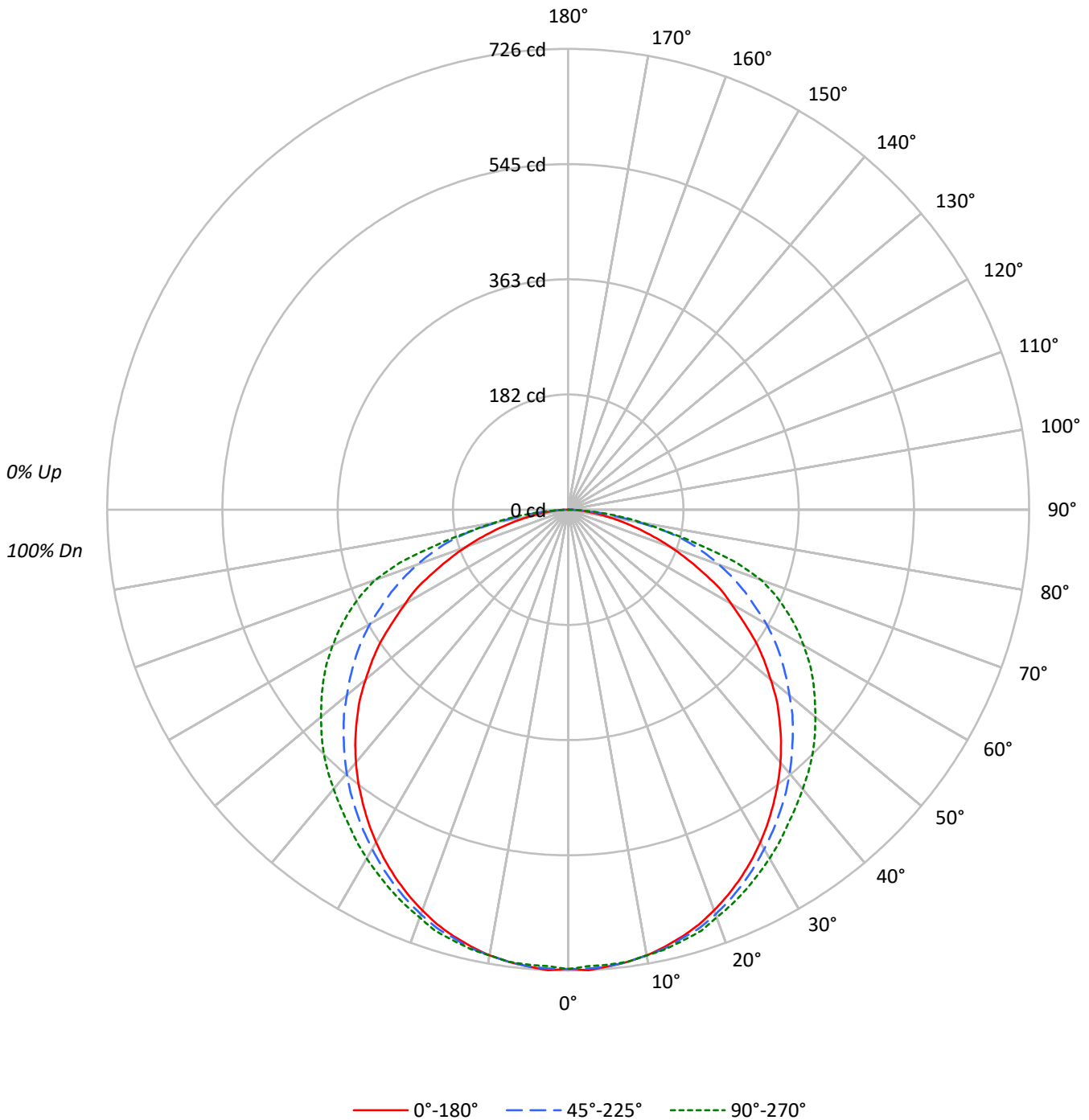
Input Watts (W): 21.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1947	1947	1947
5°	1951	1951	1944
10°	1948	1948	1948
15°	1938	1946	1957
20°	1924	1943	1958
25°	1904	1931	1963
30°	1881	1918	1972
35°	1853	1910	1984
40°	1827	1906	2018
45°	1792	1904	2071
50°	1743	1904	2127
55°	1685	1922	2209
60°	1596	1940	2305
65°	1491	1957	2422
70°	1350	1988	2543
75°	1161	2019	2227
80°	948	1691	1835
85°	781	1232	1355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.6	3.1
10°-20°	197.3	8.9
20°-30°	299.9	13.5
30°-40°	365.0	16.4
40°-50°	388.8	17.5
50°-60°	367.7	16.5
60°-70°	303.1	13.6
70°-80°	186.4	8.4
80°-90°	45.5	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°	565.8	25.5
0°-40°	930.8	41.9
0°-60°	1687.3	75.9
0°-90°	2222.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2222.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	722	722	722	721	720	69
15°	696	697	698	701	702	196
25°	641	644	650	657	661	295
35°	564	569	581	596	604	353
45°	471	479	500	528	544	363
55°	359	372	410	450	471	320
65°	234	257	307	356	380	233
75°	112	142	194	212	214	120
85°	25	33	40	43	44	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	723.6	723.6	723.6	723.6	723.6
2.5°	726.3	725.0	723.6	721.0	719.6
5°	722.3	722.3	722.3	721.0	719.6
7.5°	718.3	718.3	718.3	718.3	718.3
10°	713.0	713.0	713.0	713.0	713.0
12.5°	705.0	706.3	707.7	707.7	709.0
15°	695.7	697.0	698.4	701.0	702.3
17.5°	685.1	686.4	690.4	693.0	695.7
20°	671.8	673.1	678.4	681.1	683.7
22.5°	657.1	659.8	665.1	670.4	673.1
25°	641.2	643.8	650.5	657.1	661.1
27.5°	623.9	626.5	634.5	643.8	647.8
30°	605.2	607.9	617.2	627.9	634.5
32.5°	585.3	589.3	599.9	613.2	619.9
35°	564.0	569.3	581.3	595.9	603.9
37.5°	542.7	548.0	562.7	580.0	589.3
40°	520.1	526.8	542.7	562.7	574.6
42.5°	496.2	504.1	521.4	545.4	560.0
45°	470.9	478.9	500.2	528.1	544.1
47.5°	445.6	454.9	478.9	509.5	526.8
50°	416.4	427.0	454.9	490.8	508.1
52.5°	388.4	401.7	432.3	470.9	489.5
55°	359.2	372.5	409.7	449.6	470.9
57.5°	325.9	341.9	385.8	428.3	450.9
60°	296.6	312.6	360.5	405.7	428.3
62.5°	270.0	284.7	332.6	381.8	405.7
65°	234.1	256.7	307.3	356.5	380.4
67.5°	202.2	227.5	280.7	327.2	353.8
70°	171.6	198.2	252.7	298.0	323.2
72.5°	141.0	170.3	224.8	264.7	278.0
75°	111.7	142.3	194.2	211.5	214.2
77.5°	85.1	115.7	157.0	155.6	158.3
80°	61.2	87.8	109.1	113.1	118.4
82.5°	41.2	61.2	70.5	77.2	82.5
85°	25.3	33.3	39.9	42.6	43.9
87.5°	12.0	13.3	13.3	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)