

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: P345072

Luminaire Tested: **24CZ-70-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345072
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1905-313-5)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ-70-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6133.6 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

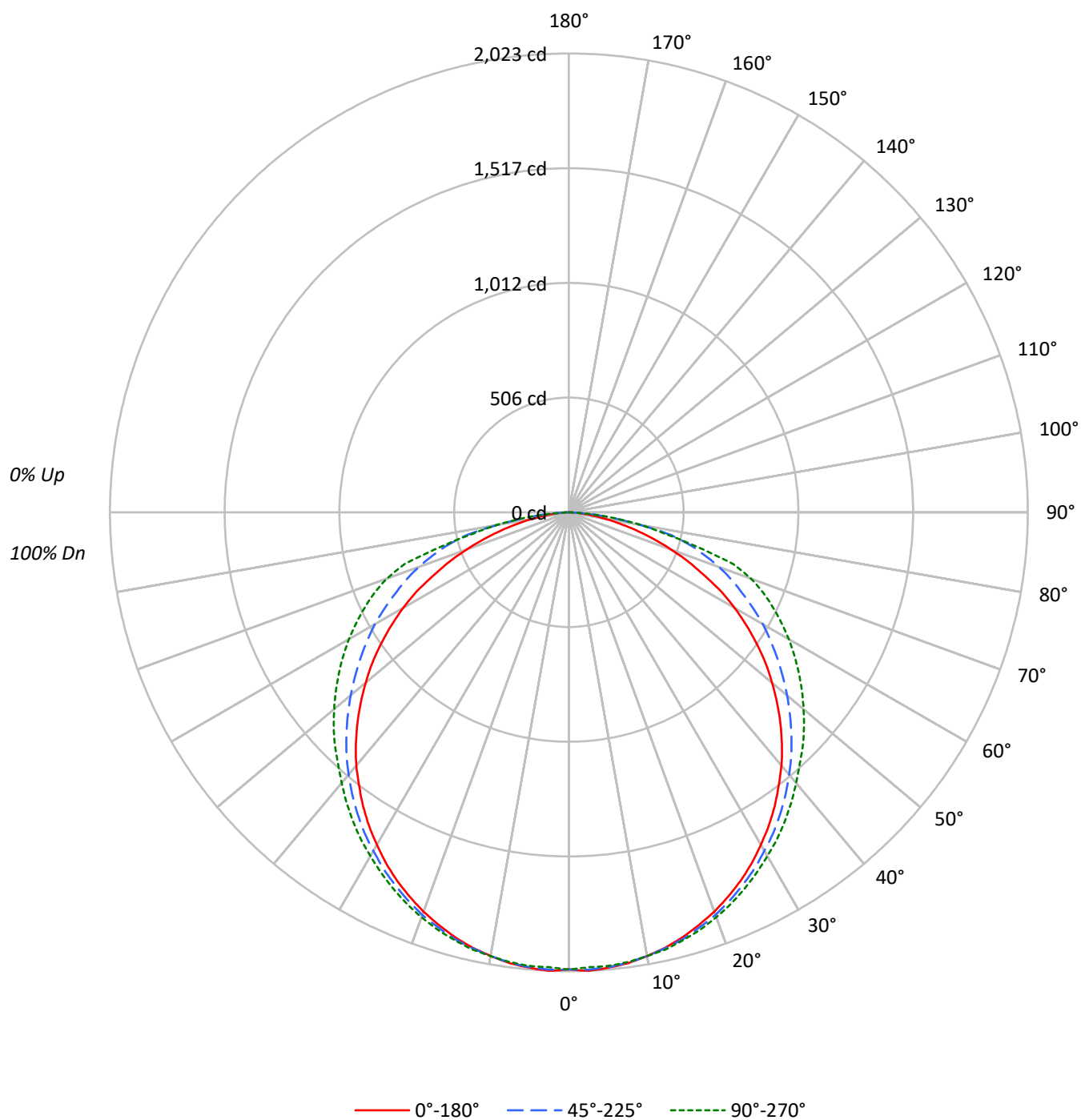
Input Watts (W): 64.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P345072

CATALOG NUMBER: 24CZ-70-L840-HRP-UNV-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P345072

CATALOG NUMBER: 24CZ-70-L840-HRP-UNV-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	103	99	95	105	101	97	93		97	93	90		93	90	87		89	87	85
2	98	89	82	76	95	87	81	75		84	78	74		81	76	72		77	74	70
3	89	78	70	63	86	76	69	62		73	67	61		71	65	60		68	63	59
4	81	69	60	53	79	68	59	52		65	58	52		63	56	51		60	55	50
5	75	61	52	45	72	60	52	45		58	50	44		56	49	44		54	48	43
6	69	55	46	39	67	54	45	39		52	45	39		51	44	38		49	43	38
7	64	50	41	35	62	49	41	34		48	40	34		46	39	34		45	38	34
8	59	45	37	31	58	45	36	31		43	36	31		42	35	30		41	35	30
9	55	42	33	28	54	41	33	28		40	33	27		39	32	27		38	32	27
10	52	38	30	25	51	38	30	25		37	30	25		36	29	25		35	29	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2712	2712	2712
5°	2722	2718	2711
10°	2714	2714	2714
15°	2701	2712	2719
20°	2682	2705	2720
25°	2660	2691	2719
30°	2629	2678	2719
35°	2598	2667	2728
40°	2561	2654	2737
45°	2510	2640	2775
50°	2447	2629	2827
55°	2373	2632	2903
60°	2270	2658	3012
65°	2100	2685	3162
70°	1891	2770	3359
75°	1598	2855	3005
80°	1242	2443	2524
85°	892	1663	1460



TEST NUMBER: P345072

CATALOG NUMBER: 24CZ-70-L840-HRP-UNV-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	191.0	3.1
10°-20°	548.5	8.9
20°-30°	834.1	13.6
30°-40°	1013.4	16.5
40°-50°	1069.6	17.4
50°-60°	1005.1	16.4
60°-70°	827.4	13.5
70°-80°	521.3	8.5
80°-90°	123.1	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°	1573.7	25.7
0°-40°	2587.1	42.2
0°-60°	4661.8	76.0
0°-90°	6133.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6133.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2015	2015	2015	2015	2015	
5°	2015	2005	2013	2010	2007	191
15°	1939	1931	1947	1952	1952	547
25°	1792	1789	1813	1824	1831	825
35°	1582	1590	1624	1645	1661	989
45°	1319	1340	1387	1427	1458	1017
55°	1012	1048	1122	1201	1238	903
65°	660	723	843	951	993	655
75°	307	402	549	599	578	328
85°	58	97	108	100	95	73
90°	0	0	0	0	0	



TEST NUMBER: P345072

CATALOG NUMBER: 24CZ-70-L840-HRP-UNV-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2015.3	2015.3	2015.3	2015.3	2015.3
2.5°	2023.1	2010.0	2017.9	2015.3	2007.4
5°	2015.3	2004.7	2012.6	2010.0	2007.4
7.5°	2004.7	1994.2	2002.1	1999.5	1999.5
10°	1986.4	1978.5	1986.4	1986.4	1986.4
12.5°	1965.3	1957.5	1968.0	1970.6	1973.2
15°	1939.1	1931.2	1946.9	1952.2	1952.2
17.5°	1907.5	1902.3	1918.0	1923.3	1928.6
20°	1873.4	1870.7	1889.1	1894.4	1899.7
22.5°	1834.0	1834.0	1852.4	1857.6	1868.1
25°	1791.9	1789.3	1812.9	1823.5	1831.3
27.5°	1744.6	1744.6	1770.9	1784.0	1791.9
30°	1692.1	1697.3	1723.6	1739.4	1749.9
32.5°	1639.5	1644.8	1676.3	1694.7	1707.8
35°	1581.7	1589.6	1623.8	1644.8	1660.6
37.5°	1518.7	1531.8	1568.6	1592.2	1610.6
40°	1458.2	1468.7	1510.8	1537.1	1558.1
42.5°	1389.9	1408.3	1450.4	1481.9	1505.5
45°	1319.0	1340.0	1387.3	1426.7	1458.2
47.5°	1245.4	1271.7	1321.6	1374.2	1405.7
50°	1169.2	1198.1	1255.9	1319.0	1350.5
52.5°	1093.0	1124.6	1187.6	1261.2	1295.3
55°	1011.6	1048.4	1121.9	1200.7	1237.5
57.5°	927.5	969.5	1053.6	1142.9	1179.7
60°	843.4	888.1	987.9	1077.3	1119.3
62.5°	756.7	806.6	914.4	1016.8	1056.2
65°	659.5	722.6	843.4	951.1	993.2
67.5°	570.2	635.8	775.1	882.8	927.5
70°	480.8	557.0	704.2	811.9	853.9
72.5°	391.5	480.8	625.3	735.7	759.3
75°	307.4	402.0	549.1	599.1	578.0
77.5°	226.0	331.1	462.4	436.2	430.9
80°	160.3	262.7	315.3	317.9	325.8
82.5°	102.5	194.4	204.9	207.6	210.2
85°	57.8	97.2	107.7	99.8	94.6
87.5°	26.3	31.5	26.3	18.4	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)