

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: P345056

Luminaire Tested: **24CZ-50-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345056
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-50-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4318.9 lumens
Efficiency: N/A
Efficacy: 106.1 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

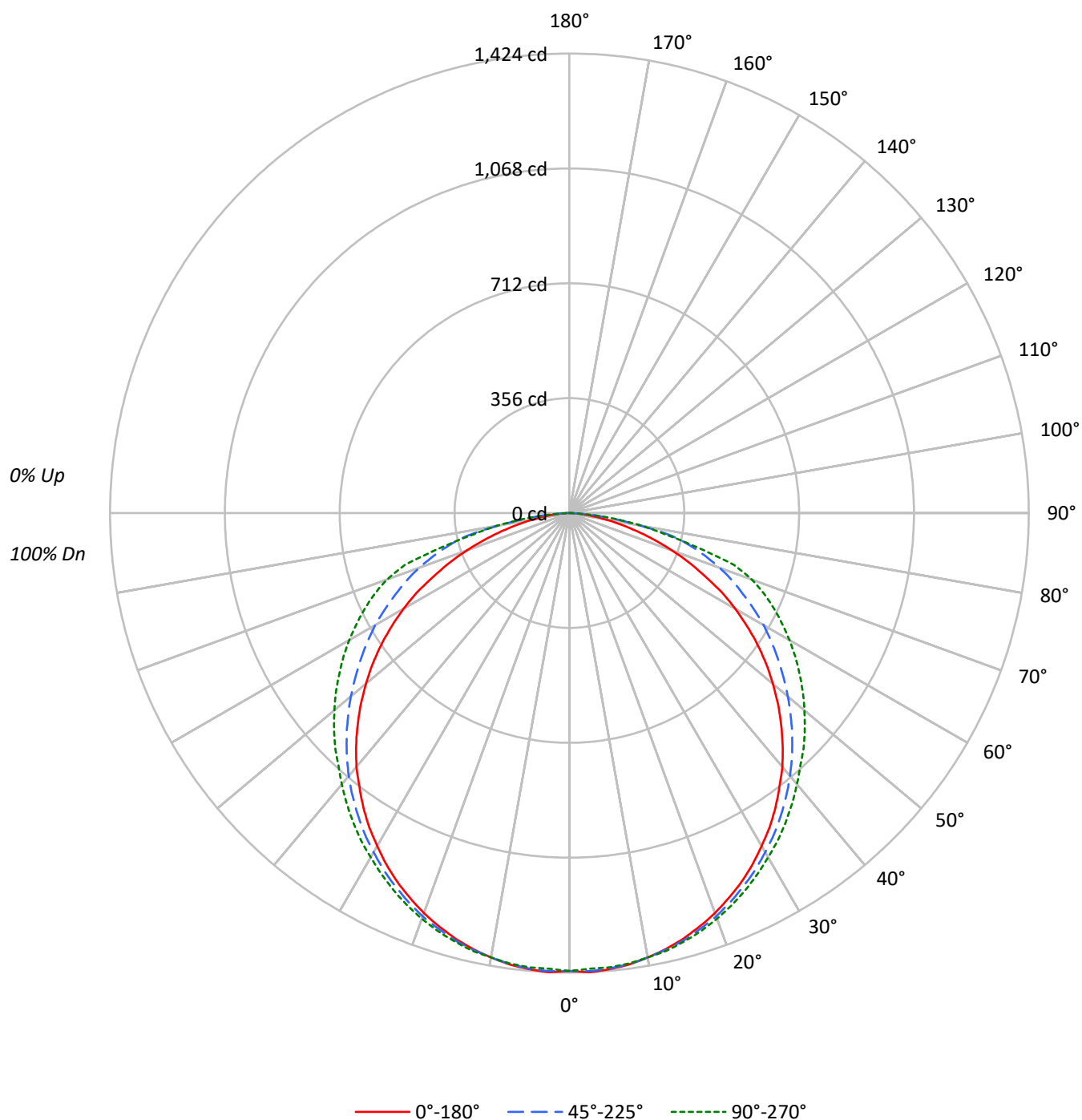
Input Watts (W): 40.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P345056

CATALOG NUMBER: 24CZ-50-L840-HRP-UNV-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P345056

CATALOG NUMBER: 24CZ-50-L840-HRP-UNV-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	108	103	99	95	105	101	97	93	97	93	90		93	90	87		83
2	98	89	82	76	95	87	81	75	84	78	74		81	76	72		68
3	89	78	70	63	86	76	69	62	73	67	61		71	65	60		57
4	81	69	60	53	79	68	59	52	65	58	52		63	56	51		48
5	75	61	52	45	72	60	52	45	58	50	44		56	49	44		41
6	69	55	46	39	67	54	45	39	52	45	39		51	44	38		36
7	64	50	41	35	62	49	41	34	48	40	34		46	39	34		32
8	59	45	37	31	58	45	36	31	43	36	31		42	35	30		28
9	55	42	33	28	54	41	33	28	40	33	27		39	32	27		25
10	52	38	30	25	51	38	30	25	37	30	25		36	29	25		23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1909	1909	1909
5°	1917	1914	1909
10°	1911	1911	1911
15°	1902	1910	1915
20°	1889	1905	1915
25°	1873	1895	1914
30°	1851	1885	1914
35°	1829	1878	1920
40°	1803	1868	1927
45°	1767	1859	1954
50°	1723	1851	1990
55°	1671	1853	2044
60°	1598	1872	2121
65°	1479	1891	2226
70°	1332	1950	2365
75°	1125	2010	2116
80°	875	1720	1777
85°	628	1172	1028



TEST NUMBER: P345056

CATALOG NUMBER: 24CZ-50-L840-HRP-UNV-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.1
10°-20°	386.2	8.9
20°-30°	587.3	13.6
30°-40°	713.6	16.5
40°-50°	753.2	17.4
50°-60°	707.7	16.4
60°-70°	582.6	13.5
70°-80°	367.1	8.5
80°-90°	86.7	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°	1108.1	25.7
0°-40°	1821.6	42.2
0°-60°	3282.5	76.0
0°-90°	4318.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4318.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1419	1419	1419	1419	1419	
5°	1419	1412	1417	1415	1413	135
15°	1365	1360	1371	1375	1375	385
25°	1262	1260	1276	1284	1290	581
35°	1114	1119	1143	1158	1169	696
45°	929	944	977	1005	1027	716
55°	712	738	790	846	871	636
65°	464	509	594	670	699	461
75°	216	283	387	422	407	231
85°	41	68	76	70	67	51
90°	0	0	0	0	0	



TEST NUMBER: P345056

CATALOG NUMBER: 24CZ-50-L840-HRP-UNV-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1419.0	1419.0	1419.0	1419.0	1419.0
2.5°	1424.5	1415.3	1420.8	1419.0	1413.4
5°	1419.0	1411.6	1417.1	1415.3	1413.4
7.5°	1411.6	1404.2	1409.7	1407.9	1407.9
10°	1398.6	1393.1	1398.6	1398.6	1398.6
12.5°	1383.8	1378.3	1385.7	1387.5	1389.4
15°	1365.3	1359.8	1370.9	1374.6	1374.6
17.5°	1343.1	1339.4	1350.5	1354.2	1357.9
20°	1319.1	1317.2	1330.2	1333.9	1337.6
22.5°	1291.3	1291.3	1304.3	1308.0	1315.4
25°	1261.7	1259.9	1276.5	1283.9	1289.5
27.5°	1228.4	1228.4	1246.9	1256.2	1261.7
30°	1191.4	1195.1	1213.6	1224.7	1232.1
32.5°	1154.4	1158.1	1180.3	1193.3	1202.5
35°	1113.7	1119.3	1143.3	1158.1	1169.2
37.5°	1069.3	1078.6	1104.5	1121.1	1134.1
40°	1026.8	1034.2	1063.8	1082.3	1097.1
42.5°	978.7	991.6	1021.2	1043.4	1060.1
45°	928.7	943.5	976.8	1004.6	1026.8
47.5°	876.9	895.4	930.6	967.6	989.8
50°	823.3	843.6	884.3	928.7	950.9
52.5°	769.6	791.8	836.2	888.0	912.1
55°	712.3	738.2	790.0	845.5	871.4
57.5°	653.1	682.7	741.9	804.8	830.7
60°	593.9	625.3	695.6	758.5	788.1
62.5°	532.8	568.0	643.8	716.0	743.7
65°	464.4	508.8	593.9	669.7	699.3
67.5°	401.5	447.7	545.8	621.6	653.1
70°	338.6	392.2	495.8	571.7	601.3
72.5°	275.7	338.6	440.3	518.0	534.7
75°	216.5	283.1	386.7	421.8	407.0
77.5°	159.1	233.1	325.6	307.1	303.4
80°	112.9	185.0	222.0	223.9	229.4
82.5°	72.2	136.9	144.3	146.2	148.0
85°	40.7	68.5	75.9	70.3	66.6
87.5°	18.5	22.2	18.5	13.0	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)