

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: P345064

Luminaire Tested: **24CZ-60-L840-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345064
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-60-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5280.6 lumens
Efficiency: N/A
Efficacy: 101.2 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

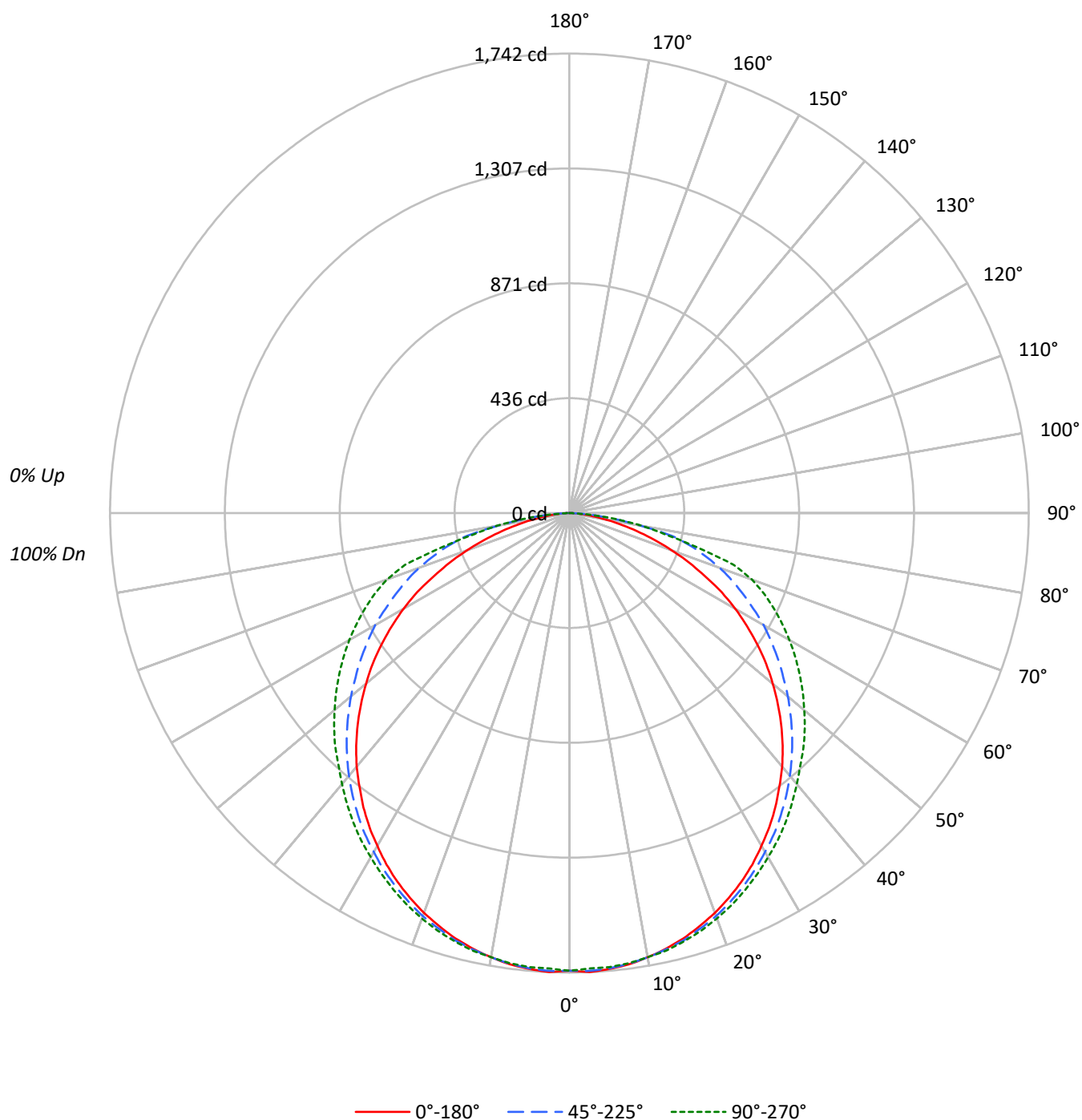
Input Watts (W): 52.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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	74	81	76	72	77	74	70	68			
3	89	78	70	63	86	76	69	62	73	67	61	71	65	60	68	63	59	57			
4	81	69	60	53	79	68	59	52	65	58	52	63	56	51	60	55	50	48			
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43	41			
6	69	55	46	39	67	54	45	39	52	45	39	51	44	38	49	43	38	36			
7	64	50	41	35	62	49	41	34	48	40	34	46	39	34	45	38	34	32			
8	59	45	37	31	58	45	36	31	43	36	31	42	35	30	41	35	30	28			
9	55	42	33	28	54	41	33	28	40	33	27	39	32	27	38	32	27	25			
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2334	2334	2334
5°	2343	2340	2334
10°	2336	2336	2336
15°	2325	2335	2341
20°	2309	2329	2342
25°	2290	2317	2341
30°	2263	2305	2341
35°	2237	2296	2348
40°	2205	2285	2356
45°	2161	2273	2389
50°	2107	2263	2434
55°	2043	2266	2499
60°	1954	2289	2593
65°	1808	2312	2722
70°	1629	2385	2892
75°	1376	2458	2587
80°	1069	2103	2173
85°	769	1431	1257



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.5	3.1
10°-20°	472.2	8.9
20°-30°	718.1	13.6
30°-40°	872.5	16.5
40°-50°	920.9	17.4
50°-60°	865.3	16.4
60°-70°	712.4	13.5
70°-80°	448.8	8.5
80°-90°	106.0	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°	1354.8	25.7
0°-40°	2227.3	42.2
0°-60°	4013.5	76.0
0°-90°	5280.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5280.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1735	1735	1735	1735	1735	
5°	1735	1726	1733	1730	1728	165
15°	1669	1663	1676	1681	1681	471
25°	1543	1540	1561	1570	1577	711
35°	1362	1368	1398	1416	1430	851
45°	1136	1154	1194	1228	1255	875
55°	871	902	966	1034	1065	777
65°	568	622	726	819	855	564
75°	265	346	473	516	498	282
85°	50	84	93	86	81	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1735.0	1735.0	1735.0	1735.0	1735.0
2.5°	1741.8	1730.5	1737.2	1735.0	1728.2
5°	1735.0	1725.9	1732.7	1730.5	1728.2
7.5°	1725.9	1716.9	1723.7	1721.4	1721.4
10°	1710.1	1703.3	1710.1	1710.1	1710.1
12.5°	1692.0	1685.2	1694.3	1696.5	1698.8
15°	1669.4	1662.6	1676.2	1680.7	1680.7
17.5°	1642.2	1637.7	1651.3	1655.8	1660.3
20°	1612.8	1610.6	1626.4	1630.9	1635.4
22.5°	1578.9	1578.9	1594.7	1599.3	1608.3
25°	1542.7	1540.4	1560.8	1569.8	1576.6
27.5°	1502.0	1502.0	1524.6	1535.9	1542.7
30°	1456.7	1461.3	1483.9	1497.5	1506.5
32.5°	1411.5	1416.0	1443.2	1459.0	1470.3
35°	1361.7	1368.5	1397.9	1416.0	1429.6
37.5°	1307.5	1318.8	1350.4	1370.8	1386.6
40°	1255.4	1264.5	1300.7	1323.3	1341.4
42.5°	1196.6	1212.4	1248.6	1275.8	1296.1
45°	1135.5	1153.6	1194.4	1228.3	1255.4
47.5°	1072.2	1094.8	1137.8	1183.0	1210.2
50°	1006.6	1031.5	1081.2	1135.5	1162.7
52.5°	941.0	968.1	1022.4	1085.8	1115.2
55°	870.9	902.5	965.9	1033.7	1065.4
57.5°	798.5	834.7	907.1	984.0	1015.7
60°	726.1	764.6	850.5	927.4	963.6
62.5°	651.5	694.4	787.2	875.4	909.3
65°	567.8	622.1	726.1	818.9	855.0
67.5°	490.9	547.4	667.3	760.0	798.5
70°	414.0	479.5	606.2	699.0	735.2
72.5°	337.0	414.0	538.4	633.4	653.7
75°	264.7	346.1	472.8	515.7	497.6
77.5°	194.5	285.0	398.1	375.5	371.0
80°	138.0	226.2	271.4	273.7	280.5
82.5°	88.2	167.4	176.4	178.7	181.0
85°	49.8	83.7	92.7	86.0	81.4
87.5°	22.6	27.1	22.6	15.8	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)