

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: P345096

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345096
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-50SE-L840-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4403.7 lumens
Efficiency: N/A
Efficacy: 94.5 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

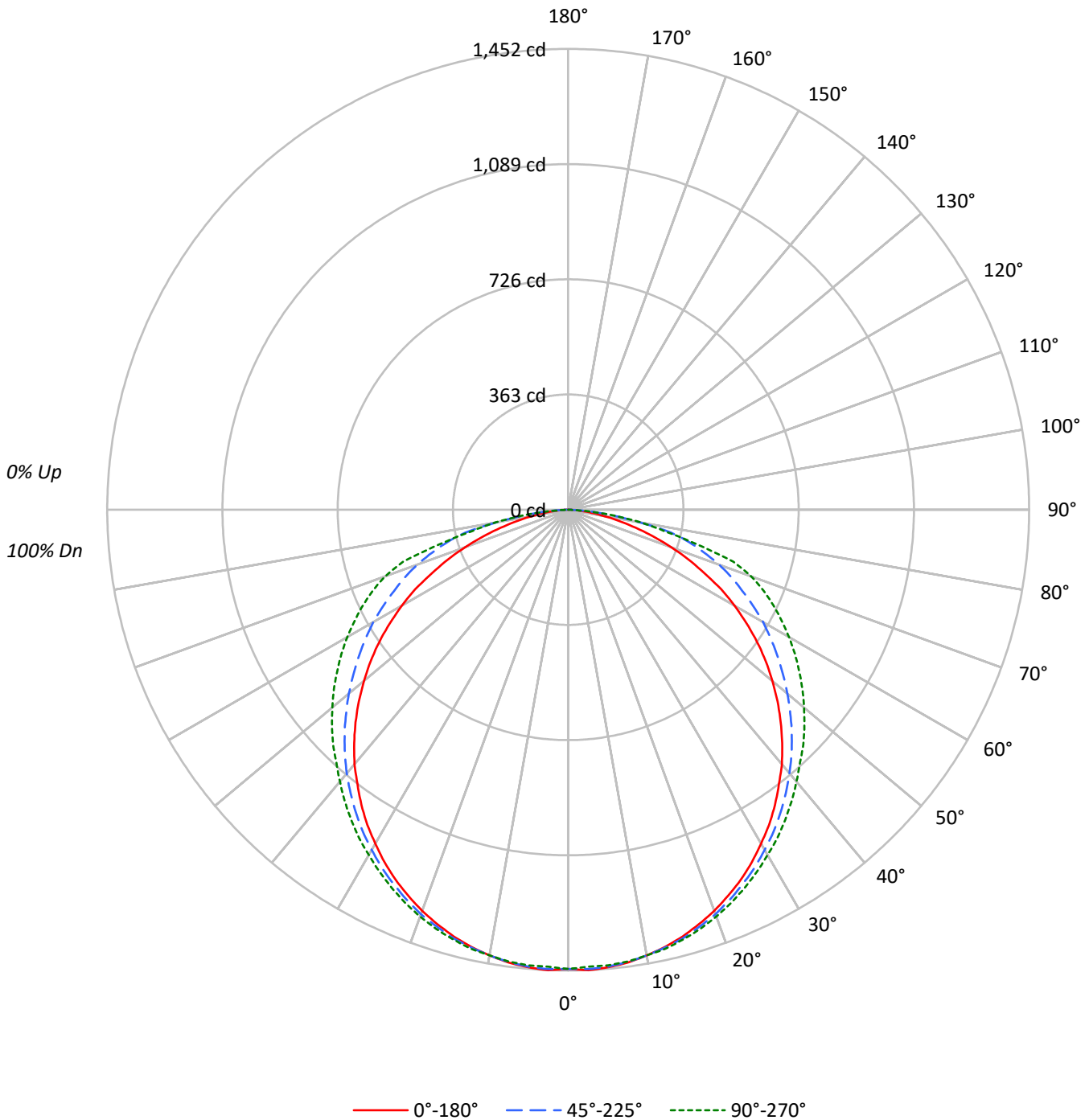
Input Watts (W): 46.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1947	1947	1947
5°	1954	1952	1947
10°	1948	1948	1948
15°	1939	1947	1952
20°	1926	1942	1953
25°	1910	1932	1952
30°	1888	1923	1952
35°	1865	1915	1958
40°	1839	1905	1965
45°	1802	1895	1992
50°	1757	1887	2030
55°	1704	1890	2084
60°	1629	1909	2162
65°	1507	1928	2270
70°	1358	1989	2412
75°	1147	2050	2157
80°	892	1754	1812
85°	641	1193	1048



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.1	3.1
10°-20°	393.8	8.9
20°-30°	598.9	13.6
30°-40°	727.6	16.5
40°-50°	768.0	17.4
50°-60°	721.6	16.4
60°-70°	594.1	13.5
70°-80°	374.3	8.5
80°-90°	88.4	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°	1129.8	25.7
0°-40°	1857.5	42.2
0°-60°	3347.0	76.0
0°-90°	4403.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4403.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1447	1447	1447	1447	1447	
5°	1447	1439	1445	1443	1441	137
15°	1392	1386	1398	1402	1402	393
25°	1286	1285	1302	1309	1315	593
35°	1136	1141	1166	1181	1192	710
45°	947	962	996	1024	1047	730
55°	726	753	806	862	888	648
65°	474	519	606	683	713	470
75°	221	289	394	430	415	236
85°	42	70	77	72	68	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1446.9	1446.9	1446.9	1446.9	1446.9
2.5°	1452.5	1443.1	1448.8	1446.9	1441.2
5°	1446.9	1439.3	1445.0	1443.1	1441.2
7.5°	1439.3	1431.8	1437.4	1435.6	1435.6
10°	1426.1	1420.5	1426.1	1426.1	1426.1
12.5°	1411.0	1405.4	1412.9	1414.8	1416.7
15°	1392.2	1386.5	1397.8	1401.6	1401.6
17.5°	1369.5	1365.8	1377.1	1380.9	1384.6
20°	1345.0	1343.1	1356.3	1360.1	1363.9
22.5°	1316.7	1316.7	1329.9	1333.7	1341.2
25°	1286.5	1284.6	1301.6	1309.2	1314.8
27.5°	1252.6	1252.6	1271.4	1280.9	1286.5
30°	1214.9	1218.6	1237.5	1248.8	1256.4
32.5°	1177.1	1180.9	1203.5	1216.7	1226.2
35°	1135.6	1141.3	1165.8	1180.9	1192.2
37.5°	1090.3	1099.8	1126.2	1143.2	1156.4
40°	1047.0	1054.5	1084.7	1103.6	1118.6
42.5°	997.9	1011.1	1041.3	1063.9	1080.9
45°	947.0	962.1	996.0	1024.3	1047.0
47.5°	894.2	913.0	948.9	986.6	1009.2
50°	839.5	860.2	901.7	947.0	969.6
52.5°	784.7	807.4	852.7	905.5	930.0
55°	726.3	752.7	805.5	862.1	888.5
57.5°	665.9	696.1	756.5	820.6	847.0
60°	605.5	637.6	709.3	773.4	803.6
62.5°	543.3	579.1	656.5	730.0	758.3
65°	473.5	518.8	605.5	682.9	713.1
67.5°	409.4	456.5	556.5	633.8	665.9
70°	345.2	399.9	505.6	582.9	613.1
72.5°	281.1	345.2	449.0	528.2	545.2
75°	220.7	288.6	394.3	430.1	415.0
77.5°	162.2	237.7	332.0	313.1	309.4
80°	115.1	188.6	226.4	228.3	233.9
82.5°	73.6	139.6	147.1	149.0	150.9
85°	41.5	69.8	77.3	71.7	67.9
87.5°	18.9	22.6	18.9	13.2	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)