

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: P345053

Luminaire Tested: **24CZ-45-L850-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345053
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-45-L850-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4185.6 lumens
Efficiency: N/A
Efficacy: 117.2 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

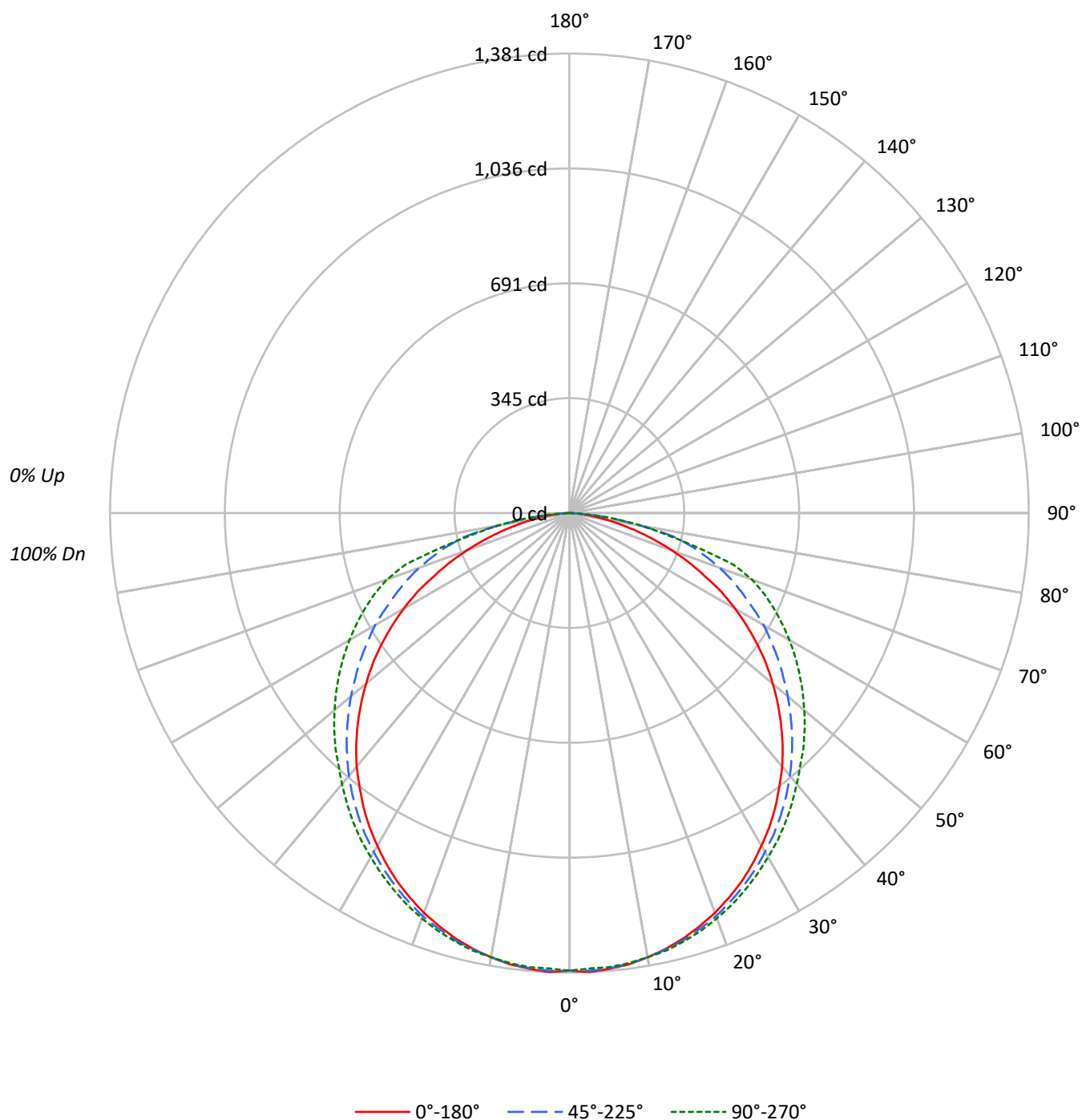
Input Watts (W): 35.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		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°	1850	1850	1850
5°	1857	1855	1850
10°	1852	1852	1852
15°	1843	1851	1856
20°	1830	1846	1856
25°	1815	1837	1855
30°	1794	1827	1855
35°	1773	1820	1861
40°	1748	1811	1867
45°	1713	1801	1893
50°	1670	1794	1929
55°	1619	1796	1981
60°	1549	1814	2055
65°	1433	1832	2158
70°	1291	1890	2292
75°	1091	1948	2051
80°	848	1667	1722
85°	608	1135	996



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	3.1
10°-20°	374.3	8.9
20°-30°	569.2	13.6
30°-40°	691.6	16.5
40°-50°	729.9	17.4
50°-60°	685.9	16.4
60°-70°	564.6	13.5
70°-80°	355.7	8.5
80°-90°	84.0	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°	1073.9	25.7
0°-40°	1765.4	42.2
0°-60°	3181.2	76.0
0°-90°	4185.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4185.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1375	1368	1373	1372	1370	131
15°	1323	1318	1329	1332	1332	373
25°	1223	1221	1237	1244	1250	563
35°	1079	1085	1108	1122	1133	675
45°	900	914	947	974	995	694
55°	690	715	766	819	844	616
65°	450	493	576	649	678	447
75°	210	274	375	409	394	224
85°	39	66	74	68	64	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1375.2	1375.2	1375.2	1375.2	1375.2
2.5°	1380.6	1371.6	1377.0	1375.2	1369.8
5°	1375.2	1368.0	1373.4	1371.6	1369.8
7.5°	1368.0	1360.9	1366.2	1364.4	1364.4
10°	1355.5	1350.1	1355.5	1355.5	1355.5
12.5°	1341.1	1335.8	1342.9	1344.7	1346.5
15°	1323.2	1317.8	1328.6	1332.2	1332.2
17.5°	1301.7	1298.1	1308.9	1312.5	1316.0
20°	1278.4	1276.6	1289.1	1292.7	1296.3
22.5°	1251.5	1251.5	1264.0	1267.6	1274.8
25°	1222.8	1221.0	1237.1	1244.3	1249.7
27.5°	1190.5	1190.5	1208.5	1217.4	1222.8
30°	1154.7	1158.3	1176.2	1186.9	1194.1
32.5°	1118.8	1122.4	1143.9	1156.5	1165.4
35°	1079.4	1084.7	1108.1	1122.4	1133.2
37.5°	1036.3	1045.3	1070.4	1086.5	1099.1
40°	995.1	1002.3	1031.0	1048.9	1063.2
42.5°	948.5	961.0	989.7	1011.2	1027.4
45°	900.1	914.4	946.7	973.6	995.1
47.5°	849.9	867.8	901.9	937.7	959.2
50°	797.9	817.6	857.0	900.1	921.6
52.5°	745.9	767.4	810.4	860.6	883.9
55°	690.3	715.4	765.6	819.4	844.5
57.5°	632.9	661.6	719.0	779.9	805.0
60°	575.5	606.0	674.2	735.1	763.8
62.5°	516.4	550.4	624.0	693.9	720.8
65°	450.0	493.1	575.5	649.1	677.7
67.5°	389.1	433.9	528.9	602.4	632.9
70°	328.1	380.1	480.5	554.0	582.7
72.5°	267.2	328.1	426.7	502.0	518.2
75°	209.8	274.3	374.7	408.8	394.5
77.5°	154.2	225.9	315.6	297.6	294.0
80°	109.4	179.3	215.2	216.9	222.3
82.5°	69.9	132.7	139.9	141.6	143.4
85°	39.4	66.3	73.5	68.1	64.5
87.5°	17.9	21.5	17.9	12.6	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)