

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: P345050

Luminaire Tested: **24CZ-45-L830-HRP-UNV-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P345050
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-L830-HRP-UNV-CD1-U
Description: CRUZE 2X4 WITH HRP LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3758.6 lumens
Efficiency: N/A
Efficacy: 105.3 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

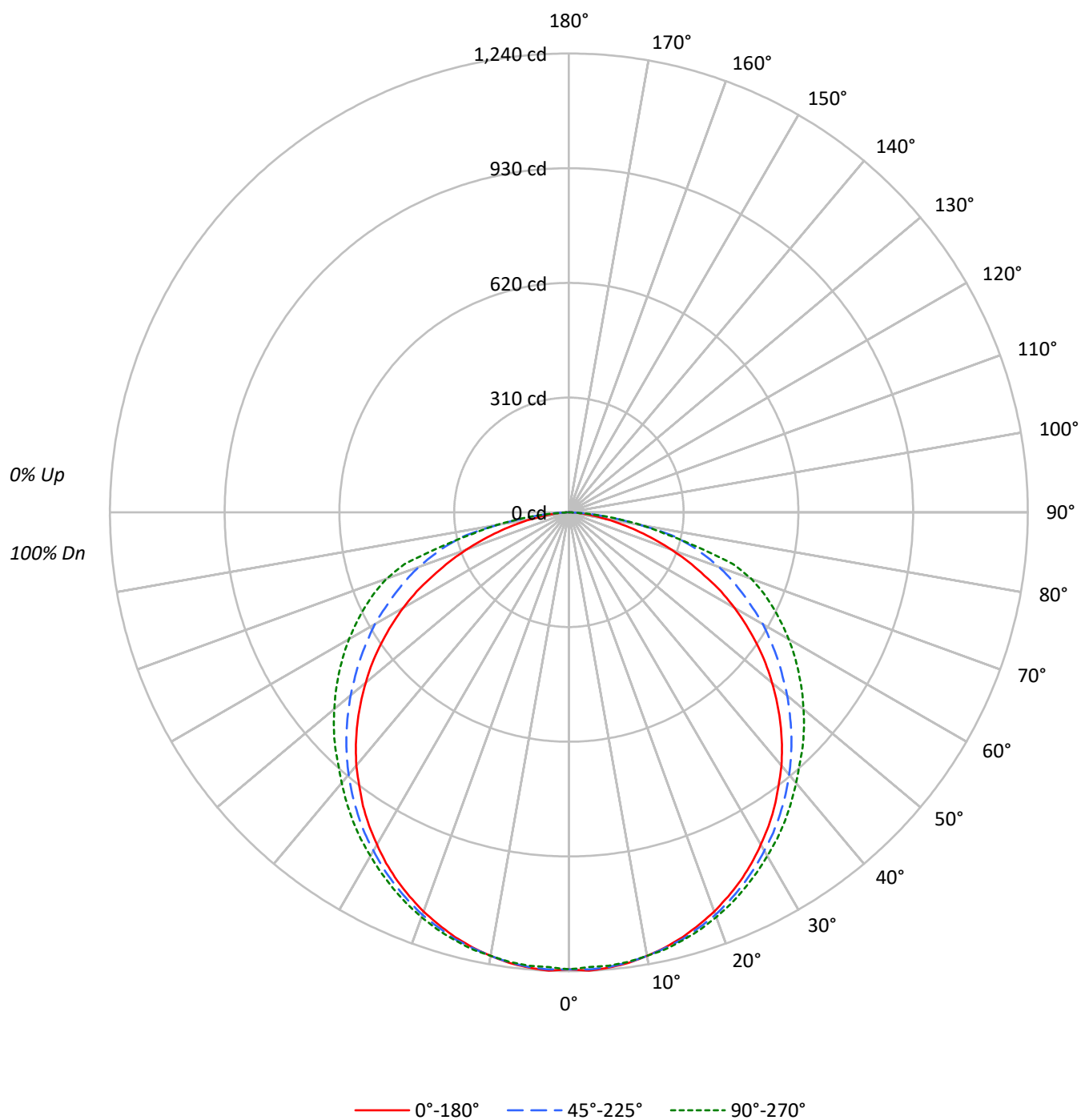
Input Watts (W): 35.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1662	1662	1662
5°	1668	1666	1661
10°	1663	1663	1663
15°	1655	1662	1666
20°	1644	1657	1667
25°	1630	1649	1666
30°	1611	1641	1666
35°	1592	1634	1671
40°	1570	1626	1677
45°	1538	1618	1700
50°	1500	1611	1732
55°	1454	1613	1779
60°	1391	1629	1846
65°	1287	1645	1938
70°	1159	1697	2059
75°	979	1749	1841
80°	761	1497	1547
85°	546	1019	895



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.1	3.1
10°-20°	336.1	8.9
20°-30°	511.2	13.6
30°-40°	621.0	16.5
40°-50°	655.5	17.4
50°-60°	615.9	16.4
60°-70°	507.0	13.5
70°-80°	319.4	8.5
80°-90°	75.4	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°	964.3	25.7
0°-40°	1585.4	42.2
0°-60°	2856.7	76.0
0°-90°	3758.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3758.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1235	1235	1235	1235	1235	
5°	1235	1228	1233	1232	1230	117
15°	1188	1183	1193	1196	1196	335
25°	1098	1096	1111	1117	1122	506
35°	969	974	995	1008	1018	606
45°	808	821	850	874	894	623
55°	620	642	688	736	758	553
65°	404	443	517	583	609	401
75°	188	246	336	367	354	201
85°	35	60	66	61	58	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1234.9	1234.9	1234.9	1234.9	1234.9
2.5°	1239.8	1231.7	1236.5	1234.9	1230.1
5°	1234.9	1228.5	1233.3	1231.7	1230.1
7.5°	1228.5	1222.0	1226.9	1225.3	1225.3
10°	1217.2	1212.4	1217.2	1217.2	1217.2
12.5°	1204.3	1199.5	1205.9	1207.6	1209.2
15°	1188.2	1183.4	1193.1	1196.3	1196.3
17.5°	1168.9	1165.7	1175.4	1178.6	1181.8
20°	1148.0	1146.4	1157.6	1160.9	1164.1
22.5°	1123.8	1123.8	1135.1	1138.3	1144.8
25°	1098.1	1096.5	1110.9	1117.4	1122.2
27.5°	1069.1	1069.1	1085.2	1093.2	1098.1
30°	1036.9	1040.1	1056.2	1065.9	1072.3
32.5°	1004.7	1007.9	1027.2	1038.5	1046.5
35°	969.3	974.1	995.0	1007.9	1017.6
37.5°	930.6	938.7	961.2	975.7	987.0
40°	893.6	900.0	925.8	941.9	954.8
42.5°	851.7	863.0	888.8	908.1	922.6
45°	808.3	821.1	850.1	874.3	893.6
47.5°	763.2	779.3	809.9	842.1	861.4
50°	716.5	734.2	769.6	808.3	827.6
52.5°	669.8	689.1	727.8	772.8	793.8
55°	619.9	642.4	687.5	735.8	758.3
57.5°	568.4	594.1	645.6	700.4	722.9
60°	516.8	544.2	605.4	660.1	685.9
62.5°	463.7	494.3	560.3	623.1	647.2
65°	404.1	442.8	516.8	582.8	608.6
67.5°	349.4	389.6	475.0	541.0	568.4
70°	294.6	341.3	431.5	497.5	523.3
72.5°	239.9	294.6	383.2	450.8	465.3
75°	188.4	246.3	336.5	367.1	354.2
77.5°	138.5	202.9	283.4	267.3	264.1
80°	98.2	161.0	193.2	194.8	199.6
82.5°	62.8	119.1	125.6	127.2	128.8
85°	35.4	59.6	66.0	61.2	58.0
87.5°	16.1	19.3	16.1	11.3	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)