

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: P393484

Luminaire Tested: **24EN-LD2-40-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393484
Test Lab: INNOVATION CENTER (G3)
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-40-UNV-L83050-W2A-1-U (3500K)
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4050.7 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

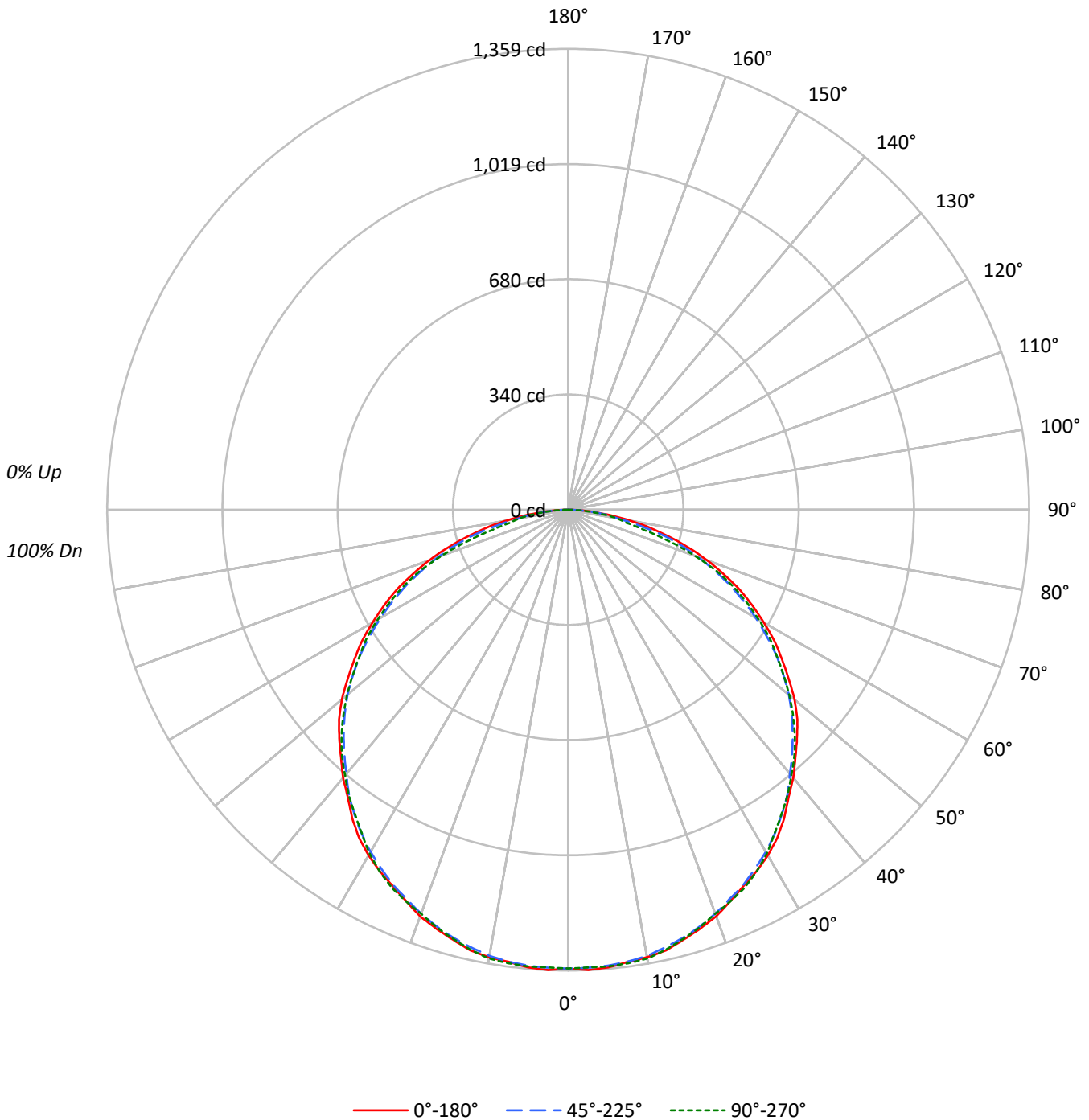
Input Watts (W): 28.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P393484

CATALOG NUMBER: 24EN-LD2-40-UNV-L83050-W2A-1-U (3500K)

Luminous Intensity Polar Plot





TEST NUMBER: P393484

CATALOG NUMBER: 24EN-LD2-40-UNV-L83050-W2A-1-U (3500K)

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	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	36	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1820	1820	1820
5°	1830	1823	1826
10°	1831	1825	1836
15°	1829	1821	1825
20°	1827	1816	1816
25°	1817	1813	1826
30°	1829	1810	1819
35°	1823	1804	1800
40°	1813	1786	1797
45°	1815	1781	1798
50°	1823	1777	1781
55°	1804	1757	1759
60°	1792	1720	1746
65°	1777	1671	1710
70°	1711	1601	1558
75°	1601	1492	1216
80°	1426	1155	1139
85°	1127	1065	957



TEST NUMBER: P393484

CATALOG NUMBER: 24EN-LD2-40-UNV-L83050-W2A-1-U (3500K)

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	3.2
10°-20°	369.3	9.1
20°-30°	563.8	13.9
30°-40°	687.9	17.0
40°-50°	726.3	17.9
50°-60°	673.4	16.6
60°-70°	527.6	13.0
70°-80°	295.2	7.3
80°-90°	78.8	1.9
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°	1061.5	26.2
0°-40°	1749.4	43.2
0°-60°	3149.1	77.7
0°-90°	4050.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4050.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1353	1353	1353	1353	1353	
5°	1355	1355	1350	1351	1352	129
15°	1313	1307	1307	1304	1310	371
25°	1224	1224	1221	1219	1230	566
35°	1110	1100	1098	1097	1096	694
45°	954	945	936	934	945	736
55°	769	759	749	749	750	689
65°	558	541	525	528	537	549
75°	308	299	287	249	234	327
85°	73	70	69	65	62	85
90°	0	0	0	0	0	



TEST NUMBER: P393484

CATALOG NUMBER: 24EN-LD2-40-UNV-L83050-W2A-1-U (3500K)

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1353	1353	1353	1353	1353
2.5°	1359	1356	1352	1353	1351
5°	1355	1355	1350	1351	1352
7.5°	1345	1346	1344	1340	1349
10°	1340	1333	1336	1328	1344
12.5°	1331	1320	1322	1316	1329
15°	1313	1307	1307	1304	1310
17.5°	1295	1291	1289	1291	1291
20°	1276	1273	1268	1272	1268
22.5°	1249	1251	1243	1252	1250
25°	1224	1224	1221	1219	1230
27.5°	1202	1195	1193	1189	1203
30°	1177	1164	1165	1159	1171
32.5°	1147	1132	1133	1127	1132
35°	1110	1100	1098	1097	1096
37.5°	1067	1066	1061	1064	1062
40°	1032	1030	1017	1020	1023
42.5°	991	988	977	979	987
45°	954	945	936	934	945
47.5°	916	902	894	888	899
50°	871	859	849	843	851
52.5°	819	809	799	797	800
55°	769	759	749	749	750
57.5°	721	708	693	696	704
60°	666	654	639	639	649
62.5°	612	597	582	584	594
65°	558	541	525	528	537
67.5°	496	481	466	470	475
70°	435	420	407	403	396
72.5°	373	361	350	328	317
75°	308	299	287	249	234
77.5°	248	241	214	179	174
80°	184	184	149	146	147
82.5°	125	123	113	106	103
85°	73	70	69	65	62
87.5°	24	28	28	27	28
90°	0	0	0	0	0

(END OF REPORT)