

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: P233281

Luminaire Tested: **4VT3-LD5-8-P-UNV-L840-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233281  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-268-6)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4VT3-LD5-8-P-UNV-L840-CD1-U  
Description: 4FT VT3 GENERAL APPLICATION, 8000LM  
Light Source: (392) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

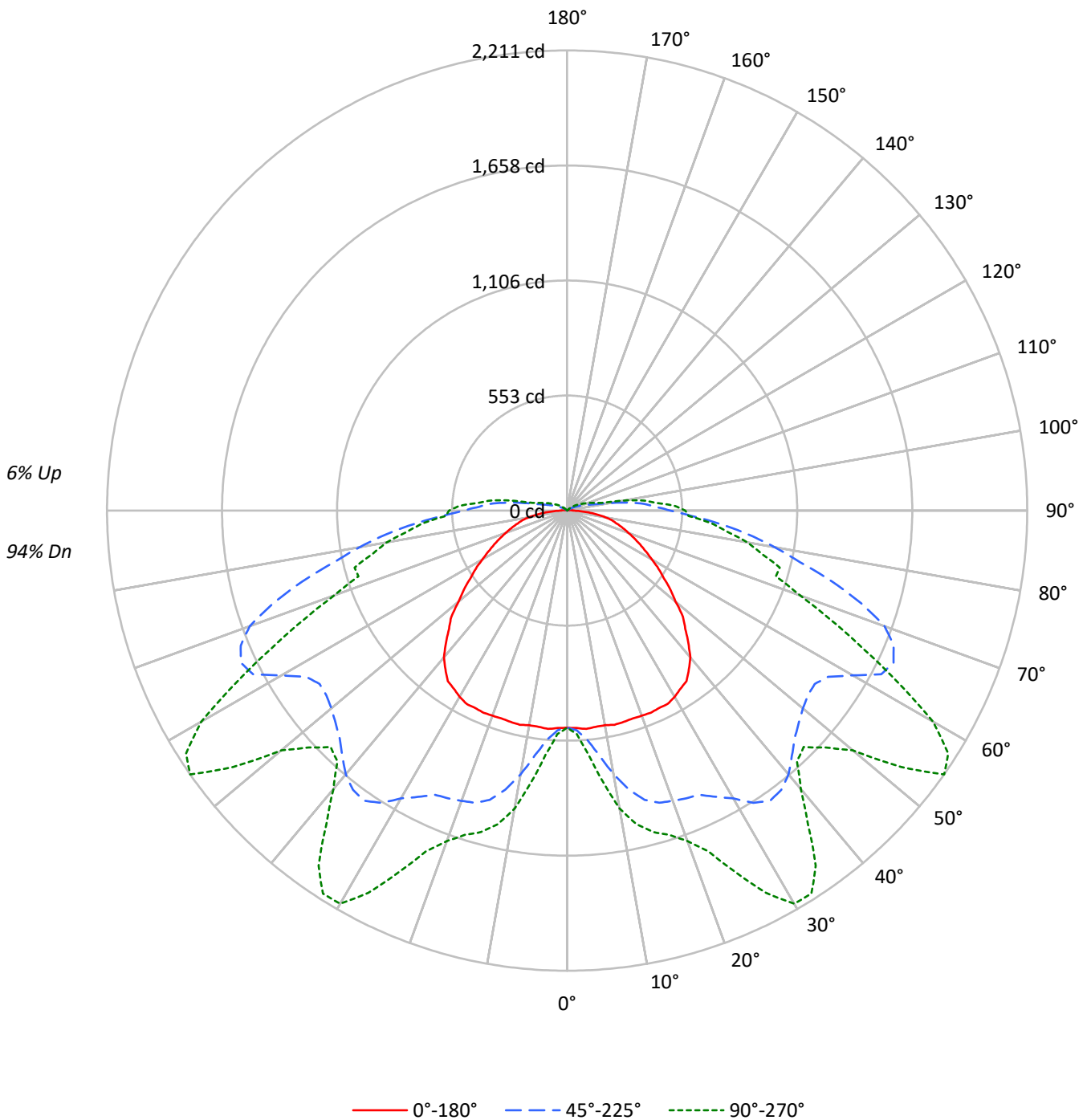
Lumens per Lamp: N/A  
Luminaire Lumens: 8060.1 lumens  
Efficiency: N/A  
Efficacy: 116.7 lumens/watt  
Spacing Criteria (0/90/45): 1.45 / 2.17 / 2.13  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.17')  
CIE Type: Direct

Input Watts (W): 69.05  
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



TEST NUMBER: P233281  
CATALOG NUMBER: 4VT3-LD5-8-P-UNV-L840-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P233281

CATALOG NUMBER: 4VT3-LD5-8-P-UNV-L840-CD1-U

**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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	103	96	90	85	99	93	88	83	88	83	79	82	79	75	78	75	72	69
2	91	81	72	65	88	78	70	64	74	67	61	69	64	59	65	60	56	54
3	82	69	59	52	79	67	58	51	63	55	49	59	53	47	56	50	45	43
4	74	60	50	42	71	58	49	41	55	47	40	52	44	39	49	42	37	35
5	68	53	43	35	65	51	42	35	48	40	34	46	38	33	43	37	32	29
6	62	47	37	30	60	46	36	29	43	35	29	41	33	28	39	32	27	25
7	57	42	33	26	55	41	32	25	39	31	25	37	30	24	35	28	23	21
8	53	38	29	23	51	37	28	22	35	27	22	33	26	21	32	25	21	18
9	49	35	26	20	48	34	25	20	32	25	19	31	24	19	29	23	18	16
10	46	32	23	18	44	31	23	18	30	22	17	28	22	17	27	21	16	14

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6736	6736	6736
5°	6802	6967	7366
10°	6816	7993	8907
15°	6950	8878	9656
20°	7102	9158	10133
25°	7312	9368	11519
30°	7523	10090	13213
35°	7661	11005	12829
40°	7502	11056	11027
45°	7041	10760	10484
50°	6509	10829	12186
55°	6036	11306	15844
60°	5674	13269	15489
65°	5429	15833	12906
70°	5320	16494	10696
75°	5399	15210	10581
80°	5686	13609	10013
85°	5170	11951	9243



TEST NUMBER: P233281

CATALOG NUMBER: 4VT3-LD5-8-P-UNV-L840-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.1	1.4
10°-20°	391.4	4.9
20°-30°	706.6	8.8
30°-40°	998.5	12.4
40°-50°	1066.7	13.2
50°-60°	1252.5	15.5
60°-70°	1266.7	15.7
70°-80°	1033.8	12.8
80°-90°	709.5	8.8
90°-100°	358.4	4.4
100°-110°	106.2	1.3
110°-120°	41.7	0.5
120°-130°	14.8	0.2
130°-140°	2.1	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°	1209.1	15.0
0°-40°	2207.6	27.4
0°-60°	4526.8	56.2
0°-90°	7536.8	93.5
90°-120°	506.3	6.3
90°-150°	523.2	6.5
90°-180°	523.0	6.5
0°-180°	8060.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1043	1043	1043	1043	1043	
5°	1053	1066	1104	1155	1176	100
15°	1051	1209	1439	1565	1599	298
25°	1046	1273	1506	1786	1918	484
35°	1000	1179	1701	2064	2083	619
45°	803	1054	1546	1636	1607	621
55°	568	830	1452	2001	2211	512
65°	387	704	1730	1705	1569	385
75°	250	924	1320	1062	1057	266
85°	103	791	737	698	695	102
90°	29	586	496	545	567	19
95°	20	296	372	429	428	15
105°	10	31	108	145	142	11
115°	4	4	43	75	75	4
125°	2	1	11	34	36	1
135°	0	0	0	6	6	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P233281

CATALOG NUMBER: 4VT3-LD5-8-P-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1043	1043	1043	1043	1043	1043	1043	1043	1043	1043	1043
2.5°	1046	1051	1053	1048	1051	1053	1051	1054	1056	1059	1057
5°	1053	1052	1057	1052	1058	1066	1070	1081	1086	1099	1104
7.5°	1048	1055	1055	1060	1071	1101	1105	1124	1147	1169	1185
10°	1047	1055	1069	1083	1102	1127	1144	1179	1222	1254	1286
12.5°	1054	1057	1081	1100	1138	1165	1187	1241	1287	1328	1373
15°	1051	1059	1086	1119	1173	1209	1232	1298	1354	1394	1439
17.5°	1047	1062	1096	1139	1202	1248	1273	1338	1391	1443	1472
20°	1049	1066	1105	1164	1226	1270	1296	1363	1415	1459	1484
22.5°	1051	1070	1109	1176	1235	1280	1307	1368	1414	1465	1496
25°	1046	1067	1114	1169	1241	1273	1301	1360	1409	1468	1506
27.5°	1047	1063	1107	1167	1223	1267	1282	1349	1410	1476	1551
30°	1033	1052	1100	1142	1197	1238	1261	1335	1415	1502	1597
32.5°	1014	1034	1077	1107	1172	1207	1240	1333	1437	1546	1665
35°	1000	1006	1027	1060	1133	1179	1221	1333	1455	1575	1701
37.5°	961	964	982	1031	1097	1162	1209	1334	1462	1579	1691
40°	921	922	941	990	1065	1137	1189	1321	1442	1550	1655
42.5°	861	869	896	945	1041	1102	1162	1280	1393	1499	1598
45°	803	814	836	894	993	1054	1113	1228	1332	1447	1546
47.5°	755	754	783	847	935	998	1052	1162	1277	1404	1509
50°	680	696	727	791	874	943	991	1100	1224	1351	1479
52.5°	626	636	673	732	819	876	932	1053	1188	1343	1458
55°	568	581	619	678	775	830	887	1022	1179	1332	1452
57.5°	521	531	566	632	731	796	862	1000	1167	1323	1486
60°	471	481	526	592	697	765	828	982	1163	1360	1583
62.5°	426	440	481	550	656	724	797	976	1209	1468	1702
65°	387	402	447	516	620	704	792	1028	1301	1555	1730
67.5°	350	366	412	483	615	720	840	1113	1367	1589	1698
70°	314	334	383	482	667	804	926	1172	1401	1557	1623
72.5°	282	306	376	517	752	883	993	1194	1365	1477	1480
75°	250	287	390	577	807	924	1025	1175	1300	1354	1320
77.5°	223	278	412	605	830	940	1018	1129	1196	1197	1146
80°	189	258	406	605	818	920	987	1047	1065	1051	1014
82.5°	148	225	380	574	779	869	920	946	934	919	878
85°	103	181	336	533	716	791	833	833	802	758	737
87.5°	60	132	289	470	636	703	733	685	637	614	598
90°	29	88	233	414	548	586	587	524	491	495	496
92.5°	24	52	183	310	407	426	426	400	393	401	422
95°	20	22	96	206	278	296	306	312	331	354	372
97.5°	17	17	30	111	186	215	235	250	268	278	291
100°	14	14	16	37	104	131	146	156	172	189	208
102.5°	12	12	12	19	39	51	64	86	104	126	143
105°	10	10	10	12	24	31	41	59	75	94	108
107.5°	8	8	8	8	16	23	29	44	61	76	87
110°	6	6	6	7	10	15	20	33	46	59	71



TEST NUMBER: P233281

CATALOG NUMBER: 4VT3-LD5-8-P-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	5	5	5	5	6	8	13	24	34	45	55
115°	4	4	4	4	4	4	6	15	24	32	43
117.5°	3	3	3	3	3	3	3	8	17	25	32
120°	2	2	2	2	2	2	2	3	10	18	25
122.5°	2	2	2	2	2	2	2	1	4	11	18
125°	2	1	1	1	1	1	1	1	1	5	11
127.5°	1	1	1	1	0	0	0	0	0	0	4
130°	1	1	0	0	0	0	0	0	0	0	0
132.5°	1	0	0	0	0	0	0	0	0	0	0
135°	0	0	0	0	0	0	0	0	0	0	0
137.5°	0	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0	0



TEST NUMBER: P233281

CATALOG NUMBER: 4VT3-LD5-8-P-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1043	1043	1043	1043	1043	1043	1043	1043	1043	1043
2.5°	1058	1061	1063	1073	1067	1078	1068	1067	1072	1075
5°	1118	1133	1145	1159	1155	1162	1161	1161	1183	1176
7.5°	1216	1231	1253	1275	1270	1296	1299	1303	1302	1313
10°	1317	1346	1368	1404	1401	1416	1436	1430	1446	1454
12.5°	1408	1441	1476	1509	1507	1516	1525	1531	1540	1544
15°	1476	1508	1538	1568	1565	1577	1582	1587	1599	1599
17.5°	1518	1539	1567	1600	1612	1618	1612	1629	1641	1634
20°	1527	1558	1602	1620	1640	1651	1657	1678	1677	1689
22.5°	1545	1587	1628	1684	1689	1716	1734	1756	1769	1772
25°	1575	1642	1702	1764	1786	1819	1857	1884	1906	1918
27.5°	1637	1720	1811	1887	1900	1940	1995	2035	2056	2071
30°	1716	1814	1908	1988	2025	2059	2110	2130	2164	2181
32.5°	1773	1871	1971	2047	2082	2113	2142	2160	2167	2183
35°	1800	1893	1996	2039	2064	2074	2087	2084	2085	2083
37.5°	1786	1872	1935	1970	1975	1973	1958	1924	1899	1901
40°	1749	1821	1861	1860	1848	1830	1796	1753	1737	1747
42.5°	1703	1750	1756	1743	1714	1711	1663	1649	1633	1634
45°	1645	1672	1681	1653	1636	1633	1611	1603	1606	1607
47.5°	1592	1621	1626	1619	1615	1621	1629	1649	1651	1684
50°	1559	1590	1624	1650	1660	1693	1738	1759	1784	1791
52.5°	1552	1605	1687	1752	1800	1844	1898	1975	2000	2024
55°	1572	1685	1816	1922	2001	2054	2128	2164	2190	2211
57.5°	1665	1842	2001	2076	2100	2127	2141	2151	2159	2171
60°	1815	1943	2028	2065	2074	2079	2070	2053	2037	2030
62.5°	1861	1936	1970	1954	1938	1925	1849	1817	1786	1795
65°	1832	1846	1807	1752	1705	1695	1627	1600	1560	1569
67.5°	1718	1672	1617	1544	1521	1487	1429	1404	1384	1370
70°	1604	1514	1441	1361	1336	1310	1238	1204	1194	1189
72.5°	1416	1329	1245	1177	1158	1126	1094	1063	1051	1052
75°	1225	1145	1091	1060	1062	1058	1052	1045	1049	1057
77.5°	1082	1038	1032	1037	1032	1024	986	971	953	956
80°	980	958	922	904	911	903	895	875	883	880
82.5°	850	833	818	804	805	798	776	770	759	775
85°	728	704	700	695	698	695	694	686	688	695
87.5°	604	602	601	596	593	591	588	585	585	584
90°	501	508	526	535	545	551	563	564	568	567
92.5°	444	465	494	511	517	518	526	522	520	519
95°	391	400	412	420	429	430	431	426	427	428
97.5°	305	318	333	350	358	357	367	366	366	371
100°	225	242	253	272	268	264	271	267	284	278
102.5°	157	163	173	175	176	174	176	172	172	170
105°	120	129	138	144	145	145	146	143	143	142
107.5°	99	108	115	119	124	123	125	124	125	123
110°	80	89	97	101	105	105	106	106	105	105





TEST NUMBER: P233281

CATALOG NUMBER: 4VT3-LD5-8-P-UNV-L840-CD1-U

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
112.5°	65	73	79	85	88	89	89	90	90	90
115°	51	59	67	72	75	76	77	76	75	75
117.5°	40	47	54	60	63	64	66	65	65	64
120°	32	38	45	50	52	54	56	55	54	55
122.5°	25	30	36	41	43	44	45	44	45	44
125°	18	23	28	32	34	36	37	36	36	36
127.5°	10	15	20	24	26	27	29	28	27	27
130°	3	9	14	17	19	21	21	21	20	19
132.5°	0	2	7	11	13	14	14	14	13	13
135°	0	0	1	4	6	7	8	7	7	6
137.5°	0	0	0	0	0	0	0	0	0	0
140°	0	0	0	0	0	0	0	0	0	0
142.5°	0	0	0	0	0	0	0	0	0	0
145°	0	0	0	0	0	0	0	0	0	0
147.5°	0	0	0	0	0	0	0	0	0	0
150°	0	0	0	0	0	0	0	0	0	0
152.5°	0	0	0	0	0	0	0	0	0	0
155°	0	0	0	0	0	0	0	0	0	0
157.5°	0	0	0	0	0	0	0	0	0	0
160°	0	0	0	0	0	0	0	0	0	0
162.5°	0	0	0	0	0	0	0	0	0	0
165°	0	0	0	0	0	0	0	0	0	0
167.5°	0	0	0	0	0	0	0	0	0	0
170°	0	0	0	0	0	0	0	0	0	0
172.5°	0	0	0	0	0	0	0	0	0	0
175°	0	0	0	0	0	0	0	0	0	0
177.5°	0	0	0	0	0	0	0	0	0	0
180°	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)