

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P938103

Luminaire Tested: SQ4-FB-125U-100D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938103
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-B40-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

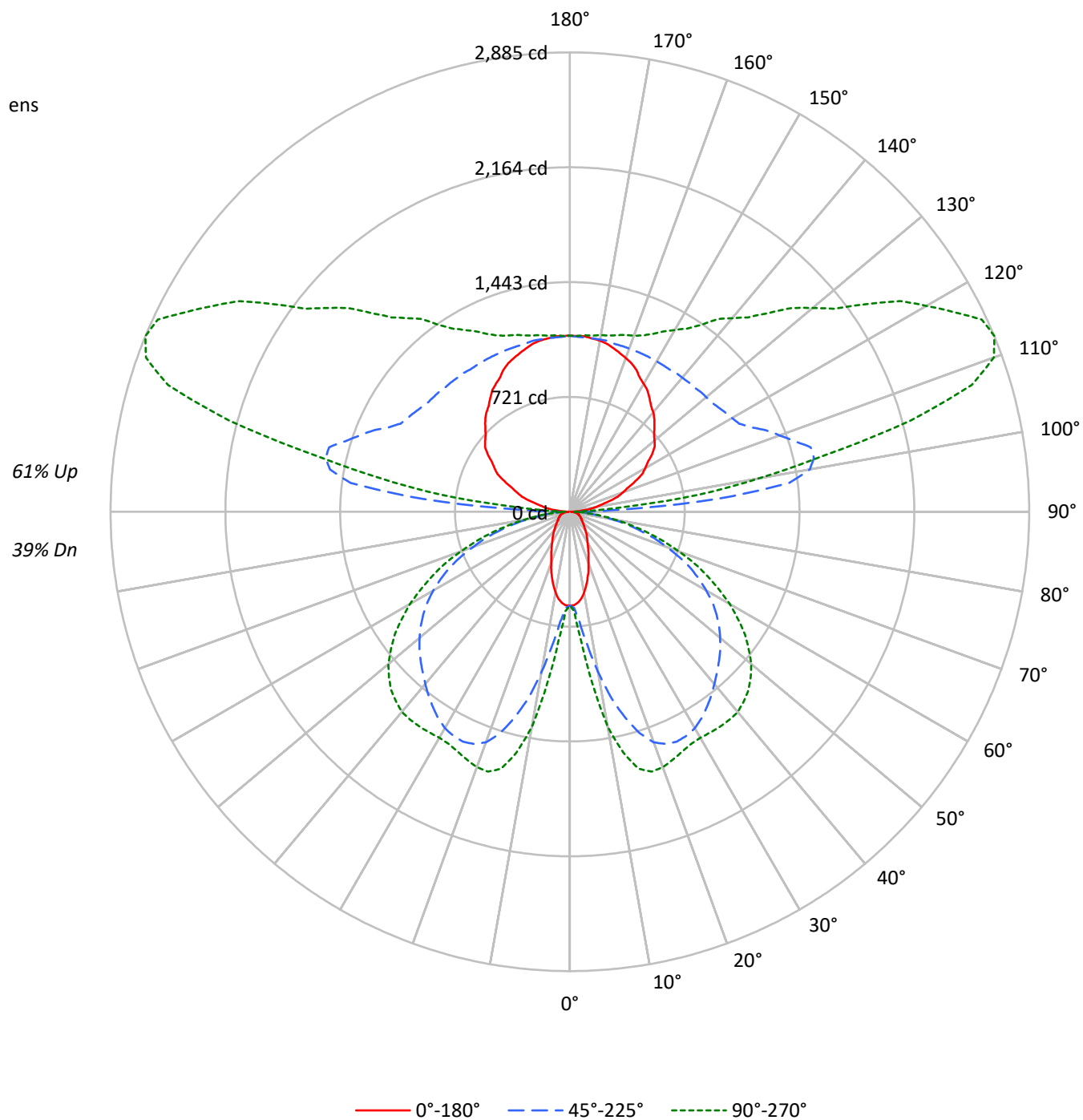
Lumens per Lamp: N/A
Luminaire Lumens: 11721.6 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 96.6
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: 24 FT

TEST NUMBER: P938103

CATALOG NUMBER: SQ4-FB-125U-100D-B40-1D-UNV-W2A-W-6

Luminous Intensity Polar Plot



TEST NUMBER: P938103

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46			39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38			32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31			26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26			21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22			18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16			13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14			11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13			10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11			9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3641	3641	3641
5°	3556	4207	4894
10°	3224	6131	8114
15°	2740	8009	9798
20°	2229	9279	9986
25°	1859	9707	9782
30°	1567	9766	9764
35°	1385	9602	10016
40°	1206	9388	10277
45°	1091	9231	10317
50°	1000	9089	10147
55°	957	8882	9697
60°	979	8489	8986
65°	1016	7892	8010
70°	1081	6878	6768
75°	1193	5602	5281
80°	1292	3880	3559
85°	1127	2054	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10317 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.1	0.6
10°-20°	337.5	2.9
20°-30°	590.2	5.0
30°-40°	759.8	6.5
40°-50°	848.7	7.2
50°-60°	812.9	6.9
60°-70°	644.2	5.5
70°-80°	378.8	3.2
80°-90°	109.4	0.9
90°-100°	538.7	4.6
100°-110°	1416.2	12.1
110°-120°	1468.5	12.5
120°-130°	1177.9	10.0
130°-140°	924.2	7.9
140°-150°	709.4	6.1
150°-160°	510.9	4.4
160°-170°	312.6	2.7
170°-180°	105.6	0.9
0°-30°	1003.8	8.6
0°-40°	1763.7	15.0
0°-60°	3425.2	29.2
0°-90°	4557.7	38.9
90°-120°	3423.4	29.2
90°-150°	6234.9	53.2
90°-180°	7164.0	61.1
0°-180°	11721.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	574	615	693	784	812	53
15°	430	793	1336	1620	1671	120
25°	274	899	1592	1662	1664	126
35°	186	859	1499	1584	1647	116
45°	127	685	1325	1518	1586	98
55°	91	435	1124	1306	1342	83
65°	72	231	835	939	952	71
75°	53	142	458	504	505	55
85°	19	44	114	125	127	20
90°	7	21	56	28	28	7
95°	71	279	928	478	326	79
105°	255	386	1566	2377	2218	271
115°	453	550	1254	2502	2855	448
125°	630	707	1141	1928	2274	560
135°	751	827	1105	1556	1764	581
145°	871	927	1091	1328	1431	546
155°	985	1012	1091	1198	1233	453
165°	1063	1077	1091	1134	1148	300
175°	1105	1105	1098	1113	1113	105
180°	1105	1105	1105	1105	1105	

TEST NUMBER: P938103

CATALOG NUMBER: SQ4-FB-125U-100D-B40-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6	588.6
2.5°	588.6	588.6	592.4	594.3	598.0	599.9	603.8	607.6	618.8	620.8	624.6
5°	573.5	581.0	605.7	615.1	641.6	677.6	692.7	717.3	768.4	783.6	793.0
7.5°	550.7	567.7	628.4	643.5	709.8	804.4	844.1	897.1	978.5	1018.2	1050.4
10°	514.7	550.7	658.7	694.6	802.5	946.3	1020.1	1094.0	1217.0	1271.9	1292.7
12.5°	475.0	533.7	690.8	740.0	895.2	1105.3	1194.2	1275.6	1415.7	1489.5	1500.9
15°	429.7	509.1	721.1	793.0	993.6	1237.8	1336.2	1436.5	1567.1	1620.1	1633.3
17.5°	389.9	490.2	749.5	825.2	1069.3	1357.1	1457.3	1540.6	1646.6	1682.5	1692.0
20°	340.6	459.9	768.4	866.9	1148.9	1444.1	1540.6	1605.0	1676.9	1699.6	1703.3
22.5°	304.7	427.7	779.8	881.9	1201.8	1497.1	1578.4	1629.5	1678.8	1686.3	1688.2
25°	274.5	391.7	777.8	899.0	1247.2	1529.2	1591.7	1629.5	1658.0	1661.7	1661.7
27.5°	246.0	352.0	770.3	902.8	1281.3	1536.8	1586.0	1612.5	1625.8	1633.3	1633.3
30°	221.5	314.2	751.4	895.2	1296.4	1529.2	1569.0	1582.2	1595.5	1606.8	1612.5
32.5°	202.6	278.2	722.9	880.0	1298.3	1510.3	1538.7	1546.2	1565.1	1591.7	1601.2
35°	185.5	242.3	690.8	859.2	1287.0	1480.1	1499.0	1506.5	1544.3	1584.2	1597.3
37.5°	168.5	215.7	649.2	823.3	1270.0	1444.1	1457.3	1470.6	1529.2	1576.5	1591.7
40°	151.4	193.0	599.9	783.6	1243.4	1400.5	1411.9	1432.7	1510.3	1565.1	1580.3
42.5°	138.2	174.1	546.9	741.9	1209.4	1351.3	1368.3	1398.6	1487.6	1546.2	1563.3
45°	126.8	155.2	490.2	685.1	1165.9	1300.2	1324.9	1366.5	1461.1	1517.9	1533.1
47.5°	115.5	141.9	431.6	626.5	1118.5	1249.1	1281.3	1328.6	1425.1	1480.1	1493.2
50°	106.0	128.7	372.8	564.0	1067.4	1194.2	1232.1	1281.3	1379.7	1430.8	1447.9
52.5°	98.5	117.4	317.9	501.6	1008.8	1137.5	1181.0	1232.1	1324.9	1374.1	1385.4
55°	90.8	107.9	270.6	435.3	948.2	1076.9	1124.2	1173.4	1264.2	1305.9	1313.5
57.5°	87.1	100.3	230.9	372.8	883.9	1008.8	1061.8	1107.2	1192.3	1224.5	1232.1
60°	81.4	94.6	200.6	319.8	813.9	944.4	989.9	1035.2	1107.2	1133.7	1139.3
62.5°	75.7	90.8	177.9	268.7	741.9	868.7	914.1	955.8	1016.3	1035.2	1042.9
65°	71.9	87.1	160.9	230.9	668.1	789.2	834.7	870.6	919.9	938.8	942.5
67.5°	68.1	83.3	147.6	198.7	594.3	709.8	743.8	777.8	815.8	834.7	836.6
70°	62.5	79.5	136.3	176.0	518.6	618.8	647.3	683.2	713.5	722.9	728.7
72.5°	58.6	73.8	128.7	159.0	441.0	531.8	558.3	579.1	605.7	615.1	615.1
75°	53.0	66.3	121.1	141.9	361.5	435.3	458.0	478.8	499.7	503.5	497.7
77.5°	47.3	58.6	104.1	119.3	282.0	344.5	363.4	374.7	391.7	395.6	397.5
80°	39.7	51.1	81.4	92.7	204.4	253.6	266.8	276.3	291.5	291.5	295.3
82.5°	30.3	39.7	58.6	66.3	138.2	174.1	185.5	191.2	200.6	200.6	200.6
85°	18.9	24.6	37.8	43.5	83.3	106.0	113.5	115.5	123.0	124.9	124.9
87.5°	9.5	13.3	24.6	26.5	43.5	54.9	54.9	58.6	58.6	56.8	54.9
90°	7.4	13.4	19.3	20.7	32.6	48.4	56.3	50.0	37.5	28.2	28.2
92.5°	29.7	80.1	130.5	143.2	201.2	278.7	317.4	278.2	199.8	141.0	135.3
95°	71.2	163.5	255.7	278.9	495.2	783.7	927.9	828.0	628.2	478.4	461.4
97.5°	123.1	204.5	285.9	306.3	667.0	1148.0	1388.5	1325.3	1199.1	1104.4	1072.1
100°	163.2	237.0	310.9	329.3	729.5	1263.3	1530.1	1534.7	1543.9	1550.8	1512.3
102.5°	197.3	266.2	335.1	352.3	758.3	1299.5	1570.1	1650.5	1811.4	1932.1	1899.1
105°	255.2	313.5	371.8	386.4	779.5	1303.7	1565.7	1746.0	2106.6	2377.1	2359.3
107.5°	314.5	368.8	423.3	436.8	783.5	1245.6	1476.7	1728.3	2231.3	2608.5	2612.8
110°	354.5	403.6	452.7	465.0	777.5	1194.1	1402.5	1683.7	2246.1	2667.9	2686.3

TEST NUMBER: P938103

CATALOG NUMBER: SQ4-FB-125U-100D-B40-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	393.8	440.6	487.4	499.2	777.8	1149.2	1335.0	1622.7	2198.3	2630.0	2658.3
115°	453.1	496.3	539.6	550.4	785.0	1097.8	1254.2	1531.4	2085.9	2501.7	2541.1
117.5°	511.8	551.0	590.2	600.0	799.5	1065.5	1198.5	1448.7	1949.2	2324.5	2368.0
120°	545.9	582.8	619.7	629.0	811.4	1054.6	1176.3	1404.9	1862.1	2205.0	2247.4
122.5°	579.3	616.5	653.8	663.1	828.5	1049.0	1159.3	1365.2	1776.9	2085.6	2127.4
125°	630.4	664.4	698.3	706.8	851.5	1044.3	1140.7	1315.6	1665.3	1927.7	1966.2
127.5°	671.9	706.2	740.5	749.1	874.5	1041.6	1125.2	1275.3	1575.7	1800.8	1833.3
130°	694.2	731.1	768.0	777.3	891.2	1043.1	1119.2	1252.9	1520.2	1720.7	1750.7
132.5°	717.2	754.2	791.0	800.3	904.9	1044.3	1114.0	1233.7	1473.0	1652.4	1679.3
135°	751.3	784.9	818.5	826.9	919.7	1043.3	1105.1	1205.3	1405.8	1556.1	1579.2
137.5°	786.2	819.5	852.8	861.1	941.9	1049.7	1103.6	1188.3	1357.7	1484.8	1503.7
140°	815.1	845.7	876.4	884.0	955.5	1050.8	1098.4	1171.6	1318.0	1427.7	1445.5
142.5°	837.3	865.7	894.1	901.1	966.9	1054.6	1098.4	1162.7	1291.3	1387.7	1403.0
145°	871.4	896.2	920.9	927.1	981.7	1054.6	1091.0	1143.6	1248.8	1327.6	1339.2
147.5°	905.6	929.7	953.8	959.8	1003.5	1061.9	1091.0	1132.3	1215.1	1277.2	1286.8
150°	927.9	949.7	971.3	976.8	1014.9	1065.6	1091.0	1125.9	1195.9	1248.3	1256.0
152.5°	950.8	967.3	983.8	987.9	1022.3	1068.1	1091.0	1120.8	1180.5	1225.3	1231.1
155°	985.0	997.2	1009.3	1012.4	1038.6	1073.5	1091.0	1114.8	1162.2	1197.9	1201.8
157.5°	1010.2	1022.0	1033.9	1036.8	1054.9	1079.0	1091.0	1109.4	1146.4	1174.1	1176.8
160°	1027.2	1036.5	1045.7	1048.0	1062.3	1081.4	1091.0	1106.8	1138.5	1162.2	1163.8
162.5°	1044.3	1051.2	1058.1	1059.9	1070.3	1084.1	1091.0	1104.4	1131.0	1151.1	1152.6
165°	1062.8	1069.1	1075.4	1077.0	1081.6	1087.8	1091.0	1100.5	1119.7	1134.1	1135.6
167.5°	1079.9	1082.9	1085.8	1086.6	1090.5	1095.8	1098.4	1104.7	1117.3	1126.6	1127.3
170°	1091.0	1094.0	1096.9	1097.7	1098.0	1098.2	1098.4	1104.7	1117.3	1126.6	1126.6
172.5°	1096.9	1097.6	1098.2	1098.4	1098.4	1098.4	1098.4	1103.4	1113.2	1120.7	1120.1
175°	1105.1	1105.1	1105.1	1105.1	1102.9	1100.0	1098.4	1101.6	1107.9	1112.6	1112.6
177.5°	1105.1	1105.1	1105.1	1105.1	1103.4	1101.0	1099.9	1102.4	1107.3	1111.0	1110.4
180°	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1	1105.1

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CATALOG NUMBER: SQ4-FB-125U-100D-B40-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	588.6	588.6
2.5°	628.4	624.6
5°	808.1	811.9
7.5°	1088.2	1086.4
10°	1353.2	1370.2
12.5°	1546.2	1550.1
15°	1663.6	1671.2
17.5°	1709.1	1710.9
20°	1710.9	1707.2
22.5°	1690.1	1686.3
25°	1665.5	1663.6
27.5°	1642.8	1644.7
30°	1633.3	1639.0
32.5°	1633.3	1642.8
35°	1637.2	1646.6
37.5°	1635.2	1646.6
40°	1627.6	1640.9
42.5°	1606.8	1616.3
45°	1574.7	1586.0
47.5°	1533.1	1540.6
50°	1480.1	1487.6
52.5°	1413.8	1415.7
55°	1334.3	1341.9
57.5°	1249.1	1251.0
60°	1154.5	1160.1
62.5°	1054.2	1054.2
65°	948.2	951.9
67.5°	838.4	847.8
70°	726.8	728.7
72.5°	617.0	617.0
75°	503.5	505.3
77.5°	395.6	395.6
80°	293.4	295.3
82.5°	202.6	206.3
85°	126.8	126.8
87.5°	58.6	53.0
90°	28.2	28.2
92.5°	112.9	90.4
95°	393.5	325.6
97.5°	942.9	813.7
100°	1358.5	1204.5
102.5°	1767.2	1635.4
105°	2288.5	2217.6
107.5°	2629.9	2647.1
110°	2760.1	2834.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2771.7	2885.2
115°	2698.3	2855.4
117.5°	2542.4	2716.8
120°	2416.8	2586.2
122.5°	2294.5	2461.6
125°	2120.1	2274.0
127.5°	1963.2	2093.1
130°	1870.7	1990.7
132.5°	1786.8	1894.2
135°	1671.8	1764.5
137.5°	1579.6	1655.4
140°	1516.3	1587.2
142.5°	1463.9	1524.9
145°	1385.3	1431.4
147.5°	1325.1	1363.3
150°	1287.1	1318.0
152.5°	1254.5	1277.9
155°	1217.2	1232.7
157.5°	1187.6	1198.5
160°	1170.1	1176.3
162.5°	1158.5	1164.4
165°	1141.9	1148.1
167.5°	1129.9	1132.5
170°	1126.6	1126.6
172.5°	1117.8	1115.5
175°	1112.6	1112.6
177.5°	1107.8	1105.1
180°	1105.1	1105.1

(END OF REPORT)