

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: P853906

Luminaire Tested: SQ2-FB-150U-125D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853906
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-12)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-FB-150U-125D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

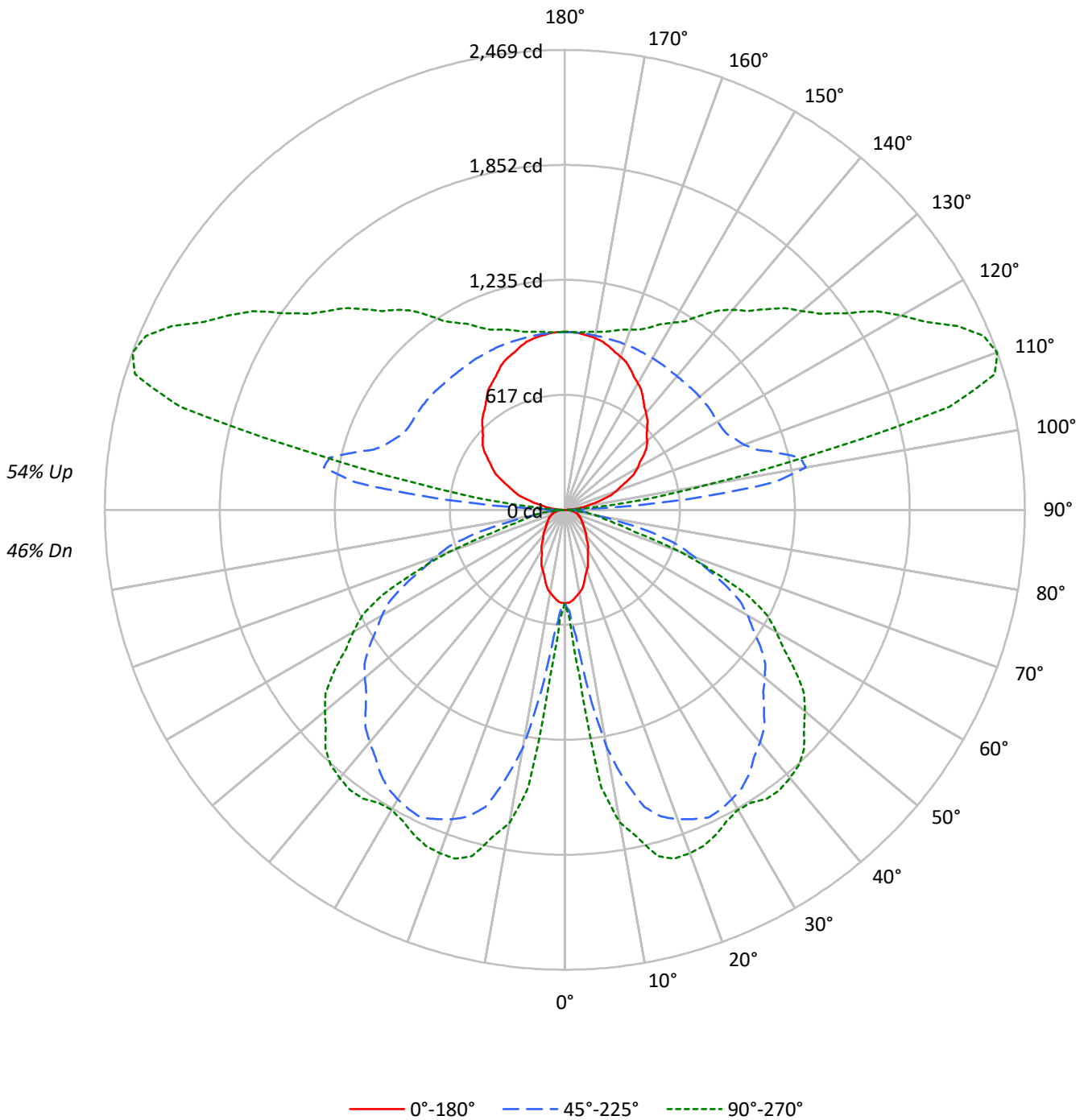
Lumens per Lamp: N/A
Luminaire Lumens: 10859.5 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 2.98 / 2.56
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 105.8
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: 24 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				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	97	92	88	85	89	85	81	78	71	68	66	58	56	55	46	45	44	38
2	88	80	74	69	80	74	68	64	62	58	54	50	48	45	40	38	36	31
3	80	70	63	57	73	64	58	53	54	49	45	44	41	38	35	32	30	26
4	73	62	54	47	66	57	50	44	47	42	38	39	35	32	31	28	26	22
5	66	55	46	40	61	50	43	38	42	37	32	35	30	27	28	24	22	19
6	61	49	40	34	56	45	38	32	38	32	28	31	27	23	25	22	19	16
7	56	44	36	30	51	40	33	28	34	28	24	28	24	20	22	19	17	14
8	52	39	32	26	47	36	29	24	31	25	21	25	21	18	20	17	15	12
9	48	36	28	23	44	33	26	22	28	23	19	23	19	16	19	15	13	11
10	45	33	25	20	41	30	24	19	26	20	17	21	17	14	17	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8110	8110	8110
5°	7906	10960	14365
10°	7404	21223	27953
15°	6701	27612	32174
20°	5935	30374	33694
25°	5248	32484	34247
30°	4639	33454	34670
35°	4141	34036	37272
40°	3766	34360	39601
45°	3473	34520	41468
50°	3275	35183	42222
55°	3195	36099	42556
60°	3274	36577	42347
65°	3415	36076	41150
70°	3536	34886	31124
75°	3918	31335	17174
80°	4045	16169	15946
85°	4020	11189	6706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 52.5°
 Luminance: 42942 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.2	0.8
10°-20°	384.2	3.5
20°-30°	675.9	6.2
30°-40°	874.9	8.1
40°-50°	964.9	8.9
50°-60°	900.9	8.3
60°-70°	696.3	6.4
70°-80°	321.2	3.0
80°-90°	62.4	0.6
90°-100°	363.9	3.4
100°-110°	1191.6	11.0
110°-120°	1178.0	10.8
120°-130°	963.0	8.9
130°-140°	785.9	7.2
140°-150°	611.6	5.6
150°-160°	440.4	4.1
160°-170°	269.4	2.5
170°-180°	91.0	0.8
0°-30°	1144.2	10.5
0°-40°	2019.1	18.6
0°-60°	3885.0	35.8
0°-90°	4964.8	45.7
90°-120°	2733.5	25.2
90°-150°	5093.9	46.9
90°-180°	5895.0	54.3
0°-180°	10859.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	488	559	676	825	886	45
15°	401	790	1652	1849	1925	112
25°	295	1062	1823	1904	1922	135
35°	210	1025	1727	1787	1891	132
45°	152	785	1512	1736	1816	118
55°	114	468	1282	1474	1512	102
65°	89	264	944	1058	1077	88
75°	63	162	502	271	275	64
85°	22	48	60	41	36	23
90°	1	3	8	7	8	4
95°	51	148	662	236	153	58
105°	207	295	1183	2247	2135	218
115°	373	446	961	1986	2331	368
125°	519	579	947	1566	1839	462
135°	625	692	939	1351	1522	484
145°	731	785	937	1162	1273	458
155°	833	861	943	1039	1080	384
165°	910	918	947	984	994	256
175°	951	951	952	959	957	90
180°	955	955	955	955	955	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	502.3	502.3	502.3	502.3	502.3
2.5°	498.5	519.2	542.9	570.2	581.5
5°	487.8	558.7	676.2	824.9	886.3
7.5°	469.0	613.0	983.4	1381.3	1504.1
10°	451.6	652.3	1294.5	1638.9	1705.0
12.5°	432.3	704.8	1489.6	1731.7	1799.7
15°	400.9	790.5	1651.9	1849.2	1924.8
17.5°	368.5	887.1	1727.2	1921.9	1963.0
20°	345.4	954.6	1767.8	1935.0	1961.0
22.5°	324.1	1005.1	1796.8	1923.5	1951.4
25°	294.6	1062.1	1823.4	1903.5	1922.4
27.5°	266.1	1077.0	1811.8	1864.4	1882.8
30°	248.8	1072.9	1794.4	1833.6	1859.6
32.5°	233.3	1061.2	1769.3	1807.3	1863.5
35°	210.1	1024.8	1726.8	1787.1	1891.0
37.5°	190.3	966.3	1670.7	1794.2	1894.4
40°	178.7	922.6	1630.2	1793.9	1878.9
42.5°	167.1	871.3	1583.8	1774.6	1859.6
45°	152.1	785.0	1511.8	1735.8	1816.1
47.5°	138.1	687.9	1445.2	1682.2	1740.8
50°	130.4	621.6	1400.7	1633.7	1680.9
52.5°	122.7	557.2	1356.3	1575.6	1619.1
55°	113.5	467.7	1282.4	1474.0	1511.8
57.5°	105.3	391.0	1198.4	1361.8	1392.5
60°	101.4	349.4	1132.7	1280.7	1311.4
62.5°	95.6	311.5	1059.2	1195.6	1224.4
65°	89.4	264.1	944.3	1058.2	1077.1
67.5°	80.7	229.0	822.1	891.8	856.4
70°	74.9	211.8	739.0	760.8	659.3
72.5°	71.0	192.9	648.2	590.7	398.5
75°	62.8	162.0	502.3	270.6	275.3
77.5°	51.2	125.3	330.4	207.8	212.0
80°	43.5	102.5	173.9	169.1	171.5
82.5°	35.7	79.7	119.8	124.5	121.2
85°	21.7	47.7	60.4	40.9	36.2
87.5°	7.9	17.8	11.2	11.0	11.2
90°	1.0	2.9	7.9	6.9	7.9
92.5°	16.7	60.8	186.9	60.8	48.7
95°	51.0	148.0	661.6	235.7	153.1
97.5°	92.7	195.2	1135.1	686.6	425.6
100°	121.7	219.6	1313.3	1172.8	777.4
102.5°	154.7	250.3	1293.7	1728.1	1339.6
105°	207.1	295.4	1182.8	2247.2	2134.9
107.5°	258.7	339.7	1074.6	2295.7	2419.1
110°	292.5	371.2	1022.8	2239.2	2468.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	324.7	401.1	991.4	2141.0	2434.8
115°	373.0	445.9	960.9	1985.7	2331.2
117.5°	419.9	488.0	949.4	1833.1	2183.9
120°	450.5	514.8	946.2	1744.1	2085.8
122.5°	478.0	540.8	946.2	1667.4	1984.5
125°	519.2	578.7	947.2	1565.9	1839.4
127.5°	554.2	614.8	946.0	1491.1	1729.1
130°	576.2	637.6	945.2	1445.8	1660.8
132.5°	595.8	658.8	942.9	1406.9	1601.9
135°	625.2	691.5	939.3	1350.6	1522.4
137.5°	656.3	721.9	937.2	1291.9	1447.2
140°	678.3	741.6	936.4	1254.8	1401.7
142.5°	700.2	759.7	936.4	1215.2	1348.3
145°	731.3	785.0	937.4	1161.7	1273.1
147.5°	763.8	808.6	938.8	1115.2	1199.3
150°	784.3	823.6	940.3	1088.2	1159.2
152.5°	804.7	839.4	941.1	1065.9	1124.7
155°	833.3	861.2	943.3	1039.4	1079.7
157.5°	859.1	879.2	945.4	1018.5	1047.7
160°	875.5	891.9	946.2	1006.6	1029.6
162.5°	889.7	902.9	946.2	997.0	1013.9
165°	909.9	918.5	947.2	983.8	994.3
167.5°	927.0	931.2	948.4	973.4	979.2
170°	936.4	938.3	949.2	967.9	969.8
172.5°	943.5	944.6	951.5	963.9	964.3
175°	951.1	951.1	952.1	958.9	957.0
177.5°	955.0	954.3	953.5	958.1	955.0
180°	955.0	955.0	955.0	955.0	955.0

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	13.93	14.78	14.92	15.78	17.11	22.67	23.51	23.65	24.52	25.85
	3H	14.66	15.42	15.66	16.43	17.78	24.29	25.05	25.29	26.06	27.41
	4H	14.96	15.68	15.97	16.70	18.05	24.47	25.19	25.48	26.20	27.56
	6H	15.18	15.84	16.20	16.86	18.23	24.55	25.22	25.58	26.24	27.61
	8H	15.23	15.86	16.26	16.90	18.27	24.56	25.19	25.59	26.23	27.59
	12H	15.26	15.86	16.29	16.89	18.28	24.53	25.13	25.56	26.16	27.55
4H	2H	18.33	19.05	19.35	20.06	21.42	23.11	23.83	24.13	24.84	26.20
	3H	19.26	19.86	20.29	20.90	22.28	24.93	25.53	25.96	26.58	27.95
	4H	19.54	20.09	20.58	21.13	22.52	25.17	25.72	26.20	26.75	28.15
	6H	19.67	20.14	20.72	21.20	22.59	25.31	25.79	26.36	26.85	28.24
	8H	19.69	20.13	20.74	21.19	22.59	25.34	25.78	26.39	26.83	28.24
	12H	19.68	20.08	20.75	21.15	22.56	25.31	25.71	26.38	26.78	28.19
8H	4H	20.72	21.16	21.76	22.21	23.61	25.29	25.73	26.33	26.78	28.18
	6H	20.95	21.32	22.02	22.41	23.81	25.49	25.85	26.56	26.95	28.35
	8H	21.02	21.34	22.10	22.42	23.84	25.55	25.87	26.63	26.95	28.37
	12H	21.05	21.33	22.13	22.40	23.87	25.54	25.82	26.63	26.90	28.36
12H	4H	20.73	21.13	21.80	22.20	23.61	25.24	25.64	26.30	26.70	28.11
	6H	21.05	21.37	22.12	22.44	23.87	25.47	25.79	26.55	26.87	28.29
	8H	21.15	21.43	22.23	22.50	23.97	25.54	25.82	26.62	26.89	28.36