

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: P855122

Luminaire Tested: SQ2-PP3-150U-050D-835-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P855122
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-PP3-150U-050D-835-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

Summary

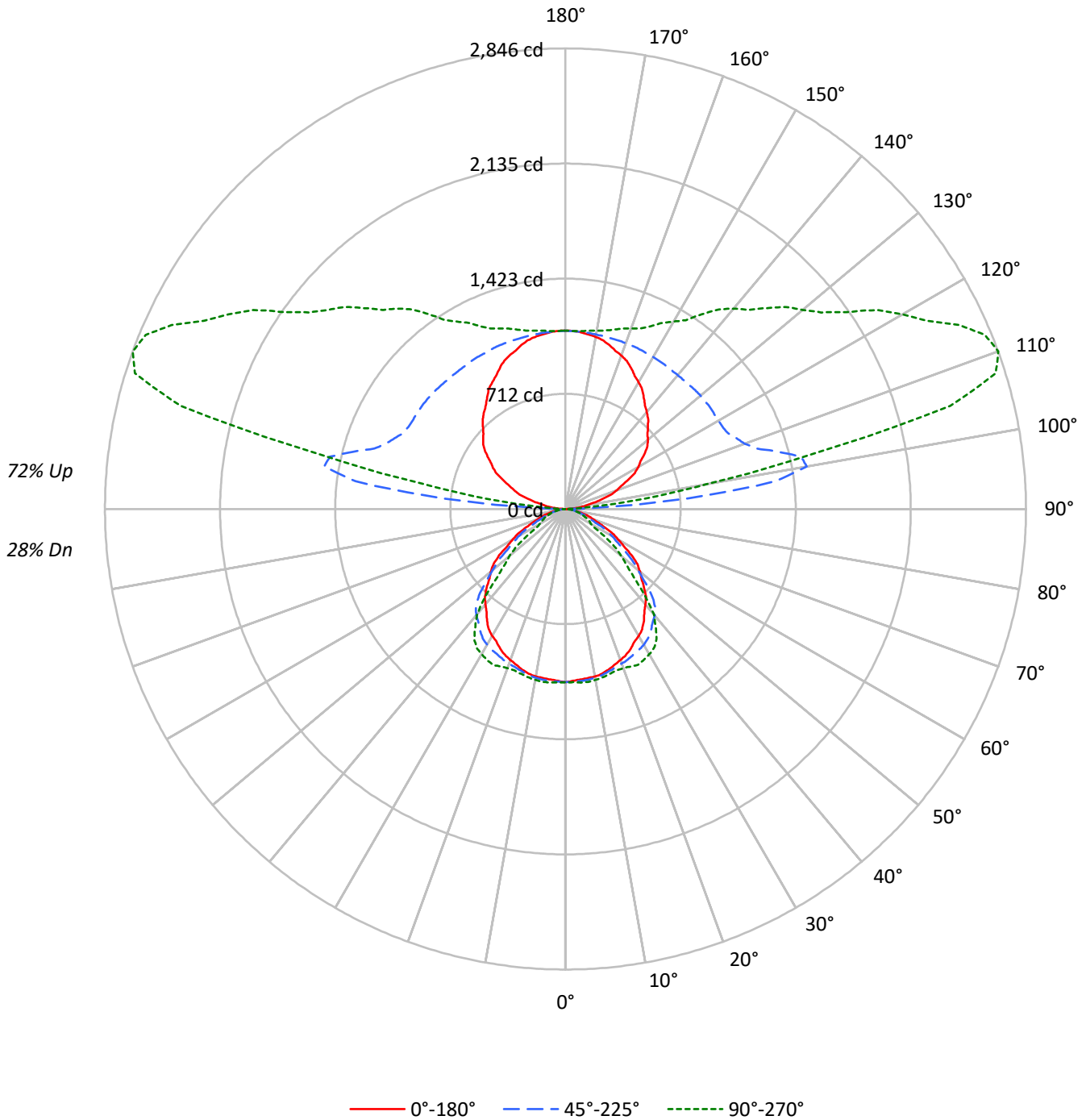
Lumens per Lamp: N/A
Luminaire Lumens: 9493.0 lumens
Efficiency: N/A
Efficacy: 127.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.41 / 1.4
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 74.4
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: 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	50	30	10	0	
RCR																						
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28				
1	93	89	86	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25				
2	85	78	72	68	76	70	65	61	55	52	49	42	40	38	29	28	27	21				
3	78	69	62	57	69	62	56	51	49	45	42	37	34	32	26	24	23	18				
4	71	61	54	48	63	55	49	44	44	39	36	33	30	28	23	21	20	16				
5	65	54	47	41	58	49	42	37	39	34	31	30	26	24	21	19	17	14				
6	60	49	41	35	54	44	37	32	35	30	27	27	23	21	19	17	15	12				
7	55	44	36	31	50	40	33	28	32	27	23	24	21	19	17	15	14	11				
8	51	40	32	27	46	36	29	25	29	24	21	22	19	16	16	14	12	10				
9	48	36	29	24	43	33	26	22	26	22	18	20	17	15	15	13	11	9				
10	44	33	26	21	40	30	24	20	24	20	16	19	15	13	14	11	10	8				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17286	17286	17286
5°	17149	17297	17460
10°	17236	17365	17588
15°	17195	17366	17630
20°	17072	17481	17986
25°	16976	17701	18930
30°	16878	18060	19326
35°	16640	18112	19362
40°	16195	18080	17888
45°	15712	17262	13618
50°	15094	14724	11341
55°	14049	12391	8155
60°	12096	10634	5848
65°	10204	8214	5750
70°	8493	6463	5504
75°	7199	5577	5153
80°	6100	4844	4630
85°	4817	3983	2519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 17262 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.9	1.1
10°-20°	295.0	3.1
20°-30°	462.2	4.9
30°-40°	570.2	6.0
40°-50°	536.8	5.7
50°-60°	380.1	4.0
60°-70°	216.6	2.3
70°-80°	107.1	1.1
80°-90°	27.4	0.3
90°-100°	419.5	4.4
100°-110°	1373.7	14.5
110°-120°	1358.1	14.3
120°-130°	1110.2	11.7
130°-140°	906.0	9.5
140°-150°	705.1	7.4
150°-160°	507.7	5.3
160°-170°	310.6	3.3
170°-180°	104.9	1.1
0°-30°	859.1	9.1
0°-40°	1429.3	15.1
0°-60°	2346.2	24.7
0°-90°	2697.3	28.4
90°-120°	3151.3	33.2
90°-150°	5872.5	61.9
90°-180°	6796.0	71.6
0°-180°	9493.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1071	1071	1071	1071	1071	
5°	1058	1077	1067	1070	1077	101
15°	1029	1043	1039	1049	1055	290
25°	953	977	994	1034	1063	439
35°	844	867	919	971	982	526
45°	688	740	756	641	596	530
55°	499	529	440	332	290	440
65°	267	281	215	152	150	268
75°	115	128	89	84	83	125
85°	26	24	22	17	14	31
90°	1	3	9	8	9	4
95°	59	170	763	272	176	67
105°	239	340	1364	2591	2461	252
115°	430	514	1108	2289	2688	425
125°	599	667	1092	1805	2121	533
135°	721	797	1083	1557	1755	558
145°	843	905	1081	1339	1468	528
155°	961	993	1087	1198	1245	442
165°	1049	1059	1092	1134	1146	296
175°	1096	1096	1098	1106	1103	104
180°	1101	1101	1101	1101	1101	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1070.6	1070.6	1070.6	1070.6	1070.6
2.5°	1062.4	1077.5	1067.8	1069.6	1071.5
5°	1058.1	1076.9	1067.2	1069.6	1077.3
7.5°	1054.0	1073.3	1063.8	1067.8	1077.3
10°	1051.3	1068.0	1059.2	1065.1	1072.8
12.5°	1043.2	1058.9	1051.1	1058.7	1065.6
15°	1028.7	1043.1	1038.9	1049.2	1054.7
17.5°	1009.0	1026.5	1026.4	1041.0	1046.8
20°	993.6	1014.6	1017.4	1035.7	1046.8
22.5°	977.3	1001.9	1006.5	1034.1	1053.1
25°	952.9	977.2	993.6	1033.9	1062.6
27.5°	924.3	948.4	982.3	1027.4	1050.2
30°	905.3	928.5	968.7	1015.6	1036.6
32.5°	881.8	905.9	948.8	999.3	1018.5
35°	844.2	867.4	918.9	971.2	982.3
37.5°	801.0	827.4	885.0	914.2	914.8
40°	768.4	802.7	857.8	863.1	848.7
42.5°	736.7	780.7	819.8	795.9	732.0
45°	688.1	740.1	756.0	640.6	596.4
47.5°	636.2	687.6	662.2	537.3	506.8
50°	600.9	649.6	586.2	480.3	451.5
52.5°	561.1	604.4	518.3	425.6	381.8
55°	499.1	528.9	440.2	331.8	289.7
57.5°	424.4	445.4	376.4	249.1	201.9
60°	374.6	391.2	329.3	204.3	181.1
62.5°	329.3	344.1	280.4	177.4	169.3
65°	267.1	281.4	215.0	151.6	150.5
67.5°	212.5	228.3	165.0	132.4	131.0
70°	179.9	196.6	136.9	118.8	116.6
72.5°	152.8	168.5	116.1	104.3	103.0
75°	115.4	127.7	89.4	83.7	82.6
77.5°	83.7	91.4	66.5	63.6	62.5
80°	65.6	68.9	52.1	50.9	49.8
82.5°	49.3	48.2	39.4	38.3	36.2
85°	26.0	23.8	21.5	16.9	13.6
87.5°	8.4	8.8	5.4	4.3	4.5
90°	1.1	3.4	9.1	7.9	9.1
92.5°	19.2	70.2	215.5	70.0	56.1
95°	58.8	170.5	762.7	271.7	176.5
97.5°	106.8	225.0	1308.5	791.6	490.7
100°	140.3	253.2	1514.1	1352.1	896.2
102.5°	178.4	288.6	1491.4	1992.3	1544.4
105°	238.8	340.5	1363.5	2590.6	2461.1
107.5°	298.3	391.7	1238.8	2646.6	2788.9
110°	337.2	428.0	1179.1	2581.4	2845.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	374.4	462.4	1142.9	2468.2	2807.0
115°	430.0	514.1	1107.8	2289.2	2687.5
117.5°	484.1	562.7	1094.4	2113.3	2517.7
120°	519.4	593.6	1090.8	2010.7	2404.6
122.5°	551.1	623.4	1090.8	1922.2	2287.9
125°	598.7	667.2	1091.9	1805.2	2120.6
127.5°	638.9	708.8	1090.6	1719.0	1993.4
130°	664.3	735.0	1089.7	1666.8	1914.7
132.5°	686.9	759.5	1087.0	1621.9	1846.8
135°	720.9	797.1	1082.9	1557.1	1755.1
137.5°	756.6	832.2	1080.4	1489.4	1668.4
140°	781.9	855.0	1079.5	1446.6	1615.9
142.5°	807.2	875.9	1079.5	1401.0	1554.3
145°	843.0	905.0	1080.6	1339.3	1467.7
147.5°	880.5	932.2	1082.2	1285.7	1382.6
150°	904.1	949.5	1084.0	1254.6	1336.4
152.5°	927.6	967.7	1084.9	1228.9	1296.5
155°	960.7	992.8	1087.4	1198.3	1244.7
157.5°	990.3	1013.6	1089.9	1174.2	1207.8
160°	1009.3	1028.2	1090.8	1160.5	1187.0
162.5°	1025.6	1040.9	1090.8	1149.4	1168.9
165°	1048.9	1058.9	1091.9	1134.2	1146.3
167.5°	1068.6	1073.5	1093.3	1122.3	1128.8
170°	1079.5	1081.8	1094.2	1115.8	1118.0
172.5°	1087.6	1089.0	1096.9	1111.2	1111.6
175°	1096.5	1096.5	1097.6	1105.5	1103.3
177.5°	1101.0	1100.1	1099.2	1104.6	1101.0
180°	1101.0	1101.0	1101.0	1101.0	1101.0

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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	14.99	15.67	16.12	16.79	18.34	11.39	12.07	12.52	13.18	14.74
	3H	16.07	16.68	17.21	17.80	19.37	12.48	13.09	13.61	14.21	15.78
	4H	16.41	16.98	17.55	18.11	19.68	12.93	13.51	14.08	14.63	16.21
	6H	16.61	17.14	17.76	18.27	19.85	13.27	13.80	14.42	14.93	16.51
	8H	16.66	17.16	17.81	18.30	19.88	13.35	13.85	14.50	15.00	16.57
	12H	16.66	17.14	17.82	18.28	19.88	13.36	13.84	14.52	14.97	16.57
4H	2H	15.08	15.65	16.23	16.78	18.35	12.08	12.65	13.23	13.78	15.35
	3H	16.37	16.85	17.53	18.00	19.58	13.31	13.79	14.47	14.94	16.53
	4H	16.83	17.27	17.99	18.41	20.02	13.86	14.30	15.02	15.44	17.04
	6H	17.16	17.54	18.33	18.70	20.30	14.29	14.67	15.46	15.83	17.42
	8H	17.25	17.60	18.42	18.76	20.37	14.41	14.76	15.57	15.91	17.52
	12H	17.28	17.60	18.46	18.76	20.38	14.43	14.75	15.61	15.91	17.53
8H	4H	16.84	17.19	18.00	18.35	19.96	14.12	14.47	15.28	15.62	17.24
	6H	17.26	17.55	18.45	18.75	20.36	14.66	14.95	15.84	16.14	17.75
	8H	17.42	17.67	18.61	18.85	20.48	14.84	15.10	16.03	16.27	17.90
	12H	17.50	17.72	18.69	18.89	20.55	14.91	15.13	16.10	16.30	17.97
12H	4H	16.79	17.11	17.97	18.27	19.89	14.12	14.44	15.30	15.60	17.22
	6H	17.25	17.51	18.44	18.68	20.31	14.71	14.96	15.90	16.14	17.77
	8H	17.42	17.64	18.61	18.81	20.47	14.91	15.13	16.10	16.31	17.97