

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: P845521

Luminaire Tested: SQ2R-FB-050D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845521
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-12)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-FB-050D-935-UNV-STD-W-4
Description: CONTINUA SQ2 RECESSED, BATWING LENS
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

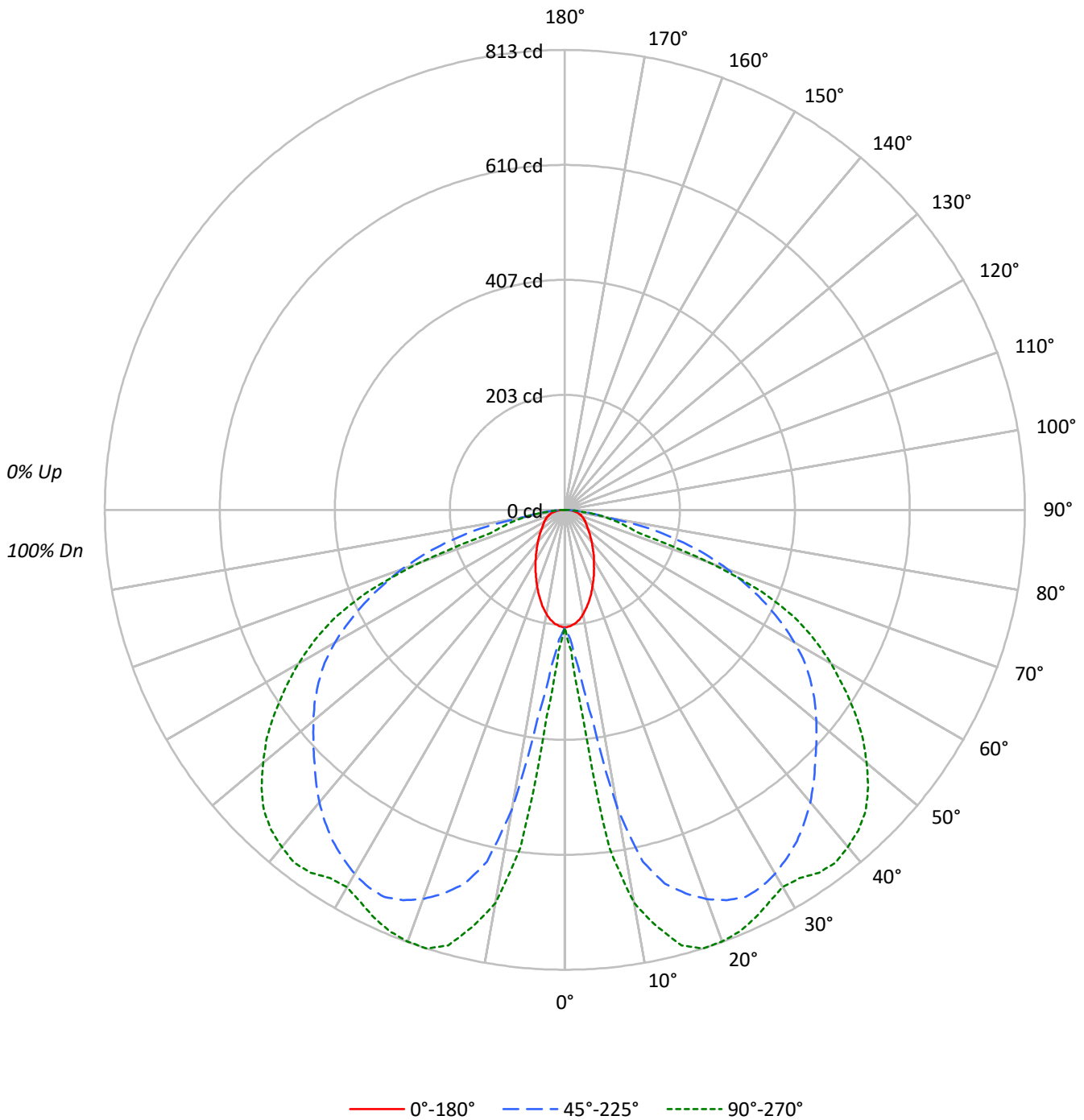
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2059.7 lumens
Efficiency: N/A
Efficacy: 115.7 lumens/watt
Spacing Criteria (0/90/45): 0.83 / 2.99 / 2.56
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 17.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: 0.9973
Total Harmonic Distortion (THDi): 0.0531
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P845521
CATALOG NUMBER: SQ2R-FB-050D-935-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P845521

CATALOG NUMBER: SQ2R-FB-050D-935-UNV-STD-W-4

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84																				
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69																				
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57																				
4	81	69	60	53	79	67	59	52	65	58	52	63	56	51	60	55	50	48																				
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41																				
6	68	54	45	39	66	53	45	38	52	44	38	50	43	38	48	42	37	35																				
7	63	49	40	34	61	48	40	33	47	39	33	45	38	33	44	37	33	31																				
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27																				
9	54	40	32	26	53	40	32	26	39	31	26	38	31	26	37	30	26	24																				
10	51	37	29	23	49	37	29	23	36	28	23	35	28	23	34	28	23	21																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3358	3358	3358
5°	3274	4538	5948
10°	3066	8788	11575
15°	2775	11433	13322
20°	2457	12577	13952
25°	2173	13450	14181
30°	1920	13852	14356
35°	1715	14093	15433
40°	1560	14227	16398
45°	1439	14294	17171
50°	1356	14569	17482
55°	1323	14947	17622
60°	1356	15145	17534
65°	1414	14938	17039
70°	1463	14445	12888
75°	1622	12976	7112
80°	1674	6695	6602
85°	1667	4631	2779

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 55°
 Luminance: 17622 cd/sqm



TEST NUMBER: P845521

CATALOG NUMBER: SQ2R-FB-050D-935-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.3	1.7
10°-20°	159.7	7.8
20°-30°	281.0	13.6
30°-40°	363.5	17.6
40°-50°	400.9	19.5
50°-60°	374.0	18.2
60°-70°	289.4	14.1
70°-80°	132.3	6.4
80°-90°	24.7	1.2
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°	475.0	23.1
0°-40°	838.5	40.7
0°-60°	1613.3	78.3
0°-90°	2059.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2059.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	208	208	208	208	208	
5°	202	232	280	341	367	19
15°	166	331	684	765	797	46
25°	122	447	755	788	796	56
35°	87	432	715	739	783	55
45°	63	331	626	718	752	49
55°	47	197	531	610	626	42
65°	37	111	391	438	446	36
75°	26	68	208	112	114	27
85°	9	20	25	17	15	10
90°	0	0	0	0	0	



TEST NUMBER: P845521

CATALOG NUMBER: SQ2R-FB-050D-935-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	208	208	208	208	208
2.5°	206	217	229	243	249
5°	202	232	280	341	367
7.5°	196	251	375	544	602
10°	187	272	536	678	706
12.5°	177	300	637	726	755
15°	166	331	684	765	797
17.5°	155	365	711	794	813
20°	143	401	732	801	812
22.5°	132	428	747	795	807
25°	122	447	755	788	796
27.5°	112	454	752	775	782
30°	103	452	743	759	770
32.5°	95	446	730	745	772
35°	87	432	715	739	783
37.5°	80	412	696	742	786
40°	74	389	675	742	778
42.5°	68	362	651	732	768
45°	63	331	626	718	752
47.5°	58	297	603	701	727
50°	54	262	580	676	696
52.5°	50	228	557	646	664
55°	47	197	531	610	626
57.5°	44	169	503	572	585
60°	42	147	469	530	543
62.5°	39	127	431	486	498
65°	37	111	391	438	446
67.5°	34	98	349	383	375
70°	31	89	306	316	273
72.5°	29	79	259	229	138
75°	26	68	208	112	114
77.5°	22	55	153	90	92
80°	18	43	72	70	71
82.5°	14	31	44	47	45
85°	9	20	25	17	15
87.5°	4	9	5	5	5
90°	0	0	0	0	0

TEST NUMBER: P845521

CATALOG NUMBER: SQ2R-FB-050D-935-UNV-STD-W-4

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	15.10	16.79	15.47	17.10	17.42	23.76	25.44	24.12	25.76	26.07
	3H	15.89	17.42	16.27	17.74	18.10	25.44	26.97	25.82	27.29	27.65
	4H	16.23	17.66	16.63	18.01	18.38	25.66	27.10	26.06	27.44	27.82
	6H	16.48	17.81	16.89	18.18	18.57	25.79	27.12	26.20	27.48	27.87
	8H	16.56	17.83	16.99	18.22	18.62	25.82	27.09	26.24	27.48	27.87
	12H	16.62	17.84	17.05	18.22	18.65	25.82	27.03	26.24	27.41	27.84
4H	2H	19.54	20.98	19.94	21.32	21.70	24.30	25.73	24.70	26.08	26.45
	3H	20.55	21.76	20.96	22.15	22.55	26.20	27.40	26.61	27.80	28.20
	4H	20.88	21.96	21.31	22.37	22.81	26.48	27.56	26.91	27.97	28.41
	6H	21.06	22.00	21.51	22.44	22.90	26.67	27.62	27.12	28.06	28.51
	8H	21.10	21.98	21.56	22.43	22.89	26.72	27.60	27.18	28.04	28.51
	12H	21.13	21.93	21.61	22.40	22.87	26.73	27.52	27.21	28.00	28.47
8H	4H	22.11	23.00	22.57	23.44	23.90	26.66	27.55	27.12	27.99	28.45
	6H	22.39	23.12	22.88	23.61	24.08	26.91	27.64	27.40	28.13	28.60
	8H	22.47	23.13	22.98	23.63	24.12	26.98	27.64	27.49	28.14	28.63
	12H	22.54	23.12	23.05	23.61	24.17	27.01	27.59	27.52	28.08	28.64
12H	4H	22.17	22.96	22.65	23.44	23.91	26.66	27.45	27.14	27.93	28.39
	6H	22.49	23.15	23.00	23.66	24.14	26.90	27.56	27.41	28.06	28.55
	8H	22.64	23.22	23.15	23.71	24.27	27.01	27.59	27.51	28.08	28.64