

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: P845593

Luminaire Tested: SQ2R-PP3-050D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845593
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-7)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PP3-050D-935-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE PRISM CONTINUOUS LENS
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

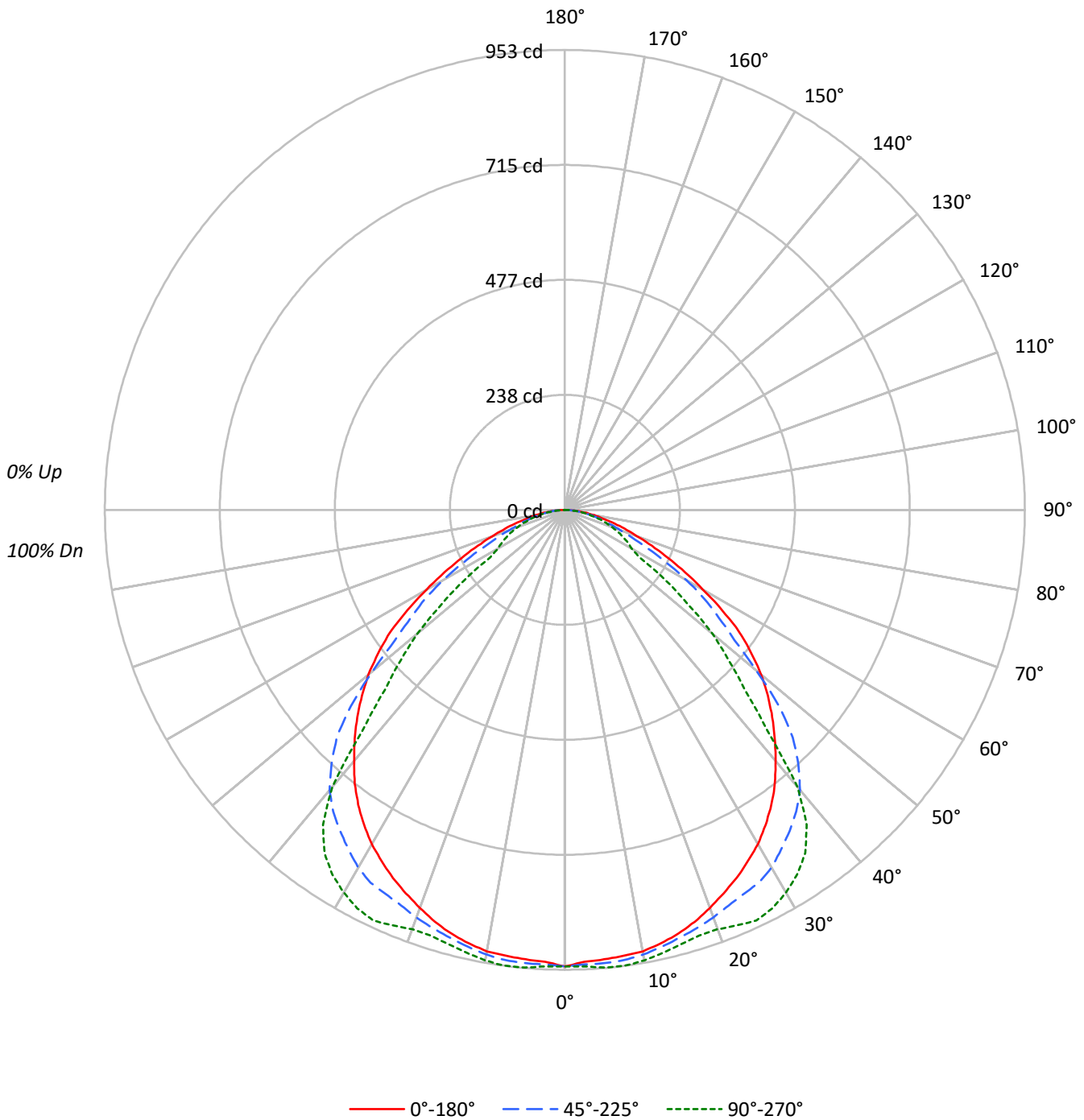
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2382.9 lumens
Efficiency: N/A
Efficacy: 133.9 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.41 / 1.4
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

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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	89	87				87
2	101	94	88	82	99	92	86	82	88	84	80	85	81	78	82	79	76	74				74
3	93	83	76	70	91	82	75	69	79	73	68	76	71	67	74	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	61	57	55				55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43				43
7	68	55	47	41	66	54	46	41	53	46	41	51	45	40	50	44	40	38				38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34				34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31				31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15274	15274	15274
5°	15154	15284	15430
10°	15231	15346	15542
15°	15194	15345	15579
20°	15086	15447	15893
25°	15000	15642	16728
30°	14915	15959	17078
35°	14704	16005	17109
40°	14311	15976	15808
45°	13883	15253	12033
50°	13338	13011	10022
55°	12414	10950	7206
60°	10689	9397	5167
65°	9016	7259	5081
70°	7506	5712	4862
75°	6363	4928	4554
80°	5393	4277	4091
85°	4261	3520	2223

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 45°
 Vertical Angle: 45°
 Luminance: 15253 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.1	3.8
10°-20°	260.8	10.9
20°-30°	408.7	17.2
30°-40°	504.6	21.2
40°-50°	475.1	19.9
50°-60°	335.8	14.1
60°-70°	190.8	8.0
70°-80°	94.5	4.0
80°-90°	22.5	0.9
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°	759.5	31.9
0°-40°	1264.2	53.1
0°-60°	2075.1	87.1
0°-90°	2382.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2382.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	946	946	946	946	946	
5°	935	952	943	945	952	89
15°	909	922	918	927	932	256
25°	842	864	878	913	939	388
35°	746	767	812	858	868	466
45°	608	655	668	567	527	468
55°	441	468	389	294	256	390
65°	236	249	190	134	133	236
75°	102	113	79	74	73	110
85°	23	21	19	15	12	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	946	946	946	946	946
2.5°	937	954	943	945	947
5°	935	952	943	945	952
7.5°	932	950	941	944	953
10°	929	944	936	941	948
12.5°	920	934	927	934	940
15°	909	922	918	927	932
17.5°	895	910	909	921	925
20°	878	897	899	915	925
22.5°	860	883	887	913	932
25°	842	864	878	913	939
27.5°	821	843	871	910	931
30°	800	821	856	897	916
32.5°	774	796	834	879	896
35°	746	767	812	858	868
37.5°	715	737	788	819	823
40°	679	710	758	763	750
42.5°	644	686	716	690	621
45°	608	655	668	567	527
47.5°	570	617	602	488	460
50°	531	575	518	425	399
52.5°	487	525	443	365	322
55°	441	468	389	294	256
57.5°	386	406	343	231	183
60°	331	346	291	181	160
62.5°	281	294	237	151	147
65°	236	249	190	134	133
67.5°	195	209	152	120	119
70°	159	174	121	105	103
72.5°	129	143	98	89	88
75°	102	113	79	74	73
77.5°	78	86	62	59	58
80°	58	61	46	45	44
82.5°	40	38	32	31	29
85°	23	21	19	15	12
87.5°	9	9	4	3	3
90°	0	0	0	0	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	20.92	22.44	21.28	22.75	23.07	17.32	18.84	17.69	19.16	19.47
	3H	22.06	23.43	22.44	23.75	24.12	18.47	19.83	18.85	20.16	20.52
	4H	22.44	23.71	22.84	24.06	24.44	18.96	20.24	19.36	20.59	20.97
	6H	22.68	23.86	23.10	24.23	24.62	19.34	20.52	19.75	20.88	21.28
	8H	22.75	23.87	23.18	24.26	24.66	19.44	20.56	19.87	20.95	21.36
	12H	22.78	23.86	23.21	24.24	24.67	19.48	20.55	19.91	20.93	21.36
4H	2H	21.11	22.38	21.51	22.73	23.11	18.11	19.39	18.51	19.74	20.12
	3H	22.48	23.53	22.89	23.93	24.33	19.42	20.47	19.83	20.87	21.27
	4H	22.98	23.92	23.41	24.34	24.78	20.00	20.95	20.43	21.36	21.80
	6H	23.35	24.17	23.80	24.61	25.07	20.47	21.29	20.93	21.74	22.20
	8H	23.45	24.22	23.92	24.66	25.13	20.61	21.37	21.07	21.82	22.28
	12H	23.52	24.20	24.00	24.68	25.15	20.66	21.35	21.14	21.83	22.30
8H	4H	23.04	23.81	23.50	24.25	24.72	20.32	21.09	20.78	21.53	22.00
	6H	23.49	24.13	23.99	24.62	25.10	20.88	21.52	21.38	22.01	22.49
	8H	23.65	24.22	24.16	24.73	25.22	21.07	21.64	21.58	22.15	22.64
	12H	23.76	24.27	24.27	24.76	25.32	21.17	21.68	21.68	22.17	22.73
12H	4H	23.03	23.71	23.51	24.19	24.66	20.35	21.04	20.84	21.52	21.99
	6H	23.48	24.05	23.99	24.56	25.05	20.94	21.51	21.45	22.02	22.51
	8H	23.68	24.18	24.19	24.68	25.24	21.17	21.68	21.68	22.17	22.74