

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: P845617

Luminaire Tested: SQ2R-PR1-050D-935-UNV-STD-W-4

Issue Date: 6/14/2024

Test Information

Test Method: LM-79-2019
Report Number: P845617
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2308-131-9)
Test Lab: INNOVATION CENTER
Issue Date: 6/14/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2R-PR1-050D-935-UNV-STD-W-4
Description: CORELITE SQ2R RECESSED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS
500 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

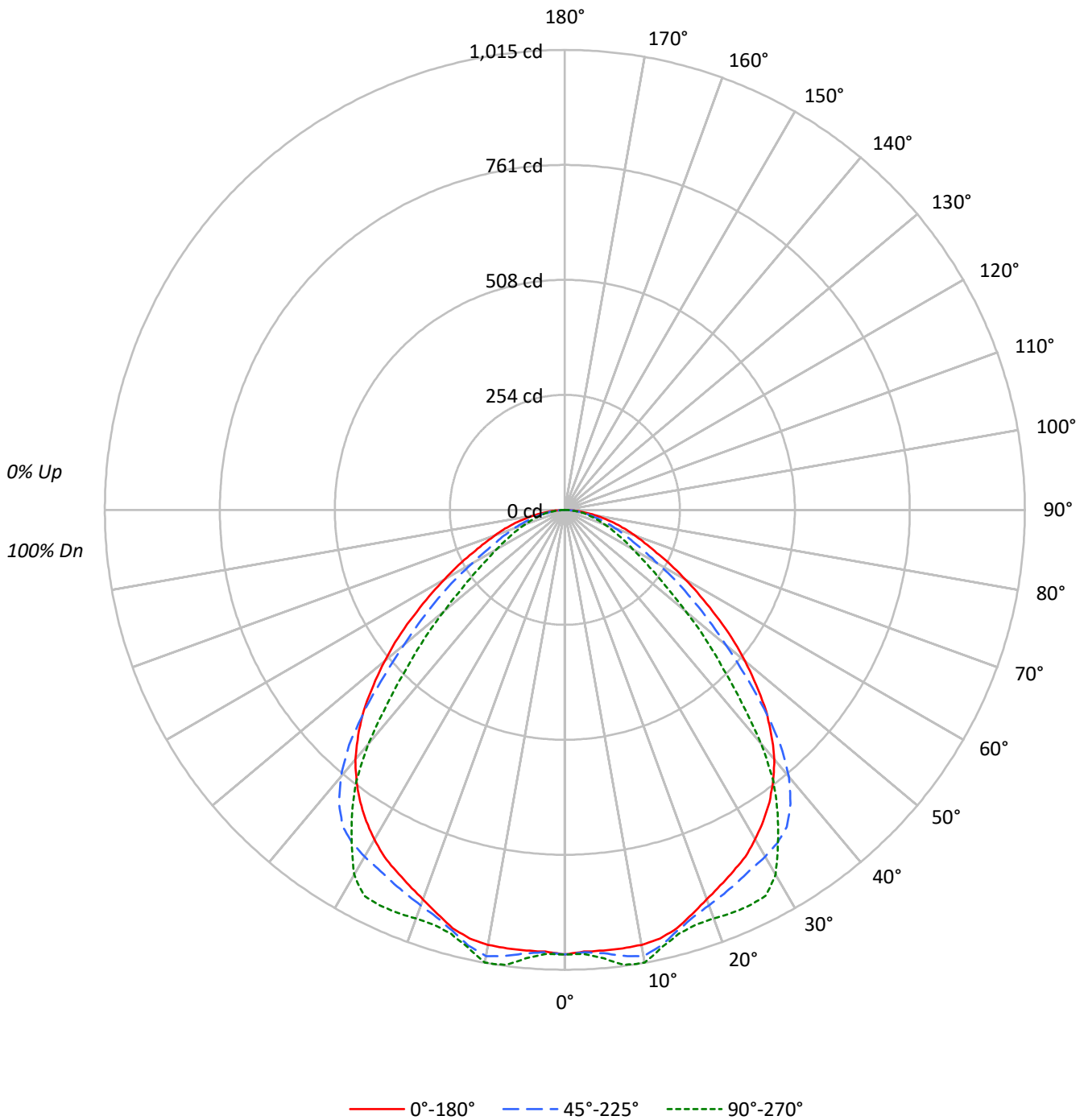
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2360.2 lumens
Efficiency: N/A
Efficacy: 132.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.33 / 1.36
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	108	104	101	97	100	97	94	96	94	92	92	91	89	87			87	
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75			75	
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65			65	
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56			56	
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50	
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44			44	
7	69	56	48	42	67	55	48	42	54	47	42	52	46	41	51	45	41	39			39	
8	64	51	43	38	63	51	43	38	49	42	38	48	42	37	47	41	37	35			35	
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32			32	
10	56	44	36	31	55	43	36	31	42	36	31	41	35	31	40	35	31	29			29	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15839	15839	15839
5°	15819	15916	16110
10°	15985	16395	16641
15°	15980	16064	16197
20°	15722	15962	16495
25°	15677	16123	17174
30°	15661	16481	17339
35°	15512	16833	16143
40°	15154	16208	14206
45°	14340	14225	11234
50°	13036	11630	8716
55°	11457	9571	6784
60°	9914	7653	5586
65°	8558	6342	4890
70°	7695	5618	4343
75°	7049	4866	3992
80°	6137	3905	3905
85°	4446	3520	1853

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15527 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	4.0
10°-20°	274.4	11.6
20°-30°	424.2	18.0
30°-40°	510.8	21.6
40°-50°	458.6	19.4
50°-60°	306.1	13.0
60°-70°	177.9	7.5
70°-80°	91.4	3.9
80°-90°	22.0	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°	793.3	33.6
0°-40°	1304.2	55.3
0°-60°	2068.9	87.7
0°-90°	2360.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2360.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	981	981	981	981	981	
5°	976	993	982	984	994	93
15°	956	996	961	964	969	269
25°	880	916	905	938	964	406
35°	787	794	854	838	819	491
45°	628	680	623	526	492	481
55°	407	423	340	263	241	366
65°	224	229	166	135	128	226
75°	113	110	78	66	64	120
85°	24	19	19	13	10	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	981	981	981	981	981
2.5°	976	991	977	978	981
5°	976	993	982	984	994
7.5°	976	999	993	1000	1013
10°	975	1004	1000	1001	1015
12.5°	969	1004	985	983	989
15°	956	996	961	964	969
17.5°	935	977	942	952	960
20°	915	956	929	943	960
22.5°	897	938	917	938	963
25°	880	916	905	938	964
27.5°	863	886	893	939	960
30°	840	854	884	923	930
32.5°	815	822	872	888	875
35°	787	794	854	838	819
37.5°	755	767	818	777	756
40°	719	743	769	699	674
42.5°	675	717	704	610	578
45°	628	680	623	526	492
47.5°	573	629	538	450	419
50°	519	562	463	382	347
52.5°	464	492	399	318	287
55°	407	423	340	263	241
57.5°	354	365	288	219	202
60°	307	314	237	186	173
62.5°	264	269	196	158	149
65°	224	229	166	135	128
67.5°	191	194	141	116	109
70°	163	164	119	97	92
72.5°	138	136	98	81	78
75°	113	110	78	66	64
77.5°	89	86	58	53	53
80°	66	62	42	42	42
82.5°	45	39	30	30	29
85°	24	19	19	13	10
87.5°	8	8	3	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	20.31	21.80	20.67	22.11	22.43	17.03	18.53	17.40	18.84	19.16
	3H	21.58	22.92	21.96	23.25	23.61	18.15	19.48	18.52	19.81	20.17
	4H	22.06	23.32	22.46	23.66	24.04	18.57	19.82	18.97	20.17	20.55
	6H	22.41	23.56	22.82	23.93	24.32	18.93	20.09	19.35	20.46	20.85
	8H	22.51	23.61	22.94	24.00	24.40	19.04	20.13	19.46	20.52	20.93
	12H	22.56	23.61	22.99	23.99	24.42	19.06	20.11	19.49	20.50	20.93
4H	2H	20.46	21.71	20.86	22.06	22.44	17.68	18.93	18.08	19.28	19.66
	3H	21.99	23.02	22.40	23.42	23.82	19.00	20.03	19.41	20.43	20.83
	4H	22.60	23.53	23.04	23.95	24.39	19.53	20.45	19.96	20.87	21.31
	6H	23.09	23.89	23.54	24.33	24.79	19.99	20.80	20.45	21.24	21.70
	8H	23.23	23.98	23.69	24.43	24.89	20.13	20.88	20.59	21.32	21.79
	12H	23.31	23.98	23.79	24.46	24.93	20.18	20.85	20.66	21.33	21.80
8H	4H	22.67	23.42	23.13	23.87	24.34	19.87	20.63	20.34	21.07	21.54
	6H	23.24	23.86	23.74	24.35	24.83	20.43	21.05	20.93	21.54	22.02
	8H	23.44	23.99	23.95	24.51	24.99	20.61	21.17	21.13	21.68	22.17
	12H	23.56	24.06	24.08	24.55	25.12	20.70	21.20	21.21	21.69	22.26
12H	4H	22.66	23.33	23.14	23.81	24.28	19.92	20.59	20.40	21.07	21.54
	6H	23.22	23.78	23.74	24.29	24.78	20.49	21.05	21.00	21.56	22.05
	8H	23.46	23.96	23.97	24.45	25.01	20.72	21.22	21.23	21.71	22.28