

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:

Luminaire Tested: SQ4-FB-0U-100D-940-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-100D-940-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
DIRECT ONLY
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

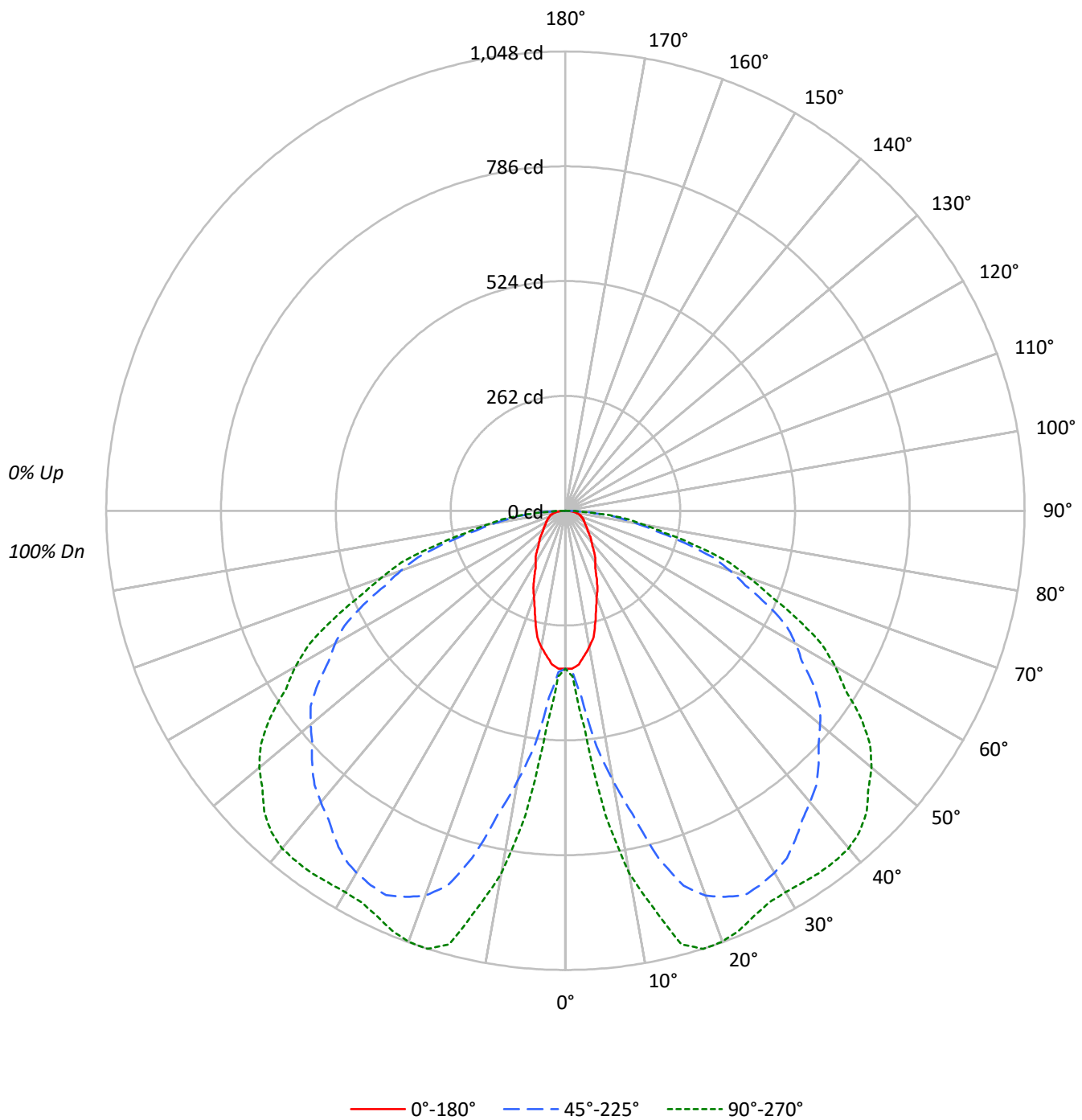
Lumens per Lamp: N/A
Luminaire Lumens: 2792.6 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 32.8
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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	108	103	98	94	105	100	96	92		96	93	89		92	89	87		89	86	84
2	97	88	81	75	95	87	80	74		83	77	72		80	75	71		77	73	69
3	88	77	68	61	86	75	67	61		72	65	59		69	63	58		67	62	57
4	80	67	58	51	78	66	57	51		63	56	50		61	54	49		59	53	48
5	73	60	50	43	71	58	50	43		56	48	42		54	47	42		52	46	41
6	67	53	44	37	65	52	43	37		50	42	36		49	42	36		47	41	36
7	62	48	39	32	60	47	38	32		45	38	32		44	37	32		43	36	31
8	58	43	34	28	56	43	34	28		41	34	28		40	33	28		39	32	28
9	54	40	31	25	52	39	31	25		38	30	25		37	30	25		36	29	25
10	50	36	28	23	49	36	28	22		35	27	22		34	27	22		33	27	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3330	3330	3330
5°	3256	3960	4610
10°	2957	5859	7871
15°	2516	7830	9786
20°	2051	9176	10276
25°	1712	9857	10383
30°	1447	10161	10705
35°	1281	10311	11370
40°	1118	10460	12116
45°	1014	10665	12686
50°	933	10891	13090
55°	896	11096	13232
60°	921	11198	13125
65°	963	11107	12741
70°	1033	10767	12050
75°	1159	9990	11044
80°	1296	8631	9617
85°	1228	7188	8225

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 13287 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.3	1.7
10°-20°	206.2	7.4
20°-30°	361.3	12.9
30°-40°	465.2	16.7
40°-50°	519.3	18.6
50°-60°	498.0	17.8
60°-70°	396.4	14.2
70°-80°	233.5	8.4
80°-90°	65.5	2.3
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°	614.7	22.0
0°-40°	1079.9	38.7
0°-60°	2097.3	75.1
0°-90°	2792.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2792.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	361	361	361	361	361	
5°	352	377	428	482	498	32
15°	263	484	820	991	1024	73
25°	168	549	968	1018	1020	78
35°	114	515	916	971	1010	71
45°	78	404	817	929	972	60
55°	56	270	690	798	823	51
65°	44	176	509	574	584	44
75°	32	111	280	305	310	34
85°	12	30	68	76	78	13
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	360.9	360.9	360.9	360.9	360.9	360.9	360.9	360.9	360.9	360.9
2.5°	360.9	360.9	362.7	365.5	366.4	370.1	375.7	378.5	380.3	378.5
5°	351.6	356.2	371.3	393.3	415.4	439.8	471.1	486.2	495.4	497.8
7.5°	333.2	346.0	388.9	446.5	510.5	574.1	629.1	673.7	699.7	700.8
10°	315.6	337.6	403.8	492.0	580.1	670.7	746.1	792.5	829.6	840.1
12.5°	296.1	329.3	419.6	537.4	658.1	759.8	843.5	894.6	924.3	928.2
15°	263.4	312.1	442.1	609.2	758.8	880.7	960.7	1001.3	1019.9	1024.5
17.5°	233.0	296.8	461.8	665.3	842.6	952.4	1013.2	1038.7	1048.0	1048.4
20°	208.9	282.0	471.1	704.3	885.3	983.9	1028.0	1044.3	1048.9	1046.6
22.5°	191.2	266.2	476.6	730.3	911.3	996.0	1029.0	1036.8	1038.7	1036.4
25°	168.2	240.2	476.9	764.6	937.5	999.0	1016.4	1018.7	1021.1	1019.9
27.5°	147.8	211.2	469.9	787.4	941.2	984.9	993.0	998.8	1006.0	1007.6
30°	135.8	192.6	460.6	794.8	937.5	970.0	978.1	988.6	1001.3	1004.8
32.5°	126.5	175.0	446.7	795.7	928.2	952.4	963.3	983.0	1001.3	1006.7
35°	113.7	148.5	423.5	789.0	907.4	923.6	946.8	979.3	1003.7	1009.5
37.5°	101.2	129.5	391.9	775.3	880.0	896.9	935.2	974.4	1001.6	1008.8
40°	92.8	118.4	367.8	762.3	858.6	878.3	925.9	968.8	997.9	1006.0
42.5°	86.3	109.1	341.8	745.6	834.5	861.6	914.8	960.5	987.6	993.9
45°	77.7	95.1	300.5	714.7	797.1	837.7	895.7	939.8	965.4	972.3
47.5°	69.6	85.4	257.4	679.5	759.1	808.7	868.1	909.9	933.3	938.0
50°	65.0	78.9	228.6	654.4	732.1	785.5	845.9	887.6	907.4	912.0
52.5°	61.3	73.3	201.7	625.6	704.3	761.4	818.9	857.0	874.9	876.7
55°	55.7	66.1	165.9	581.3	660.2	719.4	775.1	805.2	818.0	822.6
57.5°	52.7	60.8	137.8	533.3	610.5	670.0	720.5	744.0	754.2	755.8
60°	49.9	58.0	123.0	498.9	579.0	634.7	678.8	698.5	707.8	711.3
62.5°	47.1	56.2	111.9	463.7	541.9	595.7	634.2	651.2	658.6	659.3
65°	44.1	53.4	98.6	409.6	483.8	533.7	563.9	577.8	581.3	583.6
67.5°	41.1	50.6	89.1	355.1	424.0	465.3	487.6	499.6	500.3	505.2
70°	38.3	48.7	83.5	317.9	379.4	418.9	437.4	446.7	445.6	446.7
72.5°	36.4	45.9	79.8	279.9	336.7	367.8	384.5	391.0	391.7	391.9
75°	32.5	40.6	74.3	221.6	266.9	293.6	306.3	305.2	308.6	309.8
77.5°	28.1	35.0	61.0	163.4	200.0	217.7	227.9	231.1	230.0	230.2
80°	24.4	31.3	49.9	125.3	155.5	169.4	178.7	181.0	179.8	181.0
82.5°	19.7	25.8	38.8	92.8	116.5	127.6	134.1	134.6	135.3	137.4
85°	11.6	15.1	23.2	51.1	65.0	70.8	75.4	76.6	77.7	77.7
87.5°	4.6	6.5	12.1	21.3	26.9	28.8	28.8	26.9	28.8	26.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)