

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: P853732

Luminaire Tested: SQ2-F-150U-075D-935-UNV-STD-W-4

Issue Date: 7/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P853732
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2104-222-14, G2-2308-131-13)
Test Lab: INNOVATION CENTER
Issue Date: 7/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ2-F-150U-075D-935-UNV-STD-W-4
Description: CORELITE SQ2 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: -

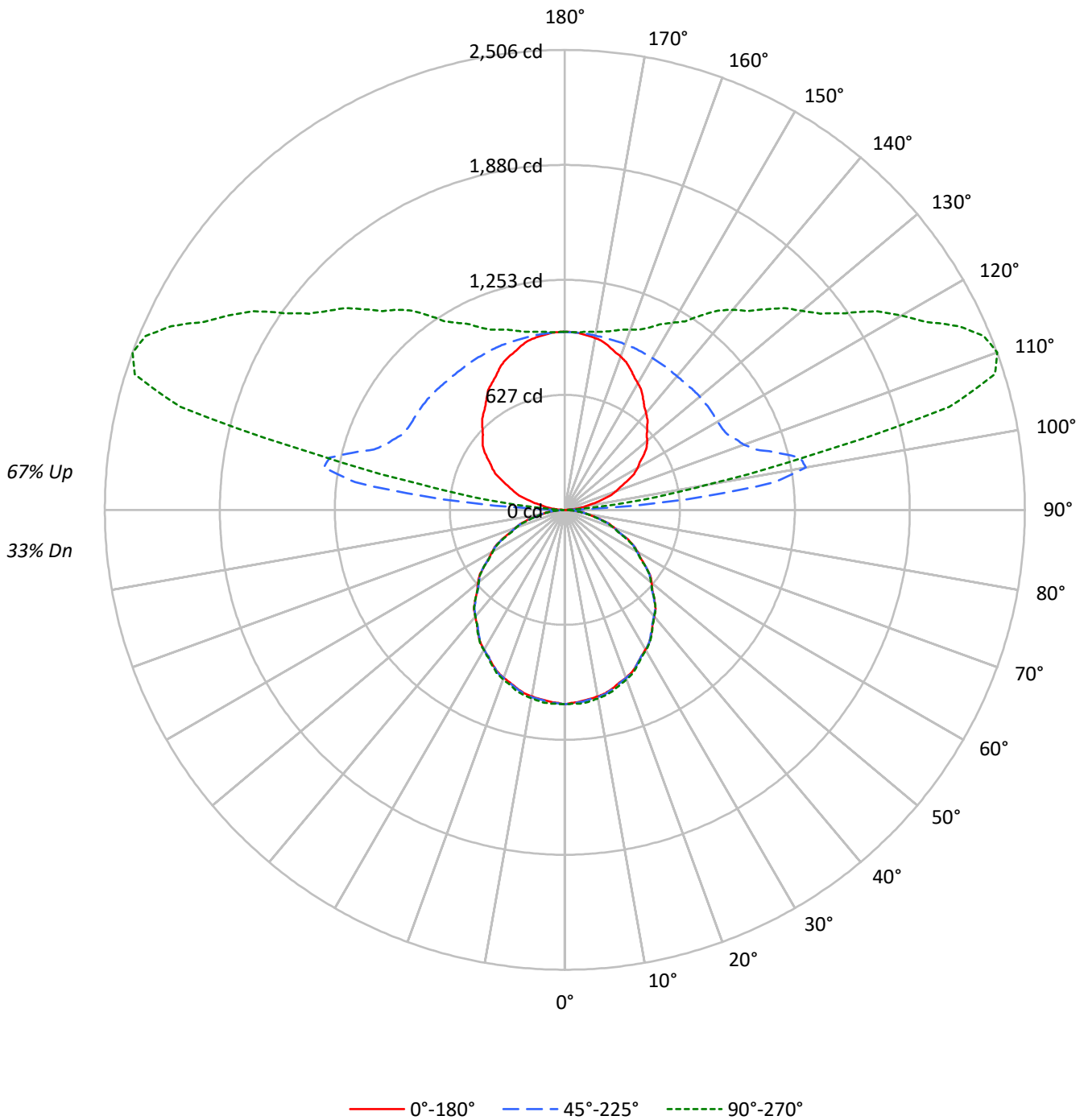
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8958.2 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 83.3
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	0
RCR																		
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	82	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	65	61	56	53	50	43	41	39	31	30	29	23
3	78	69	61	56	70	62	56	51	50	45	42	38	35	33	28	26	24	19
4	71	60	53	47	64	55	48	43	44	39	35	34	31	28	25	22	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	35	30	50	39	32	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	12	10
9	48	36	28	23	43	32	26	22	26	21	18	21	17	15	15	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17095	17095	17095
5°	16974	17021	17161
10°	16934	16982	17100
15°	16831	16879	17048
20°	16730	16756	16904
25°	16577	16577	16678
30°	16406	16406	16460
35°	16208	16151	16263
40°	15993	15932	15993
45°	15744	15680	15744
50°	15508	15362	15400
55°	15147	15105	15026
60°	14767	14673	14580
65°	14330	14162	13998
70°	13482	13416	13143
75°	12689	12420	12059
80°	11269	11000	10600
85°	9077	8281	7744

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 15842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	1.1
10°-20°	286.0	3.2
20°-30°	430.3	4.8
30°-40°	514.8	5.7
40°-50°	531.2	5.9
50°-60°	479.2	5.3
60°-70°	365.7	4.1
70°-80°	210.3	2.3
80°-90°	55.9	0.6
90°-100°	369.5	4.1
100°-110°	1209.8	13.5
110°-120°	1196.0	13.4
120°-130°	977.7	10.9
130°-140°	797.9	8.9
140°-150°	620.9	6.9
150°-160°	447.1	5.0
160°-170°	273.5	3.1
170°-180°	92.4	1.0
0°-30°	816.4	9.1
0°-40°	1331.2	14.9
0°-60°	2341.6	26.1
0°-90°	2973.4	33.2
90°-120°	2775.3	31.0
90°-150°	5171.8	57.7
90°-180°	5985.0	66.8
0°-180°	8958.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1059	1059	1059	1059	1059	
5°	1047	1061	1050	1052	1059	99
15°	1007	1020	1010	1014	1020	284
25°	930	940	930	932	936	428
35°	822	828	819	822	825	514
45°	690	694	687	688	690	532
55°	538	541	537	534	534	481
65°	375	374	371	368	366	369
75°	203	202	199	195	193	214
85°	49	46	45	40	42	57
90°	1	3	8	7	8	5
95°	52	150	672	239	156	59
105°	210	300	1201	2282	2168	222
115°	379	453	976	2016	2367	374
125°	527	588	962	1590	1868	469
135°	635	702	954	1371	1546	491
145°	742	797	952	1180	1292	465
155°	846	874	958	1055	1096	390
165°	924	933	962	999	1010	260
175°	966	966	967	974	972	92
180°	970	970	970	970	970	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.8	1058.8	1058.8	1058.8	1058.8
2.5°	1051.9	1064.3	1054.2	1056.6	1057.7
5°	1047.3	1061.4	1050.2	1051.8	1058.8
7.5°	1038.6	1053.9	1041.5	1044.3	1052.2
10°	1032.9	1047.0	1035.8	1037.3	1043.0
12.5°	1023.6	1037.8	1026.5	1029.3	1034.9
15°	1006.9	1019.6	1009.8	1014.3	1019.9
17.5°	987.6	1001.1	990.2	994.0	998.8
20°	973.7	985.0	975.2	976.8	983.8
22.5°	956.4	967.7	959.0	959.4	965.4
25°	930.5	940.3	930.5	932.0	936.2
27.5°	900.7	909.2	900.7	902.3	905.9
30°	880.0	888.4	880.0	881.4	882.9
32.5°	856.9	864.2	855.7	857.3	860.9
35°	822.3	827.9	819.4	822.3	825.1
37.5°	785.3	789.6	782.4	783.9	786.5
40°	758.8	763.0	755.9	757.4	758.8
42.5°	732.2	735.4	728.2	729.7	732.2
45°	689.5	693.8	686.7	688.1	689.5
47.5°	646.3	648.8	642.8	641.7	644.3
50°	617.4	618.8	611.6	611.7	613.1
52.5°	586.3	587.7	582.8	580.5	581.9
55°	538.1	540.9	536.6	533.8	533.8
57.5°	489.6	492.1	486.7	485.3	485.0
60°	457.3	458.7	454.4	452.9	451.5
62.5°	425.0	425.3	420.9	419.5	418.1
65°	375.1	373.7	370.7	367.8	366.4
67.5°	319.1	320.5	317.7	313.0	313.0
70°	285.6	287.0	284.2	278.4	278.4
72.5°	253.3	252.5	250.7	246.1	243.8
75°	203.4	202.0	199.1	194.7	193.3
77.5°	153.5	152.1	150.6	145.1	146.3
80°	121.2	119.8	118.3	114.0	114.0
82.5°	92.3	89.8	88.3	84.0	84.0
85°	49.0	46.2	44.7	40.4	41.8
87.5°	14.0	13.3	13.1	10.6	10.8
90°	1.0	2.9	8.0	7.0	8.0
92.5°	16.9	61.8	189.7	61.7	49.4
95°	51.8	150.2	671.7	239.3	155.5
97.5°	94.1	198.1	1152.4	697.1	432.1
100°	123.6	223.0	1333.4	1190.7	789.3
102.5°	157.1	254.1	1313.5	1754.5	1360.1
105°	210.3	299.9	1200.8	2281.5	2167.5
107.5°	262.7	344.9	1091.0	2330.8	2456.1
110°	297.0	376.9	1038.4	2273.4	2506.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	329.7	407.2	1006.5	2173.7	2472.0
115°	378.7	452.7	975.6	2016.0	2366.8
117.5°	426.3	495.5	963.9	1861.1	2217.3
120°	457.4	522.7	960.7	1770.8	2117.7
122.5°	485.3	549.0	960.7	1692.9	2014.8
125°	527.2	587.6	961.7	1589.8	1867.5
127.5°	562.7	624.2	960.5	1513.9	1755.5
130°	585.0	647.3	959.7	1467.9	1686.2
132.5°	604.9	668.8	957.3	1428.4	1626.4
135°	634.8	702.0	953.7	1371.2	1545.6
137.5°	666.3	732.9	951.5	1311.7	1469.3
140°	688.6	752.9	950.7	1274.0	1423.1
142.5°	710.9	771.4	950.7	1233.8	1368.9
145°	742.4	797.0	951.7	1179.5	1292.5
147.5°	775.5	820.9	953.1	1132.2	1217.6
150°	796.2	836.2	954.7	1104.8	1176.9
152.5°	817.0	852.2	955.5	1082.2	1141.8
155°	846.1	874.3	957.7	1055.3	1096.2
157.5°	872.2	892.6	959.9	1034.1	1063.7
160°	888.9	905.5	960.7	1022.0	1045.4
162.5°	903.3	916.7	960.7	1012.3	1029.4
165°	923.8	932.6	961.7	998.8	1009.5
167.5°	941.1	945.4	962.9	988.3	994.2
170°	950.7	952.7	963.7	982.6	984.6
172.5°	957.9	959.1	966.1	978.6	979.0
175°	965.7	965.7	966.7	973.6	971.6
177.5°	969.6	968.9	968.0	972.8	969.6
180°	969.6	969.6	969.6	969.6	969.6



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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	16.04	16.78	17.13	17.86	19.36	15.96	16.70	17.05	17.79	19.28
	3H	17.81	18.47	18.91	19.57	21.08	17.69	18.35	18.79	19.45	20.96
	4H	18.47	19.09	19.57	20.19	21.70	18.31	18.94	19.42	20.04	21.55
	6H	18.93	19.50	20.04	20.60	22.13	18.74	19.32	19.86	20.42	21.95
	8H	19.06	19.61	20.18	20.73	22.25	18.86	19.41	19.98	20.52	22.05
	12H	19.13	19.65	20.26	20.76	22.31	18.91	19.43	20.03	20.54	22.08
4H	2H	16.58	17.20	17.69	18.30	19.82	16.52	17.14	17.63	18.24	19.75
	3H	18.55	19.08	19.67	20.20	21.73	18.45	18.97	19.57	20.09	21.62
	4H	19.34	19.82	20.46	20.93	22.48	19.19	19.67	20.32	20.79	22.34
	6H	19.92	20.33	21.05	21.47	23.01	19.74	20.15	20.87	21.29	22.83
	8H	20.11	20.49	21.24	21.62	23.17	19.90	20.29	21.03	21.42	22.97
	12H	20.20	20.55	21.35	21.69	23.25	19.97	20.32	21.12	21.46	23.02
8H	4H	19.57	19.96	20.71	21.09	22.64	19.45	19.83	20.58	20.96	22.52
	6H	20.29	20.60	21.44	21.77	23.33	20.12	20.44	21.27	21.61	23.16
	8H	20.55	20.83	21.71	21.98	23.55	20.36	20.64	21.52	21.79	23.36
	12H	20.71	20.96	21.88	22.11	23.71	20.49	20.73	21.65	21.88	23.49
12H	4H	19.56	19.91	20.71	21.05	22.61	19.44	19.79	20.59	20.93	22.49
	6H	20.33	20.61	21.49	21.76	23.33	20.17	20.45	21.33	21.60	23.17
	8H	20.62	20.86	21.78	22.01	23.61	20.43	20.67	21.59	21.82	23.43